

**Proceedings of Regional Workshop on**

# **ESD Policy and Implementation in China, Japan and Republic of Korea**

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# Workshop Background



At the G8 related meetings in Japan this year, one of the main themes was the environment and climate change. The leaders meeting declaration included statements which committed the participating countries to combat climate change and to confront this issue while recognising the interlinked challenges of sustainable development. In this regard the G8 summit leaders expressed support for a shared vision for long-term cooperative action which included addressing emissions reduction all aimed at achieving a Low Carbon Society.

Meanwhile, in relating these developments to the Northeast Asia (NEA) region, we can consider its significance in climate change as this region has lead to greatly increased energy consumption. In particular, thee countries amongst the NEA region such as China, Japan, Republic of Korea (ROK) are a leading group which impacts the greenhouse gas (GHG) emissions because of either the rapid economic developmental growth or its advanced economy status. Consequently the two issues above, climate change and emissions, are becoming increasingly important for these three countries in the NEA region to create balance between economic growth and environmental sustainability.

Nevertheless, China, Japan and ROK are facing challenges in addressing the concerns above due to lack of resources, knowledge, and effective organisation of available resources. Furthermore, a regional cooperation system between these three countries is still not strong enough to address in spite of their tight geographical relationship which has been causing the adjoining air pollution issues. It is therefore necessary to organise a workshop with ESD experts and political decision-makers to

address relevant topics which may be useful not only among countries under similar conditions, but also to countries which may in the future be faced with similar circumstances.

By bringing together the experiences and addressing key concepts from among the three countries, we expected to identify critical factors regarding ESD policies and implementation. From the workshop we gained a considerable understanding of how the rapidly developing countries and a developed country are responding or reacting to these issues which have been addressed by the most developed countries as the great global challenge, although we have found that we still need to go long way to achieve our ultimate goal, a sustainable society.

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## Workshop Agenda

Opening Session		Co-Chairman (Ms. Song Xuhong, MOEP & Dr. Tian Qing, BNU)			
9:00 - 9:35	Introduction of Key Speakers	Ms. Song Xuhong, Director, Education Department of CEEC	10 min.		
	Opening remarks	Mr. Xia Guang, Vice Director of CEEC, MOEP.	5 min.		
	Key note speech	Mr. Mahesh Pradhan, Regional Environmental Affairs Officer, UNEP-Bangkok	5 min.		
		Dr. Mee Young Choi, Project Manager, IGES	5 min.		
	Closing opening ceremony & Group Photos		10 min.		
Session 1:		Chairman (Mr. Guo Yinfeng, Director, UNDP-Beijing)			
Japanese Cases	Introduction of the participants		25 min.		
	9:35 - 11:40	Presentation I	<u><i>Japan's Action Plan for the "United Nations Decade of Education for Sustainable Development"</i></u>	30 min.	
			Mr. Akihiko Noda, Senior Specialist, Office of Planning and Coordination, International Affairs Division, Minister's Secretariat/Japanese National Commission for UNESCO		
			Q & A		20 min.
			Presentation II		<u><i>ESD policy and implementation at local level in Japan: Respecting the process of local policy formulation and implementation, and adding ESD implication to existing activities for sustainability</i></u>

		Dr. Masahisa Sato, Assistant Professor, Environmental and Information Studies, The Musashi Institute of Technology	
	Q & A		20 min.
11:40 - 11:50	<b>Coffee Break</b>		10 min.
<b>Session 2:</b>	Chairman (Professor Jiang Dahe – Tongji University)		
	<b>ROK Cases</b>	<u>Current Status of the policy on education for sustainable development in Korea</u>	
	Presentation I		30 min.
		Prof. Sang Hun Lee, Expert Committee Member, Korean National Commission for Sustainable Development/Hasin University	
11:50 - 13:30	Q & A		20 min.
	Presentation II	<u>ESD Implementation in Korea</u>	
		Ms. Hyun Jin Jeon, Team Head, Youth & Children, UNEP National Committee for the Republic of Korea	30 min.
	Q & A		20 min.
13:30 – 14:30	<b>Lunch Meeting</b>		
<b>Session 3:</b>	Chairman (Professor Xu Jieying, UNESCO-Beijing)		
	<b>Chinese Cases</b>	<u>Chinese ESD Policy Research</u>	
	Presentation I		30 min.
		Dr. Tian Qing, Associate Professor, Environmental Education Center, Beijing Normal University	

14:30-16:10	Q & A		20 min.
	Presentation II	<u><i>Green School and ESD in China</i></u>	30 min.
		Dr. Yang Ke, Manager of Green School	
	Q & A		20 min.
16:10 - 16:20	<b>Coffee Break</b>		10 min.
<b>Session 4:</b>	Co-Chairmen (Mr. Mahesh Pradhan, UNEP-Bangkok & Dr. Mee Young Choi, IGES)		
<b>Conclusive Session</b>		Synthesis of country presentation: Status of ESD in the Northeast Asian Countries	
16:20 - 17:30	Conclusive discussion	Discussion for the future ESD directions: 1) in the Northeast Asian Countries, and 2) IGES ESD project	70 min.
17:30-19:30	<b>Reception</b>		

## Executive Summary

The Institute for Global Environmental Strategies, the Environmental Education Center of Beijing Normal University and the Center for Environmental Education & Communication of the Ministry of Environment for Protection in China co-organized a regional workshop on Education for Sustainable Development (ESD) policy and implementation at a conference room of Beijing Normal University in Beijing on the 26<sup>th</sup> September, 2008.

The overall aim of the workshop was to bring together ESD experts and government officers who are in charge of ESD policies in three countries - China, Japan and Republic of Korea in order to:

- Report on current condition of general ESD policies at the nation level, in particular;
- Address current ESD policies in relation to climate change and CO2 emission issues including examples of actual results in implementation;
- Introduce examples of good practice which shows a local level implementation which is well linked with the national level policy;
- Gather information on obstacles faced in implementation and share experiences, and;
- Clarify the direction of current and future ESD policies of the member nations.

The invitees of the workshop were:

- *Governmental officers responsible* for ESD policy and implementation; and
- *ESD experts* including university researchers and practitioners in actual fields related to ESD;

These people will be from the above *China, Japan and ROK* due to the following conditions:

- The main countries in the Northeast Asia (NEA) region which are in a period of rapid growth in GDP (i.e. China and Korea) or in the advanced economic status (i.e. Japan);
- The main countries in the NEA region which have lead increased energy use and CO2 emission, and;
- The adjoining countries which are closely linked by the geographical relationship and have impacted each country's air pollution conditions critically.

This workshop provided an opportunity to bring together each country's situation and experiences which were expected to:

- Contribute to the ESD political arena by providing practical guidelines for policy decision-makers and implementers;
- Provide substantial evidences of ESD policies and implementation which demonstrates the linkage between the national and local level;
- Support current and future policies regarding CO2 emissions and climate changes among not only the countries in the Northeast Asia region which have similar conditions at present or may face similar challenges in the future but also those in other regions;
- Develop a channel for sharing information and knowledge among countries with varying levels of economic growth and development, and;
- Give insights to countries that are considering changes to their ESD policies at the national and local level.

Examples of good practice in implementation of national policies were reported from invited government officers and practitioners whose work are related to ESD at the local level were given, with discussion on how to effectively bridge the gap between policy ideals and actual practice, and how climate change is being addressed under these policies. The presentation and discussion of these practices contributed to the expected outcomes of the workshop of further developing ESD policy in the region, strengthening relationships and information flow between the participating nations, and to give insights to other countries with similar conditions and issues.

## **Opening Session**

Mr. Xia Guang, the vice-director at the Centre for Environmental Education and Communication of the Ministry of Environment for Projection of China opened the workshop by stating that the reaction of the three countries to the challenges of sustainable development and climate change is an extremely important strategic issue, while these matters are the most important regionally. He noted that while there are shared approaches to facing these issues, that due to diversity in development and industrialization there will be different options and actions, and communication and exchanges such as the workshop are absolutely necessary.

Mr. Mahesh Pradhan, Regional Environmental Affairs Officer, UNEP emphasised that we are facing an environmental crisis as well as the rapid change of society. To deal with this urgent crisis, he also stressed that the three countries need to have more shared experiences and information as a good platform in the Northeast Asia region. In doing so, Mr. Mahesh Pradhan especially urged experts' interests and support on ESD to address climate change issue which is closely linked between these three countries because of the adjacent geological condition. In particular, he emphasised the need of urgent co-actions supported not only by practitioners but also policy decision-makers of

these three countries to achieve environmental sustainability balanced with the economic growth in this region.

Dr. Mee Young Choi of IGES, delivered the key note speech, describing recent activities of IGES including their involvement with the G8 Summit in Hokkaido (e.g. designated as the Japanese focal point for the Research Network on Low Carbon Society & support the Kobe 3R Action Plan) and the focus of her research team on ESD and climate change in the region as a part of an institution wide focus on climate change. She also introduced the Capacity Development and Education (CDE) Project of IGES which has been reviewing the existing national laws & policies promoting Environmental Education for Sustainable Development/ESD in the Asia-Pacific region. By conducting this political review, Dr. Mee Young Choi emphasised that the CDE Project expects to provide effective and practical policy recommendations to the governments in the relevant sectors at a regional level. In this perspective, she highly valued this regional meeting joined by practitioners and policy-decision makers from China, Japan and Republic of Korea which are not only leading economic status but also having significant environmental impacts in the Northeast Asia region.

### **Session 1: Japanese Cases**

Mr. Akihiko Noda, the Secretariat of the Japanese National Commission for UNESCO & Senior Specialist at the Director-General for International Affairs of the Ministry of Education, Culture, Sports, Science & Technology of Japan, described the fundamental role of education in Japan's development, and reminded listeners of the simultaneous pursuit of environmental protection and economic growth under the Kyoto Protocol as well as the responsibilities of developing and developed countries. Currently there are elements of ESD in "integrated studies" classes in Japan though it is not specifically mentioned, and so from 2009 the notion of ESD will be included. He sees the UNESCO Associated Schools Network as an effective way to spread ESD across Japan.

Dr. Masahisa Sato of the Musashi Institute of Technology gave a comprehensive presentation on ESD in general along with specific examples of local level implementation in Japan. Included in his presentation were guidelines for the role of local authorities which includes a coordinating and information dissemination role, as well as 14 cases of ESD model projects in Japanese schools which serve as a basis for future nationwide implementation.

## **Session 2: Republic of Korea Cases**

Prof. Sanghun Lee from Hanshin University presented on the current status of ESD policy, noting that generally ESD has been seen through the perspective of environmental education. There is low awareness of what exactly is sustainable development; however a draft for a comprehensive ESD plan has been made but is not finalized yet. There seems to be plenty of future potential for ESD given the recent policy developments, though barriers exist such as clarifying concepts and relating the various components and associated stakeholders and government offices.

Ms. Jeon HyunJin of the UNEP National Committee for the Republic of Korea shared ideas on implementation of ESD for youth, with particular attention paid to intergenerational learning and networking for youth through such programmes as the TUNZA North East Asia Youth Environment Network internationally and locally through work on the MDG report in 2007 and Eco campus contests.

## **Session 3: Chinese Cases**

Dr. Qing Tian from the Environmental Education Center in Beijing Normal University presented on Chinese ESD policy research, giving a detailed history of ESD and EE in China. It was noted that at the basic level of education that infusion is occurring,

however it is unbalanced due to disparities in knowledge and capacity among teachers. In higher education ESD is in the extremely primary stages and is generally not a major concern, with difficulties such as historical organizational structure and approach to education as well as regional difference in the vast nation identified as barriers, among others.

Ms. Yan Ke, the manager of Department of Education at CEEC of Ministry of Environment for Protection, presented on the “Green School” programme which has various projects such as the Campus Environment Management Project and Youth Masters Programme which has been successfully implemented in dozens of countries already. At a same time, an unbalanced development of ESD was reported due to economical development levels amongst different regions in China. It was also noted that there are difficulties with schools continuing their “green” efforts after receiving an award, limited communication between the green schools domestically and internationally, and unbalanced distribution of green schools nationwide. Great efforts will be needed in promotion and capacity building.

#### **Session 4: Conclusive Discussion**

There were active discussions on main obstacles of ESD in three countries, China, Japan and Republic of Korea as follows:

##### **China**

- Lack of central & local government’s understandings of ESD, especially a big gap of understandings of what ESD is amongst inter-government departments;
- Need more small grants from diverse funding sources to support ESD project at a local level because of limited funding from the central governments i.e. from the Ministry of Education and Ministry of Environmental Protection only;

- Unbalanced development of ESD levels amongst different regions. For example, the developmental gap for ESD between urban area and rural areas is a considerable concern. In particular, not only ESD developmental differences but also standards of education differences between eastern and western parts of China are one of the key obstacles to be addressed, and;
- Need to strengthen and expand opportunities of ESD teacher/expert training programmes because of lack of teaching human resources in actual educational fields.

### **Japan**

- Need more active cooperation between inter-government departments. For instance, the Ministry of Environment and the Ministry of Education, Culture, Sports, Science and Technology have mainly conducted separate ESD projects, and are in a very active position to address sharing information and solving urgent issues regarding ESD;
- Need more active communication between the central government and local governments to address ways to deal with ESD issues for building a sustainable society together;
- Need to provide a clear vision of ESD implementation & its orientation nationally and locally, and;
- Need to support seed money for small-scale ESD projects to promote actual implementation at a local level

### **Republic of Korea**

- Not clear responsibilities of governmental department leading national ESD policy and implementation;
- Lack of collaboration between inter-governmental agencies to support ESD programmes;
- Need a small grants to support small-scale of ESD projects which can promote a local school & community participations, and;
- Need sharing and changing information about teaching & learning in ESD programmes amongst inter-governments, NGOs and educational institutions.

Overall, the main issues across the presentations were how to bring together the many policies relative to ESD, address the gaps between research and practice at the national and local level, and of particular note was that resources and capacity are still in great need. The key consensus arguments amongst participants from the conclusive discussion were as follows:

- Finding common obstacles in implementing ESD across three countries, China, Japan and Republic of Korea
- Need to raise funding for co-ESD project in the Northeast region
- Need a long-term period of co-research project on ESD
- Need to develop educational infrastructure of teaching human resource development in consideration of SD level depends upon each country's economic, social and cultural level.
- Need a regional consultation meeting joined by the ESD responsible government departments consisting of not only ESD experts but also ESD policy decision-makers



## Opening Remarks

**Mr. Xia Guang**

*Deputy Director of Sino-Japan Friendship Center for Environmental Protection*

Good morning! Dear honoured guests,

First, I'd like to present my warm congratulations on the smooth opening of "Regional Workshop on Education for Sustainable Development Policy and Implementation: China, Japan and Republic of Korea" on behalf of Environment and Development Center of Ministry of Environmental Protection, also known as "Sino-Japan Friendship Center for Environmental Protection". Also, I'd like to express my great gratitude to Institute for Global Environmental Strategies (IGES) and Environmental Education Center of Beijing Normal University for your thoughtful arrangements for the workshop.

Both sustainable development and climate changes are global issues, which need human beings to face and cooperate together. China, Japan and Republic of Korea are located in Northeast Asia, so how to react to the challenges of sustainable development and climate changes, which is the most urgent issue at present from a regional perspective, is an extremely important strategic issue for us three countries.

Education plays a key role in the realization of sustainable development, which has become common consciousness globally since the Rio UN Conference on Environment and Development in 1992. Ministry of Environmental Protection of China has been doing her best to promote environmental education by means of education and communications, which have been actively promoting the realization of the strategic objectives of sustainable development of China.

With the rapid economic development, China is also undertaking deep social changes. With that background, effective promotion of educational reform needs great courage and innovative intelligence. China has put forward her new requirement for constructing an innovative country with comprehensive, coordinated and sustainable development under the guidance of scientific outlook on development. Facing new challenges, we have to follow the guidance of 21 Century Agenda, re-orientate education into the direction of sustainable development and foster future leaders and constructors for it.

China, Japan and Republic of Korea are close neighbours separated by a strip of water in geography and closely connected in cultural inheritance. As we are located in the same region and have common oriental cultural attributes, we have some common ideas about facing the challenges of sustainable development and global climate warming. However, as the diversity of industrialization process and developmental levels among us and the diverse roles we play in globalization pattern, we will definitely have different opinions and actions on the above issues and challenges.

Therefore, it is absolutely necessary for us three countries to sit together like today for communication and exchanges. We can discuss the strategies that we three can take jointly for promoting environmental education for sustainable development and reacting to the challenges of climate changes. And we can also seek for possible channels and ways of further communication and cooperation in the future.

At last, I sincerely wish this workshop a great success! Thank you!

26September, 2008

*Xia Guang*

## Key Note Speech

**Mee Young Choi, Ph.D.**

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

My distinguished guests and participants,

First of all, I would like to express my deep thanks to distinguished guests - Mr. Xia Guang, Ms. Song Suhong, Mr. Guo Yinfeng, & Professor Xu Jieying- and all participants coming from China, Japan and Korea who are joining this workshop in spite of their busy schedules.

Especially, I would like to express my particular gratitude to Professor Jiang Dahe and Mr Mahesh Pradhan who have been able to join this workshop despite the long distance to Beijing from Shanghai and Bangkok.

I also would like to convey my heartfelt thanks to Beijing Normal University for assisting the Institute for Global Environmental Strategies (IGES) with constant help and support to make this workshop today. Especially, this workshop would never been made without the Environmental Education Center in Beijing Normal University and Dr. Tian Qing's thankful efforts.

I am deeply grateful for the cooperation from Center for Environmental Education & Communication of MOEP (Ministry of Environment for Protection of China) which finally enabled IGES to make this workshop. I also would like to give my big congratulations to MOEP for your promotion from SEPA (State Environmental Protection Administration).

IGES has been conducting strategic policy research to support sustainable development in the Asia-Pacific region. One of this year's achievements is that IGES was fully involved in the G8 Environment Ministers' Meeting process in Kobe this May. For example, IGES provided essential support to the Ministry of the Environment of Japan such as the Chair's Summary, the Kobe 3R Action Plan, and the Kobe Call for Action for Biodiversity Conservation. IGES has also been

designated as the Japanese focal point for the Research Network on Low Carbon Society at the G8 Environmental Ministers' Meeting. In fact, IGES has recently gone through restructuring in order to strengthen its capacity to deal with climate change issues.

To respond to these aims of IGES regarding climate change issues, my research team, Capacity Development and Education Project has been reviewing the existing policies for promoting Education for Sustainable Development on climate change issues in the Asia-Pacific region. By conducting this political review, we expect to provide effective and practical policy recommendations to the governors in the relevant sectors at a regional level.

Therefore, I am expecting this workshop would be a valuable opportunity to discuss and gather information about ESD. By bringing together the experiences and addressing key concepts from among the three countries, we can expect to identify critical factors regarding ESD policies and implementation. From the workshop we shall gain an understanding of how the rapidly developing countries and a developed country are responding or reacting to these issues which have been addressed by the most developed countries as the great global challenge.

I sincerely hope today's workshop can contribute to the ESD political arena by providing practical guidelines for policy decision-makers and implementers, and provide substantial evidence of ESD policies and implementation which demonstrates the linkage between the national and local level.

Again, I would like to acknowledge all of distinguished guests and participants of today's workshop.

Thank you very much for your attention.

26 September, 2008

*Mee Young CHOI*

# **Session 1**

## **ESD Policy and Implementation in Japan**

# Japan's Action Plan<sup>1</sup> for the "United Nations Decade of Education for Sustainable Development"

**Mr. Akihiko Noda**

*Japanese National Commission for UNESCO*

## 1. Introduction

In December 2002 the United Nations General Assembly adopted a resolution to designate the ten years from 2005 to 2014 as the United Nations Decade of Education for Sustainable Development.

Pursuant to this resolution, in December 2005 the government established the Liaison Conference of Ministries and Agencies (hereinafter the "Liaison Conference") Concerned with the "United Nations Decade of Education for Sustainable Development" in the cabinet to strive for close coordination among the administrative bodies concerned with implementing the measures related to the "United Nations Decade of Education for Sustainable Development," and promote an effective and comprehensive implementation of said measures.

The Liaison Conference has examined this matter while paying adequate attention to opinions from various sources and decided on a plan of implementation on behalf of Japan for the "United Nations Decade of Education for Sustainable Development."

With the related ministries and agencies steadily carrying out the various measures stipulated in the plan of implementation, the government, by promoting Education for Sustainable Development (ESD) in earnest, aims to create a world where

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<sup>1</sup> Provisional translation, Inter-ministerial Meeting on the "United Nations Decade of Education for Sustainable Development", 30 March, 2006

everyone may enjoy the benefits of quality education and learn the values, actions, and lifestyles required for a sustainable future and social changes, and where every organization may participate in the creation of a sustainable society.

## **2. Basic Concept**

### **(1) Background**

ESD is derived from worldwide programs for education and sustainable development. With respect to education, the Universal Declaration of Human Rights in 1948 states that, "Everyone has the right to receive education," and after the "World Declaration of Education for All" in 1990, the world has been proactively committed to realizing Education for All (EFA) targeted at the universalization of primary education, elimination of sex discrimination in education, and improvement of literacy rates.

Concerning sustainable development, "Our Common Future," a report published in 1987 by the World Commission on Environment and Development chaired by former Norwegian Prime Minister Brundtland, has taken up the concepts of "sustainable development" by proposing a central theme of "development satisfying the needs of future generations as well as the current one." Later, the 1992 United Nations Conference on Environment and Development (Earth Summit) adopted "Agenda 21," a series of action plans regarding worldwide programs for sustainable development, with Chapter 36 of Agenda 21 (Promotion of Education, Public Awareness and Training) prescribing the importance of education for sustainable development and the guidelines for the programs thereof.

While the programs concerning education and sustainable development were pursued globally, the concepts of ESD were further elaborated, and the United Nations Commission on Sustainable Development, with the United Nations Educational, Scientific

and Cultural Organization (UNESCO) playing the leading role, has been examining an ideal way of promoting education for sustainable development.

During the process of negotiating a plan of implementation for the 2002 Johannesburg Summit (hereafter the plan of implementation for the Johannesburg Summit on sustainable development), Japan proposed, in response to the proposals of NPOs, the "decade of education for sustainable development" (hereafter the decade of ESD), and it was included in the plan of implementation for the Johannesburg Summit on sustainable development with the consent of national governments and international organizations. Pursuant to this, Japan proposed a resolution to designate the ten years from 2005 as the decade of ESD in the 57th United Nations General Assembly in 2002, reaching unanimous approval. In addition, Japan proposed resolutions to drive forward the decade of ESD in the 58th and 59th United Nations General Assemblies in 2003 and 2004, respectively, and the resolutions were adopted. Based on these resolutions, an international implementation scheme was created by the UNESCO, which was designated a promotion organization for the decade of ESD, and approved in September 2005.

## (2) About Education for Sustainable Development

### (a) Sustainable Development and Education for Sustainable Development

Sustainable development means the creation of a society that meets the needs of the current generation without impairing the ability of future generations to meet their needs. For this purpose, programs that allow everyone to lead a healthy and cultured lifestyle are required, while overcoming poverty, securing sanitation, and providing quality education are indispensable. These programs must be pushed through equitably without discrimination on the basis of sex and race. Furthermore, the programs must be moderate with consideration given to finite resources, acceptable environment limits, and nature's recuperative powers, thus allowing a sustainable society for the future

generations. Moreover, since wars and conflicts create refugees and destroy the environment, we also need peace-building efforts.

In view of the above, what constitutes the basis of sustainability are equitability among generations and regions, equality between the sexes, a tolerant society, a poverty reduction, the preservation and recovery of the environment, conservation of resources, and a fair and peaceful society. Therefore, sustainable development means nothing but promoting harmony in terms of environment preservation and socioeconomic development. (Note that this paper uses the term "society" in a broad sense that includes various aspects of culture.)

Sustainable development as noted above can only be realized with everyone being aware of it and implementing it in his or her daily living and economic activities. To begin with, each one of us must realize that we are living in close association with the people of the world, future generations, and the environment, and must change our activities. ESD is the education for this purpose. Toward that end, providing literacy and basic education for all people is the precondition.

Although the word "development" in sustainable development may be interpreted to mean "progress" or "building of society," we use "development" in this plan of implementation by noting the word has the same meaning as "progress" or "building of society." Similarly, the word "education" as used in sustainable education includes all kinds of education and places of training ranging from social education, cultural activities and to corporate training and community activities.

#### (b) Purpose of ESD

The purpose of ESD is to ensure that anyone can benefit from quality education, and that the principles, values, and actions necessary for promoting sustainable development are incorporated in all forms of education and learning environments, thus

bringing about a revolution of action for realizing a sustainable future with respect to the environment, economy, and society.

### (c) Fields to be Addressed

Fields that must be addressed differ depending on the circumstances and situations of each country. In developing countries where the eradication of poverty remains the overriding issue, sustainable growth, improved living standards and social welfare — issues of health and sanitation, basic education, human rights, and refugees — and human security are the most pressing issues. Moreover, internal and regional peace and security, as well as improved governance, which are the major causes of these issues, are indispensable. Developed countries, on the other hand, must deal with environment protection, social issues such as human rights and peace, and economic problems including poverty. Among them, controlling the excessive consumption of resources and environment protection could be cited. The world economy is mutually interlinked, making it necessary for each region and country to understand each other's issues and tackle with them in cooperation.

## (3) Japan's Action Plan

### (a) Position and Content of Japan's Action Plan

Since ESD was decided to be dealt with on a global scale based on Japan's proposal, our government will press ahead with measures at home and abroad, and lead domestic and world programs in accordance with our plan of implementation. In addition, in order for each organization to play an appropriate role in each region in collaboration with other organizations, we will clarify guidelines for implementation as well as show the details each organization is expected to achieve.

In concrete terms, the government will promote the measures along with the content of Section 3 (Guideline for Implementing ESD). Likewise, we will ensure the programs to be undertaken by the various organizations concerned will be implemented in accordance with this guideline. With respect to the concrete measures, Section 4 (Promotional Methods for ESD) shows examples of measures that will be carried out by the government as an implementing organization, as well as clarifying the roles we expect the organizations concerned to play in collaboration so that the measures can be carried out by sharing roles, showing the measures to advance, and supporting the programs undertaken by the organizations concerned. Furthermore, Section 4 shows how to promote international cooperation, demonstrating in detailed programs for exercising leadership in the global community.

(b) Our Goals by the Final Year

By actively promoting ESD, we aim to help everybody to come to grips with situations in the world, future generations, our society, and his/her relationships with them, and participate in the creation of a sustainable society.

In addition, our goal is to ensure that educational institutions, NPOs (as used in a broad sense that includes nonprofit-making, public-interest organizations, such as public-interest corporations), enterprises, and administrative organizations incorporate in their programs actions for building a sustainable society.

Moreover, we intend to build a sustainable community based on its culture, industry, nature, or history, by working hand-in-hand with diverse implementing organizations in the community.

Throughout these programs, we aim to make Japanese society a more sustainable one, with the organizations concerned able to play necessary roles, as a member of the world community by acting at regional, national, and global levels.

### (c) ESD in Japan

There are wide-ranging issues to be dealt with under the ESD programs, such as equity between generations or regions, equal status between men and women, social tolerance, a poverty reduction, the preservation and recovery of the environment, the preservation of natural resources, and a fair and peaceful society. What we must aim for in ESD is not merely to have individuals acquire exhaustive knowledge of these issues, but to transform their awareness and actions by educating them to regard these issues as their own, think globally, act locally, and become leaders in creating a sustainable society. For this purpose, two perspectives are necessary. First, we must nurture humanity such as a person's character, self-discipline, judgment, and a sense of responsibility, and secondly we should nurture individuals who, as they live in association with other people, society, and the natural environment, are able to respect their "connection" or "relations" with others, society, and the environment. Taking these perspectives into account, we must proactively nurture individuals involved in the public good and participate in the creation of a sustainable society. This could also be applied to nurturing individuals who, visualizing future society, are able to execute various programs targeted at building such a society.

With these programs undertaken by individuals being interconnected, they would have the potential to develop into the building of a sustainable community, nation, and world. For this purpose, it is concurrently necessary to establish a social system in which individuals are involved in community building.

Although the concept of ESD is new, its programs are not necessarily new altogether. For example, we already have programs to nurture "physical and intellectual ability" through a "period of comprehensive study" at schools and "community building through citizen participation" in community activities. Throwing new light on these activities from the perspectives of ESD would also allow us to implement ESD.

#### (d) Priority Issues for Japan

Among the diversity of issues involving the environment, economy, and society, what advanced countries including Japan are now required to do is to incorporate environmental considerations in their socioeconomic systems. Precisely speaking, we must change our lifestyles and industrial structure based on mass production, consumption, and waste, and establish sustainable consumption and production systems that ensure biodiversity.

However, since the environment, economy, and society do not exist in a simple vertical mode, the issues of individual lifestyles and communities must be both multidisciplinary and multi-tiered. What we are expected to do is develop a program intended to preserve the environment into a one that offers solutions for human rights and welfare issues. Taking advantage of natural resources in a region, for example, would advance regional society in terms of the regional economy and environmental preservation. In addition, with wide-ranging organizations in the community participating in this program, relationships in the community would improve, creating desirable outgrowths of face-to-face relationships and improved regional welfare.

On the other hand, from a global perspective, advanced countries are increasingly called upon to strengthen their understanding of the various issues facing developing countries and which are necessary for advancing sustainable development on a global level, and help achieve the Millennium Development Goals by strengthening coordination and cooperation with various implementing organizations in the developed countries.

Socioeconomic activities including production and consumption in developed countries and various issues such as poverty related to sustainable development in

developing countries are inextricably connected, and it is important that these issues are addressed in a comprehensive manner.

In view of the above, our government's stance on ESD in our country is that Japan will promote programs that take into account the issues related to sustainable development on a global scale involving developing countries, while dealing with issues concerning environmental preservation that must be dealt with by developed countries, and addressing the integrated development of the environment, economy, and society.

### **3. Guidelines for Implementing ESD**

#### **(1) Programs Leading to Community Building**

In ESD programs, students must view diversified issues as their own problems and make efforts to solve them. To this end, we need to create and develop implementation methods that accommodate the regional characteristics of areas near where the students receive education. Implementing ESD will clear the way to create programs that comply with the features of each community.

Each region is now engaged in activities to provide education tailored to regional characteristics and address various regional issues. Programs to regenerate education power in the country are also being introduced in various regions. Moreover, programs that place great value on traditional culture are also effective in maintaining and improving relationships in the country.

If we view these activities as ESD programs, we see many activities based on the perspectives of ESD already in place. Furthermore, by reassessing some of the activities, they may be considered ESD programs. What is important in these existing activities is to incorporate the principles and value judgment of ESD, such as valuing the connection

with future generations and other regions both at home and abroad, and develop them into programs for creating a sustainable society.

An important viewpoint in community building is that not only adults but also children must participate. Promoting children's participation will also encourage adults to participate, thus stimulating activity sites.

In implementing programs, we must pay special attention to people having difficulties in social participation, such as the elderly, persons with disabilities, and foreign citizens.

## (2) Places of Education and Implementing Organs

ESD is not supposed to be implemented by the government or local authorities alone, and it is important that ESD is carried out at any place having an impact on individual awareness.

For this reason, it is very important that every institution, not just limited to nursery schools, primary schools, junior and senior high schools, and universities, places of social education such as community centers or museums, or public institutions like vocational training schools, but also including local communities, NPOs, enterprises, and mass media, become an implementing organ.

## (3) Educational Curriculums

Issues that are subject to ESD, including environment and development education, peace, and human rights, have been taught in school curriculums as social studies, science, technical arts, and home economics, or in the period of comprehensive study as well as at social educational facilities and in community activities. Moreover, leaders providing education about the environment, international understanding, human rights,

consumers, careers, and nutrition at school, social educational facilities, and in NPO activities and corporate training are equipped with skills to provide education in each field.

ESD, however, requires not only these individual programs but also must handle them in a comprehensive way by connecting the diverse fields. This requires people with professional knowledge about each field to mutually study and understand each other's field, and collaborate with each other.

It will become important for students to study ESD in curriculums or in the period of comprehensive study through the entire school educational system from primary schools to junior high and high schools.

During the period of integrated study, students will be able to deepen their understanding of ESD by checking what they learned in each subject, putting together their thoughts, and presenting them in class. Through these lessons, they must acquire a mindset to participate in community building.

Social education and regional activities could also be developed into ESD by being interlocked and involved with individual issues as well as other fields. In promoting ESD, it is important that ESD, while being based on programs for various issues and not limited to individual fields, is treated both in an interdisciplinary and comprehensive manner from the each aspect of the environment, economy, and society.

With a falling birthrate and aging population, we are about to enter an era of declining population, that is, a shrinking workforce. Against this background, many foreign nationals have been entering our country. To maintain our dynamic society, it has become necessary that these foreign nationals participate in our society. For this reason, we need to provide them with Japanese-language courses.

#### (4) How to Learn and Teach

With respect to methods of learning and teaching, it is important to position these methods in a series of processes to stimulate "concrete actions" by "arousing interest, deepening understanding, and nurturing a willingness to participate and problem-solving ability." What is important in these processes is not merely to pass knowledge but also to place importance on personal experiences and physical feelings, taking a hands-on approach with emphasis on inquiry and practice. It is also important to value the roles of "facilitators" who excel in skillfully eliciting spontaneous activities among students at the place of activity. We should also make efforts to nurture the willingness of students to participate and problem-solving ability, and provide an opportunity to participate through these approaches.

When implementing these methods of learning and teaching, it would be highly effective to utilize learning methods based on participation and experience, and consensus-building methods. Furthermore, in secondary and tertiary education including high schools and universities, a method of learning from actual implementation through on-the-job training that allows students to gain required knowledge and skills in the workplace or the place of learning is also effective.

What is important in teaching or the learning environment is running the programs while incorporating the opinions of students. Instead of giving all the students the same method all at once, we must emphasize a one-on-one dialogue as much as possible.

#### (5) Abilities to be Developed

In ESD, we must develop systematic thinking by emphasizing the understanding of problems and events, and the logical power to offer alternatives by stressing critical thinking, in addition to improving abilities to analyze data and information, and communication skills.

Moreover, we must nurture a sense of values related to sustainable development, such as respect for human life and dignity, respect for diversity, nonexclusiveness, equal opportunity, and respect for the environment.

It is critical to nurture the attitudes and skills necessary to participate as citizens by developing these skills and values. Since the period of comprehensive study provided in primary schools and junior and senior high schools is targeted at entrenching knowledge acquired at school through experience and equipping students with the abilities to think, judge, express themselves, and solve problems, and abilities to check and put together or to present, these considerations overlap with the important ones stressed in ESD and we need to straighten out this overlapping.

#### (6) Coordination and Collaboration between Diverse Organs

When the country promotes ESD at the nationwide level, it is important to coordinate spontaneous programs by implementing organ and strengthen intra-field, inter-field, and inter-regional coordination and the coordination between the central and local governments, as well as with the international community. In this case, we need human resources and organizations able to build and produce activities and organ, taking into account the ability to coordinate among different implementing organs, the characteristics of diverse organs, and the resources and situations of the community involved.

Meanwhile in local communities, universities, boards of education, other education-related organizations, social welfare councils, and local NPOs are expected to connect the places of education with local human resources, facilities, and places of activity. They must have support organizations for education and community activities, such as a volunteer center, NPO support center, and community center, and are

expected to coordinate and produce functions. In school education, teachers must have an ability to coordinate.

#### (7) Evaluation

In order to advance ESD programs and make them more effective, the organizations responsible for ESD must implement various programs while attaching importance to the processes of planning, implementation, and evaluation so that experiences may be utilized for the next activity.

#### 4. Promotional Method of ESD

In addition to incorporating as much sustainable development as possible into its related measures, the government will play the leading role in implementing or promoting the following programs in the hope that ESD is addressed everywhere by diversified implementing organizations. To carry out or promote these programs, the government intends to implement the measures noted in detail in the Appendix (which may be reviewed every year). Concerning the concrete measures stated in the Appendix, it should be noted that individual measures alone do not necessarily achieve ESD and that the implementing organizations are expected to utilize the measures in the Appendix in their activities and develop them into ESD.

#### (1) Key Programs in the Early Stage

In the first stage of the ESD decade through 2014, our country will carry out the following programs to ensure that ESD is acknowledged and implement a promotion system to establish ESD in our country. In addition to encouraging the related ministries and agencies to implement the ESD-related measures stated in the plan of implementation, the government will have liaison conferences as required, checking the

progress of the plan of implementation, sharing information, adjusting policies among the related ministries and agencies, and ensuring that they address ESD through close coordination.

#### (a) Dissemination and Enlightenment

ESD is scarcely recognized even in places of education and where regional activities take place. The concepts of ESD continue to be put in order. However, as explained in Section 2 (3) (c) (ESD in Japan), it is a "program for promoting changes in individual awareness and action, and developing them into community building efforts." ESD is not an entirely new program, and it could be implemented by developing existing education. We are determined to press ahead with the dissemination and enlightenment of ESD by explaining in an easy-to-understand manner so that all educators and regional activists better understand ESD. Since government's programs alone are inadequate to spread ESD everywhere, the dissemination and enlightenment of ESD will be pursued in conjunction with various implementing organs.

#### (b) Implementation in the Community

Through sharing experiences in addressing ESD programs in the region, coordination and collaboration at the site level would be improved, resulting in the spread of similar programs to other regions. For example, the United Nations University has been proposing and promoting the building of bases as a mechanism to facilitate coordination and collaboration in these regions. We expect that regional characteristics will be considered for these programs and region building based on a new concept will begin, thus creating a sustainable community. For this reason, ESD will be pushed through with emphasis on community-based programs, supporting progressive approaches in the community.

### (c) Programs at Institutions of Higher Education

In the first stage of the decade of ESD, the roles of institutions of higher education are especially important. For universities and graduate schools, we intend to facilitate programs that introduce ESD-related education in the process of nurturing professionals in each field. In addition, we will support their roles as institutions to conduct survey studies that help our country and the world create sustainable societies, as well as their own programs so that they serve as major implementing institutions in the community.

In addressing these programs, it is important to utilize advanced information and communications technology (ICT), such as Internet broadcasting. Furthermore, it would be effective to introduce a mechanism by which people can learn, study, and conduct research at home and abroad based on their own experiences and are able to earn credits.

## (2) Concrete Measures to Promote in Japan

### (a) Creation of Vision and Exchange of Opinions

Incorporating the perspectives of sustainable development into various basic policies and plans related to sustainable development will facilitate education and implementation activities related to sustainable development in various places. Various related plans, such as the Basic Environment Plan, the Basic Plan for Food, Agriculture and Rural Areas, the Basic Plan for Forests and Forestry, the Basic Plan for Forests and Forestry, the Basic Plan for Energy, the Plan for Infrastructure Improvement, and the Basic Plan for Consumers, include the viewpoints of sustainable development. We will ensure that related plans to be formulated in the future incorporate the perspectives of sustainable development as much as possible. Moreover, we will examine the images of

a sustainable society based on the content of various plans concerning sustainable development by garnering the wisdom of the public and strive to explain these plans to the public.

Pursuant to the liaison conferences, we will hold, as needed, round-table meetings with academic experts, educators, and related persons from NPOs and enterprises, and exchange opinions on the method of promoting ESD.

(b) Promoting Negotiated Policy-Making and Autonomy of the Parties Concerned

In the policy-making process, inviting a broad-range of opinions from implementing organizations is effective in improving the quality of a policy and making it more reliable. Providing information to related implementing institutions will allow them to study sustainable development and create their own ideas about it. Consequently, where policies concerning sustainable development are concerned, we must bring citizen participation processes into action as early as possible. To help the parties concerned obtain information on policies, access to studies and research on sustainable development must be improved by posting the information on the home page as much as possible.

(c) Building and Management of Partnerships and Networks

With regard to the various measures included in this plan of implementation, liaison conferences will be held as needed, ensuring that the related ministries and agencies implement said measures steadily by maintaining close contact among them.

With a partnership involving schools, social educational facilities, NPOs, enterprises, and the government, ESD will be diffused to a broad range of educational institutions and places where regional activities take place. For this reason, the related

ministries and agencies will carry out the measures related to ESD, while bearing in mind the building of partnerships and networks with these parties.

In addition, effective coordination and producing methods for ESD in the region will be examined in a practical manner.

Additionally, we will train personnel to assume the roles of regional coordinators and producers. Our efforts include, in addition to personnel development, the examination of a scheme that will facilitate coordination for ESD as well as the creation of required organizations. To be more precise, we will examine hub facilities in the region, such as volunteer centers, NPO support centers, and social educational facilities, and strategies to allow implementing organizations including NPOs and enterprises to have coordinating and producing functions of ESD. In this way, we will also review the best methods of utilizing such regional resources as personnel, places, opportunities, and nature for school education.

#### (d) Development of Skills and Human Resources

We will improve the lecture courses on ESD in the various training programs offered by the government.

To improve the quality of schoolteachers, we provide training sessions targeting teacher consultants of the prefectural boards of education and ensure that the consultants who participate in the training sessions are able to offer training programs based on the training sessions in various communities. We will ensure that the training sessions include lectures on the concepts and guidelines of ESD, as well as on the preparation of training plans and ways to utilize outside talent.

In addition, for the leaders of regional activities, we will make efforts to promote ESD and enlighten them about it, secure personnel equipped to implement ESD, and

provide information on ESD leaders who are able to carry out ESD. Moreover, for the leaders and teachers engaged in regional environmental activities, we strive to offer special training courses in which they can participate together and ensure that the courses include the content of ESD.

In corporate training, it is important that employees attend training courses on business projects that comply with sustainable development. For this purpose, we intend to offer enterprises with information helpful for corporate training programs.

We will ensure that teacher-training courses offered by universities cover the details of ESD and students acquire practical teaching methods.

By accelerating the programs noted above, we are determined to develop personnel who will become leaders in creating a sustainable society. Moreover, we will make efforts to offer information to all quarters, including educational institutions, so that personnel having gone through our various ESD programs play an active role in promoting ESD. We will make sure that when these personnel offer their professional services, they are paid adequate gratuities and that their abilities to advance ESD are incorporated in the economy.

In addition to personnel, we will remain supportive of the efforts of regional implementing organizations, such as NPOs, to improve their organizational strength.

#### (e) Survey Study and Program Development

We will advance survey studies and program development for ESD, as well as implement new programs and present case examples. In addition to promoting the development of existing programs and education throughout these programs, we will ensure that more educators are able to understand and practice ESD.

It is desirable that ESD programs reflect local conditions and are rooted in the region. Therefore, we encourage survey studies on creating a sustainable region that takes regional characteristics into account, and support program development in model regions. In these cases, we will consider reflecting and utilizing the results of these survey studies in educational curriculums. In addition, we will strive to gather data on the effectiveness of ESD.

#### (f) Utilizing Information and Communications Technology (ICT)

Since ICT can be used to transmit information to many people while economizing energy and resources, which is convenient when consolidating observation data at various locations, we encourage the effective utilization of ICT.

On the other hand, as the Internet is very useful for research and study, as well as for disseminating information about resources and course materials for ESD, we will make positive efforts to dispatch information concerning ESD on the Internet.

#### (3) Programs Expected of Each Organization

It is important that diversified implementing organizations deal with ESD in view of their own capacities. Our government will remain supportive of their efforts.

#### (a) Individuals and Families

The most important goal of the programs in the decade leading up to 2014 is changing individual awareness and actions. It is, therefore, vital that we begin with day-to-day programs. Of late, we quite often hear proposals for new lifestyles that include the concept of sustainability, such as lifestyles of health and sustainability (LOHAS), or we see rising sales of products that encompass the perspectives of the environment, economy, and society like sustainability and fairness. These cases remind us that it is vital

to expand our programs that reflect these concepts in our day-to-day life. In view of the above, we are expected to undertake the following programs and roles:

- The concepts of "slow life" and "LOHAS" are spreading and being mirrored in our daily life.

- We must change our lifestyles by keeping in mind "green" purchases and fair-trade products, practicing energy-saving lifestyles, and recycling wood resources. When building or renovating our houses, we must strive to enhance environmental efficiency and harmonize with the environment.

- We should promote nutritional education and healthy dietary habits as a national movement in every domain of society, such as households, schools, child-care centers, and local communities.

- Each family must raise children who are able to think and act, have a heart that values people, things, and the environment in their relationships with other people, and can talk about relations with other regions, both domestic and foreign.

- We must participate in environmental preservation activities, social services, international exchange activities, and activities involving various issues in other regions. Positively joining policy-making processes means that we are participating in the process of building a better community and society.

#### (b) Schools

Throughout the entire course of education from kindergarten to university, educational institutions are expected to provide ESD depending on the developmental stages of students. Educational activities, which have already been addressed as the "zest for living," considerably overlap with ESD programs. With respect to the values to which ESD attaches importance, reading passages about the environment and human rights,

and improving reading comprehension, for example, will also deepen our understanding of ESD programs at the same time. As noted, when a social issue is taken up or we participate in an activity, it will stimulate willingness of the part of the learner. Furthermore, it is vital to practice "integrated intelligence" by effectually combining this cross-curriculum teaching with the period of integrated study.

ESD, which is a comprehensive program, will allow teachers to provide high-quality education without imposing inordinate burdens on them by making use of outside talent, places, or opportunities. In view of this, educational institutions are expected to undertake the following programs and roles:

- Primary schools and junior and senior high schools must promote ESD throughout all educational activities, including each subject or the period of integrated study. They must utilize school boards of trustees or promote comprehensive programs in school administration such as through PTA activities.

- We must make sure ESD is offered as a comprehensive program, with due consideration given to coordination among different school grades or primary schools, and junior and senior high schools, as well as collaboration with the regional community.

- Encourage nature-based experiences, experience-based activities in rural districts, work-experience activities, and other various experience-based activities.

- School facilities, which are places of learning as well as living, must be environmentally friendly, and well-equipped school facilities must be utilized for education.

- Institutions of higher education, such as universities, must provide education and research for sustainable development depending on the characteristics of each university. They must develop excellent teaching materials and curriculums for ESD and use them in places of learning. They are also expected to drive programs utilizing the

expertise of institutions of higher education in collaboration with the local community or collaboration among such institutions.

#### (c) Local Communities

The local community is where activities based on specific features of the region's nature and culture are conducted. To promote a community-based approach, the various roles played by local communities that constitute the region have become very important. Local communities are expected to undertake the following programs and roles by incorporating ESD's perspectives in diversified community activities participated by various people irrespective of age and sex:

- Utilize various activities in the community, such as child rearing, town-building activities, festivals, playgrounds, sports clubs, and activities addressing community issues. When advancing such an approach, regional communities must coordinate with educational institutions, NPOs, and enterprises.
- In accordance with the improvements made in regional education, create places of amusement and learning where children can freely play and engage in various activities.
- Use outside resources for school education and support high-quality education.

#### (d) NPOs

The NPO, which is spontaneously made up of people sharing awareness toward common issues and who are engaged in various activities, is one of the most promising ESD implementing organs. NPO activities are geared toward promoting shared interests for the common good of the general public. Sustainable development is not intended to

benefit specific people, but develop society as a whole from environmental, economic, and societal standpoints. For this reason, creating a sustainable society is in accordance with NPO activities, with many of them already active based on the ESD perspectives. By reviewing its current activities, it could be said that any given NPO has high potential to implement ESD programs with relative ease. NPOs are expected to undertake the following programs and roles:

- In addition to the individual themes of NPOs, such as environmental preservation, improving welfare, town building, and nutritional education, NPOs will be able to push ahead activities while being involved across different fields. With ESD incorporated in various activities, such as a policy-proposing activity, diffusion and enlightenment activity, and experience-based activity, NPOs should be engaged in various activities while being aware of their efforts to help create a sustainable society.

- Based on their expertise of each activity theme, NPOs must serve a leadership role in ESD activities.

- To promote programs involving various implementing organizations, NPOs must serve the roles of producer and coordinator in advancing ESD programs coordinated with school education, social education, corporate education, and community activities.

- Develop ESD leaders, coordinators, and producers.

- Research, study, and disseminate promotional methods for ESD based on practical examples.

#### (e) Enterprises and Industrial Organizations

To overcome the various environmental problems that we face, such as global warming, refuse and recycling, the management of chemical substances, anti-pollution

measures, as well as realizing sustainable development, we require programs targeted at building a society where both the environment and economy improve concurrently. In addition, public concerns about the social aspects of business activities, such as equality between men and women, consideration for employees, employment of persons with disabilities, and child labor issues in overseas factories, have been increasing. From the perspective of social responsibility, this means that business activities must be pursued based on three elements: the environment, economy, and society. Given the recently rising expectations in society, voluntary efforts by enterprises to address these issues have been spreading.

To realize business activities conscious of sustainable development requires increased awareness of ESD by each person in the related implementing organizations. Enterprises and industrial organizations, with their diversified networks in providing products, services, and information, and maintaining relationships with consumers, suppliers, employees, and the community, as well as global business deployment, are expected to play a large role in promoting ESD.

In view of the above, enterprises and industrial organizations are expected to undertake the following programs and roles:

- With the three elements of the environment, economy, and society as bases, enterprises and industrial organizations are expected to pursue and strengthen business activities in accordance with sustainable development at home and abroad.
- Introduce ESD in corporate education.
- Disseminate know-how of ESD by using the various networks owned by enterprises and industrial organizations.
- Cooperate in community activities in collaboration with schools, social educational facilities, NPOs, and local authorities.

- By making most of their expertise and specialties, provide personnel for school education, social education, and community activities, as well as development programs for ESD that can be utilized at schools. Offer land and facilities for the purpose of ESD.

(f) Farming, Forestry and Fishery Operators, and Related Organizations

Although farming, forestry, and fishery operators are included in (e) Enterprises and Industrial Organizations, their business activities play major roles in maintaining and managing the regional natural environment, their places of business are rooted in the local community, and they handle food, an essential element for human existence. In view of these facts, these operators are specifically expected to undertake the following roles and programs:

- Offer places and opportunities for experience-based activities in farming, forestry, and fishing communities with their multi-faceted aspects, such as actual life experience, nature-based experience, and work experience.

- In view of the fact that their business activities serve the purpose of creating a sustainable community as they help maintain and manage the natural environment in the community and promote the regional economy and industry, these operators will play a key role as leaders in community building through cooperating with various implementing organizations like schools, NPOs, and administrations.

(g) Mass Media

Since the mass media are able to acquaint us with difficult-to-understand living situations and the natural environment in overseas countries, as well as introducing advanced programs to other regions, they can disseminate information on ESD. Images

on TV or the Internet are highly effective in changing our awareness and improving our understanding. For this reason, the mass media are expected to undertake the following programs and roles:

- By taking advantage of newspapers, TV, and radio, the mass media continuously provide information on ESD ranging from global-scale topics to community-based news. They can introduce nationwide case examples or provide information on participation in various activities in regional communities.

- They can offer opportunities to diffuse ESD by opening and supporting events.

#### (h) Teacher-Training Institutions

Since teachers possessing knowledge and skills about ESD can provide effective ESD to students, teacher-training institutions are expected to undertake the following programs and roles:

- Teacher-training institutions can improve the leadership of teachers concerned with ESD and provide training to enhance lessons. In this case, they should also take up a method of preparing training programs, methods of collaborating with the outside, and teaching methods focused on inquiry and practice.

- Teacher-training courses offered by university education departments must also proactively handle ESD, as well as offer practical teaching methods for ESD.

#### (i) Public Centers, including Community Centers, Libraries, Social Educational Facilities such as Youth Educational Facilities, Volunteer Centers, Consumer Centers, and Centers for Women

A community center attracts diverse organizations, making it an ideal place for exchanges through education, as well as taking on the characteristics of a hub for the community. Since the library, in addition to lending out ESD-related books, has a wealth of materials concerning the nature and culture of the community, it must be used in implementing ESD programs. The youth educational facility in each region can be expected to develop young people who can participate in creating a sustainable society in a responsible manner.

Other public centers, such as volunteer centers, consumer centers, and centers for women can be turned into the places for implementing ESD.

These facilities can be expected to undertake the following programs and roles:

- Offer places and opportunities for ESD.
- Serve the role of a base for ESD in the community. Assume the roles of coordinator and producer by coordinating with various organizations.
- Develop personnel who can lead, coordinate, and produce in promoting ESD.

#### (j) Local Authorities

The local authorities serve the role of solving wide-ranging regional issues in conjunction with various organizations in the community, and thus have considerable influence over promoting ESD there. For this reason, we can expect them to undertake the following programs and roles. These programs, however, must be implemented, with citizens, primary schools and junior and senior high schools, local companies and universities participating in the projects.

- Based on the content of this plan of implementation, various plans, including the comprehensive plan for the region, must introduce the concepts of sustainable development. Local authorities must draw up a new or revised Local Agenda and grapple

with the creation of a sustainable community. The Local Agenda must include a plan of implementation for ESD.

- Implement community building while encouraging citizen participation. In order for citizens to decide on measures for sustainable development or community building, the local authorities must proactively provide information to them.

- Offer opportunities for ESD to various organizations in the region, as well as encouraging the creation of programs rooted in the community.

- When implementing measures related to ESD, local authorities must do so in collaboration with education-related organizations, such as the board of education and departments related to planning, community residents, the environment, urban affairs, agriculture, forestry, fisheries, and public corporations.

- Disseminate information concerning various ESD programs in the region, as well as pushing ahead with coordination with the parties concerned in the region and creating a network. In this case, they must implement programs that make the most of organizations already engaged in ESD activities and those involved in activities based on the values and principles of ESD.

- Local authorities must play the role of coordinator by putting together education-related institutions, NPOs, and enterprises in the community, as well as that of producer by initiating activities and projects involving diverse organizations in relation to various regional activities and issues.

- Promote coordination among regions and share advanced examples in a study group that includes local authorities or the places of information exchange.

#### (4) Promotion of International Cooperation

In view of the fact that ESD became addressed in the world on account of our proposal, we are determined to make a positive contribution to ensure that ESD programs are promoted in international society. With MDGs targeted at eradicating poverty and famine, as well as EFA aimed at achieving universal primary education and gender equality in education, international society has been addressing these challenges. Dealing with various issues including poverty and building a peaceful and sustainable international society would allay concerns and contribute to the ongoing development of our country. For these reasons, our country will strive to advance international cooperation.

(a) Collaboration and Cooperation with U.N. Agencies

Through contributions to the UNESCO, U.N. Development Programme (UNDP), U.N. Environment Programme (UNEP), and U.N. University, we will support ESD-related projects, such as opening seminars, conducting surveys and research, drawing up educational programs, and cultivating experts. In addition, we are resolved to advancing the decade of ESD in the U.N. General Assembly and UNESCO General Assembly.

(b) Promoting Regional Cooperation in Asia

By utilizing the frameworks of ASEAN+3, Asia Cooperation Dialogue (ACD), ASEAN-Japan Cooperation, the Tripartite Environment Ministers Meeting involving China, Japan and Korea (TEMM), the U.N. Economic and Social Commission for Asia and the Pacific (ESCAP), and holding dialogues and workshops, we will continue to cooperate with other Asian countries in creating educational programs and a plan of implementation for ESD.

#### (c) Support for the Development of Human Resources in Developing Countries

We endeavor to make a contribution to the cultivating of personnel responsible for implementing sustainable development in developing countries by implementing ESD-related projects, dispatching experts, and holding seminars at home and abroad. We also strive to nurture personnel in Japan who are responsible for support rendered to developing countries. In addition, other ODA projects will be implemented in accordance with the concepts of sustainable development.

#### (d) Collaboration with Organizations and Support for Programs by Private Organizations

In international cooperation, such private organizations as NPOs and enterprises have been playing larger roles. Consequently, our government's international cooperation will be pursued in close collaboration with private organizations. In particular, we seek to effectively implement projects by collaborating with private organizations familiar with local situations and fully understanding their needs.

To promote programs pursued by private organizations, we will continue helping them through our existing support measures and make efforts to improve and strengthen these measures. The local authorities are maintaining information exchanges with sister cities overseas, and will continue to disseminate information on ESD and promote mutual international cooperation by using these channels.

#### (e) Increasing Global Understanding by the Public

Since promoting global understanding by the public will become crucial in promoting international cooperation, we are resolved to facilitate education on global understanding and nurture human resources with a global view.

#### (f) Disseminating Information to the International Community

By taking advantage of international and regional-level conferences, we proactively disseminate information about our programs to the global community in order to encourage international cooperation.

### 5. Evaluation and Review

#### (1) Evaluation

It is necessary to evaluate the fact that ESD programs are being widely accommodated, and that the awareness and actions of the organizations concerned are changing, with Japan and the world getting closer to creating a sustainable society. In so doing, it would be necessary for us to discuss how to evaluate the effectiveness of these programs once ESD is introduced. The methods of evaluation will be reviewed in line with the research status of pedagogy and sociology, or discussions at the UNESCO about such evaluation. We are determined to make evaluations with the diverse parties concerned that participate in the evaluation process.

#### (2) Mid-Year Goals and Review

We will conduct an annual inspection of the situation of progress by our government from 2006 onward. With respect to programs in the first five years up to 2009, we will address the three key components of the environment, economy, and society centered on the environment and development, which are priority agendas, and review those programs in 2010 based on their results.

(3) Evaluation in the Final Year

By the end of 2014, we will evaluate the prior decade and discuss programs beyond 2014.

# ESD policy and implementation at local level in Japan

Respecting the Process of Local Policy Formulation and Implementation,  
and Adding ESD Implication to Existing Activities for Sustainability



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## 1. INTRODUCTION

In response to the release of DESD International Implementation Scheme (UNESCO, 2005)<sup>2</sup> at international arena, Japanese Government has developed National Action Plan of ESD and has implemented some related programmes. Currently, ESD programmes in particular in the field of Environmental Education, have implemented at local level under the support of local / national government and NGO networks. In this paper, it describes: (1) priority issues on ESD in Japan; (2) roles of local authority for ESD; (3) ESD implementation of local level; and; and (4) future of ESD implementation at local level.

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<sup>2</sup> UNESCO. 2005. United Nations Decade of Education for Sustainable Development (2005-2014), International Implementation Scheme, October 2005, UNESCO, Paris

## 2. PRIORITY ISSUES ON ESD IN JAPAN

Among the diversity of issues including environment, economy, and society, what Japan is now required to do is to incorporate “environmental consideration” in their socio-economic systems (Inter-Ministerial Meeting on the UNDESD, 2006)<sup>3</sup>. In this sense, Japanese Government stance on ESD is that Japan promotes programmes that take into account the issues related to sustainable development on a global scale involving developing countries, while dealing with issues concerning “environmental preservation” that must be dealt with by developed countries, and addressing the integrated development of the environment, economy and society.

Recalling the history of Environmental Education in Japan, it is said to have started in the form of “nature conservation education” and “pollution education”. Nature conservation education has started in Miura peninsula of Kanagawa prefecture as the citizens’ activities for nature conservation in the mid of 1950s, while the pollution education has started in the late 1960s. Pollution education was the other environmental conservation movement for the protection of children’s health from environmental contamination called “*Kowgai*, i.e. pollution”, which was due to the rapid economic development with short-sighted national development plans.

Nature conservation education as activity centred on nature observation, has stressed the importance of outdoor learning activities and hands-on experiences through ecological observation, by involving local citizens, teachers and students. Further, nature

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<sup>3</sup> Inter-Ministerial Meeting on the United Nations Decade of Education for Sustainable Development, 2006, Japan's Action Plan for the "United Nations Decade of Education for Sustainable Development" (Provisional translation)

conservation education also had the perspective of popularizing ecological environmental morals besides enforcing manners to be practiced in the fields. While, pollution education has stressed the importance of the concept of human rights and respect for human life was touted and gave the movement. Both educational activities for sustainability respect collective actions through field based approach in cooperation with local citizens, teachers and students.

Starting from the actual scenes of environmental problems, both of nature conservation education and pollution education tried to eliminate social contradictions from an ecological perspective (environmental perspective in the sense of ESD) and the pollution victim's perspective (socio-economic perspective in the sense of ESD) respectively. It can be seen that many of the messages through these educational activities overlap with the requirements for a sustainable society specified in the declaration of the Thessaloniki Conference held in 1997 (UNESCO, 1998)<sup>4</sup> (Table 1).

Table 1: Thessaloniki declaration 10 -11 (extraction)

10. The reorientation of education as a whole towards sustainability involves all levels of formal, non-formal and informal education in all countries. The concept of sustainability encompasses not only environment but also poverty, population, health, food security, democracy, human rights and peace. Sustainability is, in the Final analysis, a moral and ethical imperative in which cultural diversity and traditional knowledge need to be respected.

11. Environmental education, as developed within the framework of the Tbilisi recommendations and as it has evolved since then, addressing the entire range of global issues included in Agenda 21 and the major UN Conferences, has also been dealt with as education for environment and sustainability.

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<sup>4</sup> UNESCO. 1998. International Conference of Environment and Society; Education and Public Awareness for Sustainability, Declaration of Thessaloniki., Thessaloniki, Greece, 1998

When seeing the activities at local level in Japan, many activities for a creation of sustainable society can be seen nowadays, through the implementation of environmental education, citizenship education, development education, gender education, peace education and so forth, done by school systems, non-formal education, higher education institutions, business and industries, mostly in cooperation with local government. However, as pointed at the Japan's Action Plan for the DESD, it can be said that implementation of programmes while dealing with issues concerning environmental preservation, i.e. environmental education, can be one of effective ways for the promotion of DESD at local level in Japan, because of historical experience from educational movement for sustainability, such as “nature conservation education” and “pollution education”, which have contributed toward Japanese sustainable society and have had high potential to make a link with environmental, social and economic perspectives with collective manners.

### **3. ROLES OF LOCAL AUTHORITY FOR ESD**

According to the Japan's Action Plan for the DESD, it is stated that “ESD is not supposed to be implemented by the government and local authorities alone, and it is important that ESD is carried out at any place having an impact on individual awareness (Inter-Ministerial Meeting on the UNDESD, 2006). As roles of local authorities for the promotion of ESD, it is stated that the local authorities serve the role of solving wide-ranging local issues in conjunction with various organizations in the community, and thus have considerable influence for the promotion of ESD. For taking this role, it is expected that the local authority develop and implement ESD related programmes, with citizens, primary schools and junior and senior high schools, local companies and universities participating in the programmes. The followings are the roles of local authority as recommended in the Japan's Action Plan for the DESD (Table 2.).

Table 2: Concrete Measures to Promote ESD in Japan, by Local Authorities

Based on the content of this plan of implementation, various plans, including the comprehensive plan for the region, must introduce the concepts of sustainable development. Local authorities must draw up a new or revised Local Agenda and grapple with the creation of a sustainable community. The Local Agenda must include a plan of implementation for ESD.

Implement community building while encouraging citizen participation. In order for citizens to decide on measures for sustainable development or community building, the local authorities must proactively provide information to them.

Offer opportunities for ESD to various organizations in the region, as well as encouraging the creation of programmes rooted in the community.

When implementing measures related to ESD, local authorities must do so in collaboration with education-related organizations, such as the board of education and departments related to planning, community residents, the environment, urban affairs, agriculture, forestry, fisheries, and public corporations.

Disseminate information concerning various ESD programmes in the region, as well as pushing ahead with coordination with the parties concerned in the region and creating a network. In this case, they must implement programmes that make the most of organizations already engaged in ESD activities and those involved in activities based on the values and principles of ESD.

Local authorities must play the role of coordinator by putting together education-related institutions, NPOs, and enterprises in the community, as well as that of producer by initiating activities and projects involving diverse organizations in relation to various regional activities and issues.

Promote coordination among regions and share advanced examples in a study group that includes local authorities or the places of information exchange.

Source: Inter-Ministerial Meeting on the United Nations Decade of Education for Sustainable Development, 2006, Japan's Action Plan for the "United Nations Decade of Education for Sustainable Development" (Provisional translation)

As described in Table 2, local authority must introduce the concept of sustainable development for the development of comprehensive local policy. The introduction is not just done by the integration and coordination among issues and perspectives of environment, society and economy, but process of the introduction, e.g. manner of participation, communication, information sharing and decision making (Table 2). Such participatory and dialogical manners at the process of introduction for local policy making have inherent values in terms of developing ownership under the shared vision at local level, which is stressed as points to be demonstrated for ESD in the DESD International Implementation Scheme (UNESCO, 2005).

#### **4. ESD IMPLEMENTATION AT LOCAL LEVEL**

For the implementation of DESD, it is expected that each implementing organisation at local level which is dealing with ESD in view of their capacities, takes a role for the promotion and works together as collective actions. In particular, the followings can be implementing bodies for ESD implementation at local level: (1) individuals and families; (2) schools; (3) local communities; (4) NPOs; (5) enterprises and industrial organisations; (6) farming, forestry and fishery operators, and related organisations; (7) mass media; (8) teacher training centres; (9) public centres; and (10) local authorities. For the implementation at local level, the following programmes are example, which have been currently done in support of national policy.

UNESCO Associated School<sup>5</sup> (Formal Education): 24 model schools (as of March 2008), which are respecting the concept of UNESCO, have been implemented school-based ESD activities. The project has been in support of the Japanese National Commission for UNESCO.

Period of Integrated Studies (Formal Education): the Ministry of Education promotes the "Period of Integrated Studies", which is holistic, integrated, comprehensive and cross-disciplinary in nature and includes elements such as international understanding, environment, welfare and health. Also, the experiential learning and the skill development for problem solving are emphasized in the period. The period is regarded as high potential for the promotion of ESD, with Teacher's strong initiatives in respect of interdisciplinary areas and/or local context.

ESD Promotion Programme (Non-Formal Education): 14 ESD model projects (as of March 2008) have been done in support of the Ministry of Environment. Through these ESD practices under the 14 model projects, effective views and system, and promotion factors have been extracted since 2007, by holding a series of regional forum. It is planned that the lessons learnt from the practices will be applied for the promotion of ESD at nationwide.

In addition to the above, there are various ESD related activities, such as, (1) experiential learning in the field of agriculture and fishery in support of the Ministry of Agriculture and Fishery; (2) environmental education programme at city parks in support

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<sup>5</sup> The ASP network, which started with a membership comprised of 15 member states and 33 institutions/schools, has expanded to 175 member states and 7,815 institutions/schools (as of November 2005).

of the Ministry of Land and Transportation; (3) energy education programme in support of the Ministry of Economics and Industries; and (4) development of basic plan for food education in support of cabinet. As national policy such as, the Basic Environment Plan, the Basic Plan for Food, Agricultural and Rural Areas, the Basic Plans for Forests and Forestry, Basic Plan for Energy, the Plan for Infrastructure Improvement, and the Basic Plan for Consumers, include the views of sustainable development, therefore, local policy easily incorporate the views of sustainable development as basis.

With regard to ESD policies in relation to climate change are CO<sub>2</sub> emission issues, it is incorporated into the various national policies, such as forest conservation, urbanization, energy utilization, production and consumption. The Basic Environmental Plans and the Basic Plan for Energy provide the basis on the climate change issues, it influences to the content of local policy as treatment of climate change. Under this situation, energy saving campaign, tree planting, green purchasing activities, energy saving activities, which are linked to sustainable living, have been done in many areas at local level.

Currently, some new approaches can be seen, local ESD activities are done by multi-stakeholders in support of NGO/NPO national network, e.g. ESD-J, in cooperation with higher education institutions and local government. In case of ESD-J, local ESD activities are done by working with local NGOs and Higher Education Institutions in cooperation with local government. It is expected that collaborative works by multi-stakeholders for the promotion of local ESD activities.

## **6. THE FUTURE OF ESD IMPLEMENTATION AT LOCAL LEVEL**

– Respecting the Process of Local Policy Formulation and Implementation, and Adding ESD Implication to Existing Activities for Sustainability

For the effective development of ESD at local level, it is needed to consider: (1) respecting the process of local policy formulation and implementation, and (2) adding ESD implication to existing activities for sustainability. With regard to “respecting the process of local policy formulation and implementation,” process of local policy formulation and implementation with participatory and dialogical manner needs to be highly promoted for the development of ownership under the shared vision. With regard to “adding ESD implication to existing activities for sustainability”, by putting the sense of ESD into current educational activities for sustainability, many activities at local level can be visualized as ESD practices. In this sense, in promoting environmental education activities at local level, the context of ESD that is being debated today needs to be the basis for future environmental education.

For the identification of ESD implication, the author stresses the following ten perspectives in particular are of great importance: (1) awareness of relationships; (2) contextualization of activities; (3) formulation of sustainability principles and concepts; (4) respect for environmental ethics and diverse values; (5) utilization of and learning with diverse educational methods and higher-order thinking skills; (6) interaction amongst diverse education community; (7) collaborative approach and capacity building; (8) social learning mechanism and creation of a lifelong learning system; (9) connections with international education initiatives; and (10) positive societal transformation.

## 6.1. Awareness of Relationships

The DESD International Implementation Scheme (DESD-IIS) (UNESCO, 2005) emphasizes that activities should be conducted with the three sustainability realms (environment, society and economy) in healthy condition. All countries are directly affected by social issues such as employment, human rights, gender, peace and personal safety, as well as by environmental problems such as water and waste. Additionally, all countries need to address economic issues such as poverty reduction and corporate responsibility and accountability. HIV/AIDS, immigration, climate change, and urbanization are all deeply related to the three realms of sustainability. As this is the case, when considering such global and highly complex problems, it is essential that one does not only consider them merely as environmental problems but also as social and economic problems and that one have an awareness concerning inter-phenomena relationships (*awareness of connectedness*) to understand their interrelatedness / interdependency. One must also be aware of the various subjects that are involved. Awareness of inter-subject relationships (*awareness of inclusiveness*) -- such as between various organizations and stakeholders -- is particularly essential.

In today's environmental education one can see an emphasis on an *awareness of connectedness* and *awareness of inclusiveness* through cross-curriculum and interdisciplinary curriculum in the period of integrated studies. Education practices that emphasize this kind of *awareness of relationships* make it possible to create linkages with other educational initiatives dealing with various themes and enables improvement of awareness for sharing community resources, self awareness and civic awareness.

## **6.2. Contextualization of Activities**

The DESD International Implementation Scheme points out that, "ESD is based on local needs, perceptions and conditions, but acknowledges that fulfilling local needs often has international effects and consequences." On one hand, local contextualization (*awareness of depth*) linked with spirituality, culture and history is important. On the other hand, global contextualization (*awareness of scope*) linked with globalization and market economy is also important. In today's environmental education there are many examples of activities based in local context, however examples that are based on both perspectives. Local environmental education needs to be given meaning within a global context, not just its local. Additionally, awareness needs to be heightened concerning the international effects of local educational initiatives.

## **6.3. Formulation of Sustainability Principles and Concepts**

The principles of sustainability have been highly debated throughout the 1990s. Today, debate continues about not only "sustainability of the natural environment / ecological sustainability" and "sustainability of the social environment / social equity," but also about "sustainability of spiritual environment / ethics, values, diversity," and there are linkages amongst all of these perspectives. The DESD International Implementation Scheme emphasizes the need for ESD to "accommodate the evolving nature of the concept of sustainability." To debate, learn and create this evolving concept of sustainability, will require educational practices based on a collaborative creation of values or "knowledge acquisition / linkage", not the traditional "transfer of knowledge".

#### **6.4. Respect for Environmental Ethics and Diverse Values**

The ways communities decide how to approach sustainable development will be closely linked to the values held in these societies. Understanding your own values, the values of the society you live in, and the values of others around the world is a central part of educating for a sustainable future. Each nation, cultural group, and individual must learn the skills of recognizing their own values and assessing these values in the context of sustainability. Which values to teach and learn in environmental education programmes is a matter for discussion. The goal is to create a locally relevant and culturally appropriate values component that is informed by the principles and values inherent in sustainable development.

#### **6.5. Utilization of and Learning with Diverse Educational Methods and Higher-order Thinking Skills**

In order to create the values of sustainable development and advance behavior and attitudes towards positive social transformation, ESD needs to utilize a variety of pedagogical techniques that promote higher-order thinking skills. In particular, problem-solving, vision-building, and consensus building cannot be accomplished merely with pedagogical techniques based on the "transfer of knowledge". Utilizing participatory/dialog style learning and teaching methods in this process enable collaborative creation of values or "knowledge acquisition/linkage." Learning related to the development and application of these learning processes raises awareness and supports citizen independence based on participation and consensus building. Higher-

order thinking skills such as systems thinking that considers the interdependency of phenomena, vision-building supported by future thinking, action research that repeatedly stimulates theory and practice, and participatory evaluation, heighten awareness related to time and relationships and contribute to the advancement of a collaborative approach and improved awareness.

## **6.6. Interaction amongst Diverse Education Community**

The DESD International Implementation Scheme defines four major thrusts of education for sustainable development: (1) improving access to quality basic education; (2) reorienting existing education programmes; (3) developing public understanding and awareness and (4) providing training. In order to create ESD programmes that contain the four thrusts, all sectors of the education community will have to work together in a cooperative manner. Formal education (i.e., primary, secondary) will need to work closely with the non-formal education sector (e.g. non-governmental organizations, social education facilities) and with new partners from the informal education sector (i.e. the media and interpersonal communication). By weaving the context of ESD into environmental education, its significance as a life-long process will be strengthened and it will touch the lives of citizens at different ages.

## **6.7. Collaborative Approach and Capacity Building**

In the development of environmental education, the role of educator varies greatly depending on the goals. In environmental education that aims to transfer know "about" the environment, the educator plays the role of "conveyor of knowledge".

However, in environmental education that emphasizes experiential learning "in" the environmental, the educator plays the role of "field experience organizer". Additionally, in environmental education that focuses on environmental improvement and action "for" the environment, the educator plays the role of "fellow participant and inquirer". Having fully understood the different roles that educators play according to the goals of environmental education, it is important to conduct effective communication based on educational goals. A new collaborative approach that aims for a "knowledge acquisition/linkage" and is based on action, participation and dialog, is necessary in the context of ESD. Coordination and leadership are also necessary for adjustments.

Capacity building not only for individuals but also for organizations and citizens is essential when carrying out collaborative activities. The environmental education declaration of the Tbilisi Conference indicates that the subjects of environmental education are primarily targeting individuals (individual capacity building). However, capacity building of individuals is not enough today as we seek positive societal transformation. Capacity building of organizations and citizens is essential. Of the seven strategies<sup>6</sup> put forth in the DESD International Implementation Scheme, organizational capacity (management, organization decision making, networking, partnerships, etc.) is indispensable. It would be difficult to accomplish the scheme merely with the capacity of individuals. In school education the Whole School Approach depends on the collective skills of the organization, not the individual. An essential factor is the entire school's involvement and linkages with the community. Another characteristic of ESD raised in the DESD International Implementation Scheme is citizen capacity building. Capacity building empowers citizens and improves their awareness through vision sharing, community decision making, and improvement of community issues. A collaborative process

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<sup>6</sup> (1) Vision-building and advocacy; (2) Consultation and ownership; (3) Partnership and networks; (4) Capacity-building and training; (5) Research and innovation; (6) Use of information and communication and (7) Monitoring and evaluation.

requires effective communication, as are in the goals of environmental education, as well as capacity building for individuals, organizations and citizens.

## **6.8. Social Learning Mechanisms and Creation of a Lifelong Learning System**

The role of environmental education as stated above must not just mean individual and organizational capacity building but it needs to create social learning mechanisms and a lifelong learning system in order for society to be more aware of learning. A report of the International Commission on Education for the Twenty-first Century<sup>21</sup> *Learning: The Treasure within*<sup>7</sup> explored and recommended that lifelong learning be interpreted broadly as education for the development of humans. In particular the report identifies four pillars of education (1) learning to know, (2) learning to do, (3) learning to live together and (4) learning to be; in addition to the basic human right of access to learning. These pillars do not only link education and learning with various stages in life but also cross educational fields and learning opportunities. Based on the context of ESD, Dr. Sheldon Shaeffer, director of UNESCO Asia-Pacific Regional Bureau for Education<sup>8</sup>, has pointed out the need to add "learning to transform"<sup>9</sup> to the educational principals. Treating "transformation" as an educational principle creates an

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<sup>7</sup> UNESCO. 1996. *Learning: The Treasure within*. The Report of the International Commission on Education for the Twenty-first Century. UNESCO.

<sup>8</sup> UNESCO Asia-Pacific Regional Bureau for Education

<sup>9</sup> Shaeffer, S. 2007. *Filling a Half-Empty Glass: Learning to Live Together Through Education for Sustainable Development*, Plenary Presentation, XIII World Congress of Comparative Education Societies, Sarajevo, Bosnia and Herzegovina, September 3-7, 2007.

awareness of education for transformation of individuals and society and contributes to social learning mechanisms and the creation of a lifelong learning system.

## **6.9. Linking with International Education Initiatives**

As can be inferred from Annex I of the DESD International Implementation Scheme, today's environmental education needs to consider not only "sustainable development and education" but must also be conscious of "improving access to quality basic education." In other words, it is important to situate the environmental education with respect to efforts in which the international community is already engaged. In particular the Millennium Development Goal (MDG)<sup>10</sup> process, the Education for All (EFA)<sup>11</sup> movement, and the United Nations Literacy Decade (UNLD)<sup>12</sup> have close links with various aspects of environmental education in a global arena.

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<sup>10</sup>The eight goals and 18 targets of the Millennium Development Goals constitute an over-arching framework for international development cooperation, agreed at the level of the United Nations. The provision of primary education and gender equality in education are the two areas where the MDGs overlap with the EFA agenda – other aspects of basic education, such as literacy, quality and non-formal education, are implied as conditions for the realization of the MDGs.

<sup>11</sup>The six EFA goals are concerned with extending the reach of basic education to every child and adult and with the nature of such provision – it should be available to both female and male learners of all ages, offering relevant learning and life skills and striving for ever-increasing quality. While basic education is clearly intended to have a positive impact on the quality of life and on deprivation, the nature of this impact – and the content of education, which might be most appropriate to achieve it – is a broader question. In other words, the role and provision of education are central, and this drives the EFA agenda forward; the underlying purpose of education is either assumed or considered to be a matter for wider socio-political debate.

<sup>12</sup>The UNLD situates itself within the EFA movement, where literacy is a thread through all the six goals and a condition for their attainment. As a key instrument of learning, it must be factored into the realization of all forms and stages of education. There is no meaningful access to structured

However, the focus of Japan's environmental education has been limited within a national context and does not include the context of international education initiatives. The concept of sustainable development goes beyond the category of education; it is clear that it will affect all aspects of society and system frameworks. Linking environmental education with the concepts of sustainable development and improving access to quality basic education will enable social and development projects to internalize all of its goals. Expect that environmental education continues to define and develop based on its relationship to UNLD, EFA and other international education initiatives.

## **6.10. Positive Societal Transformation**

The basic vision of the DESD from the International Implementation Scheme is “a world where everyone has the opportunity to benefit from education and learn the values, behavior and lifestyles required for a sustainable future and for positive societal transformation”. This "positive societal transformation" has turned into an educational goal. Environmental education can no longer be limited to education "in" or "about" the environment; it must shift to "transformative education" that aims to create a sustainable society and emphasize attitudes, actions and values "for" the environment.

In the future, both perspectives indicated in 2. The Future of Environmental Education as well as perspectives to date will continue to be important. At the same time, these perspectives should be carried out in stages as part of a "continuation of

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learning opportunities without close attention to the acquisition of literacy of sufficient quality. In some respects, the UNLD goes beyond the educational process, by demonstrating strategic links to other aspects of life – the acquisition and uses of literacy have an impact on mother and child health, on fertility rates, on income levels, as well as on less tangible effects such as an increase in self-confidence, initiative, participatory citizenship and cultural self-esteem.

learning and collaborating processes". It is also essential to consider the "Infrastructure to support the DESD"<sup>13</sup> as outlined in the DESD International Implementation Scheme. By advancing a "continuation of learning and collaborating processes" and emphasizing the "creation of learning mechanisms," the context of ESD can be woven into environmental education and a "citizenship" which acts on local and global responsibilities can be obtained. It is necessary to stimulate the empowerment of citizens through such a learning spiral which aims to achieve a lifelong learning society.

## **7. CONCLUSION**

ESD mirrors the concern of education with high quality. For the development of quality education for sustainability at local level, the author stresses, as described above, the importance of (1) respecting the process of local policy formulation and implementation; and (2) adding ESD implication to existing activities for sustainability.

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<sup>13</sup> (1) Leadership; (2) Governance structures; (3) Administrative support; (4) Human resources; (5) Financial resources; (6) Material resources; (7) Accountability; (8) Evaluation, tracking and reporting; (9) Vision-building; and (10) Engagement and retention.

## **Session 2**

### **ESD Policy and Implementation in Republic of Korea**

# Current Status of the Policy on Education for Sustainable Development in Republic of Korea

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## 1. History of Development of Education for Sustainable Development

Before introducing the process of development of education for sustainable development (ESD) in Korea, the condition of pursuing the ESD policy in Korea as of 2005 shall be explained briefly.

With regard to school education, the college entrance examination-oriented education -- which reflects Koreans' passion for education -- has served as a stumbling block in enhancing ESD. In addition, SD recognition by education-related ministries and teachers is quite low. Finding policies and tasks related to SD is also difficult. In the case of social education, there was no systematic education on SD in the business sector and advanced education institutes. Although environmental NGOs and Local Agenda 21 organizations operated programs on environmental education, they had not been integrated into ESD. The education programs of human rights, reunification, peace, and government, institutes and NGOs have no direct relation with ESD.

In Korea, the Ministry of Environment and Ministry of Education, Science, & Technology have dealt with ESD<sup>14</sup>. MOE has approached ESD from the perspective of environmental education, with MEST including ESD in the national education curriculum.

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<sup>14</sup> There was a major reshuffling of ministries after the inauguration of the newly elected government in 2008.

A comprehensive approach to ESD has been attempted following the launch of PCSD (Presidential Commission on Sustainable Development) in 2000.<sup>15</sup> In particular, after the recommendation by the UN Decade of Education for Sustainable Development has been adopted at the 57<sup>th</sup> meeting of the UN in December 2002, the Korean government once again recognized the significance of ESD. At that time, however, ESD has been understood and pursued only as part of the environmental education.

With the inauguration of the new government in 2003, ESD began to be discussed actively. The third PCSD, which started its term in December 2003, established an expert committee on ESD following discussions with civil society regarding the significance of ESD. In February 2004, PCSD organized the “expert committee on public relations and education” and initiated discussions on ESD beyond the purview of environmental education.

Specifically, following the proclamation of the UN Decade of Education for Sustainable Development, PCSD prepared a comprehensive policy on ESD. Based on the Korean context, the concept of ESD has been defined, and its current status has been reviewed. For the development of a strategy for ESD, a special task force team was organized. Related ministries, professors, teachers, activists, and specialists from the Korea Commission of UNESCO have participated in the deliberation process for the strategy of PCSD. As a result of such efforts, research on “the action plan for ESD” was completed in June 2005, and concrete policies began to be prepared.

In June 2005, ESD got a major boost; the president of Korea announced the “National Vision for Sustainable Development” on Environment Day. The establishment and pursuit of the “action plan for ESD” were included as a strategy for realizing the vision. In other words, the action plan was reinforced particularly within the government.

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<sup>15</sup> PCSD became KNCSD (Korean National Commission on Sustainable Development) following the enactment of the “Basic Law on Sustainable Development” in Aug. 2007.

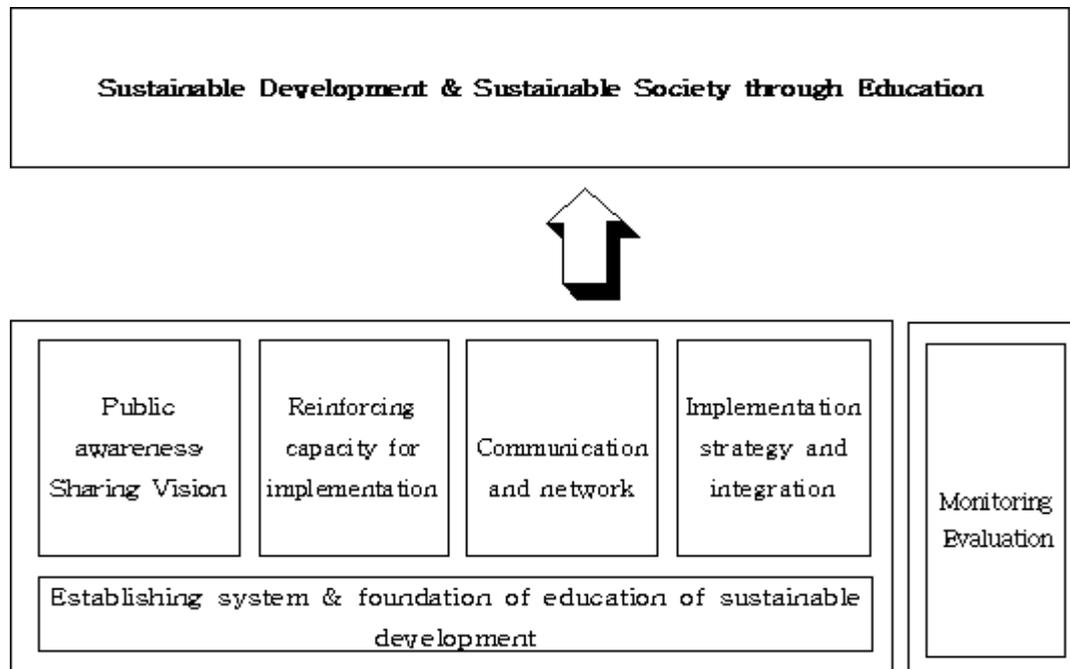
Since September 2005, the first draft of the action plan has been improved through deliberation and conference among related ministries, specialists, teachers, and activists. The refined action plan was approved as one of the “Strategies for National Sustainable Development” during the Cabinet Meeting in October 2006, and it is currently being implemented. The strategies for National Sustainable Development shall be implemented from 2006 to 2010, and they are made up of 48 tasks including the action plan for ESD.

## **2. Policies for ESD at the National Level**

As mentioned earlier, the action plan for ESD (2006-2010) as established in October 2006 is currently being implemented. The contents of the plan are briefly explained below.

### **1) Vision and Target of ESD**

- Vision: Sustainable Development & Sustainable Society Through Education
  - Individually and collectively, everyone
- Target
  - Sharing with high-level awareness and vision of SD
  - Equipped with the capacity for learning and doing for SD
  - Enforcing communication and strong networking among the stakeholders of SD
  - Participating in the process of establishing SD and creating a sustainable society



## 2) Implementation Strategies for ESD

- Strategy 1: To establish the system and foundation for the institutionalization of the ESD concept
- Strategy 2: To improve public awareness, share the vision, and secure ownership related to ESD in a participatory manner
- Strategy 3: To enforce the learning and doing capacity of individuals and groups for SD
- Strategy 4: To strengthen communication and partnership among the stakeholders of ESD

- Strategy 5: To make education and study the core strategy for establishing SD and creating a sustainable society

### 3) Action plan for ESD

The action plan shall be implemented in the following fields: establishing a foundation for ESD; raising public awareness of SD; expanding sectoral education programs, and; reinforcing cooperation.

(1) Establish a foundation for ESD.

① Formulate a comprehensive plan for national ESD.

- A comprehensive plan at the national level; includes implementation plans of stakeholders and sectors
- Correction and supplementation through the biennial monitoring and evaluation of the achievements

② Extending support to education programs for sustainable development as operated by local authorities, industry, and civil society organizations

- Pursuing the program that is closely connected with the project of establishing the foundation for “Regional Human Resources Development” by the Ministry of Education, Science, & Technology
- Enforcing support for local authorities when hosting RCE
- Enforcing government support for the ESD of the industrial sector and NGOs

## (2) Raising public awareness of SD

### ① Formulating and implementing the PR plan for SD

- Regular base survey on public awareness of SD
- Supporting the publication of introductory materials on SD

### ② Reinforcing support for SD-related policy research

- Increasing support for SD & ESD-related policy research

### ③ Finding and disseminating model cases of sustainable development and implementing the pilot project

- Holding fairs, contests, and exhibits to investigate, find, and distribute model cases.

- Expanding and strengthening support for the currently promoted related projects such as the model school for environment preservation and green school to sustainable development projects through the association among ESD, school, businesses, local governments, NGO, etc.

## (3) Expanding the education program for each area and strengthening cooperation

### ① Enriching the substance with regard to ESD in curriculums and expanding education opportunities

- Consistently expanding and strengthening ESD-related aspects in school education

-Including sustainable development education courses in the curriculum of teachers' colleges and colleges of education and reflecting them on the teaching method investigation

-Offering sustainable development education lectures in education/training courses for teachers and public servants of education

② ESD for public servants

-Providing sustainable development education for public servants in the central and local governments

③ Strengthening educational support for sustainable development in businesses and civil communities

-Strengthening educational support for sustainable management in businesses

-Developing and operating neighborhood colleges and youth lecturing programs related to sustainable development

④ Opening and supporting professional training courses on sustainable development

-Inducing the opening and operation of professional training and re-education courses for sustainable development

-Establishing supporting plans when graduate schools consider changing the existing environmental education-related curriculums to courses dedicated to the training of sustainable development professionals

⑤ Establishment of the ESD network among residents·officials·industries·academic communities

-Establishment of the ESD network for the association and activation of information exchange among various groups and areas related to ESD

### **3. Current Status of ESD Policy Promotion**

According to the national awareness survey conducted by PCSD in 2007 on sustainable development, awareness of the term “sustainable development” in the nation was 25.3%, but actual awareness of such, i.e., the percentage of those who correctly know and understand the concept, was only 5.4%. To implement sustainable development strategies on a national scale, recognition of sustainable development should be spread throughout society. ESD means creating a society where people can learn values and conduct and adopt the lifestyle needed for a sustainable future.

Accordingly, the government enacted the “Basic Law on Sustainable Development” in Aug. 2007 for the systemization of ESD. In addition, it enacted the “Environment Education Promotion Act” in Feb. 2008 to lay down the foundation for strengthening ESD in the environmental education areas. By next year when the laws are implemented on a full scale,, ESD is expected to be applied actively in each area.

The government has been consulting related divisions, civil groups, and academic circles for the purpose of establishing specific plans as well as the comprehensive promotion system for ESD in 2007, with the end in view of making “comprehensive ESD plans.” As a result, the draft was presented in Feb. 2008, but the comprehensive plan was not finalized; thus, it became the mission of the new government inaugurated in Feb. 2008. It will be promoted in consultation with related divisions and discussed in public.

In Aug. 2008, the president announced the “low carbon, green growth” as the direction of Korean society, prioritizing the policies for creating a sustainable society in response to climate changes. To support this plan, it has enhanced the education areas. The government has been establishing measures in cooperation with the Ministry of Environment, etc., as well.

In terms of systematic education, the draft revision of curriculums in preparation for the 5-day workweek system as a replacement of the 7th national curriculum has been examined in terms of sustainability. As a result, education on sustainable development was strengthened in the new curriculums to be applied by 2009. Moreover, starting this year, freshmen in teachers' colleges and colleges of education are advised to take ESD courses as a teaching profession cultural art subject to be reflected on the teacher training organization evaluation index. ESD lectures shall be presented in education/training courses for teachers and public servants of education. Including 2 hours of ESD classes in 60-hour or more curriculums is also recommended.

In terms of public servant education, the 1st workshop for sustainable development managers of central administrative agencies (2 days) was held in 2007 to add sustainable development curriculums at the Central Officials Training Institute. Aside from lectures on sustainable development, this workshop enabled broad understanding and discussion on sustainable development strategies and policies in Korea and abroad. The education subjects were sustainable development managers in all divisions of the central government. To date, education centers for public servants including the Central Officials Training Institute have started offering sustainable development lectures. In fact, some of them have already held classes.

In the case of local governments, Gyeongsangnamdo Tongyeong City and Incheon City have established and operated RCE, which is one example of strengthening education on sustainable development. Wonju City, Gangwondo is planning to establish an ESD center based on cooperation among residents, officials, and industries. The center is expected to be completed at the end of 2008.

In terms of resident/official cooperative areas, the Ministry of Environment, PCSD, and Korean National Commission on Sustainable Development jointly evaluate and select "local sustainable development model cases" that contribute to the awareness and spread of sustainable development as education contents.

#### **4. Difficulties in ESD Policy Promotion**

Korea can be said to be productive in terms of establishing national sustainable development strategies and institutionalizing and promoting ESD plans. Like other countries, however, Korea also encountered various difficulties in the process.

First of all, the ESD comprehensive promotion system is somewhat complicated. Among the government agencies, the Korean National Commission on Sustainable Development, Ministry of Environment, and Ministry of Education, Science, & Technology are in charge of promoting related works; each has its own limitations, however. Although the Korean National Commission on Sustainable Development is an agency capable of providing comprehensive consultation on ESD, stable promotion is not secured since it restructures the council every two years. Besides, since it provides consultation on general state affairs, ESD areas are consequently regarded as less important. On the other hand, the Ministry of Environment is spreading the contents of ESD at the central government level; still, it also has limitations since it focuses on the environmental education areas. In addition, the Ministry of Education, Science, & Technology is encountering difficulties due to the lack awareness of sustainable development. In the long run, however, the fact that the Ministry of Education, Science, & Technology -- which is in charge of school education and social education in general -- should play the key role is generally acknowledged.

Establishing the relationship between ESD and education in other areas is also an issue. A number of agencies are providing education in various areas such as human rights, environment, gender equality, peace, etc., under the control of the government. Although education in such areas is essential in realizing a sustainable society, deciding how to establish the relationship between ESD and other education areas is not easy

once it is offered as a course. Aside from the matter of integration and association among education materials, the issue on the position and role of related divisions and agencies is also a factor; hence the difficulty in settling it. In particular, since ESD began with environmental education, deciding the contents and scope of environmental education and ESD is difficult.

ESD is highly comprehensive and conceptual; categorizing it may be difficult. Although sustainable development education is being carried out in school and social education fields, most of them merely explain the concept of sustainable development and some classic cases. Thus, a number of teachers and residents require teaching materials that they can use to explain the concept specifically with recent cases instead of discussing only the basic concept of sustainable development.

## **5. Future Plan for the ESD Policy**

Many challenges lie ahead in spreading ESD in Korea. This year, the foundation will be reinforced in accordance with the Basic Law on Sustainable Development and Environmental Education Promotion Act. In the future, the implementation of specific goals should be fulfilled on the basis of the ESD implementation plans.

Above all, ESD comprehensive plans should be established. Although the ESD implementation plan established in 2006 carried special meaning as the first step, it left a lot to be desired in terms of government-led national planning to promote education more specifically. Since the ESD comprehensive plan draft was finalized in Feb. 2008, the specification should be promoted in consultation with related divisions and by referring to public opinion. Once the comprehensive plan is established, the status of the national plan for education in all areas including the ESD promotion system is expected to be clarified.

Education on sustainable development for public servants shall be reinforced. A number of education centers for public servants have recently started offering sustainability lectures. Nonetheless, sustainable development education has yet to be enhanced among local governments nationwide and expanded to each level of public servants.

ESD should also be strengthened in school and social education areas. For school education in particular, the inclusion of education materials on sustainable development in newly published textbooks by 2009 is planned. In addition, ESD support for the social education areas shall be strengthened by the central and local governments as per the Basic Law on Sustainable Development.

The ESD network should be established. Promoting ESD successfully requires organizing not only a certain subject but also forging cooperation and partnership among residents, officials, and industries. Thus, establishing the ESD network is crucial alongside the active participation of civil societies, efforts among industries, and political support of the government.

The development of ESD teaching materials will be supported. The active use of ESD will be promoted among teachers by producing teaching materials and teachers' reference books that can be used in school. Specifically, PCSD is planning to develop ESD teaching materials for teachers, and the Ministry of Environment, "Environment & ESD Guidance" by 2009.

## **ESD Implementation in Republic of Korea**

***Ms. HyunJin JEON***

Team of Youth and Children  
UNEP National Committee for the Republic of Korea

### **Background – ESD**

After the concept of sustainable development was showed up in 1987 through Brundtland Report, Sustainable Development started to be considered at diverse sectors. Sustainable Development is a pattern of resource use that aim to meet human needs while preserving the environment so that these needs can be met not only in the present, but in the indefinite future.

For achieving this concept, education will be the most important component to harmoniously achieve economic growth, environment protection and social integration. UN has declared a Decade of Education for Sustainable from 2005 to 2012 to encourage active contribution from diverse sectors.

### **Background in Korea**

In Korea, there are some environmental education at the formal education level through implementing special school project on environment education, operating

environmental education bus or creating internet base education website for young people.

Also, last year Law on Sustainable Development was adapted and Education on Sustainable Development was highlighted as below in the Article 23.

*Law on Sustainable Development, Article 23 <Education on Sustainable development>*

*1. Government and local authority can encourage promoting awareness on sustainable development to civil society through creating educational programme on sustainable education, fostering experts and professional institution on sustainable development.*

*2. Government and local authority have to encourage civil society's activity and support in order to follow the Agenda 21 or Johannesburg action plan according to Article 4 of this law*

## **Non formal ESD in Korea**

In the non-formal section, most of environmental civil society organization work for environmental education through diverse ways. UNEP National Committee for the Republic of Korea also focused on education on sustainable development especially young generation since the committee believe that fostering young generation as global citizen who has environmental responsibility and youth engagement in decision making

process are very essential according to TUNZA youth strategy which is UNEP's long term youth engagement strategy which was adapted in 2003. (ANNEX 1)

According to national circumstances and main strategy, we have 5 main objectives to face the challenges to achieve ESD in Korea

### **(1) Promote awareness**

In Korea, even though there are not many classes on environmental education at formal schools, most of students learn the concept of environment and how we have to protect our one planet through morals or ethic classes. However the responsibility and scope can be focused on only Korea so it is easy to understand environmental issues as national one and regard the responsibility to recover or protect in only their own country. Therefore, to provide information of how environmental issues are related with several social issues across the board among countries on environmental issues is the most required one.

Educators can provide to understand it through the real cases of understanding of global environmental issues through national examples such as desertification issues in North East Asia and beyond it.

### **Case 1 E paran Children's Environment Painting and Essay Competition**

From 2000 to present, every year, UNEP National committee for the Republic of Korea hold children's environmental painting and essay competition and usually the agenda is global issues such as biodiversity, climate change and global warming. Through this competition, children who attend an elementary school can think about nature and their life styles. Every year, more than 20,000 children apply for this competition and 500 finalists will be sent to UNEP's international children's painting competition.

Partners: Ministry of Environment, Elementary schools, private sector (Shopping mall) and media

### **Case 2 Eco Campus Project in Korea**

ANGELS will launch Eco Campus Project in Korea to combat against climate change issues and be toward low carbon society through changes of life styles in university which would be main residence and consuming area for young generations. From this year, they will hold the competition on good cases or ideas to reduce the emission of co2 in the university under the support from Ministry of Environment and UNEP Korea.

ANGELS is university student union group under the UNEP Korea and students from more than 50 universities around the country are involved in. Mainly they are hosting environment campaign or seminar and forum. They also provide environmental web magazine for peer to peer education every month. [www.unepangel.net](http://www.unepangel.net)

## **(2) Creating of environmental resources for youth by youth**

In Korea, internet based information is very used very much because of its convenience especially for young people. On environmental information, youth and children are easily contacting with internet based information but it is not the right at every time. Therefore providing exact information sounds science is very important issues for young generation in Korea. We also promote to provide environmental resources for youth and by youth as peer to peer education and increasing in engagement youth.

### **Case 3: TUNZA magazine**

Every year, TUNZA magazine is providing seasonally in Korean languages by UNEP Korea. TUNZA magazine is UNEP's environmental magazine for young by young. On the process of developing Korean version, there are chances to be involved in as translator volunteers and youth editors. Every year around 15 youth are nominated as TUNZA youth editor for Korean version and they can develop articles through editorial meetings for developing youth friendly magazines.

### **(3) Capacity building – to provide a platform for intergenerational learning**

Since there is not much classes on environmental issues at formal schooling programme, it is important to provide capacity building programme at non formal sectors to provide a platform for intergeneration learning.

### **Case 4: TUNZA ICC Korean committee**

UNEP National Committee for the Republic of Korea recruit 60 children who are from 10 to 15 years old and provide environmental education every month. Through these monthly workshops, they can understand the international environmental issues. Also, through this workshop, children have to organize their own environmental project in their school or village under the guideline and support from advisory teacher groups and coordinators. There are several types of projects according to their own situation such as protecting mountain, observing river in front of a house, reducing waste project in the class, promoting riding bicycles or making UCC projects. Beside the workshop, there are opportunity to participate in eco camp in winter season for picking up starfishes which affected marine diversity in western Korea and some selected participants are participated in TUNZA's international children's or youth's conference on environment.

#### **(4) Networking – sharing knowledge skill and values**

After developing their own project by youth or children, it is very essential to share the ideas and project with others not only in their country but also beyond the country. Since the Education of Sustainable development includes not only environmental education but also diverse social education such as peace or economy, providing the chance to share the knowledge skill and values should be one of important objectives of ESD projects.

#### **Case 5: TUNZA Sub regional Youth Environment Network**

TUNZA North East Asia Youth Environment Network was established in 2005 as one of UNEP's sub regional youth network including China, Japan, Korea and Mongolia

under the UNEP's TUNZA Strategy. Every year, youth representatives from 4 countries gather and share their own experience on environmental actions at global, regional and national level. They also discuss on important agenda every year and declare initiative on the behalf of North East Asia Youth. In 2008, they declared 'Ulaanbaatar Initiative' on Climate change and youth partnership in North East Asia to encourage actions of government, local authority and civil society and to confirm the action plans for 2008-2009 by themselves to achieve the Initiative through advocacy, youth publication, lobbying, environmental education and campaign online/offline. Also they lead World Environment Day Campaign by youth in the region. [www.neayen.org](http://www.neayen.org)

In Asia and the Pacific, there are 5 sub regional youth environment network in South Asia, North East Asia, Central Asia, South East Asia and Pacific.

**(5) Participation young generation in decision making – enables youth participation on relevant decision making process**

According to UNEP's Youth long term strategy, TUNZA Strategy, it is very important to give a chance to be involved in policy making process for youth. Since young generation have to live in the place which will be shaped by today's decision, collecting voices from young generation is very essential. Therefore UNEP provide TUNZA Youth advisory group for 12 youth (2 from each continent) and listen their opinion on UNEP's work.

**Case 6: TUNZA International Children's conference and Youth Conference**

For collecting many voices from youth and children, UNEP hold TUNZA International Children's conference and TUNZA International Youth Conference biannually. Through these conference, youth and children can share their activities and special experience with friends from all around the world and show their voices on international environmental policy.

More information, please visit to below websites.

[www.unep.org/tunza](http://www.unep.org/tunza) [www.unep.or.kr](http://www.unep.or.kr) [www.neayen.org](http://www.neayen.org) [www.eparan.or.kr](http://www.eparan.or.kr)  
[www.unepangel.net](http://www.unepangel.net)

## **Session 3**

### **ESD Policy and Implementation in China**

# Chinese ESD Policy research

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## **1. A brief developmental history of Education for Sustainable Development (ESD) in China**

ESD in China is rooted in EE and developed by EE. And most of the practice of ESD in China is EE and is extended from EE now. So it is difficult to discuss EE and ESD separately. And most of the time in this paper especially EE after 1992 refers to the same meaning of ESD.

China's Environmental Education and Environmental Protection cannot be discussed separately. They set out at the same time, developed together, connected and advanced each other. Overall, history of China's EE can be divided into three phrases<sup>[2][3]</sup>.

### **1.1 First Phrase: Germination and Start-up of EE (1972-1983)**

Compared with Western Countries, China was torpid to recognize the environmental problems. Chinese didn't have any ideas about China's environmental problems happened and developed before 1972<sup>[4]</sup>, when the Stockholm Conference was held. The Premier Zhou was the pioneer advocator for environmental protection and

environmental education. He took note of world-shaking “pollution disasters” happened in Japan in 1950-1960s. And he was aware of the disasters also probably took place in China. Then he asked the State Council to pay more attention on “pollution problem” in 1969. Maybe it is the first look to environmental problems in China <sup>[5]</sup>.

Stockholm Conference like a torch enlightened the environmental spirit of Chinese. Chinese people – specially the leaders – recognized environmental problems in China first time. In August 1973, the First National Meeting on Environmental Protection held in Beijing. It was precipitated directly by Stockholm Conference. After that meeting, the State Council approved and distributed two documents - “Report on Situation of Environmental Protection in China” and “Several Regulations on Protecting and Improving Environment”. From then on, China’s environmental protection and environmental education enterprises got start.

In initial days, to help the public understand circumstance of environmental protection in the world and negative effects of environmental problem to the social and economic development, some famous books like “Only One Earth” and “Silent Spring” were introduced into China in 1970s. The books implicated the beginning of Social Environmental Education in China, whose target audience is the public <sup>[3]</sup>.

In February 1981, the State Council promulgated “The Decisions on Enhancing Environmental Protection Work at Present Time”. This is an important document. The sixth part of this document specially mentioned issues on environmental sciences, environmental protection and environmental education. The document set keynote of environmental education in China.

In 1980 and 1981, two nationwide propaganda activities were held for disseminating knowledge of environmental sciences, environmental law and environmental policy. Many institutions and organizations such as sectors for environmental protection, sectors for propaganda, sectors for medias, sectors for academic research and academic societies participated in the activities. They

collaborated each other and held many meetings and lectures, released news, publish articles, broadcasted programs on radio, TV and movie. These activities took tremendous effects on improving social environmental awareness, and started a model in which the sectors of environmental protection, education and propaganda congregated under the flag of EE.

In 1980, the first publishing house particularly on environmental affairs – the Environmental Science Press - was established in Beijing. From early 1970s to early 1980, some environmental periodicals also started to publish in China to strengthen the environmental propaganda work.

Compared with the environmental social propaganda, knowledge dissemination and education in middle and elementary schools, environmental professional education expanded rapidly. Early 1970s, first specialties in environment were established in Chinese Peking Universities. Up to early 1980s, there have been more than 30 colleges/universities established environmental specialties, some of which could grant master and even doctor degrees. In August 1981, a school in Qinhuangdao was also founded, in which the department of environmental protection provided training courses for officials and in-service personnel engaging in environmental protection.

## **1.2 Second Phase: Formation and Development of EE (1983-1992)**

In 1983, the Second National Meeting on Environmental Protection was held. Environmental Protection was set as a basic state policy of China in this meeting. In the documents of meeting, Chinese government recognized that it is necessary to strengthened EE for officials and average citizens <sup>[8]</sup>.

Impelled by the Second National Meeting, EE developed faster. In early 1984, “China Environment News” started publication. This is first newspaper on environmental protection in China. It was also published in English in 1988, and in company with other environmental periodicals and environmental press made the basic of front of social environmental propaganda.

In 1988, State Environmental Protection Administration (SEPA) was established and the department of environmental propaganda and education was set up under the administration for improving the quality of macro management of environmental education in China.

In May 1989, the Third National Meeting on Environmental Protection was held. This meeting re-enhanced the environmental policy put forward in the Second Meeting, and pointed out that the state government should pay more attention to environmental propaganda and education for improving the environmental awareness of whole country, especially the officials’<sup>[9]</sup>.

In the light of spirit of the Third National Meeting, SEPA called up the First Workshop on Environmental Propaganda and Education, which summarized the lessons, collected from 16-year experiences, and required that EE should be speeded<sup>[10]</sup>.

From the Second National Meeting on, EE in China have new progresses. The forms of EE activities became more various; contents of EE became more definite and colorful. EE became more openly and spread from sector of environmental protection to the whole society<sup>[3]</sup>.

### **1.3 Third Phase: Upgrade and Sublimation of EE (1992-now)**

In 1992, the UN Conference of Environment and Development was held at Rio de Janeiro in Brazil. In November of the same year, the Ministry of Education (MOE) and the State Environmental Protection Administration (SEPA) jointly held the First National Meeting for Environmental Education, and indicated education as a basic for environmental protection. The importance of EE in basic education was enhanced. Afterwards EE came into a new period.

Since summer of 1993, MOE and SEPA held EE training workshops for head teachers of middle/elementary schools in Beidaihe every year. The head teachers who received training became essential power of EE in schools. In the autumn of 1993, the new curriculum guidelines were promulgated. The knowledge about environment began to be integrated into many subjects.

In March 1994, the State Council approved China Agenda 21. In this agenda, EE was considered as an important way to improve China's sustainability. EE went beyond the environmental protection, was connected with educational reform, social change and people's life first time.

1996 is an important year for China's EE. In this year, the Fourth National Meeting on Environmental Protection was held and SEPA, Propaganda Department of China Communist Party and MOE promulgated the National Action Guideline for Environmental Propaganda and Education. This guideline is an important document on EE. At the same year, SEPA started publish a special magazine named "Environmental Education". It is a symbol that EE existed as not only a part of political task, but also a part of academic research.

2000's National Meeting on Green Schools and 2002's the Fifth National Meeting on Environmental Protection ultimately impel EE's development. More and more people recognized that EE plays an important role in environmental protection, education and sustainable development.

## 1.4 Conclusion of the brief history of EE/ESD in China

As known before, EE has become a special field of research, but it is also a field of ideas, a open concept (Zhang Lansheng, 2001). EE changes and develop always. About the past and the future of China's EE, conclusions are quite difficult to make. Some preliminary conclusions could be concluded from discussions from part of this article:

a) China's EE goes with environmental protection. Concepts of EE are deeply affected by concepts of environmental protection. Environmental protection and environmental education are not aborigines in China. Different intuitions, organizations and individuals have different understandings. Thus they have different conceptual system of EE. But the conceptual system of Chinese government keeps the dominant status all along.

b) 1972 and 1992 are two milestones of China's EE. As push from international, Stockholm meeting in 1972 directly expedited the birth of China's EE. From 1972 to 1992, China's EE grew up in a relative close situation on the whole. Rio meeting became another international push for transition and sublimation of China's EE. So, China's EE was affected by international deeply.

c) The First National Meeting on Environmental Protection was the start of China's environmental protection and education. It also created the foundation framework of conceptual system of EE. The framework can be summarized to one definition – EE is a kind of activity to spread knowledge of environmental sciences; two basic forms – propaganda and education; two basic target groups – officials and professionals.

d) During 30 years, the conceptual system of China's EE remains stable, but changed subtlety. According to the differences on aims, agents, target groups,

educational fields and educational contents of EE, 30 years of China's EE conceptual system could be divided into two phrase: 1972 – 1992 and 1992 – now.

## **2. National ESD policy in China**

### **2.1 Environmental Policies Focusing on Pollution Treatment during 1973 to 1981**

At the beginning, the work on environmental protection in China focused on treating the “three wastes”, and organizing and implementing for better use in a comprehensive way. The famous “thirty-two-word guideline concerning environmental protection”, discussed and passed at the *First National Conference on Environmental Protection* in 1973, is “programming completely, arranging reasonably, utilizing synthetically, converting the hazards into benefits, relying on the public, starting work all together, protecting environment, and making people a happy life”. Since 1973, some pollutant sources contaminated seriously and led to sharp inflection of the public had been treated, and the investment mostly comes from financial budget of the state <sup>[2]</sup>.

Based on the thought of pollution treatment, to train qualified personnel grasping engineering and technology on environmental protection was regarded as the primary task of environmental education. Hence, after 1973, specialties in environmental protection was originated or make preparations one by one in the universities such as Peking University, Zhongshan University, Beijing Industrial University and Tsinghua University, etc, to aim at training persons with the ability to solve the problem of wastes pollution. This was the start of environmental education in universities in China. As to the in-service training, a trade school to give in-service training on environment protection

for managers was founded in 1981, named Qinhuangdao Cadre's School on Environmental Protection (Changed to Cadre's College of Environmental Management in Qinhuangdao in 1985).

## **2.2 Environmental Policies Focusing on Environmental Management during 1982~1991**

In 1979, a piece of watchword forward was brought by the National Working Conference on Environment Protection organized by the leading group on environmental protection under State Council, that was "strengthening environmental management in a comprehensive way and promoting treatment through management". In 1983, the idea to consider environmental management as the key link of environmental protection was rose at the Second National Conference on Environmental Protection. This made the thought of environmental management shifted from "focusing on pollution treatment" into "focusing on strengthening environmental management" <sup>[2]</sup>. Consequently, systemic environmental management thought was took shape, a set of environmental management system was established, and environmental management work was strengthened remarkably.

### **2.2.1 Policies and Guidelines on Environmental Protection**

In 1983, It was made certain that environmental protection was a basic national policy persisting in for long time in China on the Second National Conference on Environmental Protection. Policies and guidelines on environmental protection were put forward too on the conference, that was, the "three important policies", consisting of

prevention first, whoever contaminating should treat, and strengthening environmental management; and the strategic guidelines of “three synchronizations” and “three unifications”, including to synchronize planning, implementing and developing environmental protection with the economic development, and the urban and rural construction, and environmental construction, and to unify the benefits of economy, society and environment<sup>[23]</sup>.

### **2.2.2 The Law System on Environmental Protection**

It was the *Constitution of the People’s Republic of China* passed on the Fifth National People’s Congress in 1978 that stipulated in the constitution on environmental protection for the first time in the history of China. The *Law on Environmental Protection of the People’s Republic of China* for trial implementation in 1979 and issued in due form in 1989 was the basic law on environmental protection, which indicates that environmental protection in China commenced to enter a legal stage. With developing for more than ten years, the law system on environmental protection, consisting of the Constitution, laws, administrative laws and district law in many levels, was formed. This system takes the Constitution of the People’s Republic of China as the base, the *Law of Environmental Protection* as the main body, The system comprises protecting environment and natural resources, preventing and treating environmental pollution and environmental destruction, and building framework and system of environmental management<sup>[2]</sup>.

Environmental standard based on environmental policies and laws concerned is the important component part of the law system on environmental protection, and the underlying instrument and warrant of environmental management. In 1983, the Town and Country Construction Ministry issued the Standard Management Measures on

Environmental Protection of the People's Republic of China. In the standard, the classification and grade of environmental standard is stipulated explicitly. The standard is divided into four groups. They are standard on environmental quality, standard on the discharge of pollutants, standard of environmental protection basement and standard of environmental protection measures. The standard consists the national level and the local respectively<sup>[2]</sup>.

### **2.2.3 Eight Rules on Environmental management**

The first rule on environmental management in China was rose in *Some Ordainments on Protecting and Improving Environment* by the State Council in 1973. It is called "three simultaneities" that the pollution treatment measurements must design, construct and put into production simultaneously with its main body of all new built, enlarged or rebuild projects. The aim to put forward this rule is to avoid treating after pollution like that in the western countries. This first rule was latterly conformed in the *Environmental Protection Law of the People's Republic of China* (for trial implementation) in 1979. Two other rules were conformed in the low at same time are taxing on the discharge of pollutants and assessment of environmental impact. In 1989, five additional rules on environmental management were rose on the Third National Conference on Environmental Protection. They are rule of goal obligation on environmental protection, rule of comprehensive treatment and quantitative assessment on urban environmental pollution, rule of licenses on the discharge of the pollutants, time-limited treatment, and centralized controlling on environment pollution<sup>[23]</sup>. The eight rules on environmental management mentioned above unify the administrative management and economic instruments, state supervision and propaganda and education, law enforcement, and technological guidance, respectively, which forms primarily policy systems of environmental protection conforming to the situation of China.

#### **2.2.4 Four Fields and Fifteen Tasks of Environmental management**

The four fields of environmental management are as follows: firstly, to manage problems on environmental pollution caused by the activities of production and living; secondly, to deal with the problems on environmental influence and environmental destruction caused by the activities of construction and exploitation; thirdly, to manage marine environmental pollution caused by economic activity; fourthly, to protect natural environment with special values.

The fifteen tasks are: to organize setting down planning on environmental protection; to organize drawing out guidelines and policies of environmental protection; to organize sketching out laws of environmental protection; to organize setting up standards of environmental protection; to supervise the work of environmental protection in local governments and departments at all levels; to approve and supervise state of implementing “three simultaneities”; to organize spreading advanced experiences of administration and technologies of pollution treatment; to build up survey, monitoring and assessment of environment; to organize planning nature reserve areas; to build up marine environmental management; to supervise and manage poisonous chemical products; to organize implementing scientific research on environment; to organize implementing environmental education; to organize propaganda on environment protection; and to guide activities of environmental protection in local governments and departments at all levels <sup>[2,23]</sup>.

#### **2.2.5 Environmental Education as one of the instruments of environmental management**

Since 1980s. Environment education is regarded as approaches to enhance environmental consciousness of all people and one of the instruments of environmental management. Thus environmental education middle and primary schools in China commenced.

In 1983, environmental protection was confirmed to be a basic national policy in China in the Second National Conference on the Work Concerning Environmental Protection convened by the State Council. It made certain that public education played an important role in environmental protection.

In 1987, the National Commission of Education constituted the “Teaching Projects in All-Day Grade School and Junior High School for Nine-Year Compulsory Education, (A Protocol for Trail Implementation)”, which was issued in due form in 1992. In addition to the teaching outlines of all subjects. It was the first time that the contents and demands on environmental education were definitely and concretely written into the course projects and teaching outlines. It marks environmental education has been brought into the national education planning, and environmental education has been taking into practice self-consciously in the base education. The project connected environmental education into moral education and education of national conditions of China, emphasized that education concerning energy sources, environmental protection, ecology, etc should be penetrated into the class teaching of related subjects and activities out of class, and brought forward that in good-conditioned school, may try to set up independent courses and lectures related to education on environmental protection.

### **2.3 Environmental Policies Oriented by “the Strategy of Sustainable Development” after 1992**

### **2.3.1 Implementing Strategies of Sustainable Development in China**

The Congress of Environment and Development under the U.N. in 1992, made the sustainable development become the cognition in common for the common strategy of development in the future by all the countries in the world. It upsurge on environmental protection emerged again in the world. In response the Congress of Environment and Development, it was not long after the conference that the government of China put forward the *Ten Countermeasures to Environment and Development in China* (1992) <sup>[25]</sup>, then organized and constituted the *Agendum of the 21th Century in China* (1994) <sup>[19]</sup>. It is claimed that China would persist in the basic national policy of environmental protection, implement the strategy of sustainable development, advance to the direction of sustainable development favorable to environmental protection, change the traditional mode of production, and establish new economic and social system accorded with long-term interests of China by adjusting industrial structure and strengthening environmental protection and environmental construction <sup>[16]</sup>.

### **2.3.2 Major Guidelines and Policies on Environmental Protection**

In 1998, Wen Jiabao, Vice-Premier of State Council, advanced five important guidelines and policies to persist in doing a good job in environmental protection <sup>[18]</sup>:

Firstly, developing economy in harmony with environment. It is a fundamental guideline in the construction for the modernization of China. China would persist the comprehensive decision-making for environment and development, and attach much importance on economic benefits, social benefits and environmental benefits.

Secondly, paying equal attention to preventing and treating pollution and ecological protection. Preventing and treating pollution and ecological protection are two important aspects of environmental protection. They should be paid equal attention. It is regarded as important guidelines.

Thirdly, sticking to the construction of environmental protection through multi-ways. As the rising industry, the industry on environmental protection would be supported to developed in priority. Development of the industry on environmental protection must rely on the progress of science and technology, in order to realize the progress of industry under the advanced level of prevention and treatment of pollution<sup>[17]</sup>. The progress of science and technology is the basic way to solve the problems on environment and development<sup>[19]</sup>.

Fourthly, bringing environmental protection within the orbit of law. While perfecting the system of law on environmental protection, the execution of environmental laws should be paid equal attention to with the legislation of environmental protection.

Fifthly, strengthening the procession of environmental protection, and enhancing the power to supervise and manage in unification. It is requested to strengthen the education and training of the personnel responsible for the management on environmental protection, so as to have a group of environmental managers with good-thinking, just-style, familiar with operation and good at administration, It is also requested to upgrade the standard of modernized environmental management, and to enhance the ability to cope with an environmental emergency.

### 2.3.3 “ To Protect Environment, Education is Fundamental”

In November 1992, The First National Conference on Environmental Education was co-organized by the State Education Commission and the State Environmental Protection Administration. The guideline, “ to protect environment, education is fundamental”, was put forward by the conference which made certain further the importance of environmental education.

Since 1992, the focus of environmental education has converted from environmental knowledge education into environmental consciousness education. It is recognized that, in order to do well in the work on environmental protection indeed, all people must build up environmental consciousness<sup>[20]</sup>. The government of China regards doing well in environmental education and propaganda, and strengthening environmental consciousness of the nation as an important task<sup>[26]</sup>. Environment education is a fundamental project for life-long education. Thus to strengthen environmental education is one of the strategic measures to implement sustainable development<sup>[27]</sup>. As a new subject, environmental education not only played a remarkable role in enhancing the environmental consciousness of the whole nation and training professionals for environment protection, but also brought new power into the education in China<sup>[27]</sup>.

On the Fourth National Conference on Environmental Protection in 1996, the State Environmental Protection Administration, the Central Propaganda Ministry of the Chinese Communist and the State Education Commission issued the *National Action Compendium on Environmental Propaganda and Education (1996-2010)*. The national action compendium is the instructing document of the current environmental education work.

It was pointed out in the *National Action Compendium on Environmental Propaganda and Education (1996-2010)*, that environmental education is one of the means to improve the quality on mentality and morality, and on science and civilization (environmental consciousness included) of the whole nation, and it is an important task for the organizations of environmental protection, propaganda and education at all levels. In the work on environmental education, the educational system plays a leading role, with the system of environmental protection cooperating actively. Environmental education should be developed according to the characteristics of schools themselves, to make it a part of quality education <sup>[28]</sup>.

## **2.4 Promote EE and SD by education**

The Tenth Five Years Plan in 2001 promoted to develop professional persons in environmental protection for 21th century by properly planning the environmental protection major in Higher Education Organization.

In < The Syllabus for National Environmental Protection Propaganda and Education Works>, issued by SEPA in 2001, it was promoted to set up and improve EE system with Chinese character. And it was especially promoted to require various Higher Education Organizations to emphasis EE both in professional environment education and non-professional EE, especially in university of teacher education.

Ministry of Science promoted that scientific creativity is important for SD in the Scientific and Technological Syllabus for SD in 2002.

The State Council promoted in 2003 to strengthen SD in Basic education and build model of SD in some universities in China in the Syllabus for SD Action at the Beginning of the 21th Century.

In the <Suggestions about how to improve environmental protection propaganda and education works during the eleventh five years period> issued by SEPA, Ministry of Publicity and Ministry of Education in 2006, it was required to strengthen EE in basic education and make EE as contents of teacher training for basic education, strengthen EE for students and teachers of non-environmental majors in Higher Education organizations.

In 2007 there are 17 Ministries in China issued <The implementation of people's action on saving energy and reduce pollution all over China> in order to form the mechanism of saving energy and reduce pollution, promoted by government, implemented by business and company and participated in by every one of the whole society.

### **3. Current status of ESD in China at a national level**

#### **3.1 The situation in basic education**

To get information from both teachers and students on current situation of infusion environmental education, thereby to find the existing problems and provide data support for future reform on environmental curriculum. A survey was carried out in questionnaires handed out to 259 teachers teaching 7 subjects and 270 newly upgraded students in Beijing.

### **3.1.1 In general, the infusion environmental education has promoted environmental education in middle schools, yet the implementation in subjects is unbalanced.**

The current environmental education in middle schools relies on the infusion of environmental topics into subject studies. Although more than half of the teachers can fulfill the environmental part of teaching content as required by textbooks or education standards, most of them only teaches some. The implementation in subjects is unbalanced. In subjects closely related to environmental issues, such as geography, biology, and chemistry, environmental education prevails. More than 80% of teachers of these subjects can carry out environmental education as required by textbook or education standards. However, in the subjects of physics, Chinese, and mathematics, more than one third of the teachers adopt an approach of “teach, if there is time”, and a fraction of them do not teach at all. In each subject, only a small number of teachers do “a lot” teaching on environmental education. “Lack of hours ” and “lack of teaching materials” are “the main obstacles in environmental education”.

### **3.1.2 An infusion environmental education lack of compulsion cannot become teachers’ conscious action.**

From teachers’ motivation and initiative, the reason for their engagement in environmental education is personal interest in environmental education. Interest is an unstable, low-level motivation. It can be affected by many an exterior factor, such as the issue being a social hotspot or a chic topic, or the issue involving more international exchanges. An enduring motivation, “Environmental issues are important”, is much neglected. A few teachers show a passive attitude towards environmental education, and they chose “required by textbook and education standards”. This is also reflected in Table 5, which shows most teachers, except geography teachers, fail to often gather information intentionally on environmental education in daily life.

### **3.1.3 A monotonous and simplified teaching and a learning without motivation, participation and research**

The teaching approach adopted by teachers in environmental education is general lectures, which are least welcome by students.

### **3.1.4 Teachers lack of professional environmental knowledge. Mass media is the main source of knowledge for both teachers and students. Further education or training has a limited, or even negligible influence on teachers' capability.**

It is very difficult for teachers to play their role and attract students' interest, when teachers adopt general conventional lectures as way of teaching while acquiring environmental knowledge from the same source as their students do, though their judgment and understanding are different.

### **3.1.5 The environmental education at different stages of primary and middle schools lack differentiation. Students' interest in environmental issues diminishes with the up-going of grades.**

Education emphasizes on general knowledge of pollution and natural sciences, and participation in practice is out line of curriculum education. Sustainable development on environmental education is still a target far beyond reach.

After-school participations for students from primary schools to middle schools are almost the same without initiatives, such as "picking rubbish", "planting trees", and "cleaning public places". With up-going of grades, students begin to doubt the practical impact of such activities as planting trees on solving environmental problems while willful deforestation widely exists.

### 3.2 Situation in Higher Education

Taking “Verbatim Record Data Base of Academic Journal in China”(2006) as information source and using “Environmental Education, Green University and ESD in Higher Education” as key word 144 papers are searched from 1979 to 2007. The distribution of academic papers in each year from 1979 is illustrated in the following figure.

Figure 1. The distribution of number of papers in Green University research during 1986-2007

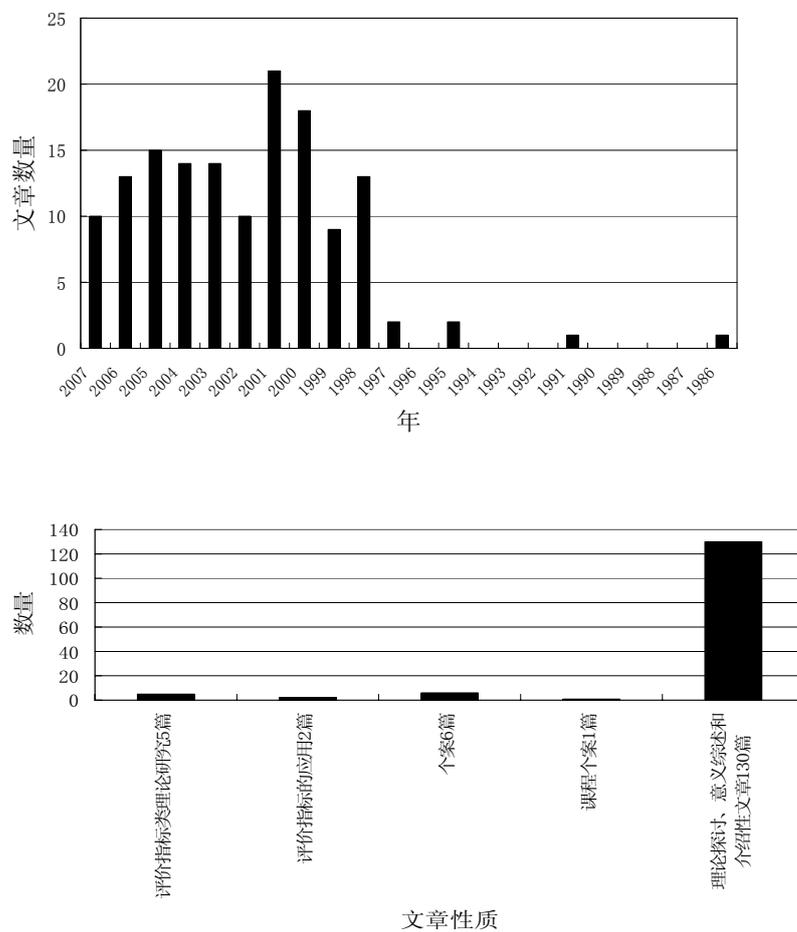


Figure2 . Analysis the content of papers in Green University research in China

1) Realized the necessary for HESD but not reached to the cognition level of rethinking about Higher Education, which is pointed out on the Sus. Development Summit in Johannesburg in 2002.

2) Emphasis on the technology creation in engineering university like Tsinghua University, but pay no attention to teacher's education in normal university. So there is huge gap between the needs from basic education and the teacher education in universities.

3) The research level in HESD is in primary stage, proved by the evidence of small paper number and more than 90% papers is in not higher level. And the research generated from the practices or theory thinking and rethinking is lack.

4) One of the most important part for the university is the course, which is paid no attention in the papers.

Altogether: HESD research is seldom concerned in China now. There is no atmosphere in China. The scholars think about it individually. There is seldom communication and progress in HESD. The course, one of the most important part in Higher Education, is not concerned now.

EE was put on the important status in the 17th Communist Party Congress at the end of 2007.

In the general the development of special EE like Environmental Science and Engineer had been improved greatly, but popularized EE is lag and cannot be concerned by the universities in China.

## **4. Difficulties of implementation of ESD policy in China at a national level**

### **4.1 In Basic education**

1) The popularization, depth, and quality of environmental education are still not satisfactory, because of the limitation of middle school curriculum, examination-based education, and teachers' environmental knowledge.

2) With the current curriculum system and education objective for examination, infusion education on environment issues cannot be efficiently implemented. However, if the infusion education is to be compelled by an examination mechanism, it can easily fall into a pure knowledge education, not to mention the danger of narrowing the scope of knowledge caused by examination. Furthermore, the current examination method can hardly evaluate students' sensibility and values.

3) It is necessary to set up an environmental education system based on the combination of integrated practice and inter-disciplinary education. The new round of elementary education reform started at 2000 provides curriculum hours for environmental education causes. Environmental education courses can be set up in middle schools in the form of integrated practice or selective lessons. Basic knowledge and concepts are taught in subject courses, while in integrated practice studies are organized in carefully selected topics closely related to students' daily life. The Contents should be easy to arrange for students to participate and study through investigation, research and problem solving. The target of integrated practice in environmental education, or integrated environmental learning, is to foster students' sensibility, ethic values, and comprehensive abilities such as information gathering, processing and analysis through the integration and utilization of basic knowledge learned in subject courses. Such a mixed environmental education is in favor of students' identification of

environmental problems as a whole, and their integration of knowledge learning and nurturing of sensibility and ethic values.

4) Establish standards for environmental courses. The learning contents should be differentiated according ages and knowledge structures in primary, middle, and high schools, thus to maintain the quality and sustainability of environmental education in middle and high school stages. The objective in primary school is to teach pupils to know environment and cultivate individual behaviors towards environment. In middle and high schools, students should be oriented from social, economic, and technological perspectives to apply their learned knowledge to identify and analyze environmental problems in life, and to learn philosophies to coordinate relations between man and man, man and environment, environment and society, and economic relations in a world of different ethic values.

5) Compile teacher's reference materials and activity guide for integrated environmental learning, thus to provide aid for teachers to timely implement environmental education. Currently it is impossible to rely environmental education entirely on teachers' personal abilities, because teachers have a heavy teaching duty and a low average level of environmental knowledge with a wide difference in individual capabilities.

6) Strengthen teacher's training. The current situation of training by subject should be broken, and inter-discipline communication should be encouraged. Environmental courses should be designed by teachers of different disciplines.

## **4.2 In Higher Education**

The discipline centred issue in university.

The hierarchy structure consisted by discipline centred feature is the feature of university since Middle Ages. Under this circumstance of university environmental science was developed. The special environmental science and engineering are improved.

But from the view of the discipline EE is periphery. University likes discipline which can bring money and reputation. Environmental science and engineering cannot, so environmental science and engineering are periphery. EE is at the more periphery statuses in environmental science. As the discipline education EE is always at the statuses of periphery and be discriminated. The result is university never gives discipline education office resources and professional title resources. In the inner discipline environmental science is paid attention to but EE is underrated.

Environmental science at BNU was regarded as non normal education discipline in the past because non normal education discipline has very good developing space, promise and benefits. But basic education demands EE. The demand from basic education and the statuses of EE in university form a strange reflected relation.

EE is at the periphery statuses in the hidden curriculum, too. The commercialization covers everything in now society. It is the moral responsibility for university to implement EE.

Education is separating personality now. When the persons were student in primary and middle schools they went to the street to pick up rubbish to make the public area cleaning. But when they grow up to be government officer they just sing high tone about SD without actions.

There is no voice from university in the significant issue and decision-makings like SD. University keeps silence together.

### **4.3 The whole situation in China**

In 1995, the *National Action Compendium on Environmental Propaganda and Education (1996-2010)* issued by the Central Propaganda Ministry of the Chinese Communist Party, together with the State Education Commission and the State Environmental Protection Bureau. It estimated the status of environmental education in China in following: Since 1970s, China has launched widely environmental propaganda

and education, and the understanding of the public concerning environment and environmental problems has been improved in some degree. But according to the result of investigation on environmental consciousness, environmental consciousness of the public in China is still low, and obvious difference among different areas and different population still exists. This estimation was made six years ago when the Rio Conference had been held and *the 21th Agenda in China* had been published. But it still suits to the present. From this estimation, we can find out problems of environmental education existing in China. To improve these problems are the task of environmental education in the future in China.

### **1) Regional Difference of environmental consciousness**

The development of environmental education is lied particularly stress on cities, especially on Beijing declared for Olympic Games, on Shanghai declared for World Exposition, and on several special districts in southeastern China open to the world. Environmental consciousness of the public in these areas has improved greatly. While in wide countryside, especially in the economic-undeveloped west, it is still low. However, the big cities are merely several “points”, the environmental problems of which are almost same with those facing up in developed countries. As long as we have money, the modern pollution problems can be treated. While real ecological and social crisis occurs or lurks in wide areas, where varieties of production patterns, such as agriculture, collection, hunting and fishery, existed at the same time,.

### **2) Difference of environmental consciousness among population**

For these years, the major objects on environmental education are citizens and students. The citizens are focused on the middle and the upper classes. And students are focused on those in middle schools and in primary schools, respectively. To the labors

engaging in industrial and agricultural production who connect tightly with environmental problems, the environmental education has not been done enough.

### **3) Environmental consciousness is still low**

Taking it into account from adjusting to sustainable development, the environmental education in China is limited to the low level, such as to make campuses and communities clean and green, to start having consciousness to cry for treating pollution in the cities polluted severely, to know some terms such as Global Warming and Kyoto Protocol to some extent. But on the whole, propaganda and education is only able to reach such a degree, because propaganda is not very consistent with deepening, as well as it is difficult to avoid fickle and making public. While real sensitive and profound problems are unfit for blazon forth, it is difficult to be avoided that environmental education is limited in the level of knowledge, technology and management.

### **4) Environmental education hasn't acquired definite insurance in schooling as yet**

If insurance of environmental education can be obtained in schooling, it is hopeful to solve the problems above. For these years, why some schools have achieved success in environmental education lies in individuals of teachers or leaders have such a cognation and is interested in the work. Because of lacking of systemic insurance, once the teacher retired, the whole work will be terminated. Now a draft of the Manual of Implementation on Environmental Education in Middle and Primary Schools(for trial) set down by Ministry of Education is in review. It is hopeful to promulgate soon, which would advance the environmental education in schools.

**5) A lot of works have to do in order to orient the environmental education to sustainable development.**

It is no doubt that expressions such as “focusing on economic development”, “getting rid of poverty”, “managing state affairs with laws”, and “managing state affairs with morals”, existed frequently everyday in newspapers, journals, and some medias, are the strongest ictus. They are just the base for environmental education to orient to sustainable development, and to achieve success. Poverty is the worst pollution, while unruliness, cheating and oppressing, lacking of morals and injustice are the root for all troubles in societies, as well as the formation of terrorism.

The Compendium for Implementation of Civic Morality Construction was issued, by the Center of Chinese Communist Party in the last year. In the part of Major Contents of Civic Morality Construction, it is pointed out that, the civic morality is behavior standard obeyed by all citizens in their social intercommunication and common lives, which contains relationship between people and people, Man and society, Man and nature.

In the part of Guidelines and Principles of Civic Morality Construction, it is said that, insisting on paying attention to efficiency in harmony with taking care of social justice, regarding unification of efficiency and justice as the important goal of socialist morality construction, and establishing the ideal of paying attention to efficiency and taking care of justice in the society.

In the part of the Importance of Civic Morality Construction, it is mentioned that, the Chinese traditional virtues should combine with the new morality conception embodying modern requirements.

All the above should be quoted without any change by environmental education into its guidelines, principles, instructing thoughts, value concept and base of theory. However, in the part of the Importance of Civic Morality Construction, at the same time

to point out delightful changes having taken place in fashion of social morality, it is mentioned that, many problems are still existed in civic morality construction. In some fields and regions, standard of morality is in cloud, the circumscription between right and wrong, good and evil, beauty and ugliness is confused; money worship, gastronomy, extreme individualism are developing; behavior such as forgetting loyalty before benefits, and doing harm to countries in the interest of oneself is taking place now and then; ignoring credit, cheating and tricking have become social problems; the phenomena of figuring for benefits at the cost of power, morally degenerate are severe. Not being solved on time, the problems must do harm to normal economic and social order, and do harm to the overall situation of steadiness of reform and development.

The overall situation of the steadiness of reform and development might be harmed, let along the succession of environmental education for sustainable development.

If the leaders with more or less power violated any one of the aspects of departing from correct standard of morality listed above, It would do harm to the normal economic and social order. For example, someone might devour the wealth created by all people and belonging to whole society into his own or his household private pockets by using his power to avail himself of the loopholes of lack efficient supervision; and someone might set up “projects of achievements in one’s post” blindly, as starting to report in some newspapers, which tries to please the public with claptrap temporarily, but leaves a legacy of trouble in ecology and society for ever. Turned to the common people, who could not have the convenience like the leaders above, and are eager to be rich but were not restricted by laws and morality, they might therefore turn to exploit cruelly to nature, over cutting, over hunting, over cultivating and over herding, as a result, leading to ecological degradation.

There are abundant and valuable contents in the Chinese traditional virtues related to sustainable development, whatever relationship between people and people,

people and society, and people and nature. “Don’t let others do whatever you yourself wouldn’t” called for by Confucius has been taken by the western countries as same as what Jesus said in meaning, you should treat others in the manner of what you hope others treating you. They are the highest rule relating with others in the world. As to the relationship between Man and Nature, it had already been explicated in the ancient literatures more than 2000 years ago. For example, it was stipulated that, during the germinating season, trees were not permit to cut, and animals were not permit to kill; female animals in pregnancy were not permit to kill; in order to avoid fishing the young fish, size of the mesh of fishing net was even prescribed. But unfortunately, now the persons who know the ancient literatures must be only a few. It would be even difficult to overcome the effects of the guidelines of eager for quick success and instant benefit, and the struggle philosophy.

Just 100 years ago, Liang Qichao, a forerunner of ideological revolution, brought forward the “theory on new people”. He pointed out that in order to rebuild China and to reform society, the Chinese people have to be reformed first. One hundred years have passed, but what about the “new people” in China?

A quite famous intellectual said, that the number of intellectual in China has been increasing for tens even hundreds times in the past more than 50 years since the World War II, but It seems there is some shortage in their education, which makes their knowledge framework and ideological level in general could not as good as that of the several generations in 1930s and before. Here the ideological level refers to independent thinking and spirits for innovation, which is just the principle part of the ability and quality stressed in undergoing education reform, as well as the critical ideation emphasized all along in environmental education. We wish it should be complaints and prejudice of the old intellect.

With the developing of the society and the raising of the concept of sustainable development, would China need another initiation campaign? People engaging in

environmental education in China are not only safeguards of environment including nature, economic and society, but also fighters in social and education reform, because the new value conception is built on the innovation of society and education. As the Chinese idiom said it takes ten years to grow trees and a hundred to rear people, it is not easy to have such an innovator group of teacher in the field of environmental education.

## **5. Future orientation of the national ESD policy in China**

About the direction of China's EE/ESD and its policy, there are several things needed to discuss.

First of all are the aims and contents of EE/ESD. Since document of Stockholm defined EE clearly, the aims and contents of EE have kept sweeping and widening. Passing by Belgrade (1975), Tilbilisi (1977), Rio Janerio (1992) and Thessaloniki (1997), EE developed from "education about environment" to "education for sustainability". The trend could be seen in this route is: "environment" jumps out from layer of "nature" and expands to a holistic "environment" which involves ecology, society, economy and politics; EE jumps out from layer of skills and knowledge about environment and expands to a holistic "education" which involves awareness, attitude, values, ethics on environment. Such progress is result from critical thinking and participation spirits of EE. If EE only emphasize awareness and knowledge but not critical thinking which is core concept of EE, it is difficult to make big progress for China's EE.

Second thing to be considered is the relationship between China's education reform and EE. China's education has been reformed several times. Recently a new type of education "quality education" was put forward. The core of "quality education" is to foster "innovative students". But "innovation" actually rooted in "critical thinking". At this point, EE has the same aim with modern education reform in China. So EE should be

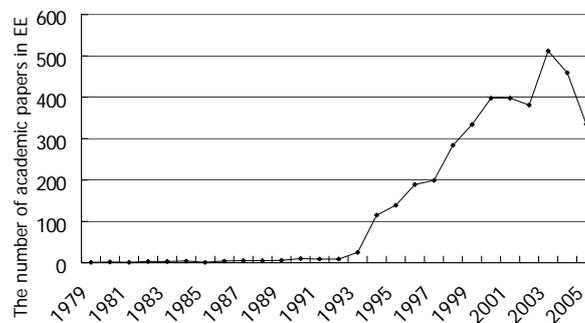
thought as a part of recent education reform. EE's progress depends on the comprehensive reform of whole education; success of reform of whole education needs EE's experiences as references.

Last thing to be discussed is the relationship between EE and education for sustainability/education for sustainable development (EFS). There are many diverging opinions at this point. Actually, from documents of "Brundtland Report" and other EE meetings, it is clear that EE should redirect to education for sustainability. And "sustainable development" could cover "environment" and "education for sustainability" could cover "environmental education". On another hand, it is accepted generally that "education for sustainability" rooted in "environmental education". Some scholars think EE and EFS are different and far away from each other probably because EE emphasize knowledge especially knowledge about environment excessively in early days and it is a difficult and slow process to introduce social, economic and political ideas into EE. Somebody even think since EFS can cover EE; EE can be called off now. For this comment, ancient Chinese wisdom may provide a solution: "Tao can exist together and not conflict".

**For example:**

Taking "Verbatim Record Data Base of Academic Journal in China"(2006) as information source and using "Environmental Education" as key word 4257papers are searched from 1979 to 2005.After the repeated papers, book sale information and advertises being picked out there are 3831 academic papers in EE in China from 1979. The distribution of academic papers in each year from 1979 is illustrated in the following figure.

**Figure 3. The number distribution of academic papers in EE during 1979-2005 in China**



According to the paper number of ESD increasing and the paper number of EE decreasing from 2004 to 2005 the trend of EE transforming to the direction of ESD is clearly.

Looking from the research content in these papers the themes like environmental equity and justice relate more closely with social dimension. So EE transforming to ESD is more clearly.

Looking from the methods and ways for EE carried out, which are mentioned in these papers, that EE is sensitive to response to the mainstream educational method. That means it is ready for EE to transform to the direction of ESD in methodology.

So it is the inevitable trend for EE to transform to the direction of ESD in China. But about how to transform there are still huge gap between theory and practice, policy and implementation. And there are many uncertainties for researchers in EE/ESD to face in the future.

## GREEN SCHOOL AND ESD IN CHINA

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Education is the key approach for Environmental Protection and sustainability. In China, Environmental Education (EE) for youth has been seen as the basic and long effective measures for Sustainable Development. According to this understanding, Education concerns have been putting into the policies on Environmental Protection since 1970's in China.

In 1973, the first National Conference on Environmental Protection was held and one of the fruit of this conference was "Regulations on Protection and Improvement of Environment". In this government file, it was require that great effort should be take to implement scientific research and education on environmental protection. It is a symbolic of the beginning of environmental education. It was also required that "environment should be a discipline and relevant curriculums should be developed in colleges and universities." And in 1978, it was required in the "Key notes of environmental protection works" proved by CPC central committee that "Content of environmental protection should be added in teaching materials in primary and secondary schools." Environmental education begin to pilot in primary and secondary schools in 1980.

The second National Conference on Environmental Protection was held in 1983, and environmental protection became a basic national policy in China. Environmental education was emphasized as an important strategic measure to implement this policy. Specific requirements was made by the National Education Committee in the syllabus of relevant subjects in basic education respectively in 1987, 1990 and 1992. From then on

the status of EE in basic education is decided. The first National EE work meeting was held on November, 1992. The policy, which is that Education is the base for environmental protection, was promoted in this meeting. In this policy the status, the role of EE and the importance of implementation of EE are emphasized.

Influenced by UNCED Earth Summit in Rio the concept of Sustainable Development has been added to environmental communication and education in China. In <China Agenda 21> in 1994 that “implementing the idea of Sustainable Development to the whole education process from basic to higher education” was promoted. And then in 1996 the contents, objects and forms of EE were made clearly in <National Action Guideline of Environmental Communication and Education (1996-2010)>.

Ministry of Communication, Ministry of Education and State Environmental Protection Agency together initiated Green School activity in 1996. In recent ten years under the hard work from both local environmental department and education department the Green School activity has been a special EE program facing to children and young people.

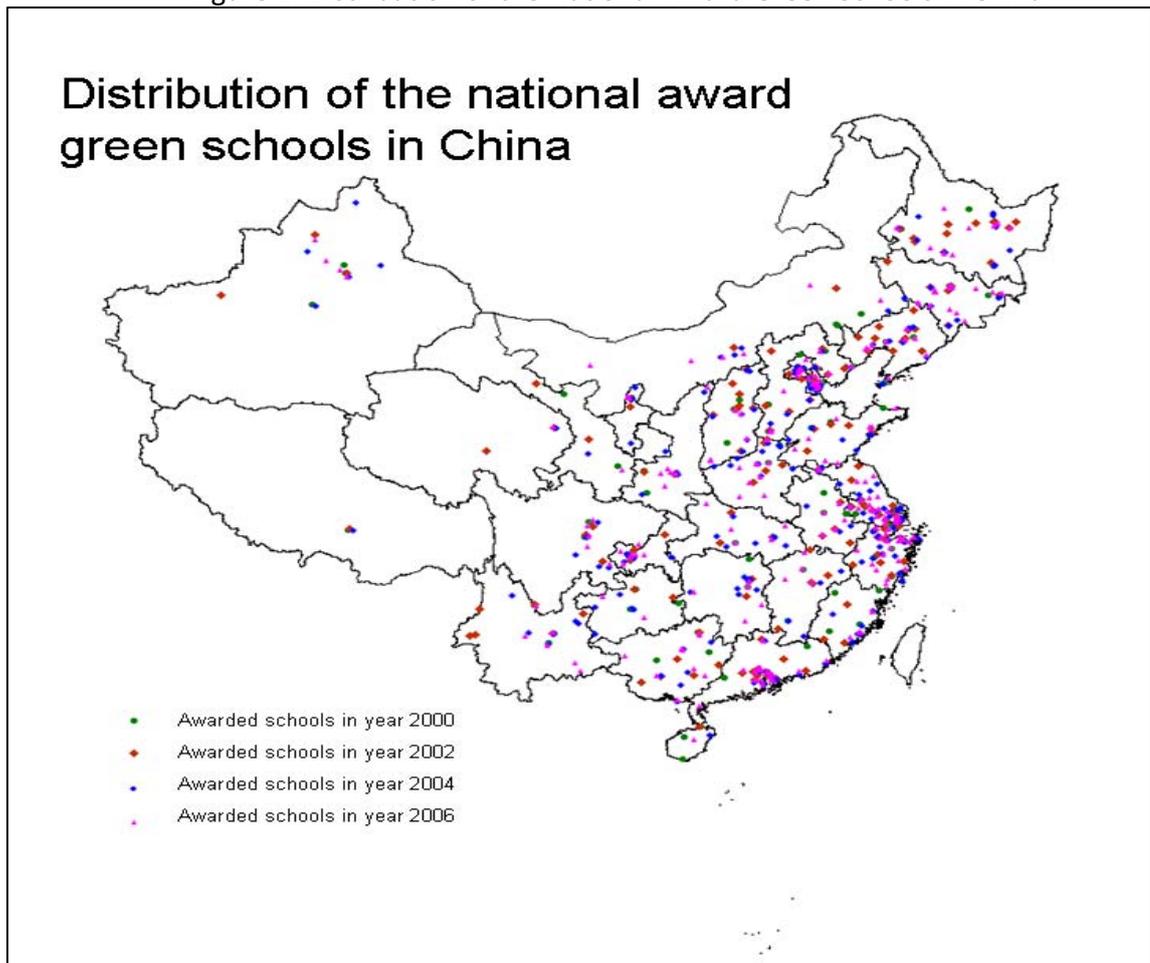
The national Green School leading group office was set up at CEEC-SEPA by SEPA and Ministry of Education since 2000. This office initiated diversity EE activities in youth through Green School Program since 2001.

## **1. Green School all over China**

There are more than 40,000 primary and middle schools, Middle Professional Training Schools and Kindergartens involved in commanding Green School building activities in 31 provinces/self-control areas all over China. More than 90% cities in China

have commanded Green Schools. There are 705 Green Schools belonging to national level.

Figure 1: Distribution of the National Award Green Schools in China



The range of Green School extended is not only referred to the primary and middle schools in 2000 but also include kindergarten, primary school, middle school and professional training school. The level was also improved and extended to be 4 levels of county level, city level, province level and national level.

The new basic frame work of commanding Green School was made by CEEC-SEPA in 2004. The commanding process includes five steps of primary audit, second audit, sample, re-audit and making commanding draft, and each step has its concrete technological process. The local environmental and education departments made series local Green School evaluation methods and documents and improved the commanding work in city and province level according to the above mentioned management rules. The local departments also improved their management methods based on local realities in their practices. These methods and strategies promoted and standardized local Green School commanding works.

## **2. The outstanding achievements of Green School**

The Green School building activities at local level all over China have been an effective method and way to promote youth to participant in environmental protection, and the concrete practices in school to implement Scientific Development View and build harmony society.

Since the work of Green School building beginning, there are series diversity activities at local level. These activities promoted the environmental awareness of teachers and students in schools, the management level of the school, the quality education and disseminate the idea of Sustainable Development. Green School became to be a good platform for youth to participant widely in environmental protection, to be an effective way to promote the work of environmental protection and to be an important power to build resources-saving and environmental friendly society. The Green School building activity has been a basic engineering for China to implement the national Science and Education strategy and Sustainable Development strategy, the necessary

composition of ESD for people all over China, and make contribution to ESD for the excellent education all over the world.

Figure 2: Water tank on the top of school building



Figure 3: A pump house



Green School building activity promotes the linkage between Green School and basic education reform. The school improves its multi-discipline penetrating system, encourage and direct students to carry out action research and investigation research under the environmental related theme, write research essays, etc. The enthusiasm and ability of youth to concern about the environment and environmental protection were promoted greatly.

Figure 4: Energy Saving and Wastes Reduction in Green Schools



School campus environmental building and management is the important content for Green School building. Through promoting school campus environmental management program of saving energy and reducing pollution, students and teachers save water, electric, energy and resources, promote the using effective of the facilities and spaces, improve the environmental quality and build environmental friendly school campus living and working space. All teachers and students of the school participate in the Green School building themselves. And the youth becomes to be the practices to build resource-saving and environmental friendly society.

Figure 5: Green School Mechanism



Figure 6: Case study of CEMP schools in 2006

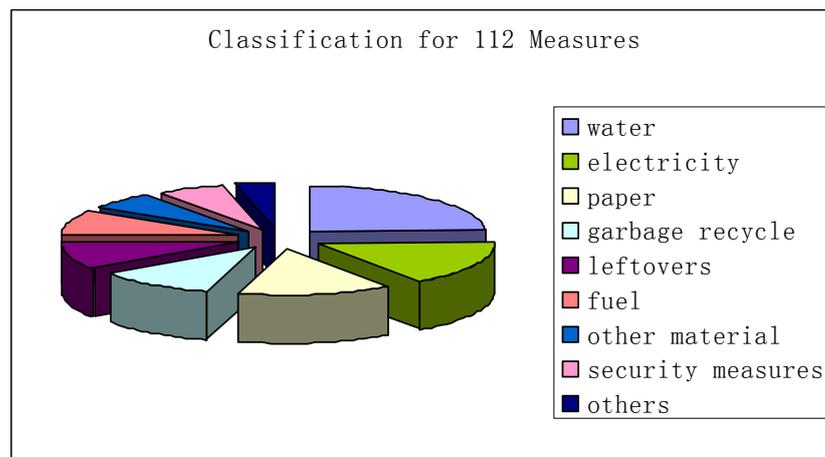


Figure 7: Invests on Implementation of Green Campus Management Project in 2006

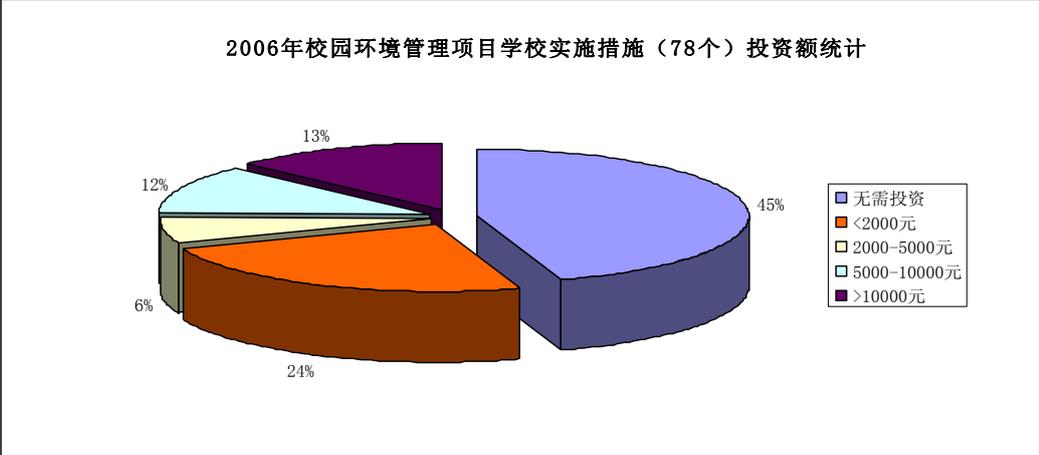
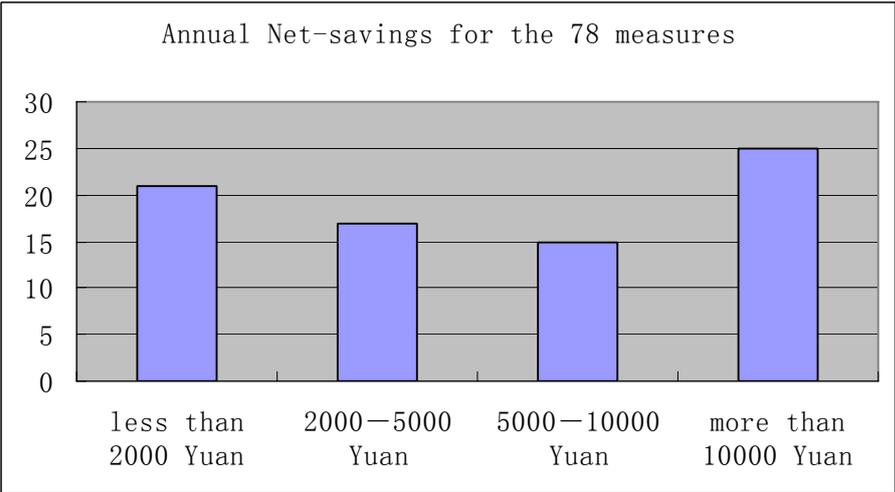


Figure 8: Annual Net-saving for the 78 Measures



The little journalist project in Green School program promote students to make action research by deeply investigating the environmental issues around them, to promote resolving methods with creative thinking and to present to the public by their report in the media. All these build the capacity of youth in concerning about environmental issues and environmental protection participation.

The activity of small hand join big hand in Green School program initiates the families, influences the communities, promote more and more people widely involve in

the action of environmental protection and produce significant social effects. All these get enthusiasm support and widely participating from local communication department, civilization office, scientific association, woman association and communist youth league all over China.

Figure 9: Use Wasted Cementing Tube as Flowerpot



Figure 10: Use Wasted Cable Axle as a Pavilion



The decision of implementation scientific development view to strengthen environmental protection>, issued by the state council, clearly refers to continue the pilot Green School activity. This is not only the fully confirm to Green School building work but also the clearly requirement to our future work.

### 3. Full of life for Green School

Since 2001 Green School Award office has built the net work of Green School manager at province and city levels, which makes the management methods and evaluation methods to be implementation. The Green School building leader group is set up by both environmental and education departments at local level all over China. The local group made concrete principles to adapt local situation according to the 10 core evaluation principle promoted by CEEC-SEPA to organize research, evaluation and audit by visit Green Schools to make specific director for practice. And building closely relationship with school principles and teacher in EE, offer much information about how to build Green School, and offer instrument, visit and learning spaces for school out-class activities. This net work extends the Green School program strongly and effectively. And each local Green School management group in the net work implement creative works with diversity.

Figure 11: Water saving campaign in schools of CEMP



Figure 12: Children Exchange Books in the School of CEMP



Figure 13: Roof solar heater in the affiliated high school of the Jiangsu Normal College



#### 4. Green School goes abroad

CEEC-SEPA represented China Green School to join in Fund of Environmental Education on June, 2007 to deeply promote China Green School to make link with international society. And in the future try to present their own features at the international arena of Sustainable Development.

## **5. The problem of Green School**

Firstly, the unbalanced development of Green School all over China is related closely with the economic level, which is not good to the awareness of Sustainable Development in under-developed area in China

Secondly, after many schools get the award of Green School they stop in their greening actions. That how to make school greening work to be regular work is an important project to be worthy researched.

Third, the communication among Green Schools in China and out of China is seldom, which is not good to the growth and development of Green School in China.

Fourth, many school still just focus on the examination and cannot give emphasis on Green School building and cannot responsible for youth sustainable development capacity building.

We have to pay more attention and work hard in the future to reform the education by the way of Green School when facing the complex situation of China education.

## **6. The future development of Green School**

One is to promote the cognition level at local Green School management level.

Two is to extend the excellence projects like school campus management project, environmental little journalist and environmental master projects, etc, to promote the quality of Green School building.

Three is to encourage and develop national level Green School participate in the Global Ecological School net work and strengthen the communication among Green School in China and between China Green School and international schools.

Four is to deepen and strengthen the capacity building for the manager and teachers in Green School in China to attract more and more school to involve in the net work of Green School and eco-school.

## Appendix 1: Workshop participants

Regional Workshop on ESD Policy and Implementation: China, Japan and Republic of Korea					
26 September					
Beijing, China					
<b>International Organisations</b>					
1	Mahesh Pradhan	Regional Environmental Affairs Officer	UNEP, Bangkok Office	<a href="mailto:pradhan@un.org">pradhan@un.org</a>	66-2-288-1801
2	Jieying Xu	National Programme Officer	UNESCO, Beijing Office	<a href="mailto:J.xu@unesco.org">J.xu@unesco.org</a>	86-10-6532 2828(Ext.134)
3	Shigang Zhang	Coordinator	UNEP, Beijing Office	<a href="mailto:zhang.shigang@unep.org">zhang.shigang@unep.org</a>	86-10-85320921 Tel: 86-10 -8532-0734
4	Guo Yinfeng	Director	UNDP, Beijing Office	<a href="mailto:yinfeng.guo@undp.org">yinfeng.guo@undp.org</a>	
5	Zhang Lei	Manager	Social Department, BP-Beijing	<a href="mailto:catherine.zhang@se1.bp.com">catherine.zhang@se1.bp.com</a>	86-10-84795117
6	Zhang Yi	Manager of Educational Department	Educational Department, WWF-China	<a href="mailto:YZhang@wwfchina.org">YZhang@wwfchina.org</a>	86-10-65227100-3230
<b>Japan</b>					
<b>Government Officers</b>					
7	Akihiko Noda	Senior specialist	Office of Planning and Coordination, International Affairs Division, Minister's Secretariat/ Japanese National Commission for UNESCO	<a href="mailto:nodanoda@mext.go.jp">nodanoda@mext.go.jp</a>	81-3-5253-4111-ex.2585
<b>Universities</b>					
9	Masahisa Sato	Assistant Professor	Faculty of Environmental and Information Studies, The Musashi Institute of Technology	<a href="mailto:m-sato@yc.musashi-tech.ac.jp">m-sato@yc.musashi-tech.ac.jp</a>	81-45-910-2564
<b>International/National Organisations</b>					
11	Mee Young Choi	Project Manager/Senior Policy Researcher	Capacity Development and Education Project, Institute for Global Environmental Strategies	<a href="mailto:mychoi@iges.or.jp">mychoi@iges.or.jp</a>	81-46-826-9572
<b>Republic of Korea</b>					
<b>Government Officers</b>					
12	Kwon Ki Tae	Public Relation Team, Team Leader	Korean National Commission for Sustainable Development	<a href="mailto:kwonkt@kncsd.go.kr">kwonkt@kncsd.go.kr</a>	82-2-2180-2277
13	Hey Kyoung Jung	Deputy Director	Environmental Awareness & Public Cooperation Division	<a href="mailto:tomiu77@me.go.kr">tomiu77@me.go.kr</a>	82-2-2110-6695
<b>Universities</b>					
14	Sang Hun Lee	Assistant Professor	Hasin University/Expert Committee of the Korean National Commission for Sustainable Development	<a href="mailto:tochi18@hanmail.net">tochi18@hanmail.net</a>	82-11-2305-4926

<b>National Organizations/Institution</b>					
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<b>China</b>					
<b>Government Officers</b>					
16	Chen Yanping	Director	Sino-Japan Friendship Environmental Protection Center, State Environmental Protection Administration of China (SEPA)	<a href="mailto:yanpingzhang@vip.sina.com">yanpingzhang@vip.sina.com</a>	86-1084846351
17	Jiao Zhiyan	Director	Center for Environmental Education and Communication (CEEC), SEPA	<a href="mailto:zhiyanjiao@vip.sina.com">zhiyanjiao@vip.sina.com</a>	86-10-84646351
18	Song Xuhong	Director of Department of Education	CEEC, SEPA	<a href="mailto:songxuhong@126.com">songxuhong@126.com</a>	86-10-84634281
19	Yang Ke	Manager of Green School Project	Department of Education, CEEC, SEPA	<a href="mailto:tb_yang@sina.com">tb_yang@sina.com</a>	86-10-84634281
<b>Universities</b>					
21	Jiang Dahe	Professor	UNEP-Tongji Institute for ESD, Tongji University	<a href="mailto:jiangdh@tongji.edu.cn">jiangdh@tongji.edu.cn</a>	86-21-65983302
22	Miao Chang	Director/Associate Professor	Division of Environmental Management & Policy, Tsinghua University	<a href="mailto:changmiao@tsinghua.edu.cn">changmiao@tsinghua.edu.cn</a>	86-10-62780478
23	Bai Yuhua	Professor	Environmental College, Peking University	<a href="mailto:yhbai@pku.edu.cn">yhbai@pku.edu.cn</a>	86-62752988
24	Dong Qi	Vice-president/Director	Director of EEC-BNU	<a href="mailto:dongqi@bnu.edu.cn">dongqi@bnu.edu.cn</a>	86-10-58807950
25	Zhang Lansheng	Professor/Executive Director	EE Center, Beijing Normal University	<a href="mailto:zhangls@bnu.edu.cn">zhangls@bnu.edu.cn</a>	86-10-62208958
26	Tian Qing	Associate Professor	EE Center, Beijing Normal University	<a href="mailto:green@bnu.edu.cn">green@bnu.edu.cn</a>	86-10-58806082
27	Huangyu	Lecturer	EE Center, Beijing Normal University	<a href="mailto:huangyu@bnu.edu.cn">huangyu@bnu.edu.cn</a>	86-10-58806082
28	Yang Guang	Lecturer/Director of EE Center	College of Basic Education, Capital Normal University	<a href="mailto:yangguangsunny@gmail.com">yangguangsunny@gmail.com</a>	86-10-68903409

## Appendix2: PowerPoint Presentations

### **Session 1: ESD Policy and Implementation in Japan**

*Mr. Akihiko Noda, Japanese National Commission for UNESCO-----127*

*- Dr. Masahisa Sato, Musashi Institute of Technology, Japan-----131*

### **Session 2: ESD Policy and Implementation in Republic of Korea**

*Dr. Sanghun Lee, Hanshin University, Republic of Korea-----137*

*HyunJin Jeon, UNEP National Committee for the Republic of Korea-----141*

### **Session 3: ESD Policy and Implementation in China**

*Dr. Tian Qing, Beijing Normal University, China -----143*

*Yang Ke, Ministry of Environment for Protection, China -----153*



## ESD Policy and Implementation in China, Japan and Republic of Korea



## PowerPoint Presentations

## Japan and the Promotion of ESD

by Mr. Akihiko NODA  
Secretariat of the Japanese National Commission for  
UNESCO  
Senior Specialist, the Office of the Director-General  
for International Affairs,  
Ministry of Education, Culture, Sports, Science  
and Technology JAPAN

### Sustainable Development:

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

(from *Our Common Future*: Report of the  
World Commission on Environment and  
Development (so-called the Brundtland  
Report) – 1987)

## ● ● ● Factors behind Japan's decision to promote ESD

- Fundamental role of education in Japan's development
- Simultaneous pursuit of economic growth and environmental protection under the Kyoto Protocol



## Issues to be addressed...

### ...by developing countries:

- Poverty reduction
- Sustainable growth
- Living standards
- Social protection
- Basic education
- Security (human rights, refugees)

### ...by developed countries:

- Environmental protection
- Peace and human rights
- Assistance to developing countries to fight poverty

## ● ● ● Aspects emphasized by ESD:

- Individual qualities (self-reliance, judgment, responsibility)
- Understanding relationships between self, society and nature

### Pedagogical approach:

- Stimulate personal interest, spirit of enquiry and participation
- Translate personal experiences into concrete action

### Other benefits:

- May help developed countries in dealing with contemporary issues such as the decline of academic interest and social norms



## ESD in Japan

- ESD elements applied in "integrated study" classes, but not specifically mentioned



- ESD fully included as a notion in new courses of study (effective from 2009)

### Examples:

- "Reflect upon the importance of preserving the environment in order to establish a sustainable society, and the relation between the environment, the evolution of the industry, urban development and human life."
- "Investigating the issues that need to be solved to establish a better society, and systematically arranging one's ideas on the subject"
- "Scientifically examine the use of technology to preserve the environment, and to become aware of the importance of establishing a sustainable society"

## ASPnet and the promotion of ESD

### UNESCO Associated School Network (ASPnet)



Martin Bobie / UNESCO / ASPnet

- Network founded in 1953
- Approx. 7,900 institutions across 176 countries
- 24 associated schools in Japan

The Development of ASPnet is seen as an effective way to promote ESD across Japanese schools.

## Fuji Junior High School (Saitama Pref.)

Observing environmental conditions and endangered species, and sharing that information with schools in other countries



Concrete projects focus on:

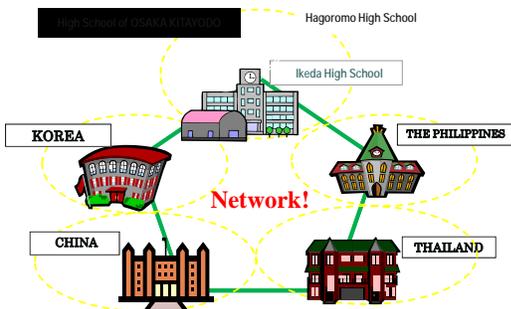
-measuring and analyzing environmental data such as temperature, rainfall, acid rains, cloud cover and cloud formations, water quality

-observing and protecting ecosystems



## Ikeda Senior High School

School network across Japan, South Korea, China, the Philippines and Thailand.



## Ikeda Senior High School

-Exchanges and mutual visits with schools in China and South Korea

- Dialogue and joint symposiums on Peace and the Environment

- Organized with schools in other participating countries

- The exchange of teaching personnel.



## ● ● ● International Cooperation by Japan

- Establishment of a UNESCO Funds-in-trust for ESD (approx. 2 million dollars)
- Resolution submitted to 34<sup>th</sup> session of the UNESCO General Conference calling for the further promotion of ESD
- Organization of international forums in 2008

**ESD International Forum (Dec. 2-5)**

## ● ● ● ESD International Forum (Tokyo, 2-5 December 2008)

- Definition of concrete strategies to promote ESD
- Cooperation with private sector and establishment of consortiums
- Research on ESD
- Midterm evaluation of ESD in the Asia-Pacific region

● ● ● Thank you for your  
attention

### **JAPANESE NATIONAL COMMISSION for UNESCO**

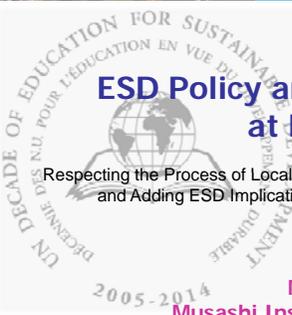
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100-8959

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e-mail: [jpnatcom@mext.go.jp](mailto:jpnatcom@mext.go.jp)

● ● ●

by Mr. Akihiko NODA  
Secretariat of the Japanese National  
Commission for UNESCO  
Senior Specialist, the Office of the  
Director-General for International  
Affairs,  
Ministry of Education, Culture, Sports,  
Science and Technology JAPAN



## ESD Policy and Implementation at Local Level in Japan

Respecting the Process of Local Policy Formulation and Implementation,  
and Adding ESD Implication to Existing Activities for Sustainability

**Masahisa SATO Ph.D.**  
Musashi Institute of Technology  
m-sato@yc.musashi-tech.ac.jp



A review paper to be presented at the Regional Workshop on ESD Policy and Implementation: China, Japan and Republic of Korea to be held for 26 September 2008 at Beijing Normal University, Beijing, the Peoples Republic of China.



## Presentation Outline

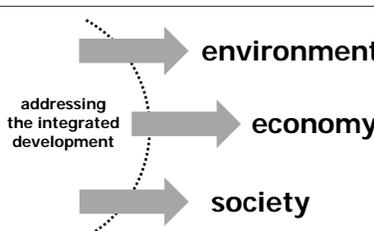
1. Priority Issues in Japan
2. Roles of Local Authority
3. ESD Implementation at Local Level
4. The Future of ESD at Local Level

### Priority Issues of National Action Plan

programmes that take into account the issues related to sustainable development on a global scale involving developing countries, while dealing with issues concerning "environmental preservation" that must be dealt with by developed countries, and addressing the integrated development of the environment, economy and society.

"Environmental Education"

addressing the integrated development



**ESD**

### Japanese Experiences:

"nature conservation education"  
(Since 1950s)



"pollution education".  
(since 1960s)



"Environmental Education"

## Japanese Experiences:

An understanding of social institutions and their role in change and development, as well as the democratic and participatory systems which give opportunity for the expression of opinion, the selection of governments, the forging of consensus and the resolution of differences

**"Society"**

"pollution education". (since 1960s)

**"Economy"**

"nature conservation education" (Since 1950s)

An awareness of the resources and fragility of the physical environment and the affects on it of human activity and decisions, with a commitment to factoring environmental concerns into social and economic policy development

**"Environment"**

UNESCO (2005) UNDESD International Implementation Scheme (IIS) As of October 2005

## 4. The Future of ESD at Local Level

Table 1: Thessaloniki declaration 10 -11 (extraction)

**10. The reorientation of education as a whole towards sustainability involves all levels of formal, non-formal and informal education in all countries. The concept of sustainability encompasses not only environment but also poverty, population, health, food security, democracy, human rights and peace. Sustainability is, in the Final analysis, a moral and ethical imperative in which cultural diversity and traditional knowledge need to be respected.**

**11. Environmental education, as developed within the framework of the Tbilisi recommendations and as it has evolved since then, addressing the entire range of global issues included in Agenda 21 and the major UN Conferences, has also been dealt with as education for environment and sustainability.**

## 2. Roles of Local Authority

Table 2: Concrete Measures to Promote ESD in Japan, by Local Authorities

- Based on the content of this plan of implementation, various plans, including the comprehensive plan for the region, must **introduce the concepts of sustainable development**. Local authorities must draw up a new or revised Local Agenda and grapple with the creation of a sustainable community. The Local Agenda must include a plan of implementation for ESD.
- **Implement community building** while encouraging citizen participation. In order for citizens to decide on measures for sustainable development or community building, the local authorities must proactively provide information to them.
- **Offer opportunities** for ESD to various organizations in the region, as well as encouraging the creation of programmes rooted in the community.
- When implementing measures related to ESD, local authorities must do **so in collaboration with** education-related organizations, such as the board of education and departments related to planning, community residents, the environment, urban affairs, agriculture, forestry, fisheries, and public corporations.

## 2. Roles of Local Authority

Table 2: Concrete Measures to Promote ESD in Japan, by Local Authorities

- **Disseminate information** concerning various ESD programmes in the region, as well as pushing ahead **with coordination** with the parties concerned in the region and **creating a network**. In this case, they must **implement programmes** that make the most of organizations already engaged in ESD activities and those **involved in activities** based on the values and principles of ESD.
- Local authorities must play the **role of coordinator** by putting together education-related institutions, NPOs, and enterprises in the community, as well as that of **producer** by initiating activities and projects **involving diverse organizations** in relation to various regional activities and issues.
- **Promote coordination** among regions and share advanced examples in a study group that includes local authorities or the places of **information exchange**.

3 ESD Implementation at Local Level

**•ESD Promotion Programme (Non-Formal Education):**

14 ESD model projects (as of March 2008) have been done in support of the Ministry of Environment.

•Through these ESD practices under the 14 model projects, effective views and system, and promotion factors have been extracted since 2007, by holding a series of regional forum. It is planned that the lessons learnt from the practices will be applied for the promotion of ESD at nationwide.




3 ESD Implementation at Local Level

**•Period of Integrated Studies (Formal Education):**

the Ministry of Education promotes the "Period of Integrated Studies",

•which is holistic, integrated, comprehensive and cross-disciplinary in nature and includes elements such as international understanding, environment, welfare and health. Also, the experiential learning and the skill development for problem solving are emphasized in the period. The period is regarded as high potential for the promotion of ESD, with Teacher's strong initiatives in respect of interdisciplinary areas and/or local context.



3 ESD Implementation at Local Level

**•UNESCO Associated School (Formal Education):**

•24 model schools (as of March 2008), which are respecting the concept of UNESCO, have been implemented school-based ESD activities. The project has been in support of the Japanese National Commission for UNESCO.



■ The ASP network, which started with a membership comprised of 15 member states and 33 institutions/schools, has expanded to 175 member states and 7,815 institutions/schools (as of November 2005).

3 ESD Implementation at Local Level



3. ESD Implementation at Local Level

3. ESD Implementation at Local Level

### National Policy Formulation and Implementation

- the Basic Environment Plan,
- the Basic Plan for Food, Agricultural and Rural Areas,
- the Basic Plans for Forests and Forestry, Basic Plan for Energy,
- the Plan for Infrastructure Improvement, the Basic Plan for Consumers,

↓

### Local Policy Formulation and Implementation

4. The Future of ESD at Local Level

ESD perspectives :

- (1) awareness of relationships;
- (2) contextualization of activities;
- (3) formulation of sustainability principles and concepts;
- (4) respect for environmental ethics and diverse values;
- (5) utilization of and learning with diverse educational methods and higher-order thinking skills;
- (6) interaction amongst diverse education community;
- (7) collaborative approach and capacity building;
- (8) social learning mechanism and creation of a lifelong learning system;
- (9) connections with international education initiatives;
- (10) positive societal transformation.

4. The Future of ESD at Local Level

Adding ESD Implication to Existing Activities for Sustainability

- (1) awareness of relationships;
- (2) contextualization of activities;
- (3) formulation of sustainability principles and concepts;
- (4) respect for environmental ethics and diverse values;
- (5) utilization of and learning with diverse educational methods and higher-order thinking skills;
- (6) interaction amongst diverse education community;
- (7) collaborative approach and capacity building;
- (8) social learning mechanism and creation of a lifelong learning system;
- (9) connections with international education initiatives;
- (10) positive societal transformation.

# Education for Sustainable Development (ESD) - the Evolution Process -

## Historical Background (1)

<p><b>Basic Education, universalizing access and promoting equity</b></p> <p>(1948: The Declaration of Human Rights, 1989: Convention on Right of the Child - CRC, 1990: WCEFA and Jomtien Declaration on Education for All – EFA, 2000: WEF and Dakar Framework of Action, 2000-2015: MDG 2-3, 2003-2012: UNLD)</p>	<p><b>Environmental Movement and Environmental Education</b></p> <p>(1972: UN Conference on Human Environment in Stockholm, 1977: Tbilisi, 1987: Moscow, Brundtland Report – Our common future, 1992: Rio Summit – Agenda 21 Chap 36, 1994: World Summit for Social Development, 1995: 2<sup>nd</sup> UN Conference on Human Settlements, 4<sup>th</sup> World Conference on Women, 1996: World Food Summit, 1997: Thessaloniki Declaration)</p>
<p><b>Quality Basic Education</b> (1990: WCEFA and Jomtien Declaration on Education for All – EFA, 2000-2015: MDGs)</p>	<p><b>Sustainable Development &amp; Education</b> 1987-2002: Emergence then definition of the concept of Sustainable Development</p>

Source: M.Sato (2005)

## Historical Background (2)

### "Education for Sustainable Development (ESD)"

- 2002: Johannesburg World Summit on Sustainable Development (WSSD) > DESD Proposed & Endorsed
- December 2002: resolution 57/254 of the General Assembly of the United Nations
- December 2004: UNESCO submits the draft IIS to UN General Assembly (resolution 59/237)
- September 2005: UNESCO's Executive Board (172) approves the IIS

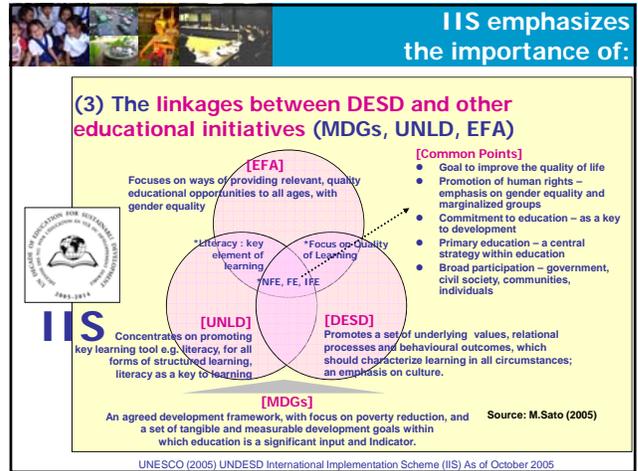
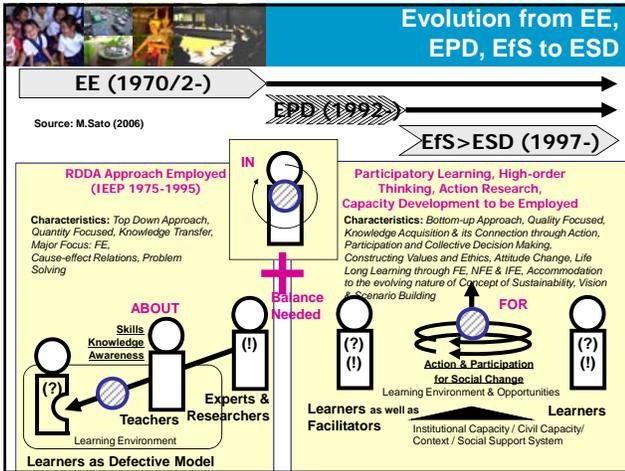
Source: M.Sato (2005)

## Evolution from EE, EPD, EfS to ESD

Timeline: EE (1970/2-) → EPD (1992) → EfS > ESD (1997-)

<p><b>Environmental Quality</b></p>	<p><b>Environment</b> (Quality, Quantity)</p> <p><b>Development</b> (Economic, Education, Social Services, Capacity Building)</p> <p><b>Population</b> (Size, Growth, Distribution, Structure)</p>	<p><b>Environment</b> e.g. water, waste</p> <p><b>Society</b> e.g. employment, human rights, gender equity, peace and human security</p> <p><b>Economy</b> e.g. poverty reduction, corporate responsibility, accountability</p> <p><b>Overarching Sphere</b> e.g. HIV/AIDS, migration, climate change and urbanization</p>
-------------------------------------	--	--

Source: M.Sato (2006)



Thank you very much

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# Current Status of the policy on education for sustainable development in Korea

26 September 2008

Sanghun Lee  
Assistant Professor  
Faculty of Liberal Arts, Hanshin University  
Republic of Korea

## Contents

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2. Policies for ESD at the National Level
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## 1. History of Development of ESD

School Education



College Entrance Exam-Oriented Education (stumbling block)

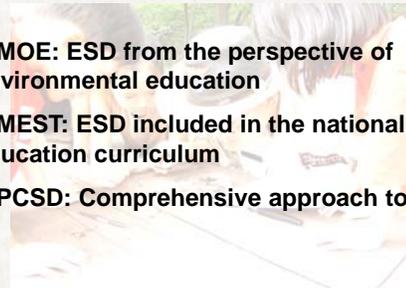
Social Education



Environmental education is not integrated into ESD

## 1. History of Development of ESD

- MOE: ESD from the perspective of environmental education
- MEST: ESD included in the national education curriculum
- PCSD: Comprehensive approach to ESD



## 1. History of Development of ESD

- In 2004, the 3<sup>rd</sup> PCSD organized “expert committee on public relations and education” and began to overcome the purview of environmental education
- Research on “The action plan for ESD” was completed in June 2005
- The action plan included as a strategy for realizing the “National Vision for Sustainable Development” announced by the President

## 2. Policies for ESD at the National Level

### 1) Vision and Target of ESD



## 2. Policies for ESD at the National Level

### 2) Implementation Strategies for ESD

- Strategy 1: To establish the system and foundation for the institutionalization of the ESD concept
- Strategy 2: To improve public awareness, share the vision, and secure ownership related to ESD in a participatory manner
- Strategy 3: To enforce the learning and doing capacity of individuals and groups for SD
- Strategy 4: To strengthen communication and partnership among the stakeholders of ESD
- Strategy 5: To make education and study the core strategy for establishing SD and creating a sustainable society

## 2. Policies for ESD at the National Level

### 2) Action plan for ESD

- Establish a foundation of ESD
  - Formulate a comprehensive plan for national ESD
  - Extending support to education programs for SD as operated by the achievements
- Raising public awareness of SD
  - Formulating and implementing the PR plan for SD
  - Reinforcing support for SD-related policy research
  - Finding and disseminating model cases of SD and implementing the pilot project

## 2. Policies for ESD at the National Level

### 2) Action plan for ESD

- Expanding the education program for each area and strengthening cooperation
  - Enriching the substance with regard to ESD in curriculums and expanding education opportunities
  - Providing ESD for public servants
  - Strengthening educational support for SD in business and civil communities
  - Opening and supporting professional training courses on SD
  - Establishment of the ESD network among residents/officials/industries/academic communities

## 3. Current Status of ESD policy Promotion

- Low awareness on SD: 5.4% people correctly knows about SD (surveyed in 2007) → ESD should play an important role to create the sustainable society
- “Basic Law on SD” was enacted in 2007 and “Environment Education Promotion Act” was enacted in 2008 → ESD is expected to be applied actively
- The draft of “Comprehensive ESD plans” with consulting related multi-stakeholders was presented in Feb. 2008, but not finalized yet

## 3. Current Status of ESD policy Promotion

- The President of Korea announced “Low carbon, green growth” as the direction of Korean society in response to climate change (Aug. 2008) → Benign circumstance for ESD
- The draft revision of 7<sup>th</sup> national curriculum has been examined in terms of sustainability
- ESD lectures shall be presented in education/training courses for teachers and public servants of education

## 3. Current Status of ESD policy Promotion

- To date “Central Officials Training Institute” is offering SD lectures
- ESD of local governments
  - Tongyoung City & Incheon City : Operating RCEs
  - Wonju City & Gangwon Province : Planning to establish ESD center
- MOE, KNCSD & KCLA (Korean Council for Local Agenda 21) jointly evaluate and select “local SD model cases” → spreading SD as education contents

#### 4. Difficulties in ESD Policy Promotion

- Uncoordinated roles and limitations in ESD-related government agencies
  - KNCSD: Stable promotion is not secured due to biannual restructuring of the commission
  - MOE: Focuses on environmental education rather than ESD
  - MEST: Lacks in awareness of SD
- Complicated relationship between ESD and education in other areas (human rights, environment, gender equality, peace and etc)
- Merely the concept of ESD is taught in schools or social education fields → Need teaching materials which contain recent concrete cases of SD

#### 5. Future Plan for ESD Policy

- ESD comprehensive plans should be established
  - The draft was finalized but requires specification
- ESD for public servants should be reinforced
  - Expanding ESD to each level of public servants
- Strengthening ESD in school & social education
  - Planning to include education materials on SD in newly published textbooks by 2009
  - Strengthening ESD in central & local governments
- Establishing ESD network among civil society, industry & government
- Development of ESD teaching material
  - KNCSD: ESD teaching material
  - MOE: Environment & ESD guidance (2009)

***Thank you for  
your attention!***

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## ESD Implementation in Korea

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## Background

- Be involved youth in decision making
- Foster young generation as global citizen who has environmentally responsibility.

=> Based on TUNZA Strategy (which is UNEP's long term strategy to engage youth in the work of UNEP and was adapted in 2003)

## Background

- Implementation strategy: affect all of our daily decision and actions and be accessed to global, regional and national environmental issues
- Partners: mainly young generation under the supports of diverse stakeholders such as government, local authority, schools, private sectors and civil society.

### 1. Promote awareness

- e-paran children's painting and essay competition
- Eco campus contests (10 university)

### 2. Creation of environmental resources for youth by youth

- TUNZA magazine seasonally
- Status of environment in North East (later)
- MDGs reports (2007)

### **3. Capacity building – provide a platform for intergenerational learning**

- TUNZA ICC Korean committee
- Youth led projects such as MDGs report in 2007, seminar or clean up campaign

### **4. Networking – sharing knowledge skill and values**

- TUNZA North East Asia Youth Environment Network (was established as UNEP's sub regional youth network including China, Japan, Korea and Mongolia)
- UNEP ANGEL (Student Union on environment, annually 500 students in more than 50 universities) : environmental campaign, hosting forum or seminar, clean up the world

### **5. Participation in decision making - enables youth participation in relevant decision making processes**

- TUNZA International Children's conference
- TUNZA Sub regional/regional youth environment network -> International Youth Conference

**Think Globally, Act locally!**

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## Chinese ESD Policy Research

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## Contents

- 1. The brief development history of EE/ESD in China
- 2. National ESD policy in China
- 3. Current status of ESD in China at a national level
- 4. Difficulties of implementation of ESD policy in China at a national level
- 5. Future orientation of the national ESD policy in China

## 1. The brief development history of EE/ESD in China

- ESD in China is rooted in EE and developed by EE. And most of the practice of ESD in China is EE and is extended from EE now. So it is difficult to discuss EE and ESD separately. And most of the time in this paper, especially after 1992 EE refers to the same meaning of ESD.
- China's Environmental Education and Environmental Protection cannot be discussed separately. They set out at the same time, developed together, connected and advanced each other.
- Overall, history of China's EE can be divided into three phases

### 1.1 First Phase: Germination and Start-up of EE (1972-1983)

- Compared with Western Countries, China recognized the environmental issues and problems later.
- Chinese didn't have any ideas about China's environmental problems happened and developed before 1972, when the Stockholm Conference was held. The Premier Zhou was the pioneer advocator for environmental protection and environmental education. He took note of world-shaking "pollution disasters" happened in Japan in 1950-1960s. And he was aware of the disasters also probably took place in China. Then he asked the State Council to pay more attention on "pollution problem" in 1969. Maybe it is the first look to environmental problems in China

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- Stockholm Conference like a torch enlightened the environmental spirit of Chinese. Chinese people – specially the leaders – recognized environmental issues in China first time. In August 1973, the First National Meeting on Environmental Protection held in Beijing. It was precipitated directly by Stockholm Conference. After that meeting, the State Council approved and distributed two documents - “Report on Situation of Environmental Protection in China” and “Several Regulations on Protecting and Improving Environment”. From then on, China’s environmental protection and environmental education enterprises got start.

## 1.2 Second Phase: Formation and Development of EE (1983-1992)

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- Three National Meetings on Environmental Protection was held during this period.
  - During this period EE was promoted by the SEPA in China. Ministry of Education is not as active as SEPA to EE during this period, even now.

## 1.3 Third Phase: Upgrade and Sublimation of EE (1992-now)

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- In 1992, the UNCED was held at Rio in Brazil. In November of the same year, the Ministry of Education (MOE) and the State Environmental Protection Administration (SEPA) jointly held the First National Meeting for Environmental Education, and indicated education as a basic for environmental protection. The importance of EE in basic education was enhanced. Afterwards EE came into a new period.

## Several milestones during this period

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- 1996 is an important year for China’s EE. In this year, the Fourth National Meeting on Environmental Protection was held and SEPA, Propaganda Department of China Communist Party and MOE promulgated the National Action Guideline for Environmental Propaganda and Education. This guideline is an important document on EE. At the same year, SEPA started publish a special magazine named “Environmental Education”. It is a symbol that EE existed as not only a part of political task, but also a part of academic research.
  - 2000’s National Meeting on Green Schools and 2002’s the Fifth National Meeting on Environmental Protection ultimately impel EE’s development. More and more people recognized that EE plays an important role in environmental protection, education and sustainable development.
  - 2007 the communist party and the central government promoted to construction eco-civilization in China and promoted EE at a higher level attention.

#### 1.4 Conclusion of the brief history of EE/ESD in China

- China's EE/ESD goes with environmental protection. Concepts of EE/ESD are deeply affected by concepts of environmental protection. Environmental protection and environmental education are not aborigines in China. Different intuitions, organizations and individuals have different understandings. Thus they have different conceptual system of EE/ESD. But the conceptual system of Chinese government keeps the dominant status all along.
- 1972 and 1992 are two milestones of China's EE/ESD. As push from international, Stockholm meeting in 1972 directly expedited the birth of China's EE. From 1972 to 1992, China's EE grew up in a relative close situation on the whole. Rio meeting became another international push for transition and sublimation of China's EE to ESD. So, China's EE/ESD was affected by international deeply.

- The First National Meeting on Environmental Protection was the start of China's environmental protection and education. It also created the foundation framework of conceptual system of EE. The framework can be summarized to one definition – EE is a kind of activity to spread knowledge of environmental sciences; two basic forms – propaganda and education; two basic target groups – officials and professionals.
- During 30 years, the conceptual system of China's EE remains stable, but changed subtly, and now greatly. According to the differences on aims, agents, target groups, educational fields and educational contents of EE, 30 years of China's EE conceptual system could be divided into two phrase: 1972 – 1992 and 1992 – now.
- In my opinion there will be a new ear for EE/ESD in China after the Olympic game. Because the communist party has promote EE at the higher level of constructing eco-civilization in China. So maybe and I hope it will be a new era for the development of ESD in China since now.

## 2. National ESD policy in China

- 2.1 Environmental Policies Focusing on Pollution Treatment during 1973 to 1981**
- 2.2 Environmental Policies Focusing on Environmental Management during 1982 ~ 1991**
- 2.3 Environmental Policies Oriented by “the Strategy of Sustainable Development” after 1992**
- 2.4 Promote EE and SD by education**

### 2.1 Environmental Policies Focusing on Pollution Treatment during 1973 to 1981

- 2.2.1 Policies and Guidelines on Environmental Protection**
- In 1983, It was made certain that environmental protection was a basic national policy persisting in for long time in China on the Second National Conference on Environmental Protection. Policies and guidelines on environmental protection were put forward too on the conference, that was, the “three important policies”, consisting of prevention first, whoever contaminating should treat, and strengthening environmental management; and the strategic guidelines of “three synchronizations” and “three unifications”, including to synchronize planning, implementing and developing environmental protection with the economic development, and the urban and rural construction, and environmental construction, and to unify the benefits of economy, society and environment

#### 2.2.2 The Law System on Environmental Protection

- It was the *Constitution of the People's Republic of China* passed on the Fifth National People's Congress in 1978 that stipulated in the constitution on environmental protection for the first time in the history of China. The *Law on Environmental Protection of the People's Republic of China* for trial implementation in 1979 and issued in due form in 1989 was the basic law on environmental protection, which indicates that environmental protection in China commenced to enter a legal stage. With developing for more than ten years, the law system on environmental protection, consisting of the Constitution, laws, administrative laws and district law in many levels, was formed. This system takes the Constitution of the People's Republic of China as the base, the *Law of Environmental Protection* as the main body. The system comprises protecting environment and natural resources, preventing and treating environmental pollution and environmental destruction, and building framework and system of environmental management [2].
- Environmental standard based on environmental policies and laws concerned is the important component part of the law system on environmental protection, and the underlying instrument and warrant of environmental management. In 1983, the Town and Country Construction Ministry issued the Standard Management Measures on Environmental Protection of the People's Republic of China. In the standard, the classification and grade of environmental standard is stipulated explicitly. The standard is divided into four groups. They are standard on environmental quality, standard on the discharge of pollutants, standard of environmental protection basement and standard of environmental protection measures. The standard consists the national level and the local respectively

#### 2.2.3 Eight Rules on Environmental management

- The first rule on environmental management in China was rose in *Some Ordinances on Protecting and Improving Environment* by the State Council in 1973. It is called "three simultaneities" that the pollution treatment measurements must design, construct and put into production simultaneously with its main body of all new built, enlarged or rebuild projects. The aim to put forward this rule is to avoid treating after pollution like that in the western countries. This first rule was latterly conformed in the *Environmental Protection Law* of the People's Republic of China (for trial implementation) in 1979.
- Two other rules were conformed in the law at same time are taxing on the discharge of pollutants and assessment of environmental impact. In 1989, five additional rules on environmental management were rose on the Third National Conference on Environmental Protection. They are rule of goal obligation on environmental protection, rule of comprehensive treatment and quantitative assessment on urban environmental pollution, rule of licenses on the discharge of the pollutants, time-limited treatment, and centralized controlling on environment pollution[23]. The eight rules on environmental management mentioned above unify the administrative management and economic instruments, state supervision and propaganda and education, law enforcement, and technological guidance, respectively, which forms primarily policy systems of environmental protection conforming to the situation of China.

#### 2.2.4 Four Fields and Fifteen Tasks of Environmental management

- The four fields of environmental management are as follows: firstly, to manage problems on environmental pollution caused by the activities of production and living; secondly, to deal with the problems on environmental influence and environmental destruction caused by the activities of construction and exploitation; thirdly, to manage marine environmental pollution caused by economic activity; fourthly, to protect natural environment with special values.
- The fifteen tasks are: to organize setting down planning on environmental protection; to organize drawing out guidelines and policies of environmental protection; to organize sketching out laws of environmental protection; to organize setting up standards of environmental protection; to supervise the work of environmental protection in local governments and departments at all levels; to approve and supervise state of implementing "three simultaneities"; to organize spreading advanced experiences of administration and technologies of pollution treatment; to build up survey, monitoring and assessment of environment; to organize planning nature reserve areas; to build up marine environmental management; to supervise and manage poisonous chemical products; to organize implementing scientific research on environment; to organize implementing environmental education; to organize propaganda on environment protection; and to guide activities of environmental protection in local governments and departments at all levels [2,23].

#### 2.2.5 Environmental Education as one of the instruments of environmental management

- Since 1980s, Environment education is regarded as approaches to enhance environmental consciousness of all people and one of the instruments of environmental management. Thus environmental education middle and primary schools in China commenced.
- In 1983, environmental protection was confirmed to be a basic national policy in China in the Second National Conference on the Work Concerning Environmental Protection convened by the State Council. It made certain that public education played an important role in environmental protection.
- In 1987, the National Commission of Education constituted the "Teaching Projects in All-Day Grade School and Junior High School for Nine-Year Compulsory Education, (A Protocol for Trial Implementation)", which was issued in due form in 1992. In addition to the teaching outlines of all subjects. It was the first time that the contents and demands on environmental education were definitely and concretely written into the course projects and teaching outlines. It marks environmental education has been brought into the national education planning, and environmental education has been taking into practice self-consciously in the base education. The project connected environmental education into moral education and education of national conditions of China, emphasized that education concerning energy sources, environmental protection, ecology, etc should be penetrated into the class teaching of related subjects and activities out of class, and brought forward that in good-conditioned school, may try to set up independent courses and lectures related to education on environmental protection.

## 2.3 Environmental Policies Oriented by “the Strategy of Sustainable Development” after 1992

- **2.3.1 Implementing Strategies of Sustainable Development in China**
- The UNCED in 1992, upsurge on environmental protection emerged again in the world. In response the Congress of Environment and Development, it was not long after the conference that the government of China put forward the *Ten Countermeasures to Environment and Development in China* (1992), then organized and constituted the *Agendum of the 21th Century in China* (1994). It is claimed that China would persist in the basic national policy of environmental protection, implement the strategy of sustainable development, advance to the direction of sustainable development favorable to environmental protection, change the traditional mode of production, and establish new economic and social system accorded with long-term interests of China by adjusting industrial structure and strengthening environmental protection and environmental construction

## 2.3.2 Major Guidelines and Policies on Environmental Protection

- In 1998, Wen Jiabao, Vice-Premier of State Council, advanced five important guidelines and policies to persist in doing a good job in environmental protection:
- Firstly, developing economy in harmony with environment. It is a fundamental guideline in the construction for the modernization of China. China would persist the comprehensive decision-making for environment and development, and attach much importance on economic benefits, social benefits and environmental benefits.
- Secondly, paying equal attention to preventing and treating pollution and ecological protection. Preventing and treating pollution and ecological protection are two important aspects of environmental protection. They should be paid equal attention. It is regarded as important guidelines.
- Thirdly, sticking to the construction of environmental protection through multi-ways. As the rising industry, the industry on environmental protection would be supported to developed in priority. Development of the industry on environmental protection must rely on the progress of science and technology, in order to realize the progress of industry under the advanced level of prevention and treatment of pollution [17]. The progress of science and technology is the basic way to solve the problems on environment and development [19].
- Fourthly, bringing environmental protection within the orbit of law. While perfecting the system of law on environmental protection, the execution of environmental laws should be paid equal attention to with the legislation of environment protection.
- Fifthly, strengthening the procession of environment protection, and enhancing the power to supervise and manage in unification. It is requested to strengthen the education and training of the personnel responsible for the management on environmental protection, so as to have a group of environmental managers with good-thinking, just-style, familiar with operation and good at administration. It is also requested to upgrade the standard of modernized environmental management, and to enhance the ability to cope with an environmental emergency.

## 2.3.3 “to protect environment, education is fundamental”

- In November 1992, The First National Conference on Environmental Education was co-organized by the State Education Commission and the State Environmental Protection Administration. The guideline, “to protect environment, education is fundamental”, was put forward by the conference which made certain further the importance of environmental education.
- Since 1992, the focus of environmental education has converted from environmental knowledge education into environmental consciousness education. It is recognized that, in order to do well in the work on environmental protection indeed, all people must build up environmental consciousness. The government of China regards doing well in environmental education and propaganda, and strengthening environmental consciousness of the nation as an important task. Environment education is a fundamental project for life-long education. Thus to strengthen environmental education is one of the strategic measures to implement sustainable development. As a new subject, environmental education not only played a remarkable role in enhancing the environmental consciousness of the whole nation and training professionals for environment protection, but also brought new power into the education in China.

## 2.4 Promote EE and SD by education

- The Tenth Five Years Plan in 2001 promoted to develop professional human resources in environmental protection for 21th century by properly planning the environmental protection major in Higher Education Organization.
- In < The Syllabus for National Environmental Protection Propaganda and Education Works >, issued by SEPA in 2001, it was promoted to set up and improve EE system with Chinese character. And it was especially promoted to require various Higher Education Organizations to emphasis EE both in professional environment education and non-professional EE, especially in university of teacher education.
- Ministry of Science promoted that scientific creativity is important for SD in the Scientific and Technological Syllabus for SD in 2002.

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- The State Council promoted in 2003 to strengthen SD in Basic education and build model of SD in some universities in China in the Syllabus for SD Action at the Beginning of the 21th Century.
  - In the <Suggestions about how to improve environmental protection propaganda and education works during the eleventh five years period> issued by SEPA, Ministry of Publicity and Ministry of Education in 2006, it was required to strengthen EE in basic education and make EE as contents of teacher training for basic education, strengthen EE for students and teachers of non-environmental majors in Higher Education organizations.
  - In 2007 there are 17 Ministries or department at Ministry level in China issued <The implementation of people's action on saving energy and reducing pollution all over China> in order to form the mechanism of saving energy and reduce pollution, promoted by government, implemented by business and company and involved by every one of the whole society.



### 3. Current status of ESD in China at the national level

- 3.1 The situation in basic education
- 3.2 The situation in Higher education



#### 3.1 The situation in basic education

- **3.1.1 In general, the infusion environmental education has promoted environmental education in middle schools, yet the implementation in subjects is unbalanced.**
- **3.1.2 An infusion environmental education lack of compulsion cannot become teachers' conscious and action.**
- **3.1.3 A monotonous and simplified teaching and a learning without motivation, participation and research**
- **3.1.4 Teachers lack of professional environmental knowledge. Mass media is the main source of knowledge for both teachers and students. Further education or training has a limited, or even negligible influence on teachers' capability.**
- **3.1.5 The environmental education at different stages of primary and middle schools lack differentiation. Students' interest in environmental issues diminishes with the up-going of grades**



#### 3.2 Situation in Higher Education

- 1) Realized the necessary for HESD but not reached to the cognition level of rethinking about Higher Education, which is pointed out on the Sus. Development Summit in Johannesburg in2002.
- 2) Emphasis on the technology creation in engineering university like Tsinghua University, but pay no attention to teacher's education in teacher's education universities. So there is huge gap between the needs from basic education and the teacher education in universities.
- 3) The research level in HESD is in primary stage, proved by the evidence of small paper number and more than 90% papers is in not higher level. And the research generated from the practices or theory thinking and rethinking is lack.
- 4) One of the most important parts for the university is the course, which is paid no attention by the researchers in their research papers and works in China.

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- Altogether: HESD research is seldom concerned in China now. There is no atmosphere in China. The academic persons think about it individually. There is seldom communication and progress in HESD. The course, one of the most important part in Higher Education, is not concerned now.
  - EE was put on the important statuses in the 17th Communist Party Congress at the end of 2007. We expect a new development ear in China.
  - In the general the development of special field of EE like Environmental Science and Engineer had been improved greatly, but popularized EE is lag and cannot be concerned by the universities in China.



#### 4. Difficulties of implementation of ESD policy in China at a national level

- **4.1 In Basic education**
- **4.2 In Higher education**

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- 1)The popularization, depth, and quality of environmental education are still not satisfactory, because of the limitation of middle school curriculum, examination-based education, and teachers' environmental knowledge.
  - 2)With the current curriculum system and education objective for examination, infusion education on environment issues cannot be efficiently implemented. However, if the infusion education is to be compelled by an examination mechanism, it can easily fall into a pure knowledge education, not to mention the danger of narrowing the scope of knowledge caused by examination. Furthermore, the current examination method can hardly evaluate students' sensibility and values.
  - 3)It is necessary to set up an environmental education system based on the combination of integrated practice and inter-disciplinary education. The new round of elementary education reform started at 2000 provides curriculum hours for environmental education causes. Environmental education courses can be set up in middle schools in the form of integrated practice or selective lessons. Basic knowledge and concepts are taught in subject courses, while in integrated practice studies are organized in carefully selected topics closely related to students' daily life. The Contents should be easy to arrange for students to participate and study through investigation, research and problem solving. The target of integrated practice in environmental education, or integrated environmental learning, is to foster students' sensibility, ethic values, and comprehensive abilities such as information gathering, processing and analysis through the integration and utilization of basic knowledge learned in subject courses. Such a mixed environmental education is in favor of students' identification of environmental problems as a whole, and their integration of knowledge learning and nurturing of sensibility and ethic values.

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- 4)Establish standards for environmental courses. The learning contents should be differentiated according ages and knowledge structures in primary, middle, and high schools, thus to maintain the quality and sustainability of environmental education in middle and high school stages. The objective in primary school is to teach pupils to know environment and cultivate individual behaviors towards environment. In middle and high schools, students should be oriented from social, economic, and technological perspectives to apply their learned knowledge to identify and analyze environmental problems in life, and to learn philosophies to coordinate relations between man and man, man and environment, environment and society, and economic relations in a world of different ethic values.
  - 5)Compile teacher's reference materials and activity guide for integrated environmental learning, thus to provide aid for teachers to timely implement environmental education. Currently it is impossible to rely environmental education entirely on teachers' personal abilities, because teachers have a heavy teaching duty and a low average level of environmental knowledge with a wide difference in individual capabilities.
  - 6)Strengthen teacher's training. The current situation of training by subject should be broken, and inter-discipline communication should be encouraged. Environmental courses should be designed by teachers of different disciplines.



## 4.2 In Higher Education

- The discipline centered issue in university.
- The hierarchy structure consisted by discipline centered feature is the feature of university since Middle Ages. Under this circumstance of university environmental science was developed. The special environmental science and engineering are improved. But from the view of the discipline EE is periphery. University likes discipline which can bring money and reputation. Environmental science and engineering can not, so environmental science and engineering are periphery. EE is at the more periphery statues in environmental science. As the discipline education EE is always at the statues of periphery and be discriminated. The result is university never gives discipline education office resources and professional title resources. In the inner discipline environmental science is paid attention to but EE is underrated.

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- EE is at the periphery statues in the hidden curriculum, too. The commercialization covers everything in now society. It is the moral responsibility for university to implement EE.
  - Education is separating personality now. When the persons were student in primary and middle schools they went to the street to pick up rubbish to make the public area cleaning. But when they grow up to be government officer they just sing high tone about SD without actions.
  - There is no voice from university in the significant issue and decision-makings like SD. University keeps silence together.



## 4.3 The whole situation in China

- **1) Regional Difference of environmental consciousness**
- The development of environmental education is lied particularly stress on cities, especially on Beijing declared for Olympic Games, on Shanghai declared for World Exposition, and on several special districts in southeastern China open to the world. Environmental consciousness of the public in these areas has improved greatly. While in wide countryside, especially in the economic-undeveloped west, it is still low. However, the big cities are merely several "points", the environmental problems of which are almost same with those facing up in developed countries. As long as we have money, the modern pollution problems can be treated. While real ecological and social crisis occurs or lurks in wide areas, where varieties of production patterns, such as agriculture, collection, hunting and fishery, existed at the same time,

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- **2) Difference of environmental consciousness among population**
  - For these years, the major objects on environmental education are citizens and students. The citizens are focused on the middle and the upper classes. And students are focused on those in middle schools and in primary schools, respectively. To the labors engaging in industrial and agricultural production who connect tightly with environmental problems, the environmental education has not been done enough.



### 3) Environmental consciousness is still low

- Taking it into account from adjusting to sustainable development, the environmental education in China is limited to the low level, such as to make campuses and communities clean and green, to start having consciousness to cry for treating pollution in the cities polluted severely, to know some terms such as Global Warming and Kyoto Protocol to some extent. But on the whole, propaganda and education is only able to reach such a degree, because propaganda is not very consistent with deepening, as well as it is difficult to avoid fickle and making public. While real sensitive and profound problems are unfit for blazon forth, it is difficult to be avoided that environmental education is limited in the level of knowledge, technology and management.



### 4) Environmental education hasn't acquired definite insurance in schooling as yet

- If insurance of environmental education can be obtained in schooling, it is hopeful to solve the problems above. For these years, why some schools have achieved success in environmental education lies in individuals of teachers or leaders have such a cognition and is interested in the work. Because of lacking of systemic insurance, once the teacher retired, the whole work will be terminated. Now a draft of the Manual of Implementation on Environmental Education in Middle and Primary Schools (for trial) set down by Ministry of Education is in review. It is hopeful to promulgate soon, which would advance the environmental education in schools.



### 5) A lot of works have to do in order to orient the environmental education to sustainable development.



### 5. Future orientation of the national ESD policy in China

- First of all are the aims and contents of EE/ESD. Since document of Stockholm defined EE clearly, the aims and contents of EE have kept sweeping and widening. Passing by Belgrade (1975), Tbilisi (1977), Rio Janerio (1992) and Thessaloniki (1997), EE developed from "education about environment" to "education for sustainability". The trend could be seen in this route is: "environment" jumps out from layer of "nature" and expands to a holistic "environment" which involves ecology, society, economy and politics; EE jumps out from layer of skills and knowledge about environment and expands to a holistic "education" which involves awareness, attitude, values, ethics on environment. Such progress is result from critical thinking and participation spirits of EE. If EE only emphasize awareness and knowledge but not critical thinking which is core concept of EE, it is difficult to make big progress for China's EE.

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- Second thing to be considered is the relationship between China's education reform and EE. China's education has been reformed several times. Recently a new type of education "quality education" was put forward. The core of "quality education" is to foster "innovative students". But "innovation" actually rooted in "critical thinking". At this point, EE has the same aim with modern education reform in China. So EE should be thought as a part of recent education reform. EE's progress depends on the comprehensive reform of whole education; success of reform of whole education needs EE's experiences as references.

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- Last thing to be discussed is the relationship between EE and education for sustainability/education for sustainable development (EFS). There are many diverging opinions at this point. Actually, from documents of "Bruntland Report" and other EE meetings, it is clear that EE should redirect to education for sustainability. And "sustainable development" could cover "environment" and "education for sustainability" could cover "environmental education". On another hand, it is accepted generally that "education for sustainability" rooted in "environmental education". Some scholars think EE and EFS are different and far away from each other probably because EE emphasize knowledge especially knowledge about environment excessively in early days and it is a difficult and slow process to introduce social, economic and political ideas into EE. Somebody even think since EFS can cover EE; EE can be called off now. For this comment, ancient Chinese wisdom may provide a solution: "Tao's can exist together and not conflict".



Thank you!



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# **GREEN SCHOOL AND ESD IN CHINA**

**YAN KE**

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# **INTRODUCTION**

## **BACKGROUNDS**

### **I. NATIONAL AWARD**

### **II. CONFERENCES AND TRAINING WORKSHOPS**

### **III. PROJECTS IN GREEN SCHOOLS**

### **IV. INTERNATIONAL COMMUNICATION AND COOPERATION**

### **V. RESEARCH AND DEVELOPMENT**

### **VI. PUBLICITY of GREEN SCHOOL PROGRAMME**

# **BACKGROUNDS**

- A. The first National Conference on Environmental Protection in 1973**
- B. "Key notes of environmental protection works" proved by CPC central committee in 1978**
- C. The second National Conference on Environmental Protection in 1983**
- D. National Action Guideline of Environmental Communication and Education (1996-2010)**
- E. Ministry of Communication, Ministry of Education and State Environmental Protection Agency together initiated Green School Awards in 1996.**
- F. Guidelines of implementing EE in Primary and Secondary Schools issued by Ministry of Education, 2000**
- G. Requirements for building energy and resource saving schools, issued by Ministry of Education, 2006**

# **I. National Awards for Green Schools**

## **A. Application for National Award**

## **B. Celebration conference of the national award**

## **C. Management of the national award green schools**

## Celebration conference of the



## Celebration conference of the national award on June 5, 2007

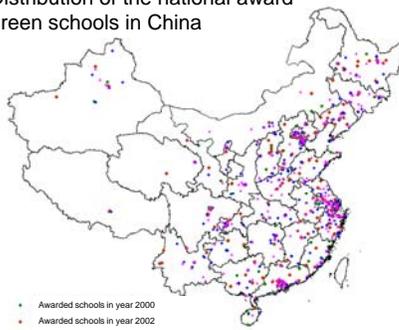


Minister Zhou Sheng-xian issuing the award board



Deputy minister Pan Yue issuing the award board

Distribution of the national award green schools in China



## Management of the national award green schools

- Data Collection
- Renew the website: [www.cgscp.cn](http://www.cgscp.cn)

## II. CONFERENCES AND TRAINING WORKSHOPS

In July 4th and 5th, 2007, the training workshop for applying for national award green schools was held in Bei Dai He, 233 from 29 provinces all over China come to the workshop.



## III. PROJECTS IN GREEN SCHOOLS

- A. Campus Environmental Management Project (CEMP)
- B. Young Master Programme in China
- C. Campaign for the Green Future Environmental Education Initiative

### Campus Environmental Management Project (CEMP)

•Pilot stage:

- Cooperator : Heinrich-Boll Foundation, German
- September 2003-December 2005, CEMP , 34 schools from 5 provinces participate.

•Promoting stage:

- CEMP was promoted in all the 705 national award green schools. In 2006, 161 participated; in 2007, 99 schools participated.



Water saving campaign in schools of CEMP



Recus

Use wasted cementing tube as flowerpot



Recus

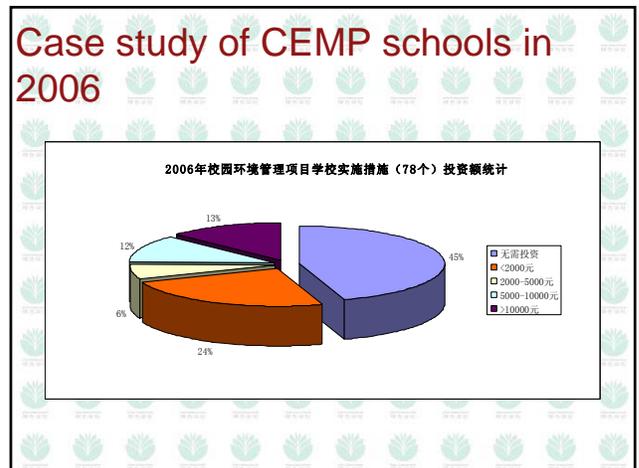
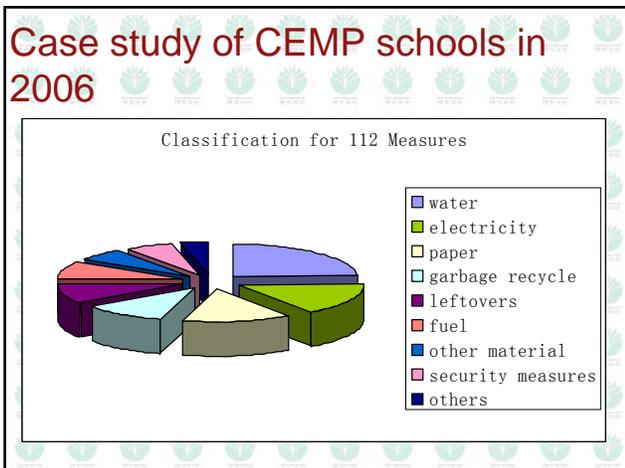
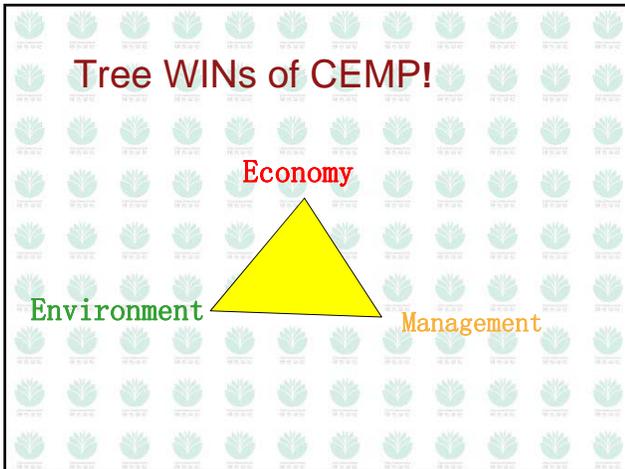
Use wasted cable axle as a pavilion

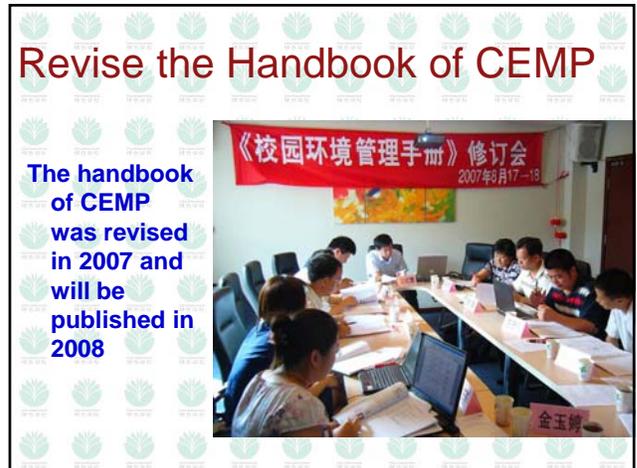
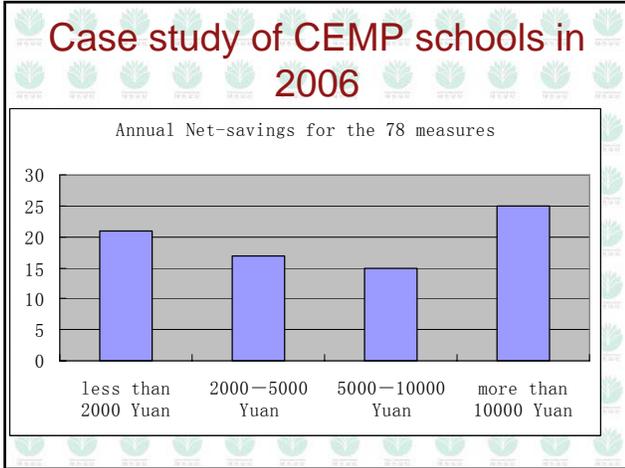


Roof solar heater in the affiliated high school of the Jiangsu Normal



Recycled bin made of wasted milk paper cases in a green school of





## Training the trainee of CEMP



## Benefits of CEMP

- It is an action to realize eco-civilization and sustainability.
- It is a practice on implementing resource saving and environmental friendly society in schools.
- Provide active cases for the specific ways and measures for developing efficiency campus.

## Young Master Project

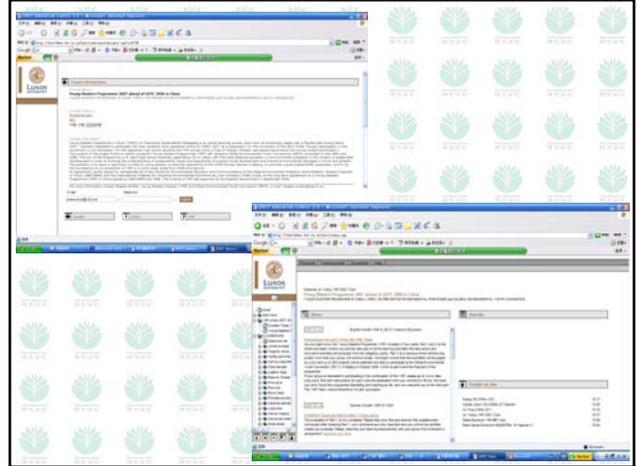
- **Background**
- **Curriculum**
- **Project progress**

## Background

- The Young Master Programme (YMP) was initiated by the International Institute for Industrial Environmental Economics, Lund University SWEDEN IN 1999.
- It is aimed to develop sustainable education among the global youth, and has been successfully progressed in dozens of nations in the world.

## Curriculum

- Part 1: Eight weeks of studies with the overarching heading “Sustainability – Why?”.
- Part 2 : “Sustainability – How?” consists of ten modules which to take two to five hours of studies each module is estimated
- Part 3: Project Work
- Part 4 :the Global Environmental Youth Convention (GEYC),



## Project progress

- China joined the YMP since 2003. Until 2007, there had been 93 Chinese senior high schools from 24 Chinese provinces become pilot schools of YMP in China. More than 2500 students (aged from 15 to 18) and their teachers took the YMP courses.





## Green Future Environmental Education Initiative

- Project duration: 2007-2009
- Sub-projects in 2007
  - Green Classes
  - Green Posters
  - Green Young Reporter
  - Green Visit
- Sub-projects in 2008
  - Green Classes
  - Go with Green Olympic
  - Green Young Reporter
  - Green Future's Olympic Torch Holder

畅想绿色未来  
Green Future Environmental Education Initiative



**Award Ceremony for  
Green Young Reporter**



**GREEN VISIT TO GERMANY**



**Go with green Olympic  
——opening ceremony**



**Go with green Olympic  
——Tianjin**



**Go with green Olympic  
——Qinhuangdao**



**Go with green Olympic  
——Shenyang**



**IV. Regional and International  
Cooperation and Cooperation**

- **With FEE**
- **With organizations in Hong Kong and Taiwan**
- **With other organizations in the world**

**With FEE**



## With organizations in Hong Kong and Taiwan

- In June, 2007, Taiwan Environmental Education Visiting Group come to CEEC.
- In July 11, 2007年7月11日, CEEC hold the Environmental Education Conference, cooperated with Beijing Normal University and Kaohsiung Normal University of Taiwan
- The EE conference among Mainland, Taiwan, Hong Kong and Macau will be held every two years since 2008.

## With other organizations in the world



## Discussion between the Chinese Japanese and Korean students



## V. RESEARCH AND DEVELOPMENT

- Research for National Strategy for Environmental Sustainability—— Environmental Education and Communication
- Green University
- Development of Environmental Education Materials

## Revise the National Guide for Green Schools



## Green Future (Journal)



## Amazing Recycling World



## Super Cases for Environmental Education and Teaching



## VI. PUBLICITY of GREEN SCHOOL PROGRAMME

- News Papers and Magazines
- Exhibitions and activities
- Others

## News papers and Magazines

65 articles for green school programmes on China Environmental News and Environmental Education (Magazines)



## Exhibition of the green school



## Support to National Award Green Schools

- Present books and magazines to all the national award green schools



- Capacity building for national award green schools
  - Heping Street No. 1 Middle School
  - Fengtai No. 5 Primary School

## The problem of Green School

- Unbalanced development of Green School all over China
- How to encourage Green schools to promote further after they got awards
- Communication among Green Schools in China and out of China is seldom
- Most schools, especially top schools in cities just focus on the examination and do not interested in green school.
- Great efforts will be need to promote ESD in schools.

## Future development of Green School Programme in China

- Enhancement of the awareness of the importance and attractiveness of Green School Programme to all the schools in China.
- Promote good projects, such as CEMP, YRE, and YMP etc. to enhance the quality of EE in green schools.
- Promote Eco-Schools in China and strengthen the communication between green schools and eco-schools all over the world.
- Capacity building of managers and school teachers in EMS and EE, enhance the education quality of awarded schools to attract more schools.

For more information about green school and Eco-School programme in China, please contact:

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