JENESYS East Asia Future Leaders Programme 2010

Education for Sustainable Development

From April 11 to April 23, 2010

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Cover photos (from top left to bottom right)
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2. An orange and the briefing document, Gaia Minamata
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Photos by photographer, Masayoshi Takahira (1, 3)
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Preface

The Japan Foundation organized the East Asia Future Leaders Programme (Youth Exchange) with the theme of "Education for Sustainable Development (ESD)," from April 11 to April 23, 2010. The program was implemented within the framework of the Japan-East Asia Network of Exchange for Students and Youths (JENESYS), which was initiated by then-Prime Minister Shinzo Abe on the occasion of the Second East Asia Summit (EAS), held in the Philippines in January 2007.

The Japan Foundation, one of the implementing organizations of the JENESYS Programme, was established in October 1972 as a special legal entity supervised by the Ministry of Foreign Affairs to deepen understanding of Japan overseas and to contribute to the enhancement of culture and the welfare of humanity in the world through international cultural exchange. It was subsequently reorganized as an independent administrative institution in October 2003. As part of its cultural exchange scheme, the organization carries out personnel exchange programs to enhance mutual understanding among countries and to contribute to the capacity development and networking in civil society. In this context, the organization was commissioned by the Association of South-East Asian Nations (ASEAN) to implement the JENESYS programme, under which various programs were outlined.

The East Asia Future Leaders Programme, targeting candidates to lead and forge the future of the next generation in various countries, is launched to promote a better understanding of Japan and to develop mutual understanding in East Asia through the attendance of cultural and social activities and the exchange of views in Japan. It is also designed to strengthen solidarity in the region through the promotion of mutual understanding among the younger generations. Through a series of discussions on critical issues and interaction with Japanese experts and citizens, it aims to build up a human network in the various layers of society and fields in East Asian community.

The itinerary led the participants to encounters with passionate counterparts in Japan who are working to revitalize their communities. They were provided with practical examples of local citizens trying to make their friends and colleagues aware of sustainability in the region.

This program was realized with the support of the Ministry of Foreign Affairs, Mr. Masazumi Yoshii, Mr. Tetsuro Yoshimoto, Soshisha Supporting Center for Minamata Disease, Gaia Minamata, Ojika Island Tourism Association, and other organizations and individuals. In particular, Dr. Yoshiyuki Nagata, Associate Professor at University of the Sacred Heart, kindly took a role as an advisor in the planning and execution of the program with great enthusiasm and generous assistance, which led to the success of the program. We wish to express our sincere thanks to all the parties concerned.

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Program Overview

1. Program Objective and Purpose

At the Second East Asia Summit (EAS) held in January 2007, then-prime minister Shinzo Abe announced that Japan would invest 35 billion yen over the next five years to carry out a large-scale exchange program. Under this program, about 6,000 young people would be invited to visit Japan every year, particularly from countries participating in the EAS (ASEAN, China, Korea, India, Australia, and New Zealand), with the aim of building strong relationship in Asia through this major youth exchange. Based on this plan, the Japanese government launched the Japan-East Asia Network of Exchange for Students and Youth (JENESYS) programme in fiscal 2007, and began a wide variety of exchange programs, such as invitation and dispatches, with the cooperation of other countries and relevant organizations.

Since fiscal 2007, as part of the JENESYS programme, the Japan Foundation has carried out the East Asia Future Leaders Programme: Youth Exchange Program, targeting young people with the potential to become the next generation of leaders in countries responsible for the future of communities in East Asia. These programs are intended to offer opportunities to gain an understanding of Japan's society and culture, as well as to promote the growth of a close network among the young generation and the formation of a shared identity. Through debates and discussion on the common issues to the East Asian region, the participants are expected to deepen mutual understanding and share experiences in this program. The theme for the program is a social issue shared by Japan and the targeted regions in an area in which Japan has considerable experience and a track record of initiatives taken through public action.

In the third year (2009-2010), the Japan Foundation organized the program with five different themes targeting 100 youth leaders in total. During the period of April 11-23, 2010, one of the programs focused on "Education for Sustainable Development (ESD)", and invited 24 members to Japan.

2. Overview of Program Implementation

2.1. Breakdown of Participants

One to three young leaders in the field of ESD or Environmental Education were invited from each of the targeted countries listed in Table 1. The participants were young professionals with English proficiency aged 35 or younger. There were nine men and fifteen women, and included two school teachers, five administration officers, seven NGO workers, six university lecturer/staff members, one UNESCO-related organization staff member, one PhD student, and two volunteer workers.

Table 1 Number of participants by participating country (broken down by gender)

Country	Male	Female	Total
Australia	0	2	2
Brunei	2	0	2
Cambodia	0	2	2
China	0	1	1
India	0	1	1
Indonesia	1	1	2
Korea	1	0	1
Laos	0	0	0
Malaysia	0	2	2
Myanmar	1	0	1
New Zealand	0	1	1
Philippines	1	1	2
Singapore	2	0	2
Thailand	0	2	2
Viet Nam	1	2	3
Total	9	15	24

2.2. Program Description

1) Program Orientation

At the beginning of the program, the participants received a briefing on the outline and objectives of the program. The disaster in Minamata was explained in the light of rapid economic growth as prerequisite knowledge. Some of the key persons in the region were also introduced to call attention to the site visits. They were also informed that they would visit the Nozaki and Ojika islands, and the whole itinerary was explained. The group was introduced to the Japan Foundation grant program. These are schemes for funds to be applied to implement proposals they come up with in the future. The organizer described the guidelines of the program and encouraged them to make use of the collaboration with the Japan Foundation.

2) Participants' presentations and small-group discussion

The participants had been instructed to prepare a pre-program report in two formats before their arrival. First, they were to prepare a one-page visual prompt to introduce a sustainable practice in their communities, and they also had to prepare a narrative report to clarify the example. They were encouraged to include unique features of the practice as well as its outcome and obstacles. The participants presented them using PowerPoint data, and hard copies of the narrative report were distributed. After each presentation, their colleagues commented freely or exchanged opinions on the cases presented.

3) Keynote Lecture by Professor Nagata

The program advisor, Dr. Yoshiyuki Nagata, Associate Professor of University of the Sacred Heart, Tokyo, gave a keynote lecture accompanied by a PowerPoint presentation. Professor Nagata explained the significance of the term "ESD" and the reasons why this approach should be adopted by the global community at present. He also showed the framework for a sustainable society presented by a Laotian NGO, and this diagram was later used to analyze the sustainability of the site visits and for the post-program report.

4) Lecture by Mr. Yoshii, a former mayor of Minamata city

Mr. Masazumi Yoshii was a two-term mayor of Minamata city from 1994 to 2002. Mr. Yoshii implemented two concrete steps to revitalize the city. First, he took moral responsibility and apologized for the first time as an administrative delegate to the victims of the Minamata tragedy. The action proved the mayor's acknowledgment that the administration assisted in covering up the sin of the wrongdoers, rather than prioritizing the lives of the citizens. The central government took the side of the factory due to its economic capacity and contribution to sustain the nation's economical development at that time. Some of the citizens started to discriminate against the patients. Others envy their neighbors who had received compensation. Mr. Yoshii's courage to take responsibility as an administrator provided a new beginning for a community in which trust had been destroyed. The other initiative was community mobilization called *Moyai Naoshi* (*Moyai Mending*). This expression comes from the original meaning of the word *Moyai*, a rope to connect boats, and it is used to mean the reconciliation of the community whose human bonds had been damaged by the tragedy, discrimination, distrust among people, and the lawsuits. Mr. Yoshii illustrated the whole history of the pollution, the physical and moral effects, the direct and indirect cause of the chaos, and the alternative process to achieve the "Environment Model City", and the city's role in the world for the future.

5) Minamata Disease Municipal Museum

The museum was established with the objective of disseminating information about Minamata Disease and its consequences. The supplementary information and documentation about the incident gained from the thorough exhibition enhanced the comprehension from the lecture.

6) Minamata city tour guided by Ms. Takashima of Soshisha

A tour of Minamata city was planned and guided by Ms. Yukiko Takashima of Soshisha. Soshisha is an incorporated foundation established in 1974 in order to support the victims of Minamata Disease in their indictments or lawsuits. Some of the staff members came to join the organization outside of the city or the prefecture. Ms. Takashima took the group to Modo coastline as the starting point, where the participants found full of marine life. The people had mainly depended on catching fish in the area, until the devastation started to break out in 1956. The group was then taken to Eco Park, which

was built on reclaimed land that Chisso Chemical Plant restored. (Cover photo; top, far right) On the last day in Minamata, the group observed the drainage outlet of Hachiman Zansa Pool, where the polluted water was also released from the factory.

7) Gaia Minamata

Gaia Minamata is an organization established in 1990 by nine people who had been working at Soshisha to support the victims and the citizens. At that time, the fishermen could not sustain themselves by selling fish only and then started to grow oranges. They chose to grow them with as few chemicals as possible because the people already suffered from polluted seafood, which destroyed the ecosystem and physically harmed humans. Mr. Takahashi and Mr. Takakura described the origins of the organization, its main activities, and concern about successors. (Cover photo; top, second from the left)

8) Lecture on Jimotogaku by Mr. Yoshimoto

Besides the two main achievements of Mr. Masazumi Yoshii, there was another important action that revitalized Minamata. The "Jimotogaku" approach proposed and practiced by Mr. Tetsuro Yoshimoto, who had also been working in the Minamata city government, played an extremely important role in changing the city. This simple yet creative approach still helps the city move forward, inviting a number of field visits or training groups domestically and internationally. Mr. Yoshimoto, the inventor and proponent of Jimotogaku, gave a lecture on Jimotogaku theory as well as its practice. (Cover photo; top, far left) In modern society, people constantly desire things and became unaware that they already have something significant and meaningful. We neglect the value of the things that we take for granted, such as rivers, trees, plants, houses, fields, and the people in our communities. These elements appear powerful, thus they are found more easily by the visitors. This is what to be gained in the fieldwork of Jimotogaku. Mr. Yoshimoto insisted that we could revitalize the community by appreciating what we have and utilizing it. He affirmed that, in any village, there are three types of things: something usual, something to be proud of, and something negative. Minamata Disease, although a negative element, it is also a driving force in the revitalization of Minamata. He also emphasized that Jimotogaku was based on people, nature, and the environment, which regenerate the community.

9) Fieldwork of Jimotogaku and group discussion

After the lecture, the participants in three groups went out to the different parts of Okhawa village. They fully used their five senses and conducted interviews to discover the "precious elements" of the community: something the residents may not notice as they take them for granted. After the interviews, they came back to the old school building to discuss the mapping of what they saw and found in groups. The groups presented their findings and had an information exchange session, including the local ladies who prepared a beautiful lunch for the members. (Cover photo; top, second from the right)

10) Observation of waste sorting activity

Having moved from Ohkawa to the Susubaru community, the participants observed the waste sorting activity of the community. Minamata city is recognized as an "Environmental Model City," and one of the distinctive practices of the city is its twenty-two kinds of waste sorting and recycling. The waste is collected from each household and put into different boxes according to the type, such as transparent bottle, brown bottle, black bottle, used pots and other categories. The participants seem amazed by the various kinds of waste and the efforts to sort them so meticulously.

11) Dinner party with Mr. Yoshimoto

The group visited the home of Mr. Yoshimoto, who had been the day's lecturer, at his kind invitation. Some of the participants went into the woods to cut bamboo shoots, while others chatted with his mother, whose messages play a part in Jimotogaku philosophy. Then they were invited into a Japanese-style house of his family and were treated to homemade dishes prepared with locally produced ingredients, including the bamboo. In addition to the delicious local dishes, the rapport with Mr. Yoshimoto facilitated the conversation and strengthened the unity of the group. This was an opportunity for the personalities of each participant to be elicited and thus deepen relationships.

12) Minamata city waste recycling center

Having observed waste separation at the community level, the group visited a waste recycling facility run by the city. Despite of the limited time available, the city officer gave a through briefing on the facilities. The participants were able to learn how much effort the city put into to remain an environmentally friendly city after the sacrifice.

13) Voice of a storyteller by Ms. Ohya

Ms. Rimiko Ohya lost her family to Minamata Disease and had not talked about it until 1990. The participants listened attentively to the history of her life. Ms. Ohya concluded her story by showing some pieces and accessories made of a recycled bottle that she had brought from her atelier. The participants seemed impressed with her strength and the courage that took for her to share her experience.

14) Minamata Wrap-up workshop

Professor Nagata facilitated a workshop to emphasize what the group had learned in Minamata. The pollution and its tragedy in Minamata provided significant lessons to be learned in relation to issues such as the environment, community, economy, central government, local administration, and revitalization. The participants were advised to come up with what they were most impressed by during the three days. Each of the participants gave presentation with great expression, which demonstrated the positive result of the visit.

15) Nozaki Island tour

After a ride on a ferry and chartered boat, the group arrived at a lodge in Nozaki Island, a depopulated island in the middle of the East China Sea. The lodge used to be a school when people lived on the island until the 1960s. The building is now managed by a local NPO to provide a place for tourists to stay. The NPO, Ojika Island Tourism Association, promotes green tourism to make tourists aware of the significance of the natural environment in visits to the Nozaki and Ojika Islands. It is this organization that manages not only the lodge but also protects the depopulated island itself. The group was guided by Mr. Junji Kametsu of the NPO in a walk through the island. They viewed the beautiful beach in its untouched natural landscape. They walked through the old community with ruined houses at the opposite side of the island. Mr. Kametsu explained that the island became more and more populated by wild deer in the process of de-popularization, which illustrates the balance of the ecosystem. They finally arrived at the old church of a hidden Christian. The church had been in use for only 60 years after its completion in 1910, despite fundraising efforts as long as about 10 years under severe living conditions. The participants seemed sympathetic to their history. (Cover photo; bottom, far left)

16) Ojika Island tour & briefing by Mr. Kametsu

Mr. Kametsu also guided the group on the bigger island, Ojika, which has a population of about 3,000. He took the group to Shirahama beach, where a lot of garbage drift in from other parts of Japan and Asia. There were plastic containers, tools for catching fish, used sandals and bottles. A world map showing the major currents that bring all this detritus to the beach was presented. (Cover photo; bottom, far right) This current connects the fourteen countries of participants, and made the members aware of a common problem shared in the East Asian region. The group observed a waste recycle facility at the end of the tour.

17) Homestay Experience at Ojika town

Thanks to the arrangements of the Ojika Island Tourism Association, the participants experienced a homestay with local families. Ojika town has a considerable reputation for its hospitality and the friendliness of the people. The guests were treated not in a special manner, but with an open spirit that made them feel at home. It was also arranged that the guests could help or experience the family's business, whether agriculture, postal service, or printing business. The next morning, the members appeared content and touched by the family's affection, despite the limited communication.

18) Nagasaki Atomic Bomb Museum

The group observed an exhibition at the museum; one of the only two in Japan that provide information about the atomic bombing, the effects, and implications.

19) Zen Meditation Experience and Kiyomizu Temple

As a cultural activity, the group had a Zen meditation experience and visited Kiyomizu temple. Kiyomizu temple is one of the most popular tourist destinations.

20) Miyako Ecology Center

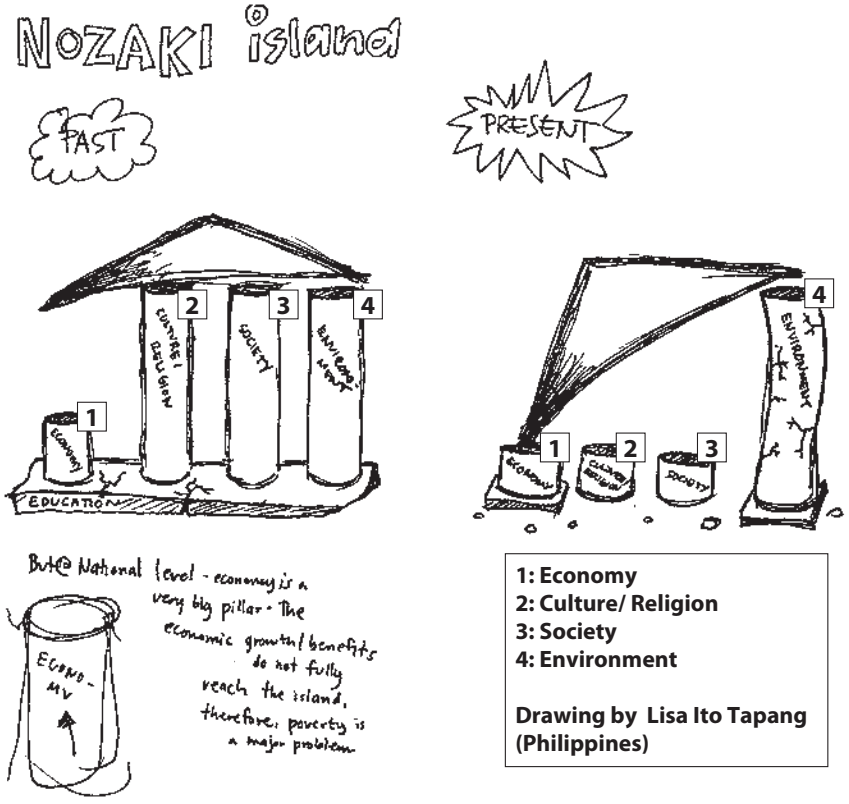
This facility displays practical techniques in environmental education. The interpreters explained useful approaches through exhibits and game-oriented activities, which would bring about behavior change. There were a lot of hands-on activities and realia that could be applied in a classroom geared toward a younger audience or to be shared in the workshop.

21) Courtesy Call to the Ministry of Foreign Affairs

Since the program was being funded by the Japanese government, the group paid a courtesy visit to the Ministry of Foreign Affairs. Ms. Chinami Nishimura, Parliamentary Vice-Minister for Foreign Affairs, received the participants. The representative from the Philippines briefed her on the program itinerary, followed by two from Australia and Singapore, who reported what they had gained throughout the eleven days. Expressing their appreciation for the program, they emphasized the rich nature of Japan and acknowledged the sacrifices that Japan had made for its economic achievements. Ms. Nishimura expressed her pleasure that the program had been meaningful for the guests from East Asian countries and encouraged them to maintain the network with the newly found colleagues beyond the borders.

22) Final Workshop by Professor Nagata

Professor Nagata facilitated the final workshop of the program. First, Mr. Nagata re-introduced the holistic approach of ESD, in which the three pillars of society, environment, and economy support the sustainable community. With that understood, he assigned each participant to analyze the sustainability of Nozaki Island in the past and present. They were given a piece of paper to draw a diagram to show how the three elements in this case were balanced to keep the community alive. Their input was collected to be sent to Mr. Kametsu as feedback from the field tour.



After the first task, the participants were divided into four groups and given the second task. They were asked to seek a practice with a holistic approach in their own countries or communities and to share with the group members. Then they chose one example to present to the whole group. This exercise was intended to prepare the participants for their post-program report, in which they would be doing the same analysis on their own. The workshop was concluded by a round of commentary from each member.

Keynote Lecture: Challenges of ESD in Asia and the Pacific — Towards a New Century of Sustainability

by Yoshiyuki Nagata, Program Advisor

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General Overview

Would it sound too ironic to say that the more advanced a country becomes, the more unsustainable it becomes? It is true, however, that most countries start to suffer from such problems as urbanization, environmental devastation, and a growing wealth gap as they become wealthier. Nowadays globalization makes it hard for people, whether they live in the country or cities, to lead satisfied lives with a sense of security. One knows that, in many developed countries, economic prosperity does not necessarily promise happiness to their nations.

Japan is one of the first countries in Asia to face this ironic situation. The country with the world's second largest economy has suffered irreplaceable losses as well as material gains. While Japan enjoyed economic growth after the end of the war, the country also suffered from such issues as environmental pollution and depopulation in remote areas.

Since Japan has been a front-runner in economic development, Japan is a country from which many other nations could learn what not to do or how not to behave in order to protect the environment. Japan, having gone through many struggles with environmental issues, has the knowledge and wisdom that could show other nations what to avoid or how to overcome unsustainable situations in the process of development.

Education for Sustainable Development (ESD) is a unique concept of education which may provide a solution for unsustainable situations through education. Based on a proposal made by Japanese citizens and government at the World Summit on Sustainable Development (WSSD) in Johannesburg in 2002, held ten years after the Earth Summit (in 1992 in Rio de Janeiro), it was resolved that the years between 2005 and 2014 would be the United Nations Decade of Education for Sustainable Development (UNDESD), for which UNESCO is the lead agency, seeking to integrate the values and practices of sustainable development into all aspects of education in order to address the social, economic, environmental and cultural issues we face in the 21st century.

With an understanding of the importance of the unique concept, ESD became one of the main topics of the Japan-East Asia Network of Exchange for Students and Youths (JENESYS) Programme in 2010. In the contexts of the developing countries and developed countries facing the aforementioned ironic situation, ESD would provide nations with opportunities to turn unsustainable situations into sustainable ones.

During the JENESYS programme held in April 2010, in addition to the traditional destinations such as Kyoto, the program also chose to visit two of the typical fields for the study of sustainable development, with special focus on ESD. One is Minamata, and the other is Goto Islands. These locations were carefully selected among many possible candidates by the organizer. One of the criteria for the selection was whether the location has the local wisdoms needed to turn an unsustainable situation into a sustainable one. The unsustainable situation in Minamata stems mainly from environmental problems; the situation in Goto Islands was caused by economic problems. In both places, one can see the endogenously developed wisdom of the local people, used by them and for them.

Minamata, situated in the southwest part of Kyushu Island, is a small town with a population of around 27,000 known for the neurological syndrome of severe mercury poisoning caused by a local company, Chisso Corporation. Because of the wastewater from the company's chemical factory, highly toxic chemicals had accumulated in the fish in Minamata Bay and its neighboring areas. People in local villages who ate the mercury-poisoned fish found themselves suffering from severe convulsive attacks. This environmental problem resulted not only in hundreds and thousands of deaths, but also caused socio-economic issues such as discrimination and poverty.

While problems of Minamata originally stem from environmental disaster, there is another issue of sustainability on Kyushu Island. The Goto Islands, located in the western part of Nagasaki, are an archipelago of 140 islands running about 85 km end-to-end. Even compared to Nagasaki, where Christianity has spread most widely in Japan, the Christian faith on the Goto Islands has been even more deeply-rooted in the villages with several churches. However, Nozaki Island, one of the Goto Islands with a beautiful church on top of a hill, found itself totally depopulated after the rapid economic growth of the 1960s. After capitalism made its inroads, first, young islanders left the island to earn their livings and, after settling in towns and cities, took their elderly parents away from the island to seek more convenient lives. The depopulated island is now occupied by deer, which are causing environmental problems as a result of their consumption of the bushes on the cliff. These sites were chosen because of the complex interrelationship of environment, society and economy embedded in

the issues of sustainability.

Another attractive feature of these locations was that both have knowledge and wisdom which provide local people with solutions in creating a sustainable society. To mention a few examples, Minamata has Jimotogaku, a self-learning or joint-learning methodology and process practiced by local people, and Ojika Island has green/blue (marine) tourism. One of the purposes of the 2010 JENESYS programme was to share these innovations with Asian countries.

Figure 1: Vicious Circle in Minamata

Figure 2: Vicious Circle in Goto Islands

Lecture Records

In this lecture I would like to talk about the following topics: 'What is ESD?,' 'Why Sustainable Development Now?,' 'Why Does Education Have a Key-role?' 'How is ESD being put into Practice?' and 'What are the Challenges for the Creation of a Sustainable Future' (Sheet 2).

ESD is an educational concept created by the international community. The acronym stands for Education for Sustainable Development. DESD is an abbreviation for the Decade of Education for Sustainable Development. Quite often, people also refer to UNDESD, which stands for United Nations Decade of ESD—i.e., the ten-year period dedicated to the development of the concept and related activities from 2005 to 2014 (Sheet 3).

The fact that we use these terms quite often nowadays may indicate that we are living in an unsustainable world. Here I would like to show the situations under which we make our own living through several maps. The distorted map of the world represents the proportion of the rich people who earn 100 to 200 dollars a day (Sheet 5).

The next map shows populations on the verge of starvation. One may notice that 20-35% of the people in most of the southern hemisphere countries faces starvation (Sheet 6).

The next sheet, which shows infant mortality, also represents an unbalanced world. The country with the most infant deaths in Asia is India, 24% of the world total (Sheet 7).

Also, the number of cars in each country seems to represent another aspect of our unbalanced world. While the number of cars in most of the African countries is less than two million, people in USA hold more than 1 billion cars (Sheet 8).

The next diagram shows the total amount of energy used over the last century. The consumption of all three major types of energy (coal, oil, and natural gas) has increased. We have used a tremendous amount of oil in the last few decades, and have now started to increase the amount of nuclear power energy as well as hydropower (Sheet 9).

As these data imply, we have gone through rapid development for the last few centuries. Human beings have never experienced such accelerated development in their history. Now I would like to show some of the results of these developments. This picture shows the deformity of fingers resulting from mercury poisoning in Minamata. We are going to visit the town as part of the field tour (Sheet 10). Beginning in the last century, hundreds and thousands of people there have suffered from neurological syndromes of severe mercury poisoning caused by a local company, Chisso Corporation. Highly toxic chemicals accumulated in fish in Minamata Bay and its neighboring areas as a result of wastewater from the company's factory caused serious damage in human beings. People in local villages who ate the mercury-poisoned fish found themselves experiencing severe convulsions.

Minamata is not the only one case. There are unfortunately other cases in and outside Japan in which environmental disaster caused many misfortunes. Chernobyl is also a well-known case in the former Soviet Union.

As human beings have gone through these tragedies, they have created key phrases to prevent them. On the next sheet, you can see how concepts concerning 'sustainability' were developed after the 1970s. 'Sustainability' or 'Sustainable development' is a concept people have come to be rather familiar with in their daily lives for the last few decades. The concept seems to have gained international recognition around thirty to forty years ago. A famous report by the Rome Club entitled "Limits to Growth" shows scientific data demonstrating that we would not be able to sustain our lives as they are unless we restrict our consumption and slow down the pace of our economic development. In the 1980s, another famous report, "Our Common Future," generally known "The Brundtlant Report," was issued. This report brought the then rather unique concept of 'sustainable development' into the spotlight, defining it as the "development that meets the needs of the present without compromising the ability of future generations to meet their own needs." Also, preservation of our earth/environment was emphasized as well as economic development, and the balance between the two was regarded as important (Sheet 12).

In the early 1990s, the Earth Summit was held in Rio de Janeiro in Brazil. In the Agenda 21, adapted in the Summit, is one of the first international statements which referred to the concept of ESD. Chapter 36 of the Agenda highly valued training and education for the development of a sustainable world. The next slide summarizes the speech that Ms. S. Suzuki gave to the world's leaders in the Earth Summit (Sheet 13).

The years after the new millennium saw further development of ESD. At the World Summit on Sustainable Development

(WSSD), held after the decade of the Earth Summit, the Japanese Government made a proposal that there should be an international decade to promote ESD from 2005 on, with strong support from citizen groups (Sheet 14).

As shown so far, the concept of 'sustainable development' and 'ESD' have been developed over the last thirty or forty years, and now sustainable development is regarded as a concept that needs to be realized through international and regional efforts (Sheet 15).

This is a huge challenge, especially in the era of globalization. I would like to show three diagrams, which one of the winners of the Ramon Magsaysay Award showed me at one of the ESD conferences (Sheet 16 – 18). These pictures represent the situation in Laotian society, but I believe that it symbolically represents the serious situation faced by most developing countries in an era of globalization. The first picture shows a balanced structure of a society in which the economy is only one of the pillars supporting it. However, under pressure from outside the country, 'contentment', a traditional goal of the people there, was replaced with such economic concepts as GDP or GNP. The quality of education changes as information technology is emphasized, which many parents believe will give students the opportunity to be rich in the future. But unfortunately, the whole society is collapsing under the pressure from globalized economy.

Now I would like to tell you why the quality of education is so important in such globalized world. Dr. Ervin Laszlo, a futurist leading the Budapest Club, stresses that our world is now at the tipping point. There are two roads we could take, but we must choose wisely. One road will allow us to break through, and the other will lead to a break down. This is where the importance of ESD comes in, because it gives us opportunities to break through (Sheets 20 & 21).

With this big challenge as part of its mission, ESD is to be regarded as a new vision of education or a new pedagogy, and also as representing a paradigm shift, a shift from fragmented thinking to systematic thinking, from a mechanistic view to ecological view, from a focus on teaching to a focus on learning, from top-down control to a bottom-up process, and from a competition-orientation to collaboration (Sheets 22 & 23).

The challenge of ESD is to create a society with three pillars or components of sustainable development (environment, society and economy) with an underlying foundation of 'culture' (Sheets 24 & 25). The UNESCO Bangkok Office has implemented several important ESD program in our region and pointed out specific actual examples of each pillar (Sheets 26 – 29).

I would like to give you some of the important characteristics of ESD, based on the International Implementation Scheme (IIS) of ESD, as follows (Sheet 30). As you can see, ESD is a holistic concept, and attaches a great deal of importance to such aspects of the learning process as critical thinking and problem-solving. Also, although it has a specific goal, that is, to create a sustainable world, there are multiple methodologies with which to achieve it, and there is an emphasis on the participation of all learners. It must be locally relevant within the globalization trend and it must also be values-driven (Sheet 30).

Here I would like to show you an example of a good ESD practice from a school I have visited in England. The name of the school is Crispin School, one of the Beacon Schools (model schools officially recognized by the government). Even after the launch of the DESD, they have started to create their own education for sustainability, including the establishment of a 'green club', involvement of students in decision-making process for the campus design and other issues, running a fair trade café, and exhibiting recycled art (Sheets 31 – 40).

Now we stand at the mid-point of the DESD and we will celebrate our achievements in 2014 in Japan with the World Conference to conclude the decade. One of the essential approaches for us to achieve the initial goals of ESD/DESD by then is the whole-school or whole-community approach. The UK government has tried to make all state schools sustainably managed with this approach. They call them 'sustainable schools' or 'suschool'. The diagram here shows a model of such a school community (Sheet 42). In order for all the schools to start without difficulties, the educational authority put up eight doorways (1. Food and drink, 2. Energy and water, 3. Travel and traffic, 4. Purchasing and waste, 5. Building and grounds, 6. Inclusion and participation, 7. Local well-being, and 8. Global dimension) (Sheet 43).

Not only in the UK, but in Asia as well, one can see similar ideas. One example is from Thailand. Based on the philosophical idea of King Bhumipol (Pumipon) on sufficiency economy, a non-profit organization called TEI (Thailand Environmental Institute) has depicted a picture of whole school development. They have also given introductory activities for ordinary schools to start with (1. Climate change, 2. Biodiversity, 3. Learning resources in community, 4. Waste management at schools, 5. Use of resources, 6. Products good for our lives, and 7. Sufficient-economy life-styles) (Sheets 44 – 46).

Thinking of what to do towards the end of the Decade, I would like to emphasize some newly developed approaches, including whole-school/community approach and others. All these approaches are holistic, and I hope I can share with

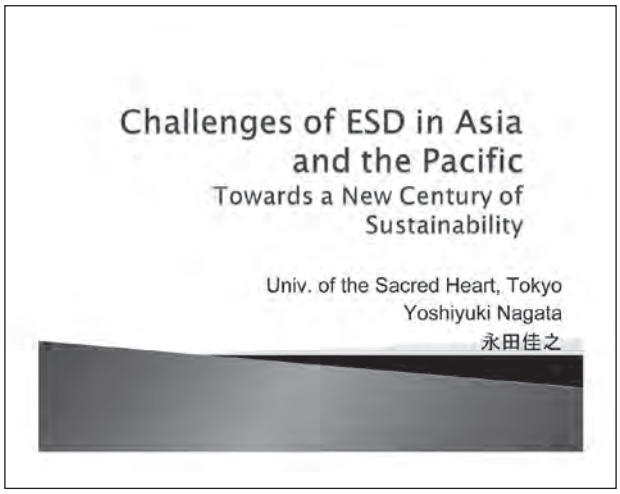
you the details of each all through the coming activities, including the field visits to Kyushu Island. I am very much looking forward to sharing a lot with you, especially lessons from the past and present (Sheets 47 – 49).

Before ending my presentation, I would like to share with you a poem on ESD, which was created by my study group of young researchers (Sheet 50).

Connectedness with nature's majesty, the world and the cosmos …
Connectedness through the past, present and futre …
We human beings live in the midst of connections.
Reclaiming connectedness with nature, society, and community
is the first step towards a sustainable future.
Incorporating and feeling connectedness within ourselves …
Cultivating this feeling is what ESD means to us.

Thank you for listening.

Sheet 1



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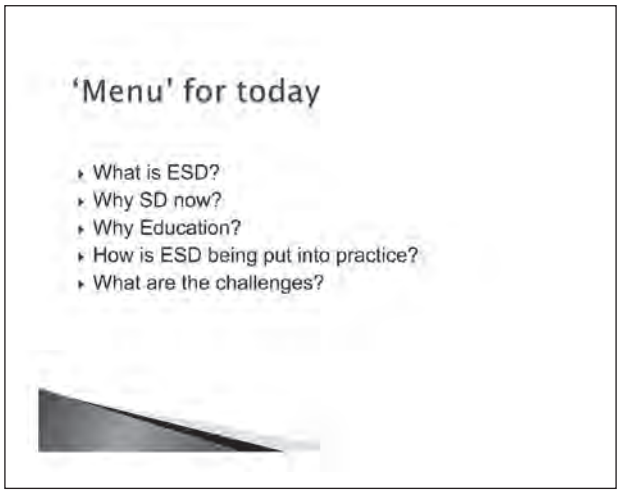

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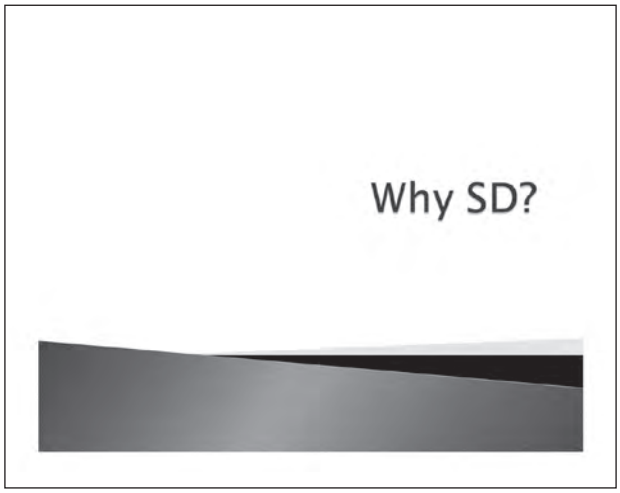

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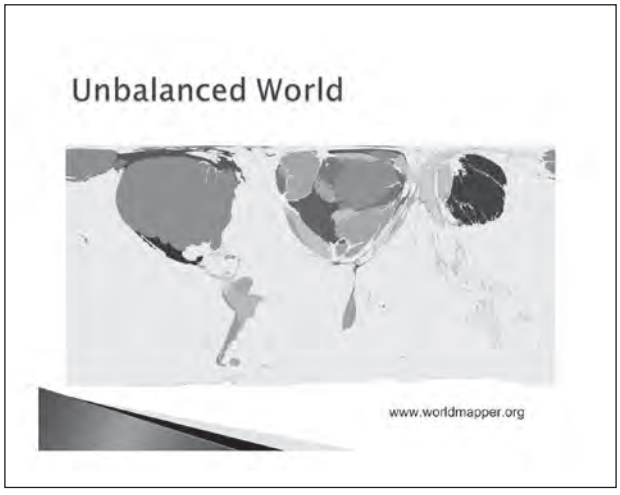

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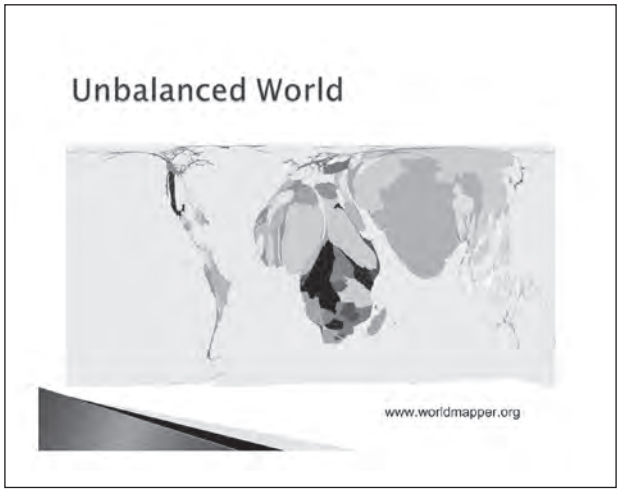

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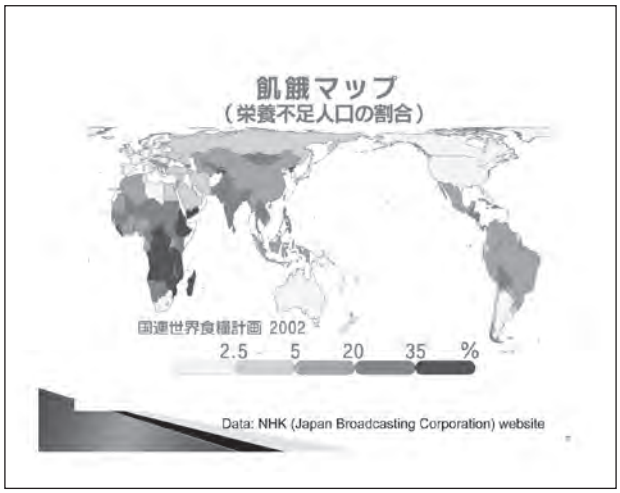

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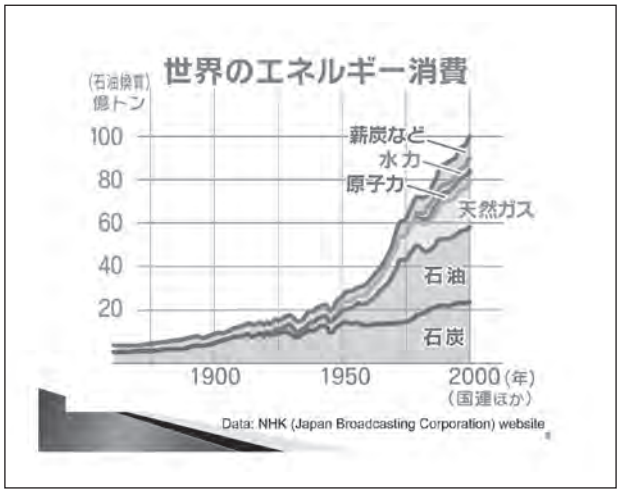

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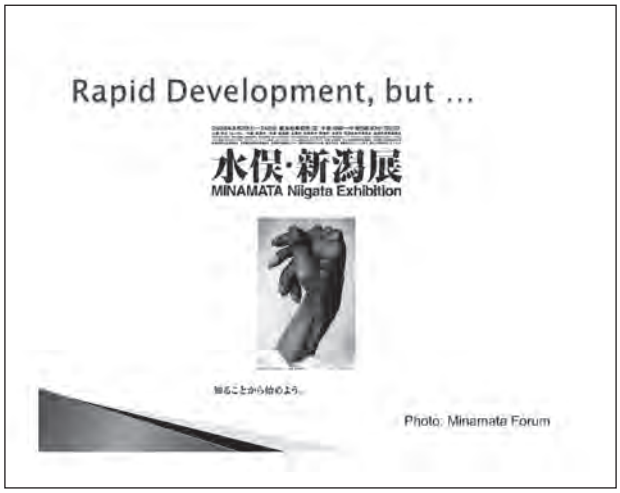

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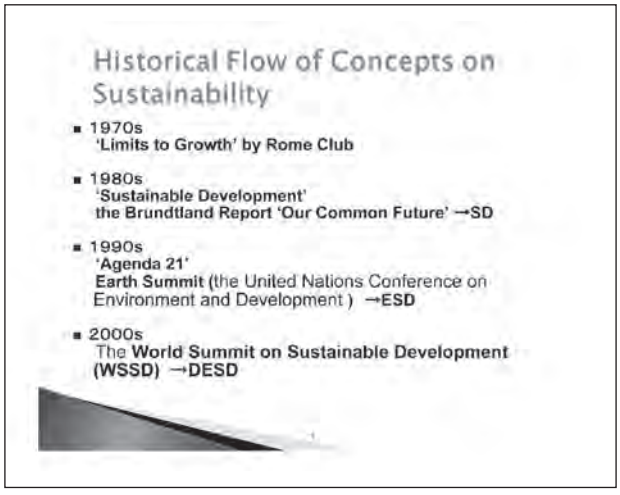

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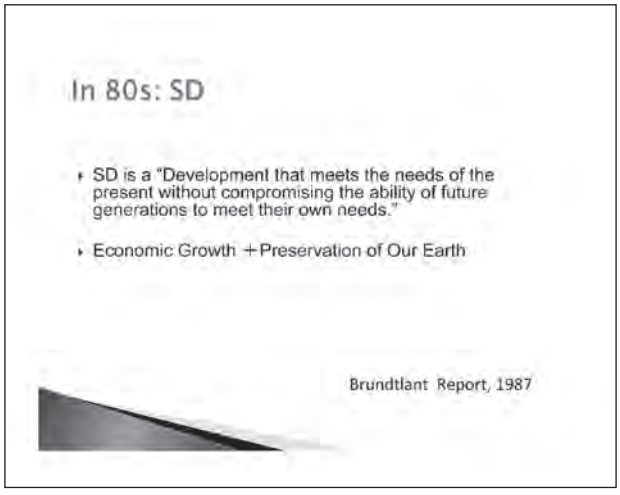

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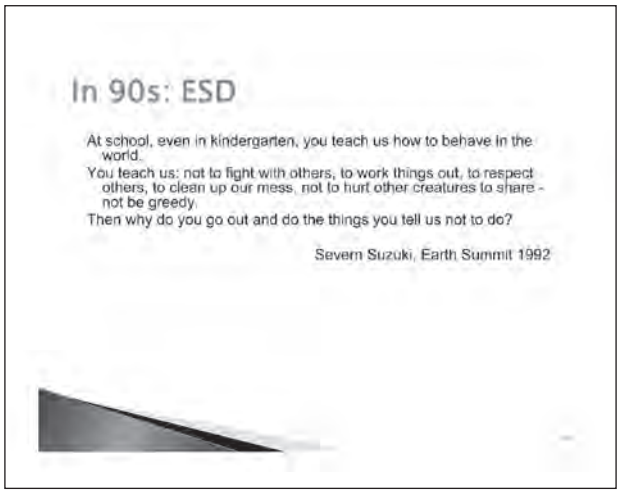

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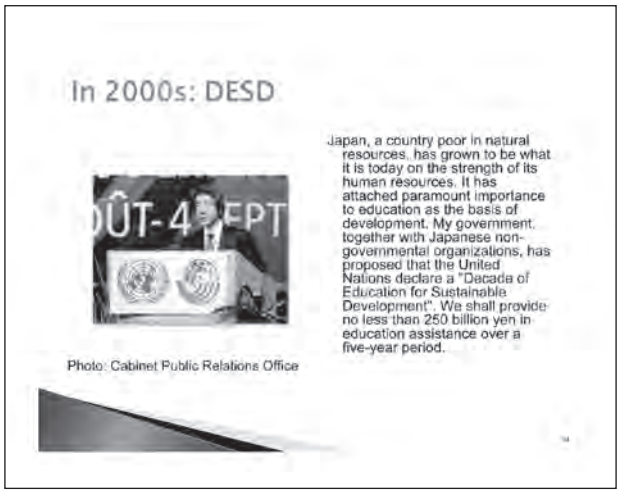

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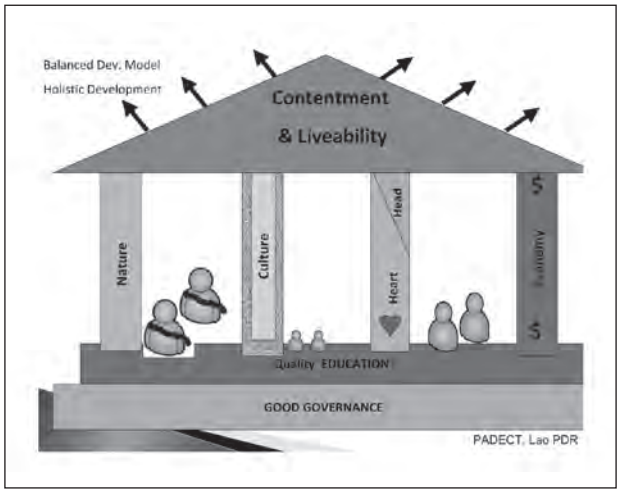
Sheet 16



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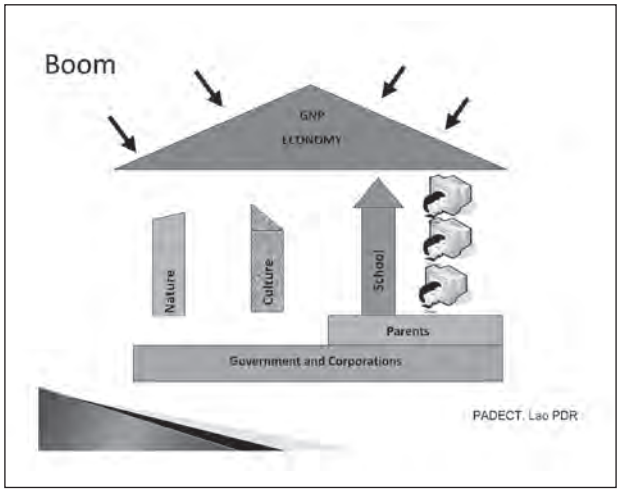

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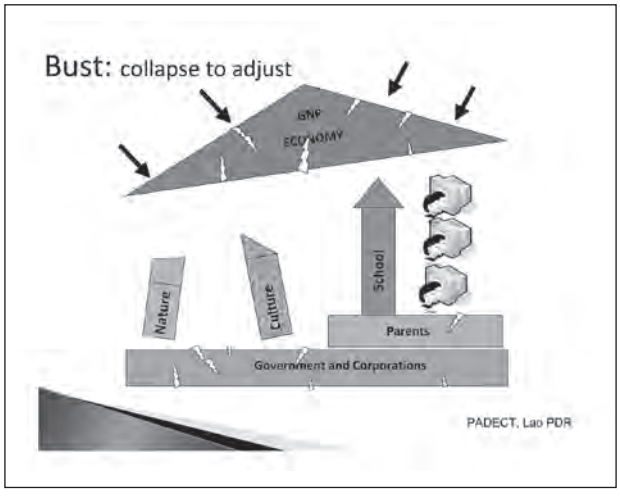

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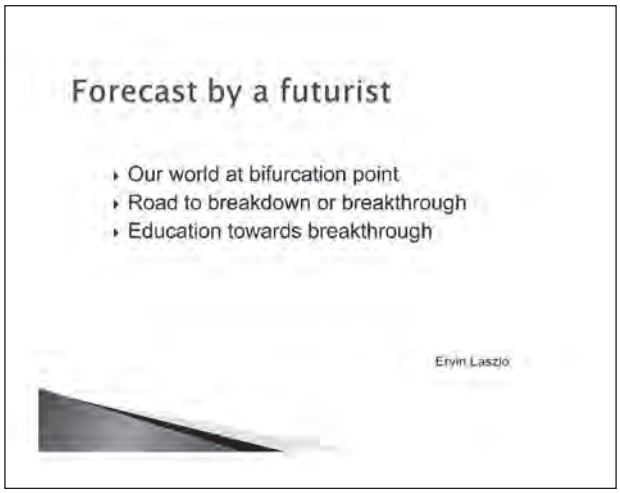

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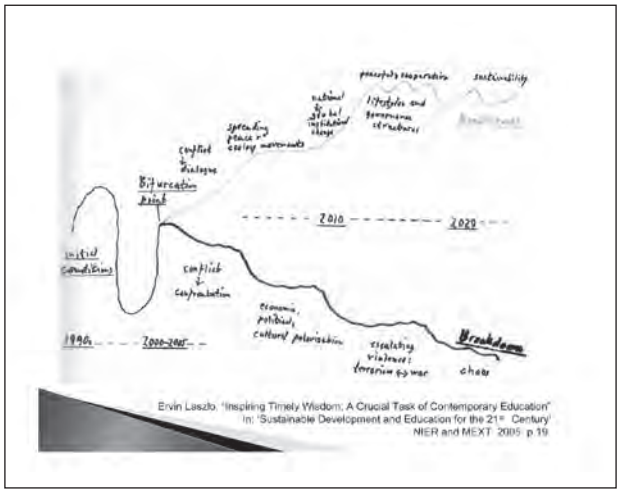

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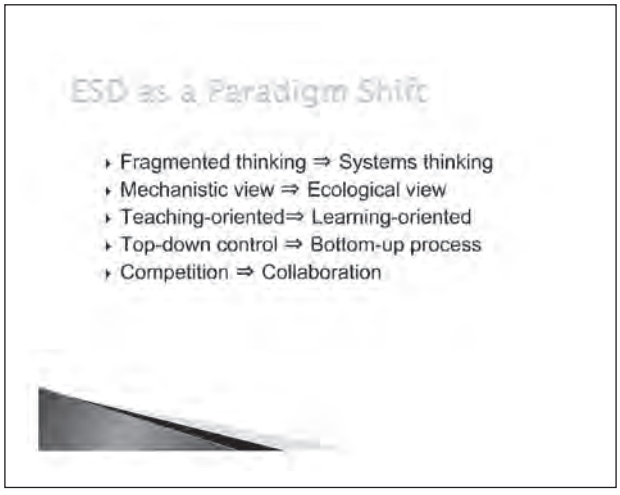

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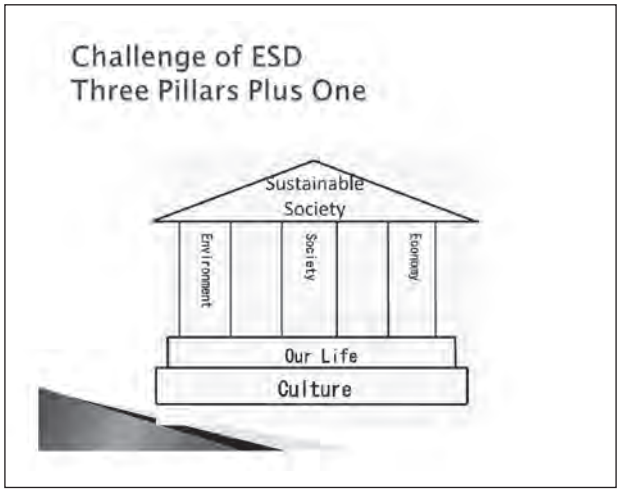

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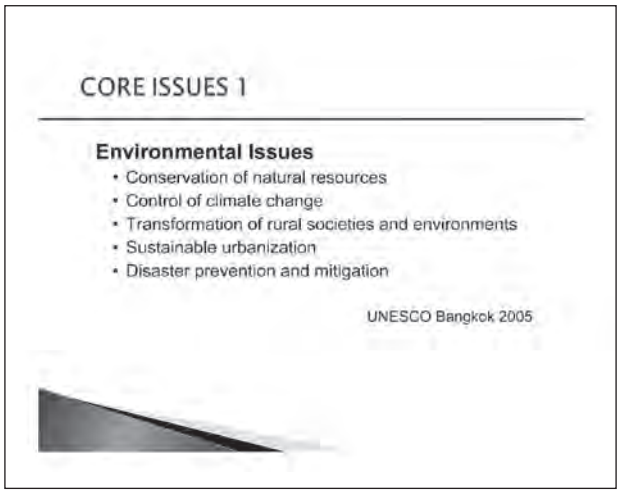

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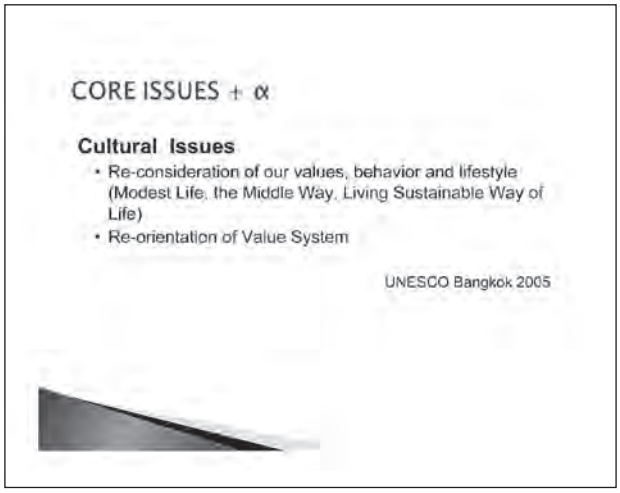

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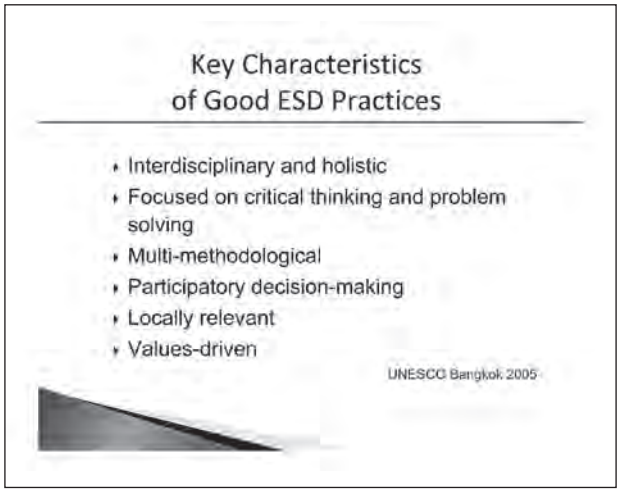

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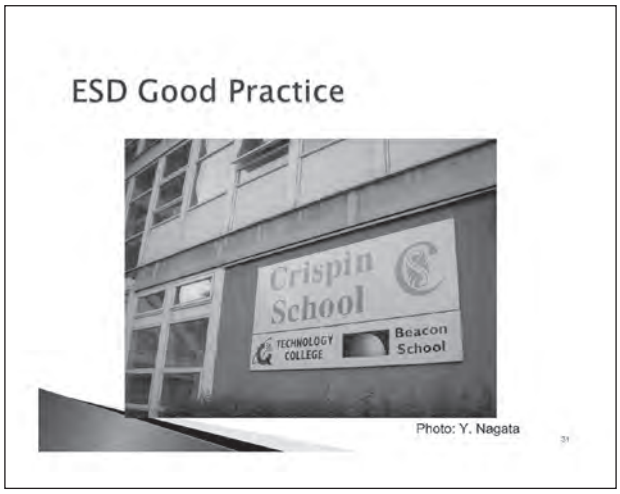

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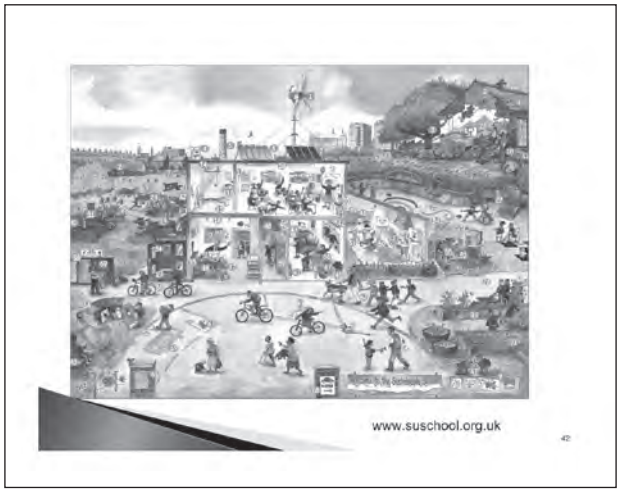
Sheet 41

Sheet 42



Sheet 43

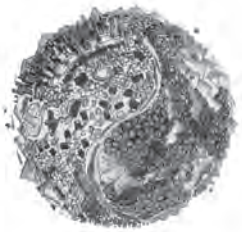
The Eight Doorways (Sustainability Themes)

1) Food and Drink
2) Energy and Water
3) Travel and Traffic
4) Purchasing and Waste
5) Buildings and Grounds
6) Inclusion and Participation
7) Local Well-being
8) Global Dimension

Sheet 44

His Majesty, King Bhumipol (Pumipon)

- "To be a tiger is not important. The important thing for us is to have a sufficiency economy, which means to have enough to survive."



Thai Environment Institute

Sheet 45

Thailand Environment Institute (TEI) 'Sufficiency towards ESD'

Sheet 46

Seven Activities

Thailand Environment Institute (TEI) 'Sufficiency towards ESD'

Sheet 47

What We Can Do Towards the End of the Decade

Photo: Y. Nagata

Sheet 48

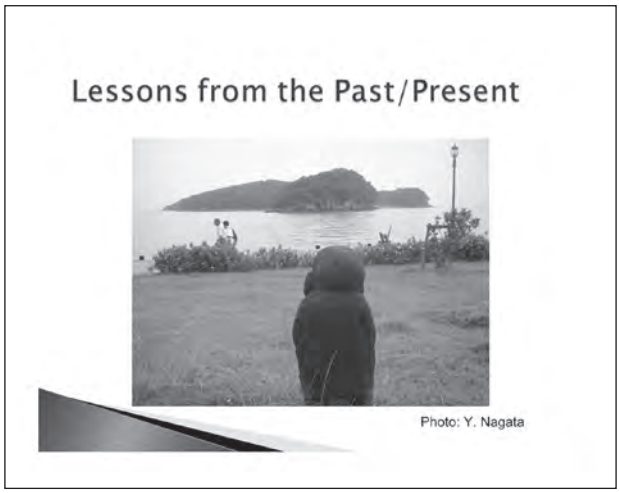
New Challenges

- Infusion Approach
- Bottom-up Approach
- Whole-School/Community Approach

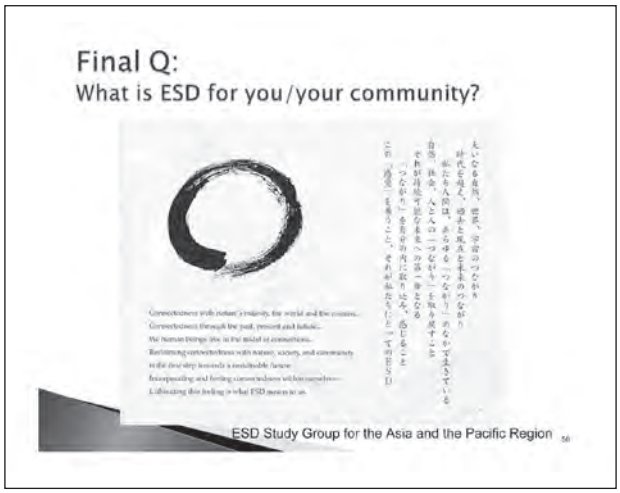
↓

Holistic Approaches

Sheet 49



Sheet 50



Commentary on Workshops

Two main workshops were conducted before and after the field studies in Minamata and Goto Islands. Also, an in-between workshop was held before we left Minamata for Goto Islands to review what we had learned in the first part of our fieldwork.

Here I would like to provide an overview and summarize what we learned in the first workshop, and the final workshop to wrap up all the learning processes after we returned to Tokyo. Then, this section attempts to draw a model of learning on sustainability which could be called 'Japan Foundation Model' for use by other programs, especially by the participants in their own home-countries.

1) Workshop I

The points to ponder in the first workshop were intended to give opportunities to all the participants to share the following basic concepts, theories and approaches concerning ESD and Sustainable Development: 1) Three pillars/triad of ESD, 2) Systems theory, and 3) Whole school / community approach.

Following the key message in the lecture which I gave to the participants on the first day, the above-mentioned concepts were reiterated so that the participants could recall them in the field visits.

In addition, several points were stressed so that the participants could rethink the cases in their home countries by making the most of these theories and approaches. As shown in PowerPoints Sheet No. 24, one of the features of ESD is the multi-faceted nature of the concept, which differentiates it from the conventional type of environmental education. There is another type to express it, as shown in Sheet No. 25. Some include governance as one of the components of ESD, while others stress cultural aspects. However, it can be said that a common understanding of a sustainable society is that the society is composed of different aspects with an overall balance.

That way of understanding the society led us to consider that environmental problems cannot be solved, no matter what program is invented and applied, if the approaches taken are focused only on environmental issues. Minamata, as explained above, is a typical case in which environmental issues are related to socio-economic ones. The participants were expected to learn a way of grasping environmental issues from social and economic viewpoints as well as environmental ones. Ojika Island is also a suitable case for the participants to understand such social issues as depopulation not only from societal viewpoint but also from economic one.

The second point to be emphasized in the workshop was systems theory. As indicated in the explanation of the three pillars of sustainable society, it is crucially important for us to become familiar with a way of thinking in which everything is connected with each other. As His Holiness the Dalai Lama the 14th says, a problem in one part of the world is directly or indirectly connected to another problem in another part of the world. Especially in this era of globalization, all citizens must become acquainted with systems thinking.

The third point to be made was the importance of whole-school or whole-community approaches in ESD. There are many ESD practices in which only an environmental approach is being taken. However, unless we use systems theory, that solution would not bring us to a true resolution. For example, in an ESD school or sustainable school, not only recycling or reusing approaches, but also such elements as student participation or a learner-centered approach are appreciated.

In the workshop, a model of a sustainable school initiated by the UK government, concerning which the participants were given information in advance, was recalled. Also, it was emphasized that in the case of non-formal education, a whole-community approach is important.

2) Workshop II

In the workshop in Tokyo, held after the field visits to Minamata and Goto Islands, an attempt was made to synthesize what the participants had experienced in both fields, with a particular focus on sustainability.

As a facilitator, I have tried to summarize what the participants saw in the fields with my own diagram. They were asked to draw a diagram or a picture which represents unsustainable situations in Minamata or Ojika Island. After this

individual work, all the participants were grouped with several members to share what they had tried to express with drawings. I put up my own diagram on a rather big sheet of paper to show to everyone on a white board, not as a model but as an example.

Then each group was asked to share an unsustainable situation in his/her country and to explain it by using the concepts of 'three pillars'. The participants were then asked to take up one of the cases with which they can work out for their own future program for sustainability and to draw a diagram or picture to show how to turn the present unsustainable situation into a sustainable one by making the most of what they had learned in the fields.

The presentations made by the groups were fun and full of ideas and inspiration. One of the goals of ESD is to inspire people, particularly the young, to make a better world. I have found many of the participants in the presentations, regardless of the severe situations they face, explaining their innovative ideas full of hope.

3) "Japan Foundation Model" for Learning Sustainability in Asia and the Pacific

Having listened to the presentations by the participants in the final workshop, I have come to realize that, based on the three pillars model, we could further develop a learning model on sustainability.

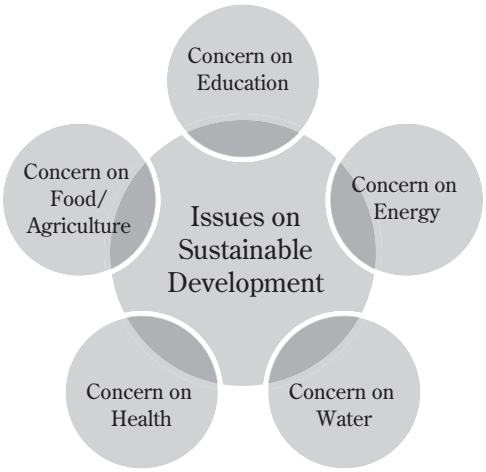
This conviction stems from my feelings in the program. The backgrounds and expertise of the participants vary from country to country. In the program, however, they seem to be united harmoniously with a common concern, which is sustainability.

The original state of relationships of the participants is shown in Figure 3.

Figure 3

As shown in the diagram, each participant with his/her own expertise has his/her own concern with rather few interests in other areas. However, by introducing a concept of sustainability or sustainable development as an important issue held in common by all, the participants started to learn about each other and a sort of synergy among a variety of expertise emerged to create a learning community, as indicated in the Figure 4.

Figure 4



In order for this learning community to feel a sense of solidarity, it is recommended that the participants of the program will make field-study visits to places which face or used to face problems with sustainability and meet with the local people who have worked out and developed solutions with their own local knowledge.

To sum up, the Japan Foundation Model for learning about sustainable development has the following characteristics:

1) To identify issues of sustainability with local as well as global perspectives;
2) To understand sustainable development holistically as multi-faceted and multi-dimensioned;
3) To attach importance to holistic views on environmental or socio-economic issues;
4) To regard 'fields' as meaningful sources for learning;
5) To listen to the voices of local people with local knowledge and wisdom in fields; and
6) To share and learn together with people with different backgrounds and expertise.

Looking back at the days spent with all the participants, their experiences were a special learning process for all the participants, including the Japan Foundation staff, interpreters and the author. The group was truly a learning community. It is my hope that this learning process goes on and on beyond the JENESYS programme and contributes to the creation of a sustainable future in Asia and the Pacific.

Closing

Through the JENESYS programme, the participants have continued to learn ESD-related issues. The next challenge would be to make the most of their learning in their own countries and region. There are several possibilities that would allow each participant to further develop what they have learned in Japan.

The first approach is to innovate and re-direct the existing resources towards local sustainability with the ideas and inspiration they have received through the program. The second challenge is to start a collaborative project among the participating countries. The third is to apply for the Grant Program of the Japan Foundation in collaboration with a Japanese NPO/NGO. The fourth possibility is to create a regional or sub-regional ESD program with a common concern or interest as a project theme. The following is a questionnaire distributed to all the participants on the second day and the results. We hope that they would be of help in realizing some of the possibilities above.

Questionnaire on ESD Topics

Your name: _____

Q 1. What theme(s) would you like to choose if a new regional programme is launched for sustainability in your region? *(Please tick as many boxes as appropriate)*

☐ Good governance, ☐ Gender, ☐ Health, ☐ Reproductive health, ☐ Peace/Conflict resolution,
☐ Human rights, ☐ Access to Education, ☐ Urban ecology, ☐ Poverty, ☐ Food security,
☐ Rural development, ☐ Cultural heritage, ☐ Indigenous knowledge, ☐ Climate change,
☐ Energy/Natural resource, ☐ Desertification, ☐ Environmental conservation, ☐ Biodiversity,
☐ (Natural disasters) ☐ Others (Please specify _____)

Q 2. How much would the following topics be important for your regional sustainability? *(Please tick only one box in each row)*

		Very important	Important	I do not know	Unimportant	Very unimportant
Item 1)	Air/Water pollution	----------	----------	----------	----------	----------
2)	Drug addiction	----------	----------	----------	----------	----------
3)	Regional history	----------	----------	----------	----------	----------
4)	Endangered language	----------	----------	----------	----------	----------
5)	Tsunami/Earthquake	----------	----------	----------	----------	----------
6)	Rare Fauna & Flora	----------	----------	----------	----------	----------
7)	HIV/AIDS	----------	----------	----------	----------	----------
8)	Forestry/Reforestation	----------	----------	----------	----------	----------
9)	Rice	----------	----------	----------	----------	----------
10)	Banana	----------	----------	----------	----------	----------
11)	Fish	----------	----------	----------	----------	----------
12)	Bamboo	----------	----------	----------	----------	----------

Q3. What is the most significant topic among the above items?
(Write the item number and the reason(s) why it is so significant in your region.)

Item number: _____, Reason(s): _____

_____

_____

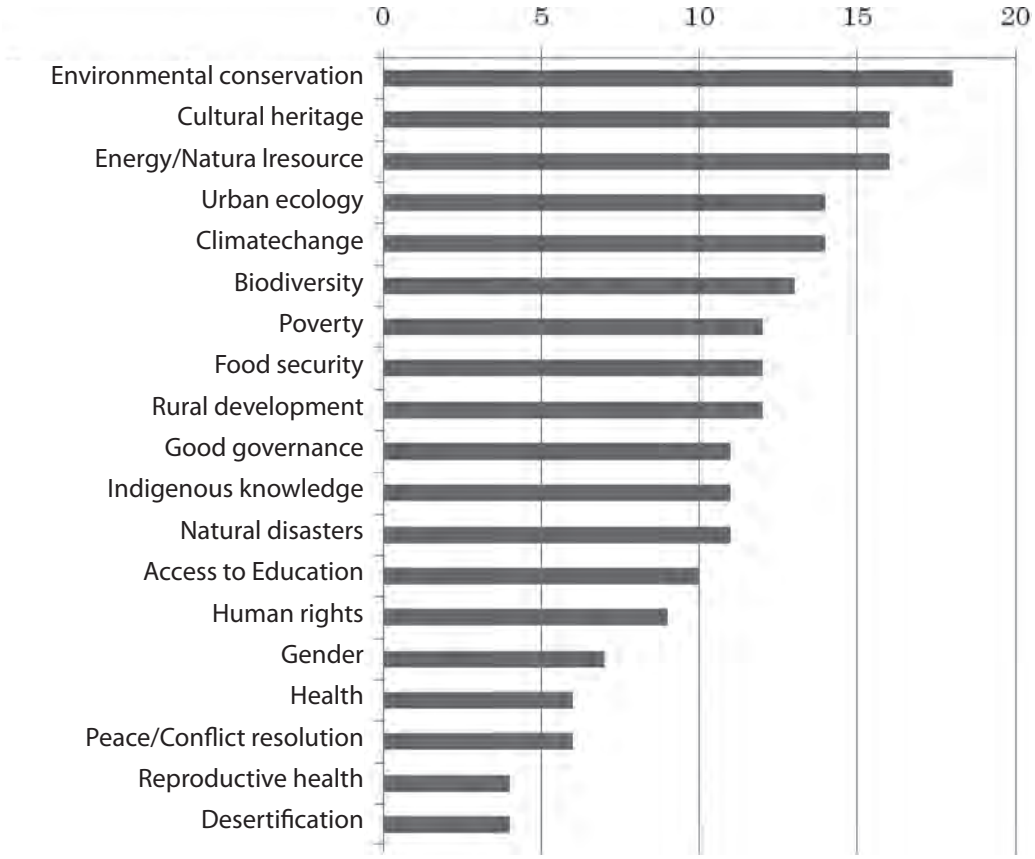
Q4. What are your ideas for a new regional ESD project in the Asia/Pacific Region?
(Please write if any)

_____

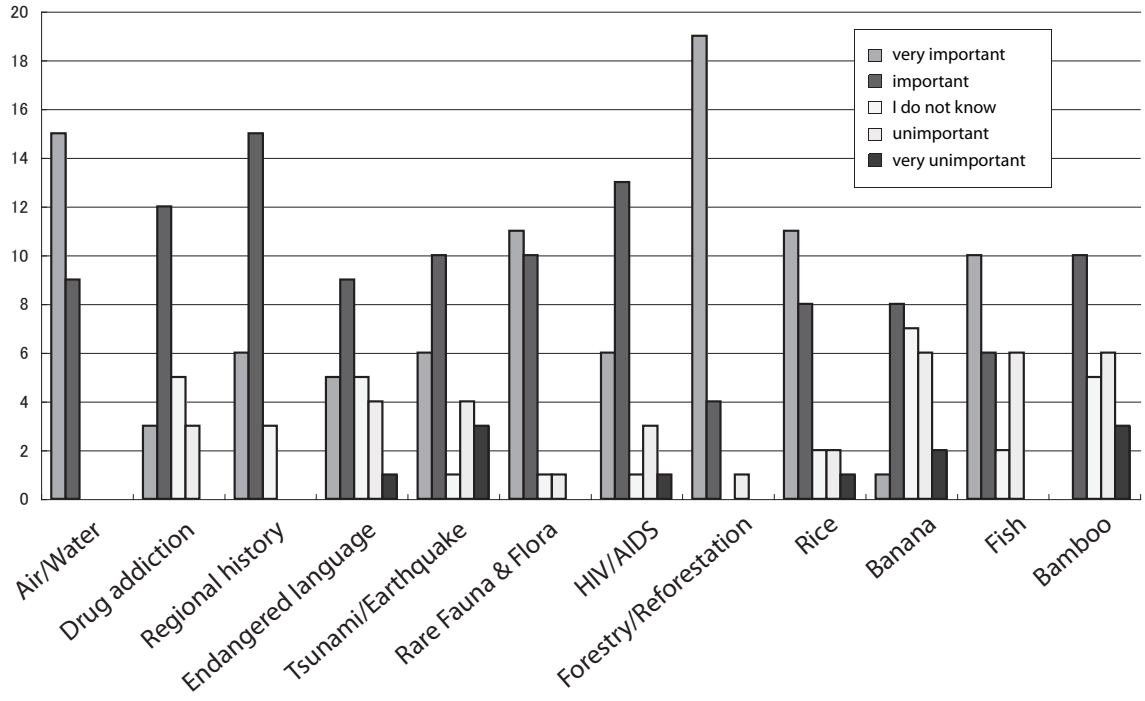
_____

Thank you very much for your co-operation!

Q1 What theme(s) would you like to choose if a new regional programme is launched for sustainability in your region?



Q2 How much would the following topics be important for your regional sustainability?



Q3 What is the most significant topic among the above items?

1) Air/Water pollution	2) Drug addiction	3) Regional history
4) Endangered language	5) Tsunami/Earthquake	6) Rare Fauna & Flora
7) HIV/AIDS	8) Forestry/Reforestation	9) Rice
10) Banana	11) Fish	12) Bamboo

1) Air/Water pollution

- Most of the topics are very important, but they are all inter-related. I have selected one (air pollution and water pollution) because it is the most closely interconnected with the others.
- It affects our health directly especially in huge area, cities, countryside, and mountains.
- It is something that affects Singapore in a huge way, given the haze and the limited water resources that we have.
- The rate of pollution in all countries is increasing without any proper treatment or solution.
- There is so much pollution around and within Punjab due to the unawareness of people.
- Beijing is a big city and the capital city. More and more private cars have appeared in recent years. Air pollution follows the increase in cars. Although the government is trying more ways to deal with air pollution, such as limiting driving by license number, diverted factories and other measures, it is not still enough.
- Since we have polluted our natural resources, they are scarce now, and we have to search for new methods and technologies to improve these connections.

3) Regional history

- The East Asia Region harbors a rich variety of culture and history which is different in each country. An understanding of each region's history and culture is necessary to design a suitable ESD.

4) Endangered language

- Some communities in our region did not conserve their local languages, and over the long term they will not be able to preserve their history and everything in our community.

6) Rare Fauna & Flora

- The Philippines is at the center of biodiversity, yet so much has been unexplored.

8) Forestry/Reforestation

- Monitoring deforestation & urbanization is a good indicator of the country's urban sustainability. There are also local issues related to "kaitiakitanga" (stewardship) which are critical to preserving cultural and environmental sustainability.
- Deforestation in developing countries like Myanmar is proceeding at an alarming rate. Reforestation is urgently needed in order to achieve sustainability.
- The forest is very important because if we keep the forest it will sustain other organisms. Forest provides the basics for human life.
- As we know, if we sustain the forest and also the environment, our air, water, and environment will also be saved and we can live in peace. This will also protect against soil erosion, flooding and other issues.
- Indonesia does not have a lot of forest anymore.
- Forests play an important role (water catchment, biodiversity, indigenous culture, reducing CO_2 levels) in tropical countries.
- Forestry/reforestation is important in the context of climate change, as well as to reduce carbon emission.
- The state of deforestation in my country is very severe; forest cover dropped from more than 70% a century ago to less than 18% in recent years. This state of chronic deforestation adds to the natural hazards and vulnerabilities of many communities, making more people vulnerable to disasters, loss of livelihood, & biodiversity loss. We have had our share of tragedies and wish to prevent more from happening in the future.

- Urbanization is destroying all our good agricultural areas, ensuring forest corridors is important. Future food security will be very important.
- In the past, 70% of Cambodia was covered by forest area. Recently, the percentage of forestry in Cambodia has decreased. Reforestation is one of the government's strategic goals, so it is very important in our country.
- Nowadays, forests in any country are being destroyed by human activities. This action has had a serious impact on the environment, human society and the economy as a whole.

9) Rice
- Despite the fact that rice is the staple of the Korean diet, the country is not self-sufficient and the self-sufficiency rate is decreasing due to the priority given to industry.
- Rice is our staple food and yet we import more than 90% of our rice, which is not good in terms of food security.

4) Endangered language, 6) Rare Fauna & Flora and 8) Forestry/Reforestation
- Australia is currently destroying these things because of widespread ignorance.

Q4 What are your ideas for a new regional ESD project in the Asia/Pacific Region?

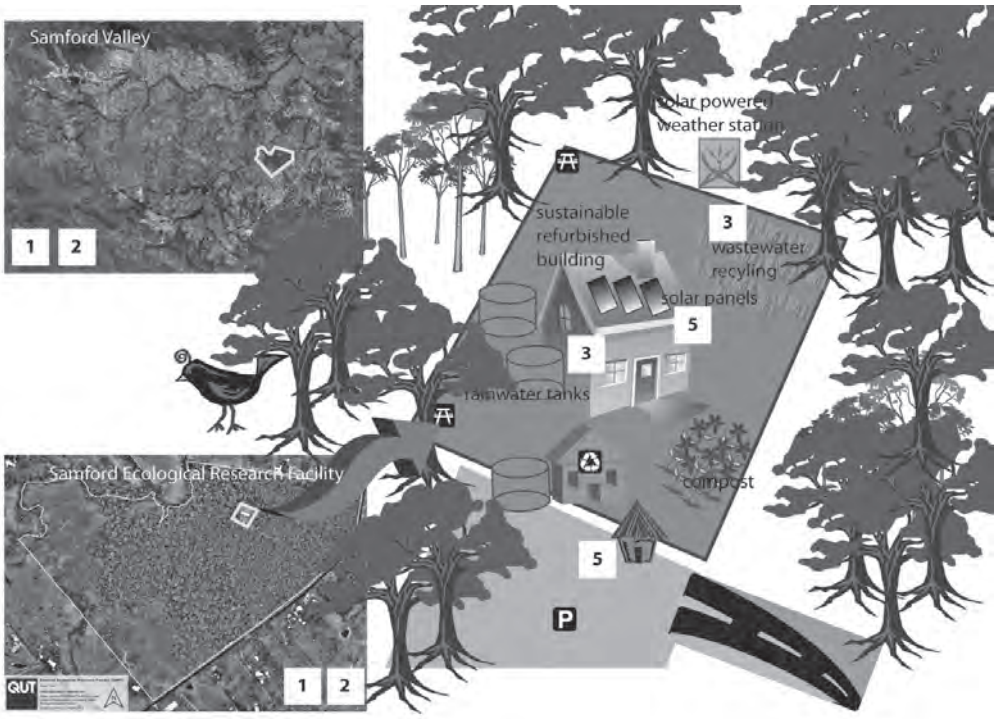
- Considering disaster relief issues in Asia/Pacific caused by climate change (which is a man-made disaster)
- Forestry and Environmental education through participatory approach
- Compile a network, platform, Summary of good ESD practices, practitioners & businesses, schools, communities.
- All countries can participate together to implement project to solve environment issues with slogan "Act together, big impact"
- Climate change. A new regional initiative should deal with this common concern that all countries share.
- Urban-region connectivity
- Need to strengthen our ties
- Loss of culture due to globalization
- Project related to climate change or global warming
- A project to help incorporate ESD into as many subjects in the school curricula as possible, as early as possible in the school years, and preferably as soon as a child enters school
- Sharing the country's wisdom for conservation of our resources, and management by themselves.
- There should be links for a regional ESD focusing on indigenous culture.
- Besides garbage sorting, what is the other ways that we can reduce garbage? Several communities are against garbage incineration. The conflict between garbage plants and citizens is more serious. My organization just started a new program for garbage sorting and composting in communities and ask companies to take responsibility for their products' wrapping. Garbage problems have occurred in Asian countries in recent years. Not all countries sort garbage as well as Japan does.
- Strengthening regional ESD & environmental education networks, 2. exchange between environmental education practitioners on the issues of climate change and its impacts at the sub-regional level.
- Understanding the link/balance between food security/production and climate change. Need to keep forests, agriculture through good spatial planning. Full life cycle analysis of products. Education for future and existing technology that will be required
- It is very important for Asia/Pacific countries to share experiences each other.
- ESD project will bring a great change to a new generation to enhance their knowledge and also help bring out the creativity of the people.
- More partnerships between specific primary schools, inviting more East Asian people to Australia ESD conference, creating/collating internet contact information so we can share knowledge. Making music/art/poetry for ESD. Using university network to promote a youth ESD event. Sharing photos of exiting projects.

The responses were summarized by Yoshiyuki NAGATA and Hideki MARUYAMA

Post Program Report by Participants

Country	Australia
Name of Facility	Samford Ecological Research Facility (SERF)
URL Address	www.serf.qut.edu.au
Name of Reporter	Michelle Ann Gane

A Whole-School or A Whole-Community Practice in the Country



Narrative Explanation of the Practice

The Samford Ecological Research Facility (SERF) is a 52 hectare property 25 minutes northwest of Brisbane (capital of Queensland). The property is used by Queensland University of Technology (QUT) to educate its students about the environment, sustainability and climate change. Seventy-five percent of the property is forest, while the remaining area is grassland.

1. **Environment:** Protects the last patch of forest in the Samford Valley.
2. **Society:** Shares all knowledge with the local community through open days, information sessions, newsletters and website.
3. **Economy:** Utilizes solar energy, collects rain water, organic composting wastewater system and composts all kitchen waste.
4. **Governance:** Managed by QUT's Institute for Sustainable Resources who specialize in sustainability research.
5. **Culture:** Meeting rooms for study and creation as well as exhibitions and community meetings.
6. **Education:** Major component of QUT's sustainability research and teaching and learning programs. The main building (barracks) on the property is a living example of sustainable development.

The 'barracks' started life in the early 1900s as Brisbane's Roller Skating Rink, which was located on the site where Brisbane City Hall is now. The skating rink was closed down in the 1920s and the materials were used to build the barracks at a Samford quarry that was mining granite for the new Brisbane City Hall. In 1942, the barracks were relocated and rebuilt once more in its present location. The barracks has been subsequently partially renovated through QUT's Built Environment

and Engineering undergraduate students studying Construction Management. All materials used to renovate the building were sourced from second-hand materials, in keeping with the sustainable nature of the building.

Action Plan

To develop a cost-effective long-term monitoring plan for the Samford Ecological Research Facility (SERF) and Samford Valley to monitor the impact of urbanization on natural resources and ensure the sustainability of the site for future generations.

The development and transformation in land use exploitation of resources associated with population growth in southeast Queensland will intensify the pressure on the catchment, aquatic and coastal environments, potentially leading to significant habitat fragmentation, and changes in biogeochemical cycles, water quality issues, biodiversity loss and los of economic and amenity values.

This information will be used to educate QUT staff and students, the local community and local government about the ecological processes occurring in the whole valley and the management practices needed to ensure sustainable development.

Objective

The objective is to deploy a network of acoustic sensors throughout SERF and the Samford Valley.

Human-made and biological noises are different. By measuring how much of each are present, you can determine how healthy your environment is. The acoustic sensor platforms transmit data over a wireless network that bridges large distances while also conserving power. Data is initially delivered to a sensor server for storage and then relayed to remote servers or grid services for further analysis and processing for further ecological inquiry. Researchers interpret these sounds to estimate the number and diversity of sound-producing animals in the environment.

Each sensor platform collects data at pre-programmed times that ensure minimal site disturbance and human intervention. The sensor platform comprises a pole-mounted sensor unit and a solar panel coupled with a deep cycle battery to provide power over extended periods. The sensor platform can also be modified to transmit the data via a mobile phone. The sensors can literally be placed anywhere. It is a cost-effective tool that can be used to gather large amounts of information.

Beneficiaries

The beneficiaries will be all staff and students at QUT, the local community including schools, local government, land owners and scientists. SERF will also benefit as we will be able to adapt land management practices based on the information provided to accommodate changing environmental needs, thus ensuring the long-term ecological viability.

Stakeholder

For this Action Plan to be successful, it will require the local community, land owners and the local government to help change land use and natural resource degradation.

Expected outcomes

This information gathered by the acoustic sensors can then be used to calculate an index of the health of the land and water in the area. Monitoring wildlife and evaluating changes enable researchers see the big-picture issues relating to climate and land-use change.

Concrete Activities

QUT is working with the Remote Environmental Analysis Laboratory (REAL) at Michigan State University in the US in the development of new acoustic sensor platforms and cyber-infrastructure to enable sampling of environmental sounds in near real-time.

We have recently run a successful trial with five acoustic sensors at SERF. The information gathering has been very successful and we are increasing the number of acoustic sensors at SERF to ten, with the first ten to be implemented into the broader valley. This will be done in collaboration with the local government.

"My KEY WORDS" from the program

Acoustic sensors, long term, sustainability

Country	Australia
Name of Facility	CERES, Melbourne
URL Address	www.ceres.org.au/
Name of Reporter	Alexandra Hilvert

A Whole-School or A Whole-Community Practice in the Country

Narrative Explanation of the Practice

CERES is a not for profit organisation and centre and model of 'how to do sustainability'.
CERES is located 8kms from the center of Melbourne, by the Merri creek. It is an environmental education centre and an urban organic farm. Thirty years ago, community members decided to restore a decommisioned landfill tip site and regenerate it so that it could be used by the local community.
Since then, CERES has expanded its community reach and site infrastructure. The site includes a sustainable café, eco-house renovation model, bush foods and permaculture nursery, community bike shed, bi-weekly market, eco-shop, organic food farm, education centre, wind and solar power generation, organic recycling centre, rain harvesting technology, electric car, cultural village, sustainable building designs and a large variety of education programs, festivals and community action groups.

Action Plan

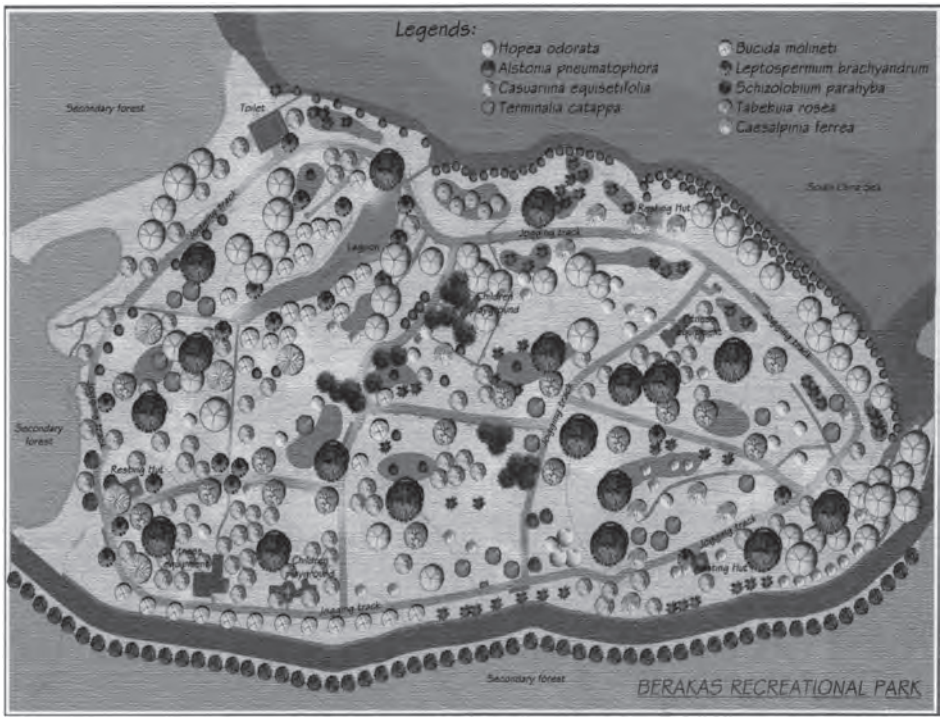
1. Objective: to organise an infrastructure at CERES to create and support an action group focused on youth-based sustainability.
   This would be intially initiated through a school holiday program that provides opportunities for
2. Beneficiaries: Young people, CERES, the local community, future generations
3. Stakeholders: Young people, CERES, local schools, local council, parents, grant bodies,
4. Expected outcome: Students develop new skills, mutual support and a connection to CERES which will empower them to develop personal and group action to promote sustainabilty
5. Concrete Activities: Discuss proposal with key CERES staff members, generate interest in the project through advertising in CERES newsletter, local environmental education networks, schools and community newspapers, organise an intial meeting for all interested individuals, brainstorm project plan with the group.

"My KEY WORDS" from the program

Thinking big, passion, generosity, culture, environment

Country	Brunei
Name of Facility	Berakas Recreational Park
URL Address	–
Name of Reporter	Haji Ryni Sofian Bin Haji Othman

A Whole-School or A Whole-Community Practice in the Country



Narrative Explanation of the Practice

Berakas Recreational Park in Berakas Forest Reserve is a forest-based recreation park. Originally, this park was forested area, but in 2004 this area was burned. Accordingly,in 2009 this area was converted into a recreational park in order to protect the surrounding forested area--part of the community's recreational area--as an ecotourism site. The area of this park is 2 ha. It was established in 2009 and officially opened on March 21, 2010 on World Forestry Day 2010 in conjunction wiht the International Year of Biodiversity.

Environment: Various species of trees, palm; recreational facilities

Economy: Recycle, Reuse and Reduce policy; Sustainable Forest Management

Governance: Free space for any community, from children to adults

Education: Playground, fitness area, camping area

Social: Free space for community, outdoor learning area

Industry: Ecotourism site

Country Brunei
Name of Facility Sayyidina Hasan Secondary School
URL Address smsayhasan.web.com/
Name of Reporter Muhammad Zul-Akmal Bin Haji Zainuddin

A Whole-School or A Whole-Community Practice in the Country

Narrative Explanation of the Practice

Sayyidina Hasan Secondary School is a government-run secondary school in Brunei Darussalam. It is located in the Brunei Muara District. The school had 2000 students in 2010 studying in year 7 - 9. Sustainability is not yet the focus of the school, but the school does have some sustainable practices, several which will be highlighted below.

1. Non-toxic markers: These are used in every classroom and notice board to reduce harmful effects.
2. Controlled foods and drinks: Some foods and drinks are prohibited to be sold in the school such as chewing gum and fizzy drinks.
3. Double-sided printing: To reduce the use of paper.
4. Environmental and energy clubs: Teaching students the importance of conserving environment.
5. Recycling bins: Only seasonal; Recycling project once a year.

Action Plan

OBJECTIVE:
Equipt the school with permanent recycling facilities.

BENEFICIARIES:

1. School: The school will have a better image as a school that is concerned about the environment. In addition, the school will gain extra income due to the money from recycling.

2. Recycling company: Benefit form the recycled materials contributed by the school which had previously been thrown away.
3. School population: By having a permanent recycling facility, teachers, staff and students will be more motivated to recycle and ultimately conserve the environment.
4. Dumping sites: There will be less waste because all the recyclable materials will go to recycling facilities.

STAKEHOLDERS:

School: School will have to approve the project and all the necessary arrangements and negotiations must go through the school.

Environment club: This club will be in charge of monitoring the overall project as well as acquiring funding for the project.

Recycling company: The company will sponsor and provides the recycling bins that will be situated permannently in the school.

Teachers: Responsible for informing and educating the students on how to use the facilities properly.

School prefects: Selected school prefects will be appointed to monitor the recycling activities and to transfer the waste materials to the recycling point at the end of the day.

EXPECTED OUTCOME:

This project is expected to reduce the overall waste generated by the school and ultimately support the conservation of the environment. Furthermore, the school will gain a small profit which will go straight to the environment club to be used for other environmental projects in the future.

ACTIVITIES:

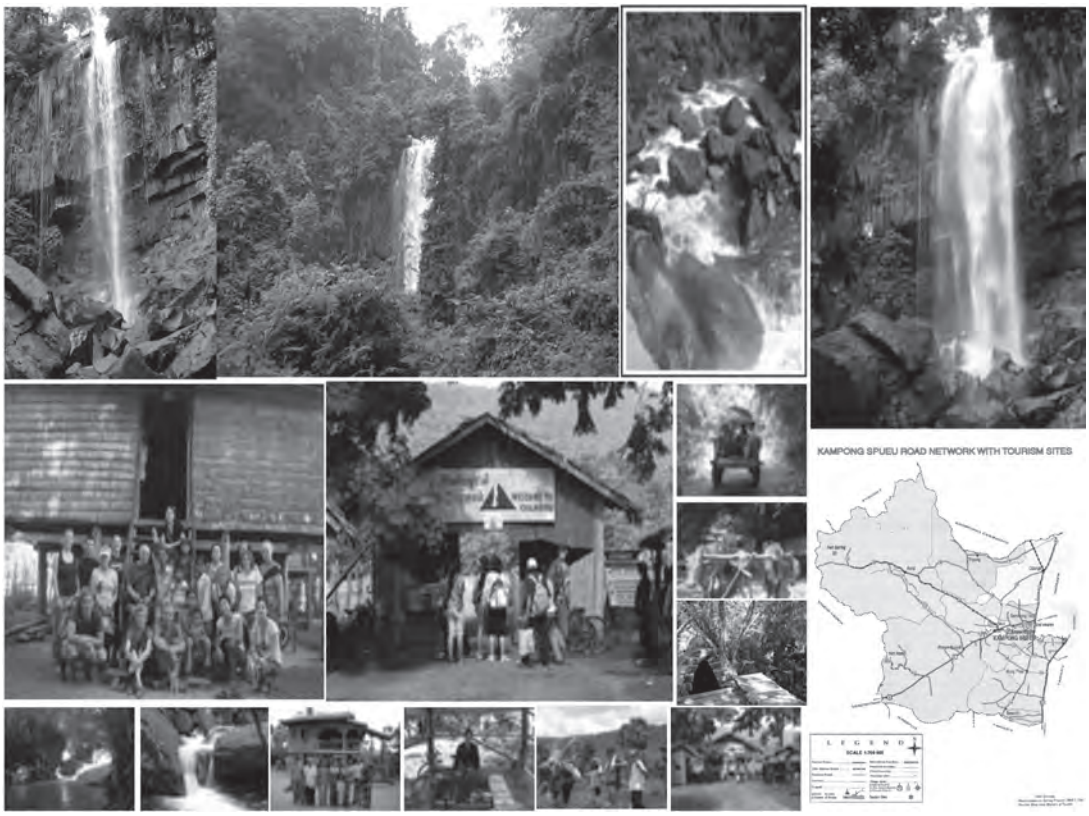
1. Prepare proposal plan and seek the principal's approval.
2. Write up a letter and proposal plan to the recycling company requesting sponsorship of recycling bins that will be located permanently in the school.
3. Upon approval, 15 smaller recycle bins will be needed for the four proposed recycling points throughout the school; two points for ground floor, one point in canteen area, one point for first floor and one for second floor. To acquire these bins, the environmental club will organise a bazaar where the students will sell their used belongings or something of their own creation. Outside stores will also be invited to join the bazaar and will be charged an amount that will be set at a later stage. Letters regarding this activity will be distributed to parents and targeted shops. A working committee for the bazaar will also be drawn up, which will comprise all teachers and staff.
4. After the bins have been acquired, labels for all the recycle bins will be made and attached to the bins.
5. School prefects will be appointed to monitor these recycling bins and the recycling activities during breaktime to ensure that students discard rubbish correctly. They will also be responsible for transferring the materials to the main recycling point at the end of the school hour. A duty roster will be drawn up and the prefects will take turns performing the duty according to the time table provided.
6. Before the recycling bins are put out, an assembly for all students and teachers will be conducted. In this assembly, teachers and students will be briefed on the importance of recycling and conserving the environment. Teachers and students will also be introduced to the projects and to the location of all the recycling points and how to dispose of the waste properly to avoid any confusion in the future. Another seperate assembly will also be conducted especially for the selected prefects to explain their roles and responsibiliites. Some teachers will also be selected to monitor the prefects and these teachers will also be briefed.

"My KEY WORDS" from the program

FOCUS ON WHAT YOU HAVE RATHER THAN WHAT YOU DON'T HAVE.

Country	Cambodia
Name of Facility	Chombok Community-Based Ecotourism
URL Address	www.mlup.org
Name of Reporter	Panchakneat Oeurn

A Whole-School or A Whole-Community Practice in the Country



Narrative Explanation of the Practice

Chambok Community-Based Ecotourism is one of the good practices in the community of Cambodia. This project was created by Mlup Baitong, literally translated as "Green Shade," which is a British NGO that addresses the problem of deforestation in Cambodia, with a focus on educating the general public on conservation of natural resources. The Chambok Community-Based Ecotourism Project is considered as model of best practices in terms of biodiversity conservation, environmentally-friendly livelihood development and project sustainability.

1. **Environment:** Install garbage bins, conduct patrols to prevent forest fire and Illegal forestry activities
2. **Society**: Setting up rules and regulations for waste management, educational signs
3. **Economy:** Entrance fee collection, car parking, ox-cart riding, tourist guiding, food preparation, souvenir vending, traditional dance performances, and homestays
4. **Governance:** Establishment of the Women Association and Management Committee
5. **Culture:** Tourist guiding, food preparation, souvenir vending, traditional dance performances and homestays
6. **Education:** Educate villagers, service providers and visiters on related environmental subjects

Action Plan

1. Objective

The main objective of the project is to strengthen the existing management system aiming at improving local livelihoods and protecting natural resources. The four specific objectives to reach the projct obejctive are:

- Coordinated efforts given at all management levels to enforce agreed regulations on natural resources management
- Understanding throughout the local community of the importance of sustainable use of natural resources
- Environmental management integrated into schools
- Training opportunities in place for natural resources management and supporting improved and alternative livelihoods

2. Beneficiaries

The target beneficiaries of this project are the households in the community. The project"s target beneficiaries can be divided into groups of main categories depending on the project site that has been chosen.

3. Stakeholder

Local authority, local community members, local and international NGOs, ministry involved, Line Departments.

4. Expected Outcome

To run the project, the expected outcomes are:

- Strengthening the management system at all levels,
- Protecting natural resources with local community awareness,
- Integrity of natural resources management with community involvement,
- Sustainable natural resources management with facilitation from provincial and local levels ,
- Increasing knowledge on the sustainable use of natural resources.

5. Concrete Activities

To run this project successfully and to achieve all the above objectives, the following specific activities will be carried out:

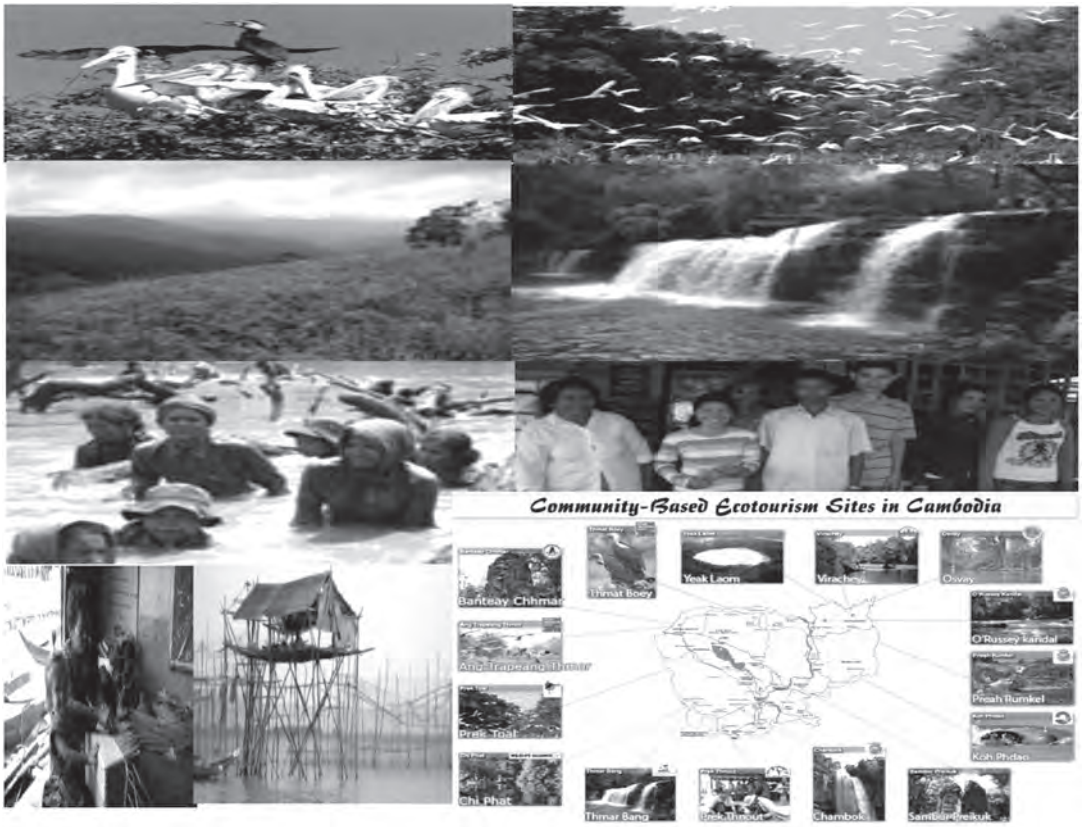
- Conducting awareness and training on the importance of natural resources,
- Conducting assessment on the empirical use of resources,
- Best practices with diversifying options of environmentally friendly,
- Gradually improving alternatives to natural resources,
- Promoting ecotourism in protected areas,
- Strengthening of regular monitoring and regulation-based law enforcement,
- Preventing illegal occupation of natural resources,
- Any discussion with local community and line departments to promote and strengthen all types of law enforcement,
- Provide opportunity for local villagers to be involved in the public forum.
- Discussion with line Departments & involved NGOs and international organizations to arrange a Natural Resources Day at the local level (this could be integrated with a school rally as well),
- Environmental management integrated in schools. The training of the trainers has been put in place and is being implemented in the schools in the targeted areas.

"My KEY WORDS" from the program

Natural resources are life

Country	Cambodia
Name of Facility	Preak Taol Sustainable Ecotourism Site
URL Address	www.samveasna.org
Name of Reporter	Sreyroth Heal

A Whole-School or A Whole-Community Practice in the Country



Narrative Explanation of the Practice

The Preak Toal community-based ecotourism site is a special place for all visitors who wish to see a bird lover's paradise in the real world. It was established with support from Cambodia Community Based Ecotourism Network (CCBEN) and funded by the EU. This ecotourism site is one of the CCBEN's projects, and it welcomes visitors from all over the world. Tourists are encouraged to stay overnight with community residents and enjoy the traditional food they provide. People are also given training to support and promote the community's efforts to be more sustainable.

1. **Environment:** Rattan, Waterfall, garbage sorting
2. **Society:** Encourage community residents to get to know the rich environment surrounding them
3. **Economy:** Provide new market for community products, train people to be creative with natural resources, reuse of water for vegetables
4. **Governance:** Whole community decision-making process, people's participation
5. **Culture:** Traditional dance , cultural performance, homestay program, Cambodian traditional food
6. **Education:** Provide education to young children, training in skills for community

Action Plan

1. Objective

As a developing countries with richer natural resources than developed countries , Cambodia has made use of those resources by creating a number of ecotourism sites to attract both foreigners and local people to give them a real sense of pride in their natural environment. More than this, the Cambodia Community Based Ecotourism Network (CCBEN) is the only ecotourism network in Cambodia established to serve, support and promote the community for poverty alleviation and conservation. So far there are many projects that have been conducted to focus mainly on the quality standards and marketing for community-based tourism in Cambodia to match with the CBT standard in Asia with funding from the EU and coordinated by ECEAT. Prek Toal is located in Battambang Province in the Northwest of Cambodia. Prek Toal can be reached by National Road Number 5 from Siem Reap Town in a 1/2 hour drive. From Battambang Town you can take a boat which will reach Prek Toal within 6 to 9 hours. It is the usual jumping off point for visits to this bird lover's paradise. This community, which is also an ecotourism site, was created with the aim of conserving natural resources , attracting tourists from all over the world, helping community people improve their livelihoods, creating jobs for people, sustaining their environment, and linking environmental protection with livelihood improvement. Villagers depend on their natural resources for survival (fish, wood, water), and CBT brings additional income to the villagers without damaging the environment. Villagers also participate in the protection of the bird colonies and the flooded forest and raise environmental and social awareness among the visitors. The border of Prek Toal bird sanctuary, classified as a Biosphere Reserve by UNESCO in 1997, can be reached by driving for 30 minutes form Siem Reap province to reach the harbor. It takes another hour and a half to reach the bird sanctuary.

2. Beneficiaries

Prek Toal is facilitated by Osmose and supported by Osmose, UNDP-Tonle Sap Conservation Project (TSCP) and Asian Development Bank (ADB). The project includes:

- 19 families for padding (CBVT and bird sanctuary) with 1 CBVT facilitator + 1 peddler group
- 30 women for handicraft
  1 seller + 1 women's group leader
- 1 family for food + 5 activities presenters
  Until now 100% of CBVT. including food and homestay income. is shared among the villagers. They save part of the income in the community box and use it to renew the material or to buy new equipment. When Osmose brings a group of tourists to Prek Toal or Preak Kantel, the benefit is enjoyed in the villages with an Environmental Education program for 1100 students and local development programs such as schooling assistance, medical care, water sanitation, floating gardens, material assistance, etc.

3. Stakeholder

Osmose , UNDP , TSCP, ADB and community people.

4. Expected Outcome

We believe that more and more visitors will come to visit this amazing place

- Tourists will bring more income to the local community people
- Living condition of local people would improve
- People could live and earn their livings with sustainable environmental practices
- Number of different birds will move to live in this sanctuary

5. Concrete Activities

There are many activities, such as the following:

- Bird sanctuary in flooded forests
- Enjoying paddle boat tours through the floating village
- Visiting the core bird reserve in the flooded forest guided by SVC bird guides and Wildlife WCS rangers
- Visiting crocodile and fish farms
- Staying overnight in the Environmental Research Station or in a local restaurant and watching birds at dawn
- Cross the Tonle Sap Lake and discover its unique fauna and flora
- Watch birds in Prak Toal bird sanctuary
- Meet women making water hyacinth handicraft
- Visit a floating village on a paddle boat tour organized by the community
- Learn about activities implemented by Osmose
- Watch sunset on the Tonle Sap Lake

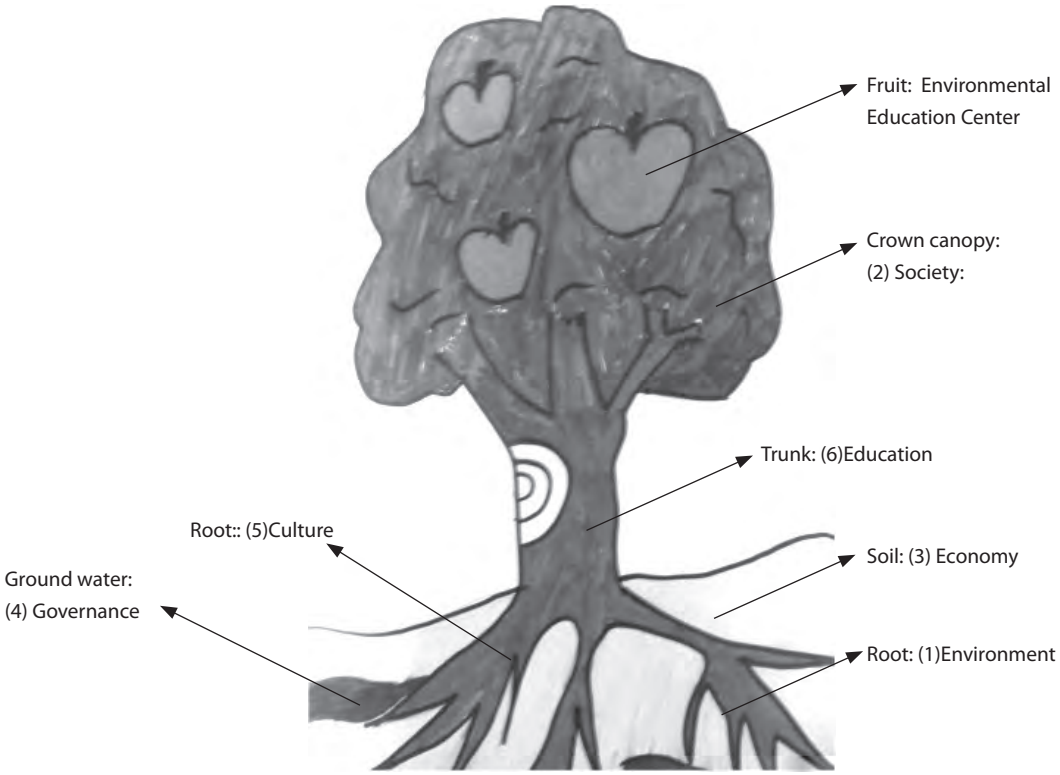
* These categories are optional. Reporters are free to organize their action plan within the designated space.

"My KEY WORDS" from the program

Long-lasting sustainable ecotorism site

Country	China
Name of Facility	Friends of Nature (FON)
URL Address	www.fon.org.cn
Name of Reporter	Song Xi

Nature Education in communities-TREE community



Narrative Explanation of the Practice

Lingxi Environmental Education Center is located in the Langjiao village of Mentougou District in Beijing, where is a less-developed area. The founding of the Center not only provided a place for children's environmental education in Beijing, but also promotes the local community's economic development. With these benefits, the local communities have more incentive to protect the neighbouring wetlands and forest.

The mission of Lingxi Environmental Education Center is to provide a most uninterrupted natural environment and professional guidance for the visitors to experience and learn about a typical mountainous ecosystem in Beijing Area. Its goal is to foster people's love of nature and country land, and holistic knowledge of the relationship between city and country.

Youth is a major service target of the Center. Every year, the Center will welcome thousands of children from individual families and field tour groups organized by schools and social organizations. Young visitors may participate to various activities in the Center like hiking, camping, biological observation, agricultural practice, and environmental education lectures and games. Through learning the nature in the nature, the experience in the Center can help children get rid of so-called "nature-defict disorder" due to being isolated in the urban space and staying in the indoor classroom for too much time.

(1) Environment: Conservation of biological diversity, organic agriculture, environmentally friendly camping ground and hiking path
(2) Society: Some permanent education bases under the cooperation of the Center and some schools or social organizations
(3) Economy: Government grant and some revenue from environmental education activities
(4) Governance: A management committee supervised by the government of Mentougou District, Beijing City, responsible for the conservation of the natural environment and the management of the visitors' activities
(5) Culture: Traditional food and art workshops; for example, tofu-making workshops, paper cutting workshops
(6) Education: Playground, biological conservation area, camping area

Action Plan

1. Project: Antelope Van Natural Experience Camp

2. General Introduction:
This project aims to provide opportunities for children to learn and experience nature and have contact with nature with activities involving the observation of the shape of fallen leaves, touching the rough bark and listening to the sound from the world of insects, and learning to use words and sketches to record nature. The main teaching tool in such eduction is known as Natural Experience Education.
Its main activities include team building, ecological learning, field trips, interactive games, planting, art projects, and natural restorations.

3. Places:
Nature experience activities are suitable for any place with a good natural environment, especially the rural countryside. Lingxi Environmental Eduction Center is one of the best communities on the list for the project.

4. Type of activities:
(1) Parents-children camp: Such activities includes missions that should be fulfilled by children and their parents. The more they are "working" together, the more they feel love from each other.
(2) Urban oasis camp: This helps children learn to better know the animals and plants in their communities, learn how to protect them and sketch a Green Map.
(3) Nature class camp: Learn specific knowledge in the natural field, such as entomology, ecology, nature note-taking and nature handiwork workshop.
(4) Nature bi-lingual camp: Guide children in playing games in English, becoming familiar with the English names of objects in nature and reciting English nature poems. This type of activity combines nature education and English education perfectly.
(5) Winter (Summer) Camp: Normally 3 to 7 days of camping activities during summer and winter holidays; enable children to experience nature and learn about nature over a relatively long period.

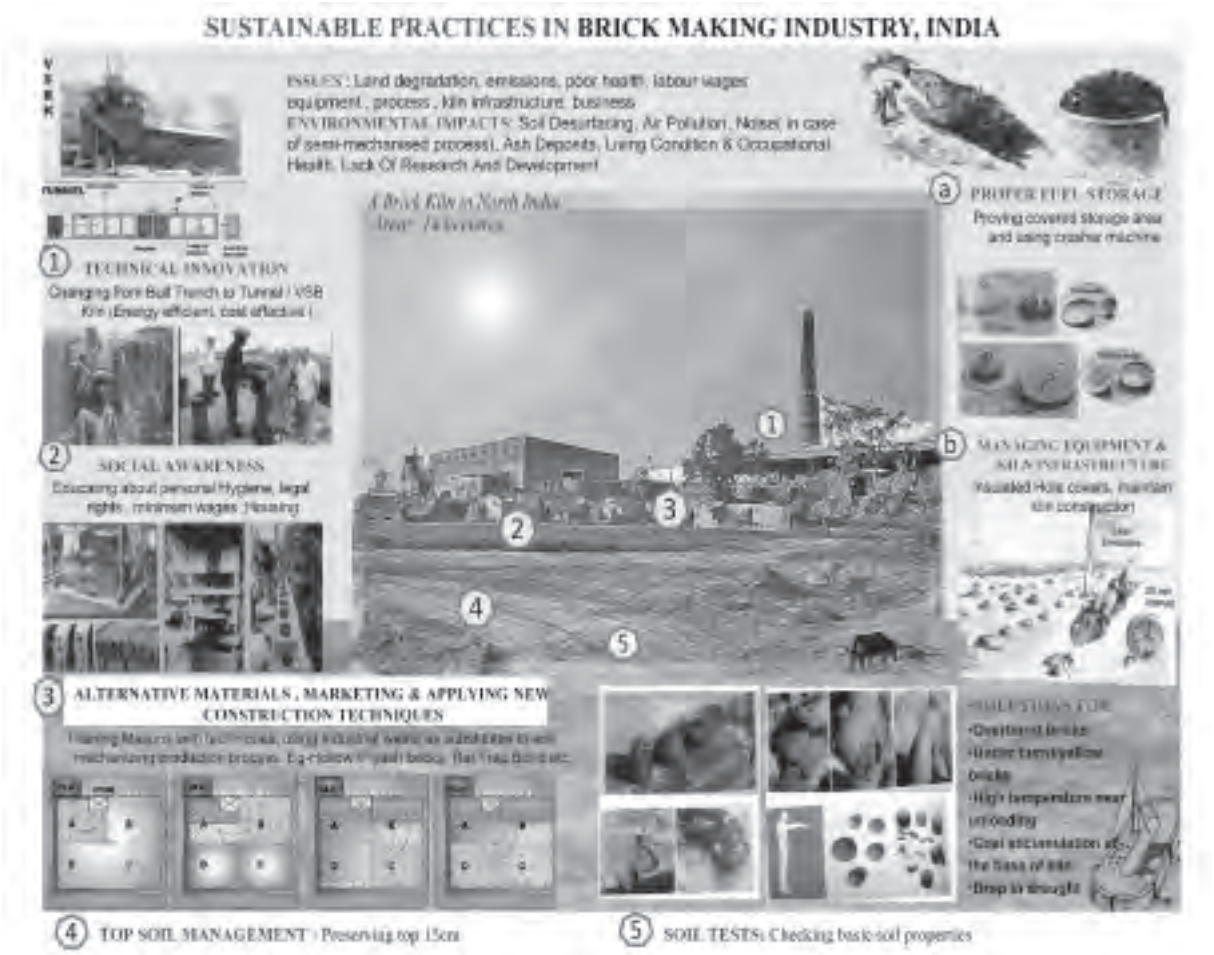
5. Objectives:
(1) Enable more children to receive nature education.
(2) Utilize commercial education services to promote NGO and community development.
(3) Establish more Environmental Education Centers in communities.

"My KEY WORDS" from the program

Nature experience, local community, environmental education

Country	India
Name of Facility	Brick Making Industry (BMI), India
URL Address	–
Name of Reporter	Jasmine Kaur

A Whole-School or A Whole-Community Practice in the Country



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Narrative Explanation of the Practice

India produces nearly 140 million bricks per annum and BMI is the third largest consumer of coal in the country. BMI has also been identified as a major contributor to hydrocarbon emissions, burning of polluting fuel, which causes extensive dredging of topsoil (approx. 6 hectare per kiln per year) and social issues (bonded-migrant labour). In order to achieve sustainable consumption of resources and prevent further environmental degradation, it is crucial to review the process, extent and nature of the environmental impact of this industry.

1. Environment: Save energy, decrease consumption of resources, topsoil management.
2. Society: Improving work conditions, social advancement of vulnerable members of society, awareness of legal rights.
3. Economy: Increasing production with same resources, using beneficial technology.
4. Governance: Technical improvements to mitigate pollution, substitutes & alternatives and their salability.
5. Education: Basic education for children on brick kiln site, educating mothers about personal hygiene.

Action Plan

1. Objective: To enlighten stakeholders about the environmental impacts of BMI and introduce them to environmental management strategies for sustainable development.
2. Beneficiaries: Farmers, Brick kiln owners, labourers, government agencies, consumers.
3. Stakeholders: Brick kiln owners, labourers, consumers.
4. Expected Outcome: As listed in the plan below.
5. Concrete Activities:

TASK A	PLAN FOR GOVERNMENT AGENCIES			
		Action title	Topics to be covered	Expected Outcome
Week 1	Action 1	Discussion with experts	a. Critical Issues and evaluation components b. Impacts on resources - Land, human, cost, general environment c. Legal Issues d. Mitigation Measures- Best practises, Environmental Management Plan	Facts and figures
Week 2	Action 2	Discussion with Pollution Control Board		Refer to listed checklist for siting and managing small-scale industries based on EM tools
Week 3	Action 3	Discussion with State Council for Science &Technology		Promote new materials, waste minimisation techniques
Weeks 4 to 5	Action 4	Discussion with District Planning Committee, Town & Country Planning Department, District Food Supplies Committee & Health Services (joint meeting)		Suggest planning criteria for functional and defunct kilns based on natural resources, promote waste minimisation
Week 6	Action 5	Discussion with Brick Kiln owner association		Improve workers' living condition, working conditions, SCBA
	Action 6	Discussion with local NGOs		General awareness

TASK B	GENERATE AWARENESS & PROMOTE RESEARCH		
Starts week 4	Action 1	Publish articles in local and regional newspapers.	General public, experts
~	Action 2	Collaborate with an NGO to promote awareness	Improve condition of stakeholders
Starts week 3	Action 3	Promote research and analysis by authorised agencies	Find details of environmental impacts to find better solutions

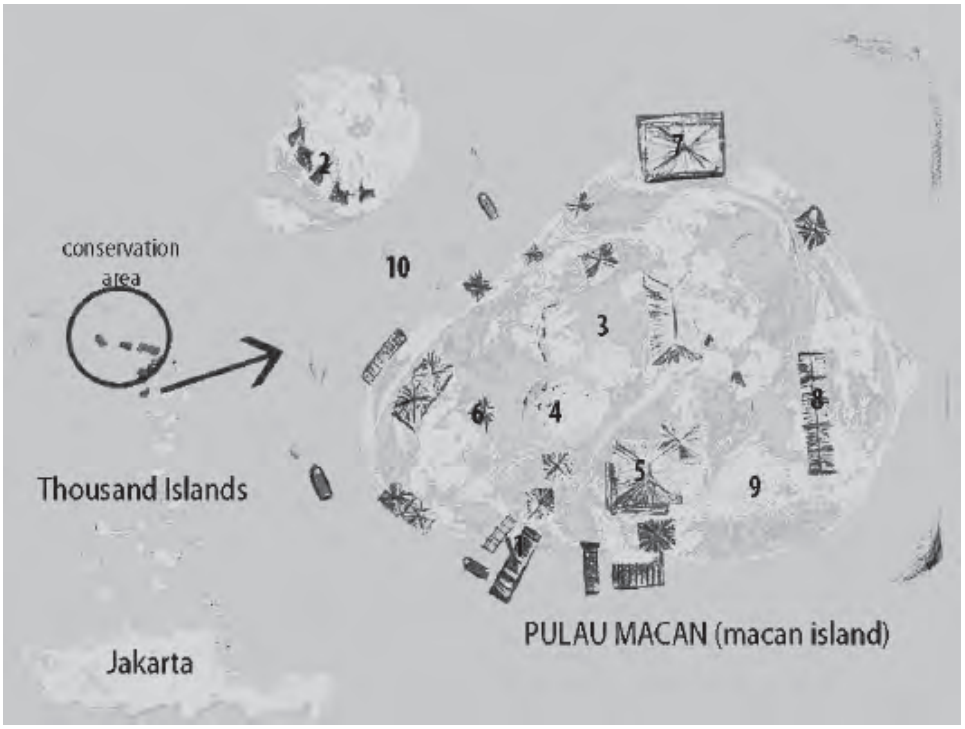
**All these actions are dependant on response of general public and collaboration with a team; assessment of time limits is tentative; the action plan implementation is beyond the scope of a single individual.

"My KEY WORDS" from the program

Sustainable brick kilns, environmental management, land degradation

Country Indonesia
Name of Facility Pulau Macan (Tiger Island) Village and Eco Resort
URL Address www.pulaumacan.com
Name of Reporter Elisa Sutanudjaja

A Whole-School or A Whole-Community Practice in the Country



Narrative Explanation of the Practice

1. Alternative Energy: Pulau Macan uses an off-grid system, consisting of Japanese-made photovoltaic solar cells and wind turbines as energy generators, and a Sundaya energy storage and distribution system.
2. Conservation area for Mangrove forest
3. Rainwater Harvesting: Rainwater passes through a sand and coal water filtration system that makes the water quality good enough for tap water, bathing water, and washing.
4. Vegetable, fruit and herb Gardens:

5 and 7. Use of Local Resources: Where practical and possible, we use local materials for our needs. This includes driftwood that washes ashore, local sustainable timber, and hard wood from old boats in the region.

6 and 9. Waste Management: Pulau Macam composts its organic materials for its own garden and recycles glasses, papers and metals. They also recycle their tap and bathing water for gardens, and introduced an incentive system to buy trash from local fishermen and islanders.

8. Sustainable Livelihood: As much as possible, Pulau Macan use local staff from the Pulau Seribu region (which consists ofmany immigrant Madurese from the transmigration projects). Pulau Macan also buy fish from local fisherman who use bamboo traps, an ecologically sensitive way of catching fish. They also work with local craftsmen to produce and maintain their furniture.
10. Reef Protection & Clean Up

Action Plan

Rujak Center for Urban Studies (RCUS) is founded to fill the gaps in the necessary process of transition into the ecological age. The vision of RCUS is to work together with communities to generate innovative knowledge and practices to build sustainable cities and regions.

By sustainability, RCUS means not only surviving climate change and other ecological disasters, but also solving other urban problems that have predated our awareness about ecological issues. Nevertheless, we do believe that the awareness about ecology, and the new production of knowledge that it sparked, have created a new perspective and opportunities for conceptualizing our actions differently to solve those other outstanding urban problems such as poverty, justice, pluralism, inclusivity, and other issues. Indeed, they make possible a new way of building cities. However, it is also understood that much more new research and knowledge are needed to change many things.

Our persistent orientation is towards an ever-expanding ownership of sustained changes by citizens, through their initiatives and active participation in city- and region-building. Our optimism is based on many years of encountering and working, at the grassroots level, with a growing number of citizens' independent and autonomous initiatives, whose growth in the last decade is a very significant phenonomen in itself. In all our work, we wish to always build infrastructure, space, and habitats for citizens' initiatives and participation, not as by-products, but as the very goal itself. We wish to become a management center for knowledge that is generated together with communities to create innovations and to be used by communities in making changes.

RCUS's Programme

1. Jakarta Petrodollars is a programme within a larger framework/cluster that we call "Cities and Energy": Almost none of Jakarta citizens know that actually Jakarta has oil and gas revenue from wells off-shore in the island district of Kepulauan Seribu (which literally means "Thousand Islands"). A reliable source estimates that it is worth at least 100 billion IDR per year (Jakarta's annual budget is 24 trillion IDR).

We wish to:

1. Track the details of the flow of this revenue
2. Track its use
3. Track the impact that its extraction has on the islands
4. Make all the information known to the public
5. Facilitate formation of a multi-stakeholder forum as a partner (and later as the main actor) to carry on this work.
6. Advocate policies to better use the revenue
7. Sustain monitoring of this sector's revenue
8. Use this knowledge and experience in expanding our future research within the theme "Cities and Energy" (the mid to long-term goal being policy advocacy towards sustainable energy options for cities)

2. Creating Interaction Infrastructure for Citizens' Active Participation in Jakarta and a secondary City in Java.

Attached detailed proposal. This programme falls under our cluster "City and Citizens". It consists of 5 components (some of which we have tried out in Jakarta): Participatory Urban-Region Fact Sheets: Writing together the facts and events since 1998 that have shaped the city and its region in its current form. The purpose of this is to create a basis for a common understanding of each city, and start a productive, well-based conversation.

Imagining the City together: City at Sea (urban coastal spaces as social-cultural spaces). The purpose is to nurture collaboration between science and arts to imagine more deeply and widely the use of coastal spaces, where most cities were actually born with an intercultural legacy. This way, we hope to create a wider perspective among citizens in facing the challenge of climate change and other outstanding urban problems that are often related to the degradation of coastal, old heritage quarters of cities.

"My KEY WORDS" from the program

Public Participation, City and Region, Urbanism, Sustainability

Country	Korea
Name of Facility	Korean National Commission for UNESCO
URL Address	www.unesco.or.kr
Name of Reporter	Kim Myoung Shin

1. Project Title

Rainbow Global Youth Citizen Project

2. Background

The Korean National Commission for UNESCO endeavors to support a group of highly motivated schools and students who joined the UNESCO Associated Schools Project Network (ASPnet). ASPnet's basic concept starts from developing a global interest in peace and human rights, education for international understanding, and education for sustainable development. We encourage them to develop their own methods that will make the world more sustainable. In 2010, as emphasized by the project's subtitle 'Local change makes the world change,' we also expect students to identify problems in their own location first, and then relate them to the bigger picture at the global level in an attempt to distinguish the vehicle of this project with a more comprehensive, integrated approach. In addition, the collaboration within all participants is one of the most basic elements for successful implementation of the project.

3. Goals

(1) To promote students' motivation and their engagement with student-based activities and meetings.
(2) To make connections with seven specific issues: peace, human rights, multi-cultures, the environment, international organizations, indigenous local cultures, and economic justice. This will eventually help students avoid a single, narrow perspective approach to current issues in the society, most of which are often complex and have numerous causes.
(3) To focus on 'locality' rather than abstract, general agendas. By searching for specific, particular issues in one's location, students who participate in the project will be able to take into account both sides equally: their own local issues and worldwide issues. In addition, as they are developed more, we highly encourage them to incorporate those specific local issues into global agendas as well for the purpose of exploring the underlying connections.

4. Content

The whole program will be implemented in six steps:

(1) Proposal Submission: All ASPnet schools in KNCU are invited to join '2010 Rainbow Global Youth Citizen Project' and to develop their ideas, mostly those gathered from students, and submit these to KNCU.
(2) 2010 Rainbow Students Project Presentation / Selection
(3) Rainbow Global Youth Travel: This three-day trip will provide not only a chance to review the project in the middle of the whole process, but will also be a meaningful time for students to get along each another and make further plans for the year through cooperative activities.
(4) Rainbow Global Youth Citizen Action: 17th October, "End Poverty Day" as officially declared by United Nations
(5) Rainbow Global Youth Citizen Declaration
(6) Publication and dissemination of 'UNESCO Associated Schools ESD Good Practice'

5. Expected Outcomes

(1) Cooperation will be built between ASPnet schools and the region in which it is located.
(2) A closer network will be built among ASPnet students and their motivation to participate in the project will be raised by holding student-led programs such as Global Youth Citizen Trip and presentations.
(3) Students' awareness of the mechanisms by which the seven main subjects of the project are connected will be raised, and by doing so they will be able to devise problem-solving strategies using a comprehensive approach.
(4) The selected ESD education materials and methods will be disseminated.

Country	Malaysia
Name of Facility	Penang State
URL Address	–
Name of Reporter	Chuah Chiew Yen

A Whole-School or A Whole-Community Practice in the Country

Narrative Explanation of the Practice

Penang is "green" state which leads many ongoing environmental projects and is heading towards a common future in which sustainability is the priority. The concept of sustainability is fully supported by the Penang government, NGOs, universities and the community in Penang.

Penang Government – Penang is the first state in Malaysia where the 'Ban Plastic Bag Campaign' was initiated. Penang Government is collaborating with retailers (supermarket & hypermarket) in Penang to fight against the high plastic bag consumption rate. The campaign was started in July 2009 and the no-plastic-beg day was successfully extended from one day to three days. During the no-plastic-bag days, plastic bags aren't be provided to the customers unless requested and at a charge of RM0.20. The money collected from the penalty will be donated to the Partners against Poverty Fund. Since July 2009, millions of plastic bags have been saved and 20 thousands ringgit was successfully raised for the Partners against Poverty Fund.

Water Watch Penang (WWP) – Water Watch Penang is a non-government organization which actively participated in creating awareness of water conservation amongt the general public, research on water issues, tips on water saving, consultancy on water recycling and water education in the schools. In August 2009, WWP and Jabatan Pengairan Dan Saliran Malaysia (JPS) launched a rain harvesting project at N-Park condominium in Penang. In this project, rain water will be collected and used for non-drinking purposes in common areas for car washing, watering plants, and other purposes.

A rainwater harvest system with capacity of 10,000 litres water was built on the rooftop of the blocks to collect rain water. The aims of this project are to reduce water usage by at least 10-20% a year and at the same time, create awareness among the citizen. Discussions, brochures and drawing competitions were organized to create awareness of this project among the residents in N-Park condominium.

Water Watch Penang (WWP) – Besides the rain water harvesting project, WWP is involved in other projects / research. One of the important projects is river education. Education plays an important part in shaping the future generation toward a sustainable society. In this project, kindergarten students, primary and secondary school students, university students and even adults are eligible to join the activity. They will go to the river in Penang Botanical Garden and carry out some simple water quality tests and visit the water treatment plant. These activities will help them to increase their knowledge of water pollution and conservation, and thus create a water saving society.

Universiti Sains Malaysia (USM) – USM has launched a 'Ban Styrofoam' campaign in which Styrofoam food containers are totally banned in the USM campus. No restaurants and cafeterias in USM are allowed to use Styrofoam plates or cups, even for take-away service, and replaced them with biodegradable containers (made of oil palm waste / sugarcane waste). However, customers (students / staff) have to pay RM0.20 for each biodegradable container. The main idea of this campaign is to encourage people to use reusable containers and thus reduce the amount of waste produced. This campaign is a successful case: (i) it reduces the amount of waste, (ii) it reduces the use of Styrofoam, (iii) it fosters awareness of the harmful effect of Styrofoam, (iv) it successfully encourages other institutes to take the initiative in organizing similar campaign. This campaign is unique because it is totally driven by students (student activism) who care for the environment and led by healthy campus in USM.

Community –3R Reduce, Reuse and Recycle is commonly practiced by the community in Penang. We are trying to reduce the amount of waste by cutting down the use of disposable containers and replacing them with reusable containers. Moreover, more people are aware of the harmful substances produced by Styrofoam and some restaurant are starting to provide biodegradable containers instead of the Styrofoam containers. Recycling is popular in Penang. Recycled items collected at the household level will be sent to the recycling industry or given to charity organizations to help them obtain some money by selling those recycled items.

Action Plan

Objectives:

- To increase the awareness of environmental issues among Penang residents
- To reduce the water consumption rate
- To provide more opportunities to youth, students or teachers in environmental training
- To produce more environmental leaders

Beneficiaries:

- Penang citizens
- Primary & secondary school students
- Primary & secondary school teachers

Stakeholders:

- Water Watch Penang (WWP)
- Perbadanan Bekalan Air Pulau Pinang (PBAPP)

Expected outcomes:

- Awareness on environmental issues among Penangites increases and thus lead Penang towards a sustainable society
- Water consumption rate is reduced to less than 233L per day
- More environmental leaders are produced and collaboration between each other will significantly increase the effect and impact of those environmental projects

Concrete activities:

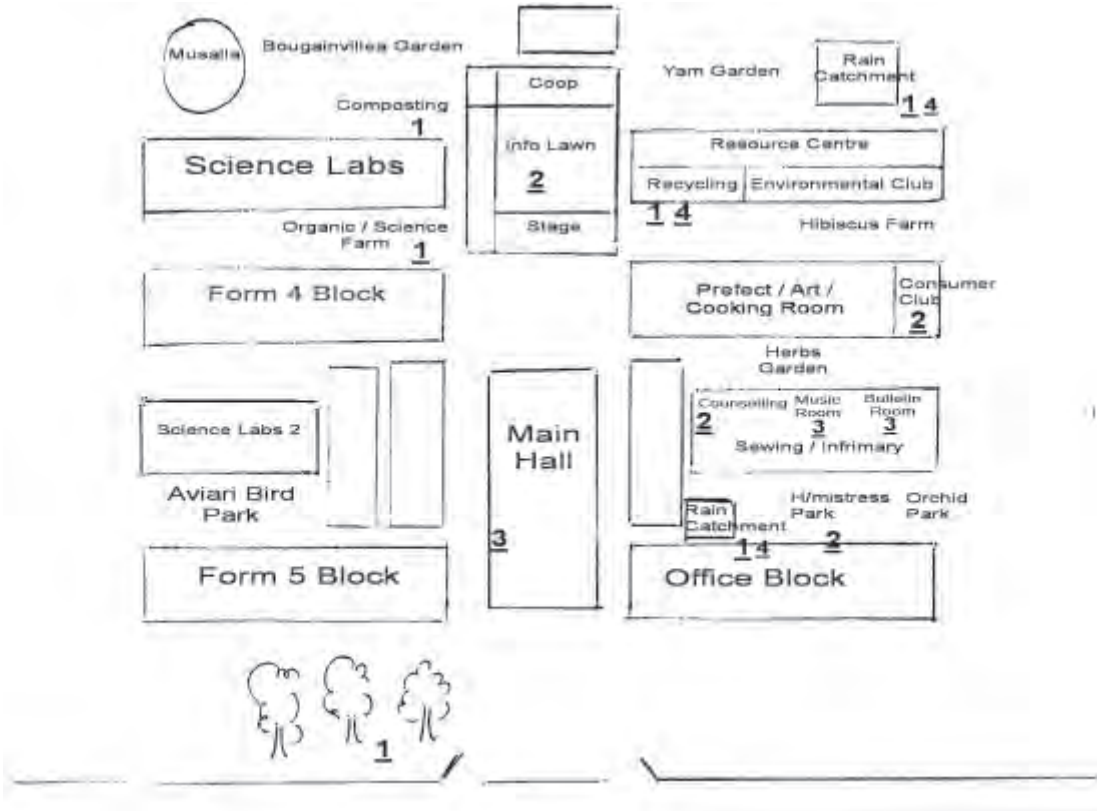
- River education
  Groups of students will be brought to Penang Botanical Garden to carry out some activities:
  * River clean up
  * Simple water quality test
  * Game
  * Visit to water treatment plant
- Walk for water
  Hiking / Walking competition or campaign where the participants have to carry water to the destination. The objective of this project is to increase awareness of water. Participants will have the same experience as those people living in rural areas who have to carry water from a distance back to their house for daily usage.
- Holiday camp
  A three-days, two-night holidays camp will be organized for those students or teachers who want to be trained as environmental leaders or environmentalists.
  * Workshop
  * Field trip
  * Classroom activity
  * Game

"My KEY WORDS" from the program

No-plastic-bag campaign, rain water harvesting, river education, ban Styrofoam campaign, 3R, environmental leadership, sustainability

Country Malaysia
Name of Facility SMK Zainab 1
URL Address –
Name of Reporter Intan Sazrina Binti Saimy

A Whole-School or A Whole-Community Practice in the Country



Narrative Explanation of the Practice

Zainab 1 Secondary School is located in Kota Bharu, Kelantan, on the East Coast of Peninsular Malaysia. It is a secondary girls school which has won many prestigious awards mainly for education: best secondary school in the country, best students awards, choral speaking competition, the best consumer club in the country and other various sports. Students from the ages of thirteen to nineteen are taught basic education, which addresses sustainability and is expanded to include critical thinking, skills in organizing and interpreting data and information and the ability to analyze issues that confront communities. It is at this stage that teenagers further develop these skills as they proceed higher in the education system. These generic skills are important and necessary to fulfil their respective roles in the future.

The teachers of the school have a vision that integrates the environment, economy and society and involves teaching and learning knowledge, skills, perspectives and values that will guide and motivate students to pursue sustainable livelihoods, participate in a democratic society and live in a sustainable manner. It is something that should happen continuously throughout the formal education system. Moreover, to achieve these visions, many initiatives were taken progressively to support the education throughout the school years. Some of it can be observed in the school area, from the flower gardens to the old newspaper centre that serves the surrounding community.

These last few years, the school has developed several gardens planted with bougainvillea, orchids, palm, herbs, cactus etc., which are mainly intended to make use of land around the school. However, in the past few years, the gardens have been a focus and have been enhanced for a sustainable school contest which was organised by the Department of Environment and local municipal council in 2009. They won in the state category and were nominated as the country's most sustainable school (the result has not been announced yet). These gardens are managed and maintained by the students themselves, with help from the gardeners and teachers. The Avari bird park and the Headmistress Park are places where students can rest, relax and discuss issues in serene and shady places. Furthermore, being in these places would enhance the students' public awareness, change their behaviour towards the surrounding environment and sense of responsibility toward taking care of the bird park and school area. The school also have given the initiative to preserve three trees, which has been there since the British colonial days and are estimated to be 150 years old. Situated by the front gate, the girls may have sat together, discussed, played and maybe planned their youthful life under these trees.

The school also encourages students to be involved in local art and music activities where they draw and have their own music club, choral group and many more activities. The students' mural drawings can be seen on the wall of the main hall. The bulletin room is where the students are given the opportunity to train themselves as journalists by writing school bulletins and reporting on the school's activities and current news. The information lawn is where students can also obtain current news about their school, especially co-curriculum activities and clubs. It is also a place where students sometimes sell their products and display the creativity of their respective clubs to visitors or other students during Open Day, etc. This enhances their ability to be independent, responsible and confident among peers.

This school has won an award for the best consumer club in the country and state several times. They usually cooperate with the state's Department of Consumers and the Department of Environment on topics such as the usage of consumerism, research on river water quality, awareness and educational talks, including library visits. The environment club also initiated a project to recycle old newspapers so that nearby residents can bring old newspapers to the school, for which they are paid, and the school reuses the newspapers in the arts club or for other purposes. They also sort the canteen's waste, which is composted for fertilizer. The clubs joined by the students would sharpen their skills in decision-making and foster awareness of the environment and other people and sustainable lifestyle.

Both of the sites of the rainwater catchment are mainly used to water the gardens nearby, but together, the consumer club and the environmental club have already discussed an idea to attach pipes to the catchments, making it easier for the water to be used to water all of the other gardens in the school area. The organic farm or the science farm is a place where students may tend the vegetables among themselves as a hobby and a place where they can understand more of the concepts learned in science classes. Here they can understand the concept of production and consumption.

1 – Environment: Organic/science farm, composting, three (3) 150 year-old trees, garbage sorting, old newspaper recycling, reuse of rainwater for plants, flower gardens.
2 - Society: Information centre, consumer club, counselling club, reading place for students, old newspaper recycling.
3 – Culture: Student's mural drawing, art centre, music centre, stage.
4 – Economy: Old newspaper recycling, reuse of rainwater for plants, organic / science farm, composting and co-op.

Action Plan

Introduction

The community or citizens are the most valuable asset of a country. Furthermore, developing or changing the mindset of citizens is a big challenge and would take years to achieve. However, if we ever want to move towards a knowledge-based economy and a sustainable developed global country, the development of human capital should be a priority. In the context of a global world, advanced human capital is a necessity and not a luxury.

Objective

There are many industrial areas in Selangor where most of the workers are immigrants from other countries. An area in Selangor has been identified as one of the areas that requires help living sustainably in their residential areas. The local community at the site and the immigrants working mostly from a major factory there are having problems living sustainably together in the area, especially with waste disposal and respect for each other. The locals have asked for help from the local town municipal council to help overcome these problems.

Stakeholder

After several approaches and discussions, the major factory in the area has volunteered and is willing to sponsor and bear all the costs of this project. They are even willing to pay for the cost of bigger drainage surrounding their factory area to prevent floods during the monsoon season and blockage caused by the waste thrown into the smaller drain.

Since the local municipal council does not have enough manpower to conduct the awareness programme, to monitor and support both of the communities at the site, they have asked our university to help and manage the programme under the Environmental Health Programme. This project would be a good platform for the students to train themselves in community involvement, as they would use this experience in the future. The communities may also help the students to develop knowledge and understanding, especially good values and skills. As such, this approach of teaching and the learning experiences students will have are key elements of effective Education for Sustainable Development (ESD).

Expected Outcome

Raising awareness and support and encouraging the public, students, government sectors and corporations to take action on certain issues. Campaigning and promoting, hoping that the citizens will be involved with each other and live harmoniously as well as sustainably regardless of their culture, race, religion and age. Starting with this small issue, the notion would attract others, transforming the nation into a better place for all. This country needs more people to be environmentally aware, healthy and respectful of nature so that it can become a developed country.

This programme will indirectly be an active learning tool for the students, whereby the project offers experiential and problem-based learning and fosters awareness of sustainability objectives. Students would have the ability to develop creativity and imagination, which is important in thinking and learning tools that can encourage them to view the challenges of sustainability from multiple dimensions. This will promote the development of alternative understandings that inform and develop innovative sustainable practices. Sustainable development embedded in higher education thus signals a commitment to produce educated individuals who contribute to the development of a quality life in society and the harmonious environment of the nation.

Specific Activities

Since ESD encompasses a vision that integrates the environment, economy and society, orienting the programme requires teaching, learning and taking actions that will guide and motivate the people in the area to pursue sustainable livelihoods, to participate in a democratic society and to live in a sustainable manner. Our world needs literate and environmentally aware citizens and work force to help guide nations in implementing their sustainability plans. As such, the programme would include sectors in business, industry, higher education, governments, non-governmental organizations (NGOs) and community organizations.

The approach taken would be holistic. Holistic in this sense emphasizes the development of knowledge and skills, which involves progressive attitudes and high ethical and moral values. First and foremost, it would involve research by sitting down and listening to both the local community and the immigrant workers on their perspectives and problems. Then there would be discussions and thorough research plans on the actions that would be taken. Then awareness sessions or theoretical discussions will be held continuously for several months. There would be training for these two groups of people to accept the positive changes in practices and procedures. In other words, the programme implemented is a socially transforming process that gives those people knowledge, skills, perspectives, and values through which they can participate in and contribute to their own well-being and that of their community and nation. Sustainability requires a population that is aware of the goals of a sustainable society and has the knowledge and skills to contribute to the achievement of those goals.

Implementing the programme is a large task for any community. Fortunately, the non-formal education sector (e.g. NGO's,

educators and agents) and the informal education sector (e.g. , television, newspaper and radio) must work cooperatively with the local municipal council for the awareness of people of all ages, races and nationalities. Since ESD is a lifelong process, the formal, non-formal, and informal sectors need to work together to accomplish local sustainability goals.
In addition, students who will be recruited for the project would at the same time be educated and trained as the leaders of the future and responsible citizens endeavouring to meet the above obligations. If students understand sustainability as an aspect of their social and ethical responsibility, they will become citizens who see themselves as connected to the natural world and to other humans. Thus, they will have the capacity to facilitate the development of activities that sustain rather than degrade.

Conclusion

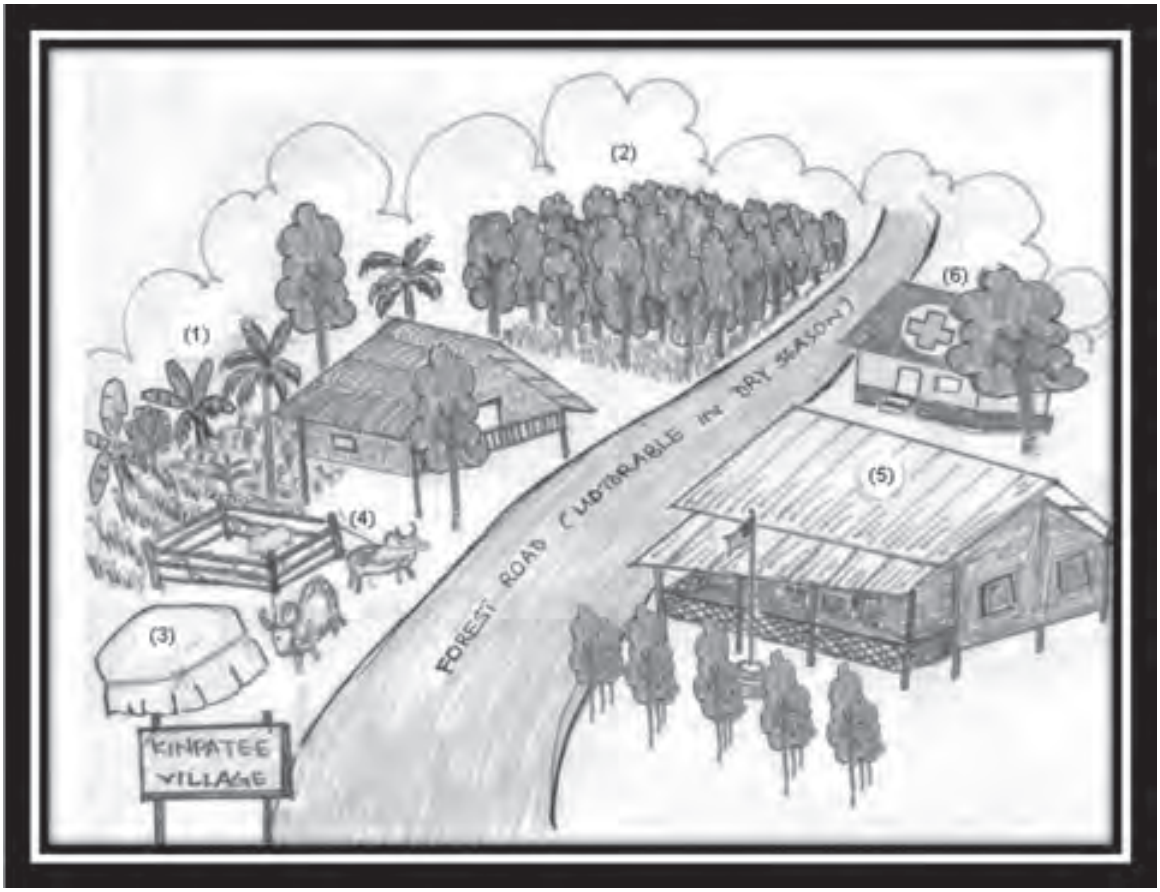
The strength of a nation is strongly dependent on the ability of its citizen to be highly intellectual and skilled. The development of human capital is thus important and necessary since it drives the nation to envision a vision and mission. Without high-quality human capital, a nation will be weak as there are no human factors that are capable of embarking on new initiatives and perspectives. High-quality human capital comes from high-quality education and life experiences. A carefully designed, well-planned education system and exposure is critical to develop such human capital. The educated or leaders should be capable of providing such knowledge and skills to future leaders and other residents. Therefore, it is hoped that the information and exposure given to the lives of the society will develop their knowledge, understanding, values and skills, which are essential for sustainable development.

"My KEY WORDS" from the program

Sustainable development, community, educational activities, public awareness and participation

Country	Myanmar
Name of Facility	Kinpatee Village Community
URL Address	–
Name of Reporter	Ye Khaung

Sustainable Practices of a village community in Myanmar



The Kinpatee village tract lies close to the Magari Reserve Forest of Taikkyi Township, Yangon Division. It has a total population of 1,300 people from 255 households. The village tract consists of the Lower, Middle and Upper Kinpatee villages. After the project entitled *Promoting Food Security of Vulnerable Population of Taikkyi Township through Material, Financial and Technical Inputs Assisted by Integrated Agro-Silvo-Pastoral System of Reforestation*, the village community is being developed as a sustainable society.

1. Environment

(1) Homestead gardens; (2) Community Agro-forestry plantation; (3) Making of Bio-fertilizer

Each household established a homestead garden with perennial crops and seasonal cash crops. The main objective is to yield multiple products from a very limited land area. Those gardens could be expected to produce vegetables, flowers and fruits seasonally throughout the year. Even fuel wood could be obtained from perennial crops when those are being pruned. The utilization of home-made Bio-fertilizer in homestead gardens saves not only money for chemical fertilizer but is also an environmentally friendly practice.

The village community established 150 acres of Community Agro-forestry plantation with multi-purpose, fast-growing and good coppicing species in the Magari Reserve forest. The landless were given priority to plant cash crops and fruit trees as under-story in 50 acres out of the 150 acres of plantation. This represents agro-forestry. The agro-forestry design developed by the community includes forest trees (*Acacia mangium* and *Xylia dolabriformis*), both planted at 20'x20' spacing, and mango trees planted at 40'x40'. Spacing between *Acacia mangium* and *Xylia dolabriformis* in rows is only 10'. The rows are laid 20' apart. Mango trees are planted in alternate strips. Cash crops are raised in the strips and between the trees. This Community Agro-forestry plantation the community has established will not only provide them with various forest products, but also improve the environment, soil and water resources. More importantly, it will be a carbon sink and reservoir helping to combat global warming and climate change.

The community has been trained in how to make bio-fertilizer at home. The agricultural consultants for the project conducted training on making EM Bokashi fertilizer, its utilization and IPM, Integrated Pest Management (Pest control using integrated farming system without using chemical pesticides). The EM fertilizer is made by processing agricultural residues like straw, animal dung from livestock breeding and EM solution made from molasses. When making EM Bokashi bio-fertilizer, the straw and animal dung are layered, and the EM solution is then poured onto the top layer, after which all the layers are covered with plastic sheets to protect it from rain and air. The EM fertilizer can be obtained when all the components have completely decayed after a certain period. The EM fertilizer can be used in home gardens as well as in the rice fields, saving money otherwise spent on chemical fertilizers and saving the environment from chemical pollution.

2. Society

(5) State Primary School; (6) Retail drugstore

The community-based self-reliance group (SRG) was formed in the name of a Village Tract Development Committee (VTDC) comprising the President, the Secretary and members. The VDTC play a leading role in the development of activities in the village tract, including renovation of the state primary school and the establishment of a retail medicine shop. The VTDC was able to renovate the primary school with the financial contribution of the French Embassy and also form a retail drugstore assisted by the British Embassy. The committee sent a young man to Yangon for pharmacological studies and assigned him to take responsibility for the running and long-term maintenance of the drugstore.

3. Economy

(1) Homestead gardens; (2) Community Agro-forestry plantation; (4) Livestock Breeding

The villagers now have regular income from homestead gardens as they yield seasonal crops, fruits, nuts and vegetables. The waste from homestead gardens can again be used as manure as well as raw material for making EM Bokashi bio-fertilizer. The community can also earn money by selling various products from the Community Agro-forestry Plantation such as fuel wood, poles, posts, timber and other non-timber forest products. Small-scale livestock breeding can also be expected to generate alternative income for the community.

Action Plan

Conservation and Rehabilitation of Babulon Htan Area in the Kachin State

Project background

The Babulon Htan area in the Kachin State, which is situated in the northernmost part (approximately 270 North latitude and 97^0 50" East longitude) of Myanmar, is rich with rare fauna and flora. Due to the remoteness of its location, the forest there is almost pristine. According to the wildlife survey carried out by the Wildlife Conservation Society of the United States of America in 2002 and orchid survey conducted by the Myanmar Forest Department, the Singapore Botanic Garden and the Myanmar Floriculturist Association in 2007 had recorded a number of threatened species in the proposed project area. If properly managed and protected, this area can turn out to be a valuable conservation area rich in biodiversity. At present, poaching is carried out by the local villagers. The impact is significant and this activity must be checked so as to conserve the wildlife population and restore a balanced ecosystem. The conservation and enhancement of the threatened wildlife and the restoration of a balanced ecosystem cannot be achieved without the participation of the forest-dependent population living especially in its vicinity. In this context, the proposed project has also emphasized the social, economic and cultural development of the local communities.

1. Objectives

(1) To conserve the existing 189,600 hectares of pristine forest of Babulon Htan
(2) To conserve and promote threatened biodiversity
(3) To enhance the livelihood of the local community
(4) To conserve the watershed of the Ayeyarwady river
(5) To conserve and promote the tradition and culture of the local community
(6) To conserve and enhance forest carbon reservoirs and sinks
(7) To raise the awareness of the local community on the value of natural resources
(8) To promote ecotourism.

2. Beneficiaries

Primary Beneficiaries

1) Babulon Htan forest, the wildlife in it and
2) Communities in the vicinity

Final beneficiaries

1) The entire nation and the country of the Union of Myanmar

3. Stakeholders

The Forest Department of Myanmar, Ecosystem Conservation and Community Development Initiative (a local NGO) and four ethnic tribes, namely the Shan, Kachin, Lisu and Rawan, live in this very hilly and remote area.

4. Expected outcomes

1) The pristine forest and the endangered fauna and flora of a biological hotspot of the world preserved, biodiversity enlarged and ecotourism promoted
2) A large carbon reservoir and sink, measuring about 189,600 ha in area, preserved and enhanced
3) The critical watershed of Malikha River improved and conserved
4) Lives, livelihoods and food security of the local communities enhanced through increased job opportunities, agricultural and livestock production, improved infrastructures, education, information and communication
5) The awareness of the local communities about the conservation of natural resources raised

6) Capacity of the wildlife sanctuary staff strengthened
7) The traditions of the local races of the area preserved

5. Activities

a. Convert the Babulon Htan area into a wildlife sanctuary
b. Conduct socio-economic survey of the project area
c. Conduct inventory on and investigate the flora and fauna of the project area
d. Undertake necessary silvicultural treatments including enrichment plantings and artificial regeneration to improve the existing forests and biodiversity
e. Form income generation (IG) groups and create income generation opportunities
f. Construct IG group-owned traditional houses
g. Improve infrastructure, such as roads, guard houses, rest houses, etc.
h. Protect the project area effectively
i. Train and raise awareness of the stakeholders so as to enable them to actively and efficiently participate in resource management
j. Generate employment opportunities for the local communities

Country	New Zealand
Name of Facility	Architecture for Humanity New Zealand
URL Address	–
Name of Reporter	Lee Ja Yeun Alexandra

A Whole-School or A Whole-Community Practice in the Country

Narrative Explanation of the Practice

The Auckland Chapter of International Design Non-Profit: Architecture for Humanity promotes architectural and design solutions for global, social and humanitarian crises. Auckland's main areas of outreach are in education and advocacy, and since its inception in 2007, it has held several design competitions, educational workshops, informative lectures on disaster relief and homelessness, and partnered with local institutions and organisations to help local communities with small design projects. More than a non-profit, Architecture for Humanity is a grassroots movement, creating opportunities for architects and designers from around the world to help communities in need. We believe that where resources and expertise are scarce, innovative, sustainable and collaborative design can make a difference.

- Unique Features

A sustainable operational model is central to providing good pro-bono services to the community. Most of the work we do is performed pro-bono by tertiary students or recent graduates of architecture schools seeking relevant experience, undergirded by the technical guidance of senior graduates and professionals. Direction is formed by the junior members of the chapter with support and endorsement from qualified professionals.

- Outcome

The Auckland Chapter has been successfully and actively engaged both among the professional body, as well as the public. Our flagship event is held during the biannual public event: Auckland Architecture Week. In 2007 we launched a campaign to revive discarded umbrellas for distribution within the downtown area as a public commodity, similar to the bicycle stands introduced in Europe for use by the public to reduce carbon emission. In 2009, we held a creative workshop for secondary school students in Auckland to teach them about sustainable design and to introduce them to basic architectural principles.

Action Plan

1. Objective

To create a national network of communities who would work together to make socially and environmentally sustainable changes in New Zealand, by creating an online portal where this conversation can take place.

2. Beneficiaries

The primary target audience consists of education providers, their constituents, and community organisations in New Zealand selected on the basis of need. According to the World Bank, educating all children worldwide will require the construction of 10 million new classrooms in more than 100 countries by 2015. Meeting this challenge represents the largest building project the world has ever undertaken. UNESCO has marked 2005-2014 as the decade of Education for Sustainable Development. In addition to this, it is intended to bring together established agencies by facilitating change within complementary mandates. By acknowledging the diversity and ever-changing needs of New Zealand this proposal seeks to combine resources from the building industry with empirical need in our communities.

3. Stakeholder

- **NGO** – Architecture for Humanity Auckland Chapter, Habitat for Humanity, other independent advocacy groups
- **Professional Institutes** – New Zealand Institute of Architects
- **Educational Institutions** – intermediate, secondary and tertiary institutions
- **Government Agencies** – Ministry of Education, Ministry of Social Development, The Office of Ethnic Affairs
- **Communities** – Disenfranchised urban and suburban as well as rural communities throughout New Zealand

4. Expected Outcome

This project recognizes open collaboration to be a fundamental component of sustainable programs, and seeks to achieve the following:

- Build capacity in future generations for awareness and knowledge in sustainability through adaptive application of education platforms of a creative and practical nature
- Extend the concept of 'Sustainable Classrooms' by disseminating the benefits into broader community groups and marginalised individuals with social and environmental deficiencies relating to domestic and community settings
- Facilitate professional bodies in the building industry that are seeking to invest in their local communities by setting up a partnership platform for mutual benefit
- Facilitate better communication between the partner organisations, multiple disciplines and industries, donors and beneficiaries for optimisation of skills and services provided as well as overall efficiency of delivery in services
- Synthesise education with real projects by grounding the learning process in practice, enabling transparency, and greater community engagement and input into public facilities
- Advocacy through media communication and publication of these concepts to nurture and broaden the network of socially responsible project partners, linking back to the philosophy of Architecture for Humanity

5. Concrete Activities

Firstly, lay out a secure framework for all stakeholders and beneficiaries: partner organisations, community representatives, government bodies, education institutions and beneficiaries of the system, to pledge and commit to a set quantity of service outputs both in the short term and the long term. This would start out with one of the current projects managed by Architecture for Humanity Auckland Chapter and existing partnerships and connections adapted as a model for future collaborations.

Risk-assessment and terms of services would be refined to identify suitable clients from the shortlist of projects to determine eligibility and future-proof the services against potential liabilities and inefficient use of resources.

Develop an online platform, or latch onto an existing framework such as http://www.donatenz.com or http://www.builderscrack.co.nz that can facilitate communication between multiple users.

Examples of eligible projects and beneficiaries would be: marginalised persons or households unable to afford adequate insulation or other basic needs as prescribed in the New Zealand Building Code for meeting minimum standard of comfort; community organisations and low decile (low socio economic region) schools whose need for upgrade in facilities and basic amenities are not covered by the current funding schemes due to lack of human resources or adequate knowledge; intermediate and secondary school groups seeking further input in existing curriculum for social and environmental sustainability education.

"My KEY WORDS" from the program

Architecture for Humanity, Social Sustainability, Collaboration, Online Networking, Education, & Community Empowerment

Country	Philippines
Name of Facility	Research, Education and Advocacy (REA) Unit Center for Environmental Concerns (CEC) Philippines
URL Address	–
Name of Reporter	Lisa Ito Tapang

A Whole-School or A Whole-Community Practice in the Country

Rapu-Rapu is an island in Albay province in the Southern Luzon region. It is a small and fragile island ecosystem with unique biodiversity and rich marine and mineral resources. The island lies in the migratory route of the whale shark and its waters teem with a variety of fish and coral species. Fronting the Pacific Ocean where most of the typhoons hitting the Philippines originate, it is rainy in this region for most of the year. Most of its residents (around 10,000) in 13 coastal villages make their living through fishing and farming rice, corn, abaca, coconut, fruit trees, and root crops, synchronizing their agricultural and fishing with the seasonal monsoon climate.

Located in the typhoon belt and across a major faultline, the area is prone to natural disasters such as typhoons and earthquakes. There is also a lack of basic social and economic services for education, health, transportation, and communication. The island and its communities have also been damaged by large-scale or open pit mining over the years (in the 1960s and since 2005) and continue to face threats to their livelihoods and environment due to the continued presence of mining.

What I will be sharing are selected practices and initiatives that my organization, the Center for Environmental Concerns-Philippines (CEC-Phils), has proposed and pursued in the island, in cooperation with the local organization, Sagip Isla Sagip Kapwa (Help the island, help the people), and regional organizations and scientists since 2005. These activities and programs aim to complement the community's efforts to address the environmental challenges and problems they are facing.

- **Disaster preparedness:** The organizations involved installed a network of simple and inexpensive rain gauges (adopted and slightly modified from standard manual rain gauges) in different villages. This project was proposed due to the area's high vulnerability to landslide and flash floods due to geo-hazards, persistent rainfall, reduced forest cover, and poverty rates. These rain gauges are tools to gather baseline data for monitoring local weather patterns and their correlation to landslide and flash flood events. Training support for local disaster preparedness committees is also provided.
- **Environmental Education:** CEC focuses on providing adult education on basic ecology and science, community development and leadership training, and discussions on the importance of watersheds and their significance to communities and water quality monitoring for affected villages.
- **Promotion of science-based approaches:** Mobilization and support for volunteer experts and geologists to delineate watershed areas in the island and conduct water quality monitoring and similar studies. Community education on these practices is also integral to developing an appreciation and application of citizen science.
- **Promotion of public participation:** Due to community organizing and mobilization efforts, local residents support the dissemination of advocacy and awareness activities (press conferences, for example); hosting of fact-finding and solidarity missions and community exposure trips by environmental advocates, artists, NGO workers, and other concerned citizens; and campaigns on important social issues.

- **Culture:** There is popularization of art, such environmental songs created through workshops and cultural presentations for advocacy events.
- **Governance:** These projects necessitate the cooperation of local and regional organizations with village officials and residents.
- **Economy:** The organizations involved are currently exploring support for local irrigation systems for crops.

Of course, there are still many things that should be done in order to fully address the many challenges that the people of Rapu-Rapu continue to face. Like many other communities in the Philippines, the case of Rapu-Rapu is still an ongoing and unfolding story, one that needs a comprehensive solution that encompasses not just the local community but also national legislation and policy, macro and micro governance, and a concerted effort to address mounting ecological problems, especially with climate change. But we continue to work with hope. In our experience, collective power, pro-people and progressive environmental education and community effort is a sustainable and renewable resource which will lay the foundations for more changes to come.

Action Plan

a. Sharing of experiences, lessons, and insights from the JENESYS program

Coming back from the study tour, I proceeded to communicate and retell the experience of the program to my colleagues in CEC and our network organizations. It helped a lot that there were hard copies of all reports and speakers' presentations distributed during the program as well as internet platforms (such as mailing lists and the website forum) and social networking tools to share more digital images and other types of information online. What particularly impressed us were the creative yet effective methods used by the Miyako Ecology Center, especially in light of our organization's efforts to develop our own environmental education center and materials here in the Philippines.

I also found it helpful to communicate through writing. As of this date, I have submitted an article on the program for the Japan Foundation Manila office's newsletter, Suki. I have also written more extensively about the experience of visiting Minamata and the issues related to the disease for our trimestral newsletter, entitled Feedback, which is regularly published and then distributed to our partner organizations and networks.

b. Supporting and promoting progressive environmental policy reforms

My advocacy as an NGO worker did not stop after coming back from the study tour. One of the advocacies which we have been working on, and which was affirmed during the program, was the pursuit of environmental policy reforms at the national level. The Philippines has just finished its national elections for this year, and this presents yet another opportunity to propose and lobby for changes in laws.

We are currently coordinating with lawmakers to review policies with regards to extractive industries, particularly on mining, and its impact on Philippine natural resources and patrimony. Other agendas for proposal are looking into the disposal systems for industrial wastes and enforcing styrofoam bans in schools and fast food courts while giving more concrete support for research and local development of more sustainable packaging. Lastly, we are lobbying for a law to protect the rights of environmental advocates against harassment suits (such as libel) and to strengthen public participation.

c. Supporting grassroots partners through environmental education

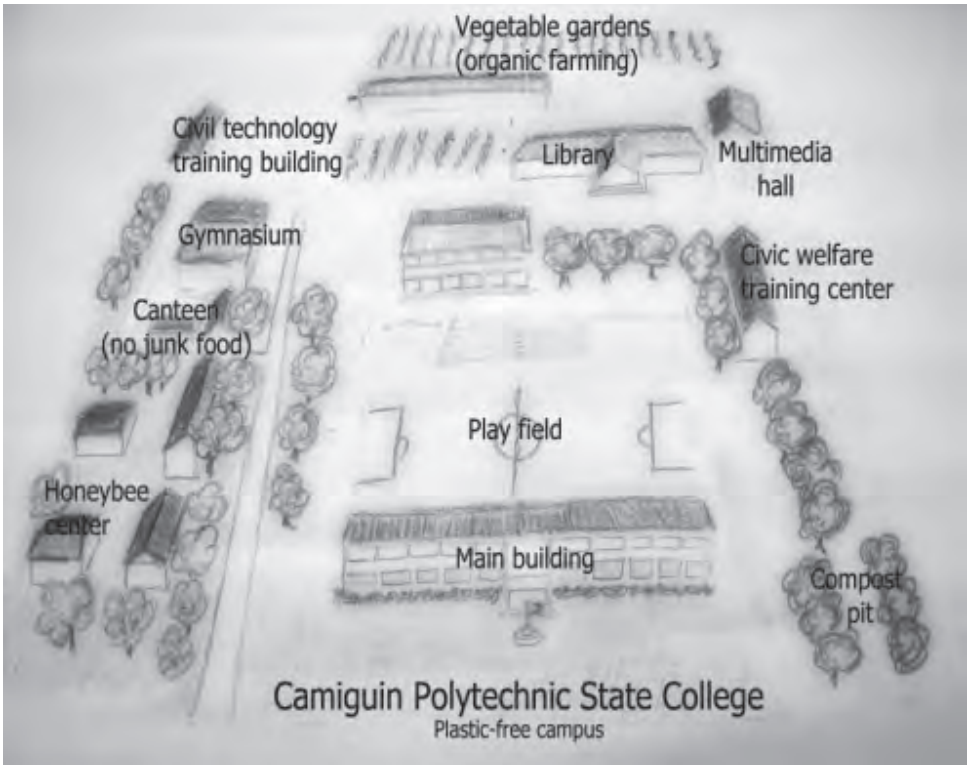
Lastly, our work involving environmental education continues. After the program, for example, we piloted a new environmental campaigners course, called EnviCore, which aims to sustain our efforts to reach out to organizations representing different regions and social sectors (which is to say, not being limited to environmental organizations) and develop a network of people from these organizations who can integrate environmental concerns and/or work into their respective contexts and communities. Through these efforts, we hope to contribute to the efforts to build more relevant, responsive, and pro-people environmental education programs within the country.

"My KEY WORDS" from the program

Communication, Environmental Education, Policy Advocacy

Country	Philippines
Name of Facility	Camiguin Polytechnic State College
URL Address	–
Name of Reporter	Ratunil Casiano Oliver Patrick Talaroc Paderanga

A Whole-School or A Whole-Community Practice in the Country



Narrative Explanation of the Practice

Camiguin Polytechnic State College was established in 1997 to serve the island of Camiguin, mainly by providing affordable tertiary education to the mostly poor families of the island, who were relatively far from most universities and colleges in the region.

1. **Environment:** Organic farming, some of it vermiculture-based; waste sorting; compost pits; plastic-free campus; local and traditional food (no junk food allowed); training on traditional, energy-saving and environment-friendly architecture; support of conservation activities in surrounding and nearby communities
2. **Society:** Civic welfare activities of and by students incorporated into the curriculum
3. **Economy:** Training on traditional, energy-saving and environment-friendly architecture; scholarships for students from poor families
4. **Governance:** Student government and student organizations
5. **Culture:** Training on traditional, energy-saving and environment-friendly architecture; theatrical plays on environmental themes
6. **Education:** Environmental courses incorporated into curriculum; extension services for community on the benefits of conservation; training in traditional, energy-saving and environment-friendly architecture; theatrical plays on environmental themes

Action Plan

As I am still pursuing my graduate degree, these plans are for the future, when my studies are completed. However, some activities can be done while I am still studying, if time and resources permit.

As a faculty member of a state college, plans are limited to a smaller sphere of influence: the students, the college and the neearby communities (aside from family and friends).

The strategy that is envisioned here is to incorporate the issues of sustainable development into all or most of the courses already being taken up the students, such as the case studies being discussed in economics classes or energy computations in basic physics classes, and not simply having a separate course for sustainable development (although this could also be a possible course for environmental management majors, for example). This way, environmental protection, sustainable development and a connection to nature will always be part of the students' lives and, as such, will have a greater chance of being incorporated permanently into their thinking, decisions and actions.

Objective: To increase the knowledge and sensitivity of students to the issue of sustainable development, particularly those aspects stressed in the program, e.g. jimotogaku and the ageing and dying of communities

Beneficiaries and stakeholders: Students, the college, the local communities

Expected outcome: Students and graduates who are more knowledgeable and sensitive to the issues of sustainable development and who will incorporate these issues not only into their major decisions in life, but also in their smaller everyday decisions

Concrete activities:

- **Incorporation of lessons learned on sustainable development into the courses being handled at the undergraduate and possibly at the graduate level**
- **Identification, emphasis and giving of importance to local and traditional methods and practices of protecting the environment and ensuring sustainable use of resources in the lessons and class discussions**
- **Encouragement of other faculty members to do the same and assist in this if necessary**
- **Presentation and discussion of lessons learned, particularly jimotogaku, in relevant fora and gatherings**

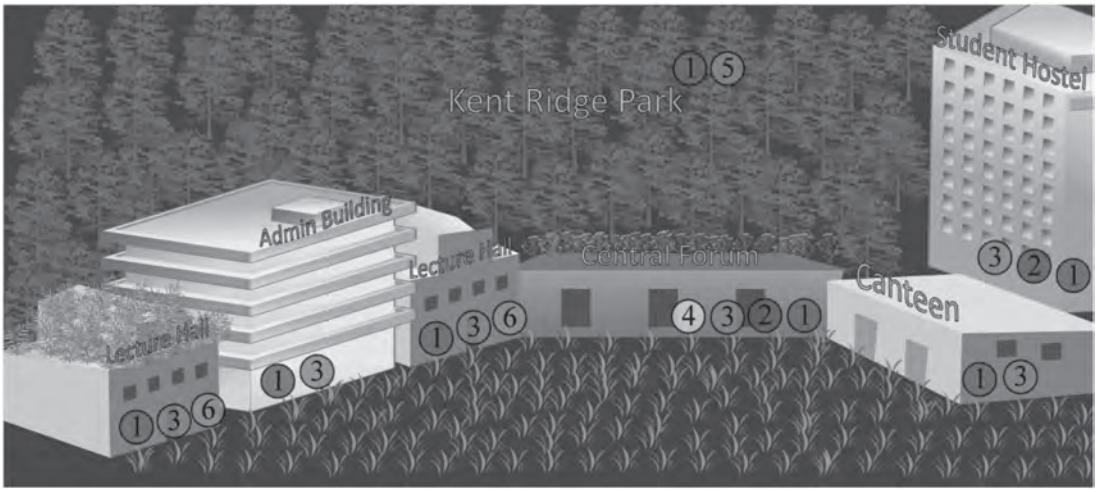
Although the phrasing and wording of the plan discussed above is focused mainly on the campus and the students, the plan also includes an increase in the sensitivity of the nearby communities to the issues mentioned. Activities of the college also include extension programs for the communities and, as such, the lessons learned in the program will also be incorporated into these, particularly since most of the extension activities of the college have been on issues concerning the environment, such as the protection and conservation of coral reefs and support to ensure sustainable fisheries through the establishment of marine reserves.

"My KEY WORDS" from the program

Jimotogaku

Country	Singapore
Name of Facility	National University of Singapore
URL Address	http://www.nus.edu.sg
Name of Reporter	Chen Dexiang

A Whole-School or A Whole-Community Practice in the Country



Narrative Explanation of the Practice

General Outline: The National University of Singapore (NUS) is a global university centered in Asia. It is one of the ten universities in the International Alliance of Research Universities (IARU) which subscribes to the idea of implementing campus sustainability principles and practices. In late December 2003, NUS officially broached its commitment to protect the environment and has since incorporated various practices to reduce resource consumption and greenhouse gas emissions as well as the conservation of nature. In this report, I would like to highlight five of the sustainability practices which NUS has adopted and discuss their outcomes, difficulties and obstacles.

1. **Environment:** Reforestation; facilities for recycling, reusing and reducing.
2. **Society:** Establishment of green clubs and committees; campaigns and roadshows to involve students and staff.
3. **Economy:** Introduction of energy efficient appliancea; stickers to remind staff and students to lower air conditioner temperatures and to switch off appliances when not in use.
4. **Governance:** Establishment of the Office of Environment and Sustainability.
5. **Culture:** Guided nature walks to remind the young of the history of Kent Ridge as well as our natural heritage.
6. **Education:** Guest lectures; screening of documentaries; environmental conferences.

Action Plan

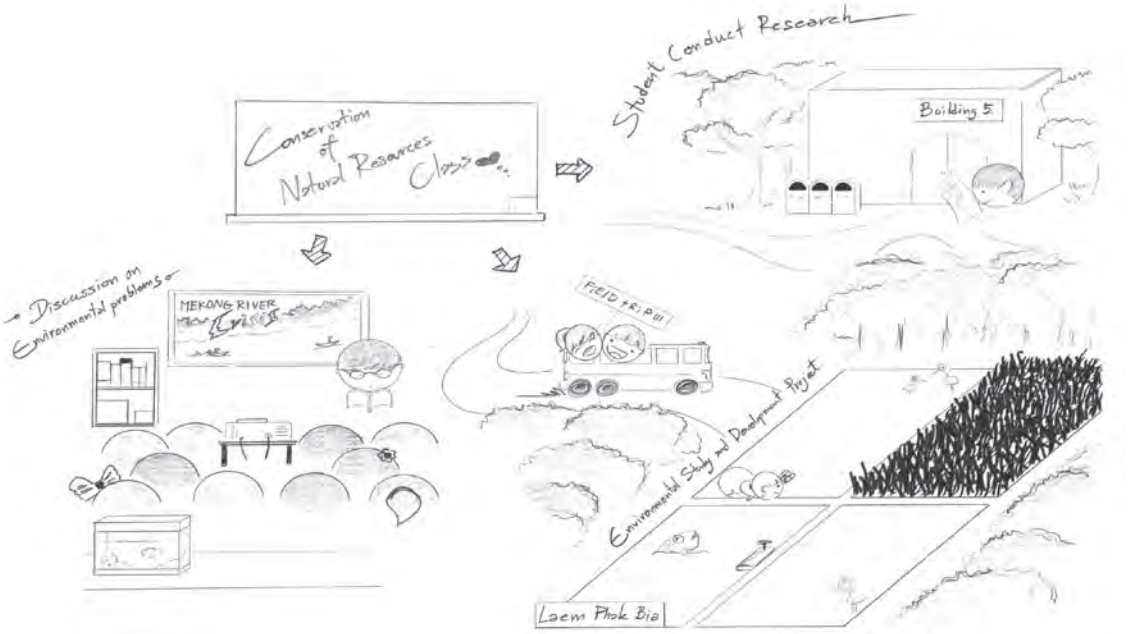
1. **Objective:** A programme aimming to reduce the carbon consumption within households.
2. **Beneficiaries:** Individual households benefit from the savings from their reduced consumption of energy; students get exposed to climate change and the need for sustainable practices; schools receive help and funding to improve their recycling facilities and environmental education tools.
3. **Stakeholdera:** All Primary Schools, Secondary Schools and Junior Colleges; Public Utilities Boards; Students; Parents; National Environment Agency; Singapore Environment Council; Ministry of Education.
4. **Expected Outcome:** Reduction of at least 10% in energy consumption in the households of all participants during the competition period.
5. **Concrete Activities:** 1) Draft a proposal which includes rules and regulations as well as guidelines. 2) Approach stakeholders with proposal. 3) Form a network to connect all stakeholders. 4) Set up website to be used by students, parents and teachers. 4) Set out to give talks to the students of participating schools. 5) Monitor the energy consuption for the three months assigned as the Baseline period. 6) Monitor the energy consuption for the next three months assigned as the Competition period.

"My KEY WORDS" from the program

Sustainable; Culture; Understanding.

Country	Thailand
Name of Facility	Conservation of Natural Resources Course Faculty of Education, Chulalongkorn University
URL Address	–
Name of Reporter	Watcharaporn Kaewdee

A Whole-School or A Whole-Community Practice in the Country



Narrative Explanation of the Practice

The "Conservation of Natural Resources" is an elective course in the Faculty of Education's Science Education program. This course supports undergraduate students who intend to become science teachers in secondary schools in the future from their first year to fifth year. This course focuses on the types and importance of natural resources; relationship between human and natural resources and the environment, crises, problems and their effect on natural resources and the environment, guideline measures to solve the problems and conserve natural resources, and applications in basic education curriculum. This course promotes environmental awareness, active teaching and learning as the student is the main actor of the learning process, collaborative learning as the students work in group, authentic learning as the students conduct research and visit natural sites or communities. This course provides students with opportunities to learn about 1) a consideration of environmental issues from a local regional and global perspective; 2) knowledge of environmental and development topics to understand the cause-and-effect relationships of the related issues; 3) research on environment problems in the field; 4) projects that balance the entire ecological system and lead to sustainable development, as initiated by His Majesty King Bhumibol Adulyadej, the King of Thailand.

In practice ESD, an infusion approach is applied to provide sustainable development experiences for students. The main learning activities are as follows:

1) Discussion of environmental problems and solutions by using environmental documentary and news as learning materials, as well as discussions on global warming, the depletion of natural resources and pollution. Some of these learning materials including "Home," a film, shows the diversity of life on earth and how humanity is threatening the ecological balance of the planet; news on how "drought affects countries along Mekong River" and "environmental problems in Map Ta Put, Thailand," and a case study of "Minamata disease and community regeneration, Japan"; 2) authentic learning by sending students on field trips to sites and organizations working in natural resource management and environmental conservation to foster students' SD awareness. Those sites and organizations provide various hands-on activities, creative innovation and science and technology, and local wisdom transferring for SD. Some places and organizations are involved in the "Laem Phak Bia Environmental Study and Development Project according to His Majesty the King's Initiative", whose main objective is to carry out study and development work to enhance the effectiveness of waste water treatment and waste disposal by using natural means as well as by tackling environmental pollution in general by using appropriate technology, and the Marine and Coastal Resource Rehabilitation and Conservation Center, Samut Sakhon, in which Mr. Narin Bunroum, as a group leader of the Khok Kham community, uses local wisdom on bamboo embroidery to slow waves and reduce coastal erosion; 3) environmental projects by committed baby research to develop awareness and working skills in SD. Students work in groups to plan, collect information, and make presentations. Some of them work on garbage disposal or survey the use of food containers in the faculty or examine the drinking quality of the faculty or champagne on global warming at the dormitory of Chulalongkorn University.

1) **Environment:** Environmental documentary and news, field trips to natural resources or organizations working in environmental conservation and management
2) **Society:** Rehabilitation and conservation by using local wisdom
3) **Education:** Active learning, collaborative learning, authentic learning, infusion approach

Action Plan

Thailand Environmental Education Annual Report 2009

Objective

To conduct research on Thailand Environmental Education Report 2009

Beneficiaries

1. The information in the report will benefit environmental education or sustainability development.
2. The report will be useful for administrators, personnel and people in making a connection or future work concerning environmental education.
3. The information obtained will be useful in monitoring environmental education and making connections with people working on environmental education at the national and international level.

Stakeholders

1. People from formal sectors, non-formal agencies, and non-governmental organizations who work on environmental education at the national and international level
2. Business organizations related to environmental education, including formal education, informal education and non-formal education of various types, such as museum, and alternative education
3. Academic experts and educators related to environmental education in educational institute and community

Concrete Activities

1. Collecting information from documents, reports and research from documents, reports and research in order to identify persons, organizations and projects that work in environmental education
2. Reporting on the persons, organizations and projects which work in environmental education to the Department of Environmental Quality Promotion
3. Collecting information by using questionnaires, interviews, participatory observation, non-participatory observation, and focus groups
4. Analyzing, synthesizing and revising information to prepare a draft of the Thailand Environmental Environmental Annual Report 2009
5. Sending the draft report to three experts to read and comment on, and improving the report
6. Conducting a conference with stakeholders for their comments on the improved report
7. Correcting and improving the report again, and preparing the full text of the Thailand Environmental Education Annual Report 2009 in Thai. The summary report will be made available in English and Thai versions.
8. Providing the guidelines on collecting information and preparing the Thailand Environmental Educational Annual Report 2010.

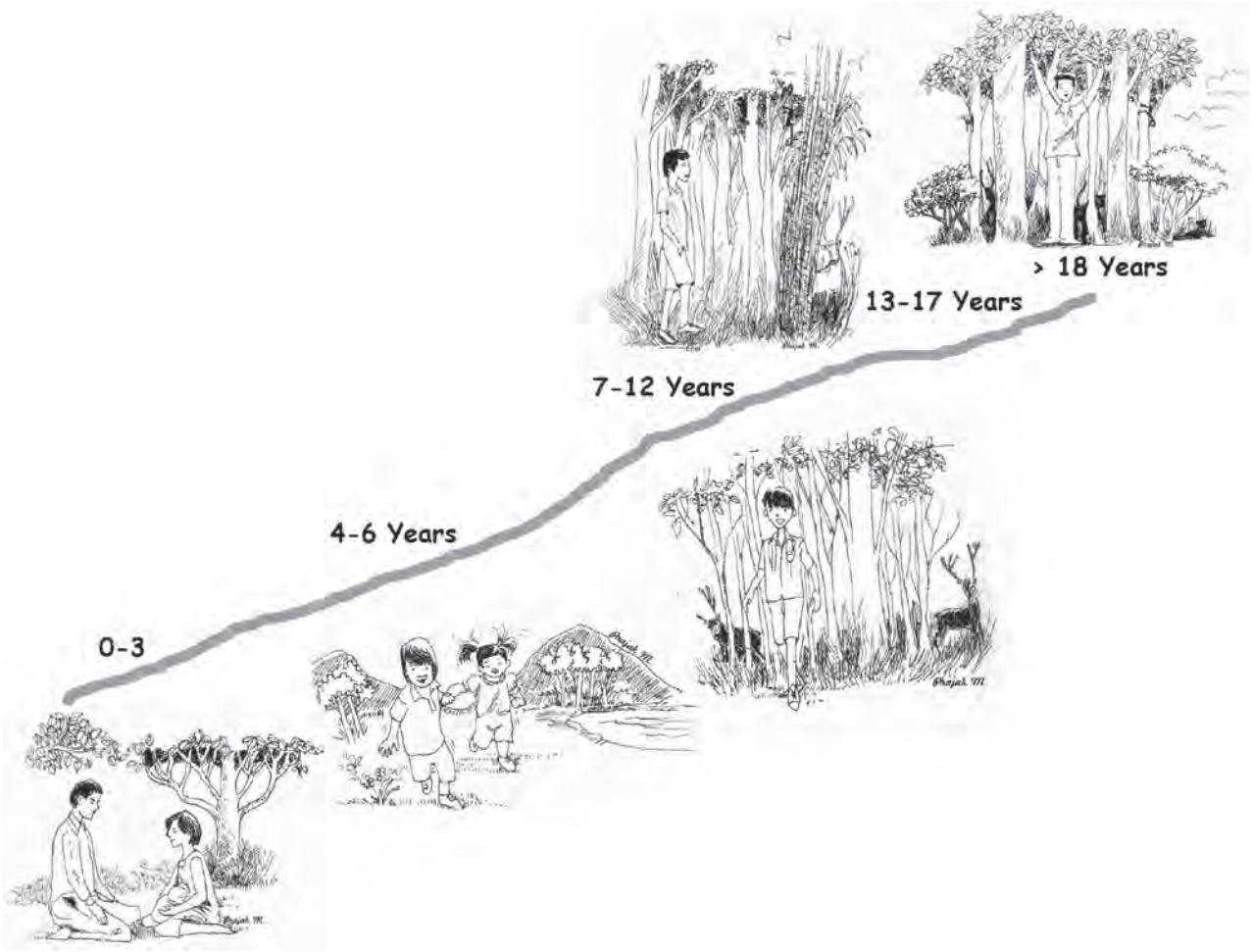
* These categories are optional. Reporters are free to organize their action plan within the specified confines.

"My KEY WORDS" from the program

Environmental Education Annual Report, Thailand

Country	Thailand
Name of Facility	The voice from Eco-school, the echo of ESD practice in Thailand
URL Address	–
Name of Reporter	Nantawan Lourith

The voice from Eco-school, the echo of ESD practice in Thailand



The picture shows an accepted knowledge of ESD practices received from Eco-school project, which has been supervised by the Department of Environmental Quality Promotion (DEQP), Thailand. As shown in the picture, the voices of children are a mirror and an expression of ESD practices; that is, every stage of child development is explained by a single picture showing a child in a certain situation, starting from infancy to the teenage years.

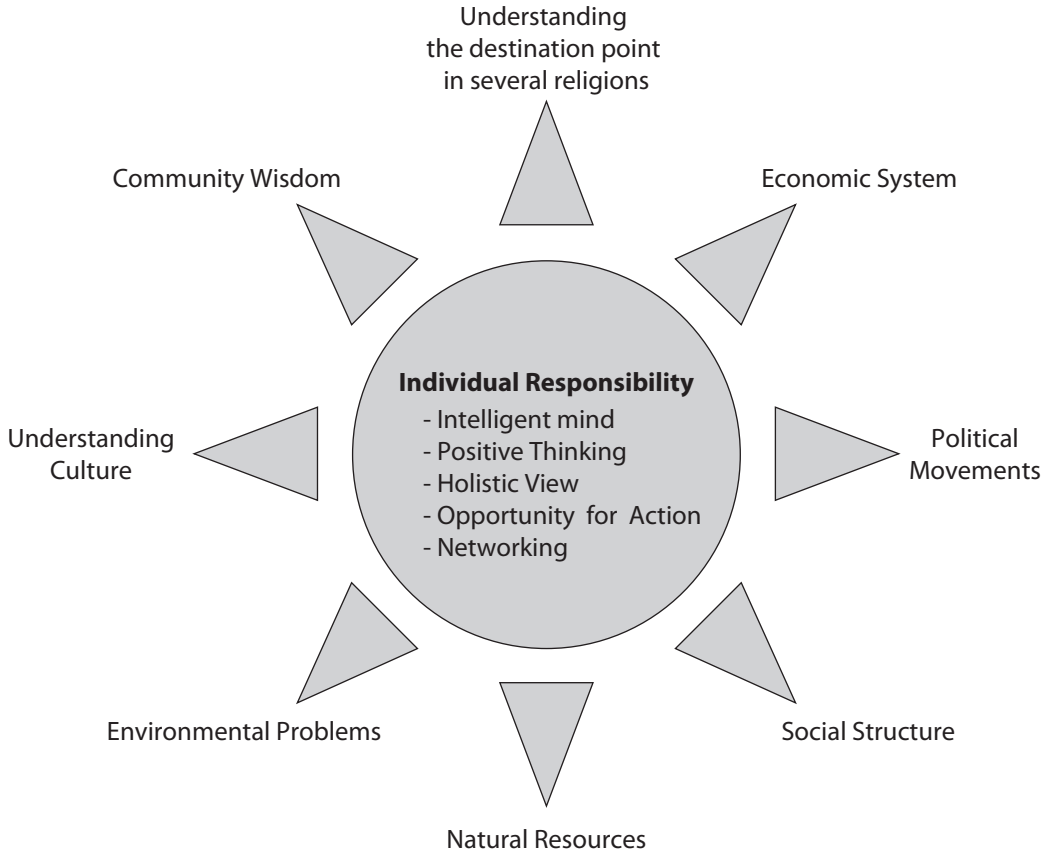
In 2009, the Eco-school project itself evaluated output and outcome by organizing a workshop mainly aiming to get feedback from the children whose schools have been involved with Eco-school. The children were also given a platform for discussing and exchanging thought and emotion as part of the project. Consequently, the picture demonstrates the learning process of children in the Eco-school and in nature.

Thai culture divides child development into five stages. In a nutshell, such a reflection clearly demonstrates the overall image of the country's development from ancient times to the present.

Children's stage of Development	Situation in Thailand	ESD prospect
0-3	I'm an infant being fed breast milk for a short period (less than 3 months). I have better opportunities than other Thai babies (only 43,000 of 840,000 babies or 5.4% are breastfed). My friends' parents spent about 30,000 baht/year (approx. 81,500 Yen) buying milk powder, so parents were forced to work far harder. As a result, mothers haven't had enough time to take care of their children, and have a poor relationship with their children. Since they live up-country with their grandparents, they meet their parents just once or twice a year; however, they have access to fresh air and playgrounds to spent time in nature and wild places.	I would like to have healthy food, fresh water, and fresh air. Occasionally, I want to spend time with my parents and grandparents. On holidays, I would like to experience the joy of nature and the environment.
4-6	Since my family is well-off, I have started learning at age 2-3 because my parents have less time to take care of me; for this reason, I have been educated and developed at an early age, which improves my future prospects. Some children prefer playing computer games and watching television over playing in natural areas. On weekends, my parent hope that I attended tutorials because they are concerned about my continuing education in primary school	My education starts in kindergarten. The children learn by playing and touching. I would like to stay with my parents because they sometimes tell me stories and tales.
7-12	Six years into primary school, I have to study 7-8 hours a day in 8 subjects. Some subjects are taught outdoors. I like the outdoor education together with play. In an urban primary school, students have to study on weekends; English, Mathematics, and Sciences are popular subjects for extra study in tutorials. On the other hand, some families encourage their children to study art and play sports. Golf and tennis are very popular among the rich. On May 2010, schools in Bangkok postponed the semester opening for two weeks due to the volatile political conditions in the country. The political policies of the country result in good natural resource and environmental management. Even if government officials are working on environmental management, they cannot push environmental measures through because they must earn political support.	I would like to study outside of the classroom and in nature or in the community. I also would like to study the community's culture. Sometimes, villagers and learned men teach me local knowledge and wisdom.
13-17	In this stage, teenagers seek the value of growth from childhood to adolescence. I need my parent to look after me and occasionally I would like to take care of myself. Youth is a span of life in which teenagers prefer to set up their groups following their specific interests. Korean pop stars have a strong influence in Thai society. It's very famous among teens, so they copy those styles. At the age of 17, teenagers have to study seriously to enter the university. However, urban students have better opportunities to enter the university than rural ones. Political conflicts have expanded in several aspects of society, such as inflation and human rights.	During holidays, my friends and I run social activities in the community. For me, my parents are coaches for my life. I gain confidence to think and do anything I want to. I need to search for and understand meaning in my life myself. I also would like to have good opportunities to create activities and have a strong body and intelligent mind. A good role model is very important for this age.

Teens grow up from childhood to adolescence eager to learn all about their surroundings based on their understanding of the culture, environmental problems, natural resources, social structure, political movements, the economic system, religion, and community wisdom. Those are key success factors in achieving a sustainable life and they should adopt a long-term education to develop their community, country, and finally the world.

The Holistic View of Education for Sustainable Development from a Child's Development to Adulthood



Conceptual Ideas for the Action Plan

Education on the sustainable life and holistic view to transform behavior for sustainable development in Thailand

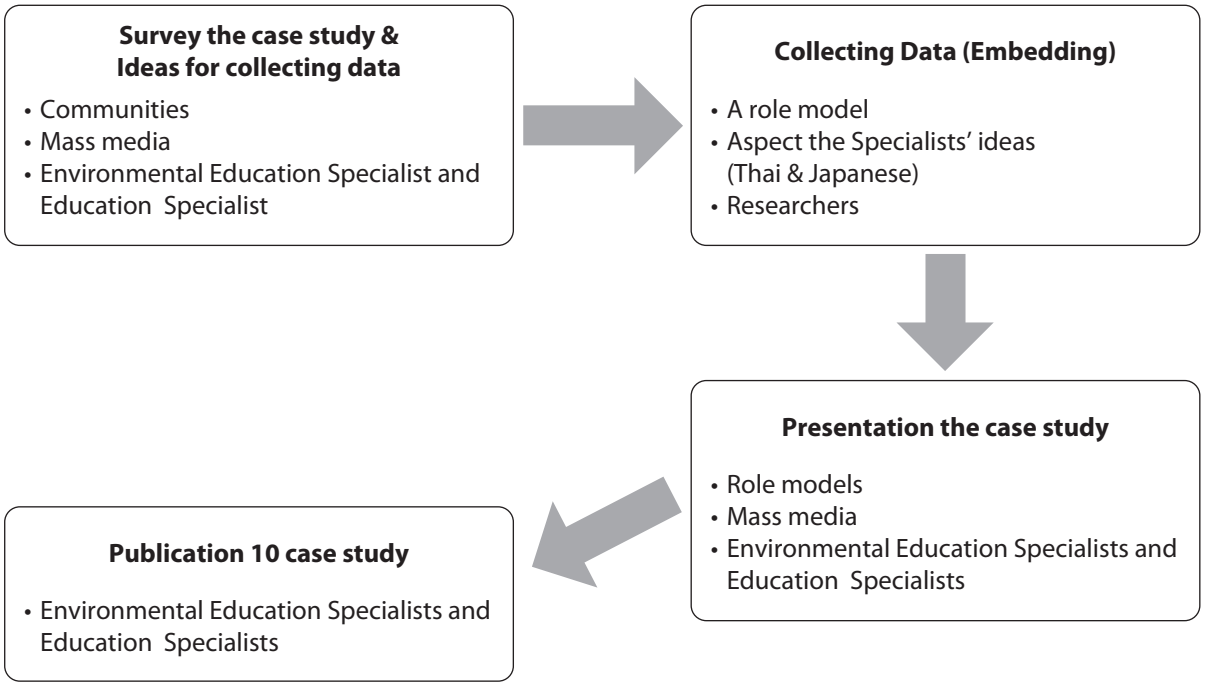
Objective

1. To study and collect data on education for the sustainable life and holistic view to transform behavior for sustainable development in Thailand
2. To present the story of life and sustainable activities in public communication

Beneficiaries

1. The students in primary and second school have alternative role models (10 case studies) for learning about sustainable behavior and development.
2. The circle of environmental education and education in Thailand and around the world.

Stakeholder/ Concrete Activities



Expected Outcome

10 alternative role model (10 case studies)

"My KEY WORDS" from the program

Sustainable life and transform behavior for sustainable development

Country	Vietnam
Name of Facility	–
Website	www.livelearn.org, www.thehexanh.org
Name of Reporter	Do Van Nguyet

From Awareness to Action Promoting "The He Xanh" - Green Generation in Vietnam

1. Introduction of Green Generation Network in Vietnam

What can the youth, as a large population group in countries like Vietnam, do about sustainable development? We consider the involvement of today's youth as crucial to both the short-term and long-term success of the sustainable development journey. Sustainable development requires sustainable people, and "The He Xanh" (green generation) is one initiative to contribute to the development of such responsible people/generation. The He Xanh inspires young people to think and act for the environment, support youth network and empower youth in the role of agents of change.

The Green Generation aims to develop a strong network of young people to learn and adopt sustainable actions, to build awareness on climate change and promote green lifestyles among youths. It is an open network for environmental clubs and youth groups to share and mobilize resources, increase coordination among their activities and create synergies.

2. Vietnamese Youth in the face of climate change and unsustainable development

Vietnamese youths are becoming increasingly equipped with globally-updated information and technology, foreign languages and modern knowledge. The biggest generation in Vietnam faces ecological literacy challenges as the whole country is struggling for socio-economic growth. Many see climate change issues as too big a problem for their daily lives, or believe that their action does not influence the big picture.

In recent years, more and more Vietnamese youths, students and young workers show their concern and care for social and environmental issues in charity, environmental action activities and the formation of many volunteers groups and clubs. Since 2004-2005, students and volunteers groups in Hanoi have organized on New Years eve for a street clean-up program called "Clean New Year Eve". As of this point, a large number of volunteers groups have emerged in big cities in Vietnam out of their concern for social-economic problems.

3. Development of youth-led *volunteer programs and groups on sustainability issues with active green change agents*

The Auckland Chapter has been successfully and actively engaged both among the professional body, as well as the public. Our flagship event is held during the biannual public event: Auckland Architecture Week. In 2007 we launched a campaign to revive discarded umbrellas for distribution within the downtown area as a public commodity, similar to the bicycle stands introduced in Europe for use by the public to reduce carbon emission. In 2009, we held a creative workshop for secondary school students in Auckland to teach them about sustainable design and to introduce them to basic architectural principles.

As of this point, there are over 50 youth groups carrying out diverse and innovative activities in recycling, cycling, climate change education groups, wildlife trade and other areas. Several groups were founded by visionary young individuals, who are personally touched by the urgency of the environmental protection or degradation of their living environment. Web pages and blogs are now used to share information and bring the groups together. Groups could be school-based clubs or self-organized volunteer clubs outside school, with members often holding weekly meetings and monthly events.

"Environmental youths and volunteers need to become green role models first" Many youths are concerned about human behavior and system changes in favor of sustainable practices in Vietnamese society, without realizing how and when, through participating in their civic group, they changed themselves positively and differently from their previous state of sustainability illiteracy. These young people are part of a green generation who care and are eager to apply sustainable

lifestyles. They self-engage and demonstrate their roles as active citizens who improve the environment and their communities now and in the future. With little or even no financial support and no formal registration for their own organization, many volunteer clubs have continued to operate in the last four to five years.

4. Networking for sustainability

"We need to create a bigger wave of green action, not only a big campaign for Earth Hour in one evening or one-off events from separate clubs" (one high school student). The increase in voluntary and self-organized environmental activities is a good sign pointing to civil society development in Vietnam, when young citizens want to express their concerns and their role in building a sustainable life. Promoting and networking among these small groups, people and activities will contribute to stronger change and better contributions.

Youth representatives meet online and offline for cooperation. In July 2009, Green Generation Network formally started; 2009-2010 marked significant efforts in volunteer network development, among the groups themselves and with support from NGOs: Live&Learn, Oxfam, the British Council, Care International in Vietnam, Rosa Luxemburg Stiftung, and others. In particular, the "Vietnam Youth and Sustainable Development" summit (VYS), with the theme "Climate change: Be Aware and Act" in 2009 and "Tomorrow Starts Today" in 2010, annually attracted 60-80 green change agents across the country. VYS is the venue for active youth in both urban and rural areas of Vietnam to connect and exchange their awareness and actions about climate change and sustainable development.

In addition, the network receives growing attention and support from media, government agencies and business. Green Generation also connects and joins activities with international youth events such as the global 100-day moving climate campaign, 350.org, and others. At the moment, key change agents in "The He Xanh" have committed to reach 20,000-40,000 people in different places in Vietnam to raise climate awareness and promote green actions.

Action Plan

1. Objective	To build awareness and promote the actions of young people in Vietnam in the area of sustainability, particularly climate change and good governance issues
2. Beneficiaries	Young people, including students in universities
3. Stakeholder	- Youth-led organizations, including volunteer clubs, students organizations - Government organization: Center for environment training and education (CETAC) - NGOs: Live&Learn, Oxfam, Care International in Vietnam, British Council - Business: FPT
4. Expected Outcome	- At least 125 active youth, students and volunteers will increase their awareness, knowledge and skills and capacity to facilitate and share topics of climate change and governance topics - At least three educational material packages on climate change and sustainable living - At least 2,000 youth, students and volunteers will participate in events to raise awareness and promote climate actions facilitated by young green change agents
5. Concrete Activities	1. Organize meetings among youth activists and groups for sharing knowledge and activities combatting climate change with the participation of at least 150 people and connecting at least 30 voluntary/social clubs and universities to join the network. 2. Organize capacity building activities and events to train change agents 3. Develop at least three educational material packages on climate change and sustainable development 4. Organize joint events on topics of climate change to expand and attract the participation of at least 2,000 young people, students and volunteers. 5. Share and connect youth climate actions to communities, businesses, government and non- government organizations and the public.

Country	Vietnam
Name of Facility	Green Living in Ha Noi
URL Address	www.cungsongxanh.org
Name of Reporter	Nguyen Hue Phuong

A Whole-School or A Whole-Community Practice in the Country

Narrative Explanation of the Practice

General Outline: Green Living in Hanoi is a program under the project "Neighbourhood Empowerment for Sustainable Development in Hanoi" implemented by Action for the City. This program enables participants, especially poor urban women, to take action to improve their own living conditions and neighbourhoods. It started in 2009 and now there are 34 groups with over 300 households. We also established four Green Living Clubs in four wards. Paritcipating in this group, we encourage them to change their behaviour so that it is more sustainable through saving energy, saving water, reducing waste, becoming conscious consumers, creating safe homes, and improving health.

1. **Environment:** Reduce, reuse and recycle; safe vegetable garden; saving energy; saving water
2. **Health:** workshop about nutrion, planting safe vegetable garden, preriodic health examination, safe home
3. **Economy:** Save money from saving electricity, saving water and planting vegetables, becoming conscious consumer
4. **Society:** improve their neighbourhood (playground, community gardens…), household engagement for sustainable neighbourhood; improve relationship between people in neighbourhood
5. **Education:** learn the sustainable lifestyle; learn experiences from each other related to 6 topics
6. **Urban governance:** emphasizes a strategy of citizen's engagement with mass organization and local government. Representative of local mas organizations and government will be invited to take part as members of Green Living teams, and to learn about how to work with residents' groups on community-initiated projects.

Action Plan

GREEN COMMUNITY

After taking action at the household level, Green living teams are more ready to work together on community projects. The projects stem from ideas and suggestions that arise from people who take part in Green living teams and are inspired by what they see in their local community. These collective projects might include neighbourhood clean-ups, community gardens, or children's playgrounds. Action for the City will provide a small seed fund for community projects, and the rest of the funding will be raised by Green living teams.

1. **Objective:** to empower small groups in specifically targeted neighbourhoods to take action to improve their living environments
2. **Beneficiaries:** to establish a sustainable neighbourhood; improve the relationship between residents, improve the urban governance through promoting bottom-up residents' actions.
3. **Stakeholder:** Authorities in four wards, Green living team Club, Mass Organizations, Experts, Civil Society Organizations
4. **Expected Outcome:** Green living teams in each ward in Hanoi implement at least two community projects in 2010 and they will organize community workshops to evaluate these projects and plan for 2-3 new projects in 2011.

90% of members of Green Living teams report a higher sense of community intergration

No	Activities	Timeline	Partner	Indicators
1	Green Living Teams identify community projects	September 2010	Action for the City, Authorities in four wards, Green living teams	• Plans of community projects identified by Green Living teams
2	Green Living teams implement planned projects	October - December 2010	Action for the City, Authorities in four wards, Green living teams	• At least 4 community projects implemented in each ward
3	Green Living teams organize community workshops to evaluate their projects and plan for sustainability	January 2011	Action for the City, Authorities in four wards, Green living teams	• At least 2 workshops organized in each ward to evaluate community projects. • Plan for sustainability developed in each ward
4	Develop a resource CD of project methodology, tools, activities and lessons learned	September 2010 - February 2011	Action for the City, Green living teams	• Publish 200 resource CDs to introduce the process of this program

"My KEY WORDS" from the program

GREEN HOUSE, GREEN COMMUNITY

Country	Vietnam
Name of Facility	Secondary schools of Tung Ba (Vi Xuyen district) Yen Dinh and Yen Minh (Bac Me district), Ha Giang Province, Vietnam
URL Address	http://www.nature.org.vn/en/news/
Name of Reporter	Nguyen Van Luan

1. Background

Khau Ca Nature Reserve is located on Ha Giang province, in the far north of Vietnam. It was established to protect the Tonkin Snub-nosed Monkey (Rhinopithecus avunculus), which is listed as critically endangered and considered one of the 25 most endangered primates in the world.

Our organization, Center of People and Nature Reconciliation (PanNature) has collaborated with Ha Giang Forest Protection Department (FPD) to implement an environmental education programme (EEP) to improve awareness for pupils who are living around the Khau Ca Nature Reserve area to protect the Tonkin Snub - nosed Monkey population and their habitat. The EEP took steps to establish environmental education activities for local secondary schools of three communes around the Khau Ca Nature Reserve.

2. Programme Objectives

The programme aims to raise awareness and change behaviors of local people on sustainable use and maintenance of local nature resources and their living environment. The specific objective is as follows:

- Pupils from secondary schools within the buffer zone of Khau Ca Nature Reserve are aware of the importance of environmental protection and show increased commitment to preserve their environment.

3. Beneficiaries

Pupils, teachers and 3 secondary schools within the buffer zone of Khau Ca Nature Reserve. Total pupils of 3 schools: 986 pupils

4. Stakeholder:

- PanNature
- Ha Giang FPD
- 03 Secondary Schools: Tung Ba (Vi Xuyen district) Minh Son and Yen Dinh (Bac Me district) – Ha Giang province.

5. Expected Outcomes

Up to now, the environmental education programme has reached the following outcomes:

1. Local school teachers/pupils were guided to implement the environmental education activities at their schools.
2. A series of lesson plans on environmental themes and accompanying materials (with a focus on local issues) produced and used by teachers.
3. Pupils joined extra-curricular environmental education activities and learn practical knowledge and skills.
4. Local school teachers and their pupils have experiences and learn good practices outside of their area.

6. Concrete activities

6.1 Training teachers on EE integration

A two-day training course on *Integrating Environmental Education into Secondary Schools* was organised 16 – 17th May, 2010 for 16 local teachers (also called participants) from three selected secondary schools that participated in the course This training aimed at (1) strengthening knowledge and skills of EE at school for local teachers; (2) introducing and practicing methods of integrating EE into the schools' formal teaching programme and outdoor EE activities.

Most of the articipants understood the basic concepts and knowledge of EE and the goals that need to be achieved when conducting an EE programme with secondary school pupils. They were introduced to knowledge and approaches of changing human behaviors.

6.2 Organizing environmental painting contest for pupils.

This extra-curricular activity was implemented within three schools, organised by School Management Boards from 18th to 23rd May 2010. Themes of drawing competition are listed below:

- Our living environment
- Presentation of your dreams about our living environment
- Tree planting, nursing and protecting
- Water resource protection
- Hygienic activities at school, class, home and village
- Protection of wildlife in general and Tonkin Snub nosed- Monkey in particular

The contest formed as a bridge from pupils to local community in order to share and express their massages to environment, forest and natural resource.

6.3 Guidance on personal hygiene in class and schools

This activity was organised from 26th to 29th of May , 2010 for three secondary schools. Pupils were guided in practicing personal hygiene activities such as washing hands/faces properly with limited water. They were also guided in how to sweep classrooms and collect rubbish.

6.4 Protecting and nursing trees, parterres and guidance on planting vegetables

In May, local environmental education teachers introduced pupils to some techniques of nursing and protecting trees and assigned responsibility for the care of parterres and tree pots in class.

At Minh Son Secondary Schools, after guiding them on planting and protect trees, pupils in each class were allocated a small land area in a courtyard to practice planting trees.

At Yen Dinh Secondary School, old tires were used as flower pots, and pupils were assigned to care for them. Twelve recyclable pots were made and placed in the courtyard and protected carefully by pupils.

A small vegetable garden also was established in Minh Son Secondary School where pupils can join and practice on planting trees and learn how to nurse trees.

6.5 Guiding pupils on collecting, classifying and processing solid wastes

Environmental education teachers encouraged pupils to collect and classify waste at school.

Pupils were guided in studying waste sources and the negative impact of waste on the environment. This activity also helped them to classify waste and how to treat each type of waste.

As teachers' facilitation, pupils practice classifying waste that they collected in class and on the school grounds and then bring them to a public place.

6.6 Study of wildlife

This activity was implemented by environmental education teachers in order to help pupils learn about wildlife through extra-curricular games such as identifying the appearance of endangered species and their living environment. They also studied threats to wildlife from negative impacts such as deforestation, wildlife hunting, trading and consuming. Pupils also had the chance to contribute solutions to protect wildlife, especially the Tonkin Snub Nosed Monkey.

6.7 Supporting environmental education library

The environmental education programme supported each school by providing an environmental education bookshelf. These books and photos are related to natural discovery, the living environment, stories of animals, forest resources, use of water resources, waste disposal, and other issues.

The environmental education library helped teachers in preparing materials for integrated environmental education content. Many teachers use information, photos and documents effectively for their environmental education activities.

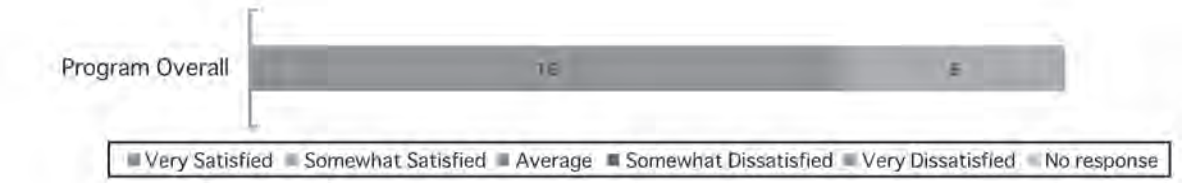
Project Evaluation

Project Evaluation

1. Program Overview

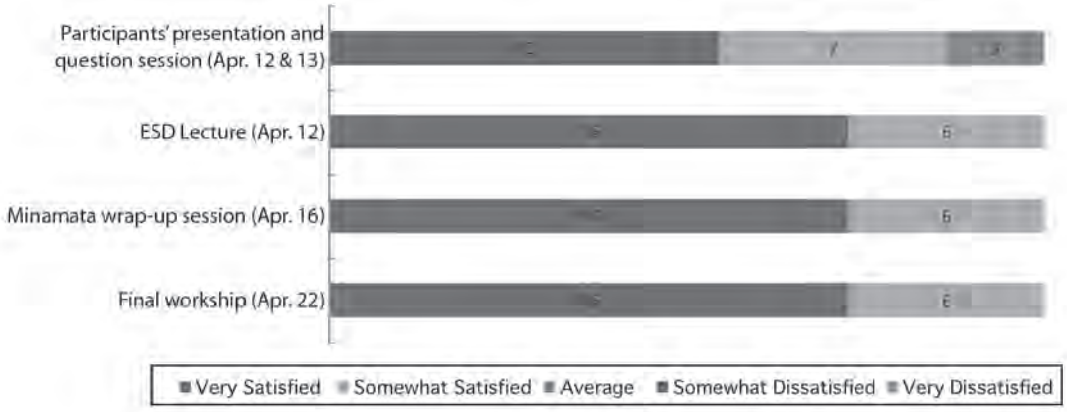
A questionnaire was conducted on the last day of the program to collect feedback for the future development of the program, and 22 out of 24 participants returned it. The proportion shown in the graphs below is based on the scale of a total of 22 respondents.

The results of the questionnaire showed that 100% of respondents stated that they were "Very Satisfied" or "Somewhat Satisfied" with the program overall, with 16 making the former response and six the latter.



2. Lecture and Workshops

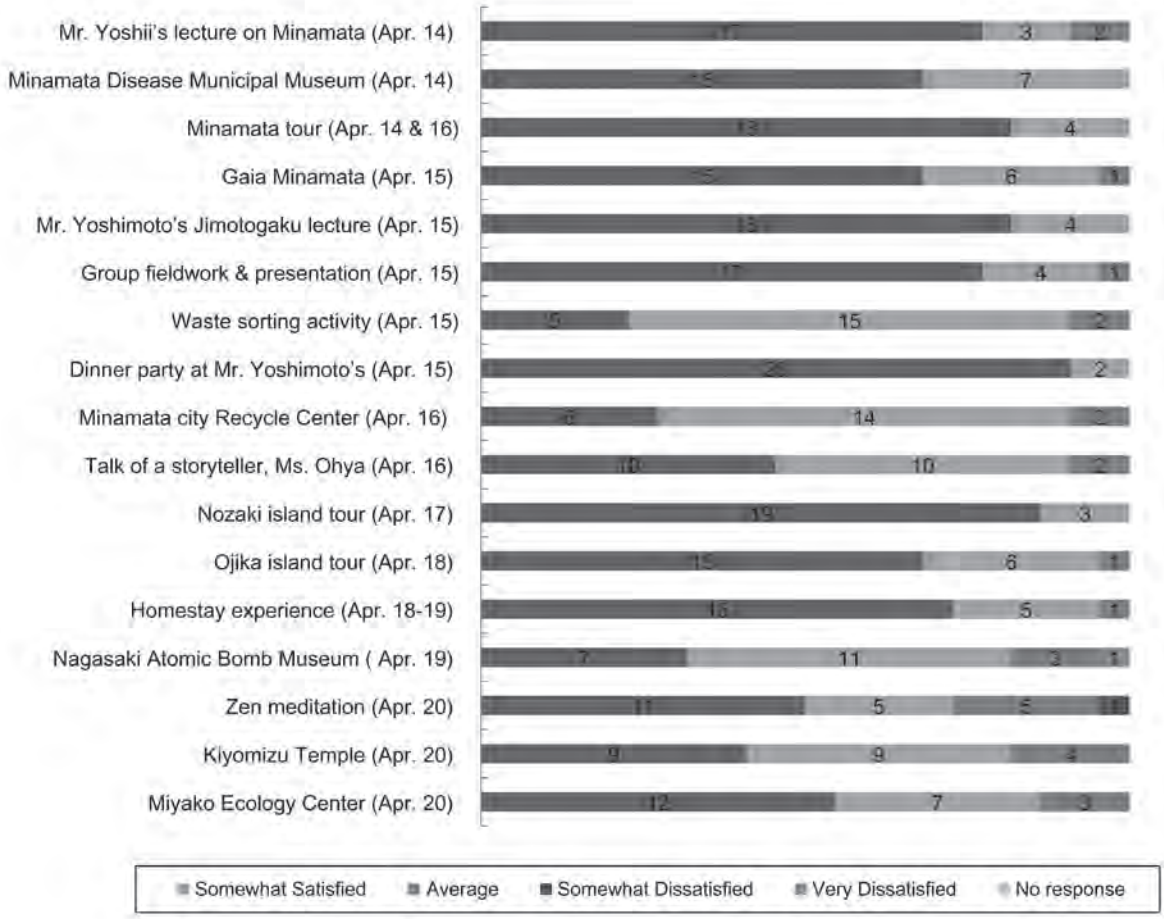
Dr. Yoshiyuki Nagata, Associate Professor at University of the Sacred Heart, gave a lecture entitled "Challenges of ESD in Asia and the Pacific" on the second day of the program. Sixteen participants replied that they were "Very Satisfied" and six that they were "Somewhat Satisfied" with the lecture, Minamata Wrap-up session, and Final Workshop.



3. Programs in outlying regions

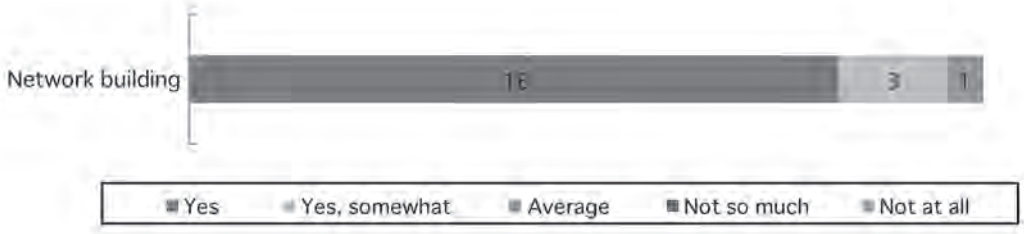
The participants gave the highest assessment to the dinner party at Mr. Yoshimoto's, with 20 replying that they were "Very Satisfied" and two "Somewhat Satisfied". There was also a high evaluation for the Nozaki Island tour, with 19 "Very Satisfied" and 3 "Somewhat Satisfied".

The Minamata city tour and Mr. Yoshimoto's Jimotogaku lecture were also supported, with 18 "Very Satisfied" and 4 "Somewhat Satisfied". Besides the statistics for those four site visits mentioned, 17 were "Very Satisfied" with Mr. Yoshii's lecture and Group fieldwork & presentation and 16 with the Homestay experience.



4. Network building

Asked about whether they were able to make a prolonged relationship, 21 out of 22 participants replied with "Yes" and "Yes, somewhat". The explanations of the responses are as follows.



- I have learned a lot from various participants from different countries. They have specific methods in their countries to integrate environmental education.
- We are already thinking of co-organizing group events with each other's help.
- I will definitely work together with my new-found friends in the program for ESD in the region.
- Meeting other young leaders of their own community was stimulating. Because we share same values, we became very close in such a short period of time.
- I think that the professional and personal bonds that were forged during the program were very strong and open to further solidarity and cooperation.
- I have set up a joint program with another NGO in one of the participants' country.

5. Significance of the program

The responses to a question asking the participant to state the utility and effectiveness of the program for the sake of individuals and each community were as follows.

- I have a much deeper understanding of Japan and all the other countries that were included. I have not been to many South East Asian counties so it was great to learn about all the different countries and cultures and to work with them while we were learning.
- ESD has many special ways to think and act. I will learn more about it after I go back to my country. This trip gave me the big picture of ESD. I'll think more about ESD when I work with children.
- It helped me broaden my knowledge, experience, mutual understanding, and ideas which will be useful in my future career.
- So much in common with what I do back home that I have so many ideas coming, what to do, who to tell, etc. A starting point for me.
- I have a much more comprehensive knowledge about ESD, and how it can transform and shape the communities in which it is being implemented. I will take this knowledge and teach it in a seminar on sustainable design in architecture.
- I think one of the meaningful realizations that the program helped bring about was the value of utilizing / harvesting own culture / creativity to facilitate a qualitative change in people's way of thinking about the environment and sustainable development in changing perceptions and attitudes in a holistic way. Whether it was the philosophy of 'Jimotogaku' or the creative exhibits at the Ecology Center, all of these forms inspire me to think about how I can better contribute to my own organization and community. I think this experience will be helpful and valuable for me, especially in the course of my organization's efforts to contribute to regional network building on ESD, establish our environmental education center and develop more participatory methods of community development.

Follow-up Project: Report from Program Advisor of the Previous Year

Report on the "Seminar on Education for Sustainable Development (ESD)"

Kimiko Kozawa
Professor emeritus at Tokyo Gakugei University and professor at Tokai University

Departing from Narita, I left the Japanese winter behind and flew to Bangkok, Thailand, which was in the dry season. Approximately 90 minutes after arriving, I finally got through immigration. None of the other Japanese passengers on board were in the immigration procedures line. I guessed they had changed planes for other destinations in Thailand.

Wathana Onpanich, the program officer for The Japan Foundation, Bangkok, picked me up at the airport and took me to the center of Bangkok, a modernized city with a web of highways as well as subway and monorail systems. The hotel where I stayed is located near The Japan Foundation's office and is surrounded by high-rise buildings.

The primary purpose of the visit was to take part in a seminar on education for sustainable development (ESD) titled "From Policy to Practice: Sharing Experiences of Implementing ESD (Education for Sustainable Development) at the Grassroots Level between Thailand and Japan" and fulfill two major objectives:

1) To share information with regard to the experiences, policies, and implementation of environmental education aiming for sustainable development in Thailand and Japan; and
2) To meet with former participants of JENESYS East Asia Future Leaders Programme (Youth Exchange) to hear about their experiences in Japan, and with other key stakeholders promoting ESD in Thailand to share views and information.

In accordance with the above objectives, I (1) made a presentation on ESD, environmental education, and related management programs (policies, methodologies, grassroots implementation, etc.) in my capacity of Japan's delegate, and (2) visited a school that promotes environmental education, attended a seminar organized by Thammasat University for teachers and students (a retreat-style seminar that lasted three days and two nights), and exchanged opinions with the seminar participants.

1. Field trip

I visited two local organizations. Over the course of a morning and afternoon, I visited a local environmentally friendly school that offers the full range of classes from kindergarten to high school, all on the same premises. There I participated in a workshop on waste separation together with 15 teachers who also attended the three-day environmental education seminar run by Thammasat University. In the evening, I visited the Thailand Environment Institute to learn about their green programs and activities.

1) Visit to Roong Aroon School (Photo 1)

Roong Aroon School is a private school established in 1997. Located on a lush, green, 20-acre block in a suburb of Bangkok, this alternative school adopts holistic approaches to provide total education from the level of kindergarten to high school in separate buildings all located on the same premises. These two- and three-story buildings are arranged in a cluster format according to grade. Charoenwattana Rithirong, an alumnus of the fiscal 2009 East Asia Future Leader Programme under the JENESYS Programme, teaches at the school. Incidentally, the tuition for this school is three times as much as that of Thammasat University. The total number of students is 1,200, including 463 pupils at the kindergarten and elementary school level. The day of my visit fell on the final day of a three-day athletic meet, so the children in a very energetic mood, running around the schoolyard. Considering the hot local climate, the students' water intake is monitored carefully and there is plenty of shade about.

The school curriculum includes many activities that take place in nature and focuses on learning processes that integrate knowledge with wisdom and virtue. Rice paddies are also used as a location for environmental studies, a practice that is

also followed in Japan. I noted that the school has adopted teaching methods designed to develop students' ability to think, i.e., the ability to understand themselves and their external surroundings. Waste management is among the key themes of the school. Even though I did not observe actual classes, I learned that the school thinks of its grounds as an island and has adopted a zero-tolerance policy regarding the generation of waste by the "island." Under this policy, students learn about waste and waste management in their classrooms, and also practice appropriate waste management in their everyday life in school. The no-waste policy was not in place when the school was first established and the school curriculum did not cover waste-related topics. In those early days, all they did was to collect garbage. These days, however, the idea that "Nothing on the Earth is designed to become garbage. Only people turn things into garbage," has permeated the school. Together with the 15 teachers who separately attended a seminar at Thammasat University, I joined a workshop on waste separation where we sorted trash into (1) organic matter, (2) recyclables, and (3) others (Photo 2). Parents also had the option of taking part in the workshop and some of them did.

With regard to waste separation, programs in Japan initially focused on recycling, but have since evolved into initiatives that make the "3Rs"—reducing, reusing and recycling—in that order of priority. Given that when seeking solutions for waste management, it is important to consider the implications for social systems, it may be necessary for Thailand to consider introducing an eco-labeling system and promoting it in local communities in the future.

2) Thailand Environment Institute (TEI)

Founded in 1993, this non-profit organization promotes environmental programs in Thailand. I had an interview with its project manager, who has visited Japan many times, and a woman who participated in the JENESYS Programme in 2009. Another member of TEI came to Japan under the program in 2008. They told me that TEI is currently conducting 60 environmental projects on major themes including: climate change, environmental education, pollution, environmental management, and low carbon society. Among them, projects relating to climate change account for approximately 50%. Funding for these projects comes from government (50%), business (20%), overseas (20%), and other sources (10%). To facilitate environmental education, TEI has been implementing a "School Project for a Better Environment" in collaboration with a number of stakeholders for the past 13 years, focusing on a wide range of themes, such as energy, global warming, forests, water, sustainability, and other areas. They also develop various related printed educational materials.

In response to the government's environmental policies, the Department of Environmental Quality Promotion has been encouraging environmental education for sustainable development and, accordingly, promoting the "Eco School Project" to raise public awareness in Thailand of environmental issues. Due to time constraints, I was unable to visit the Department of Environmental Quality Promotion.

2. Seminar at Thammasat University (January 16, 2010)

We participated in a three-session seminar at the Institute of East Asian Studies, Thammasat University. During Session One, keynote speeches were delivered by three speakers, including myself. After my speech, titled "Past, Present and Future of Japan's Environmental Issues and Trends in Environmental Education," a panel discussion featuring Thongdee Yaemsuan (teacher in sciences and physic courses at Kanarad Bumrung Pathumthani School and advisor to the project of reducing climate change by Sufficiency Economy of TEI), Athapol Anuthavorasakul (associate professor of Chulalongkorn University and deputy director of R&D Center on Education for Sustainable Development), and myself was held. Thongdee noted that while environmental education is not included in the official curriculum set by the national government, schools can take the liberty of introducing it within their own programs by implementing it as part of their multidisciplinary classes, combining several existing subjects, or establishing a special program. He also stressed that it is important to develop students' thinking skills through empathy-provoking approaches rather than by teaching facts and figures. This is intended to produce empathetic children who can communicate with, and influence, their communities. In other words, it is important to develop in children skills related to planning, implementation, and relationship building.

In Session Two, former participants of JENESYS East Asia Future Leaders Programme (Photo 3) made presentations on their findings and observations during their visit to Japan. Among them, a female writer who visited Japan in 2008 as a JENESYS participant introduced Japan's green efforts in an easy-to-understand manner. She made a PowerPoint presentation showing specific examples of waste bins at Narita International Airport, a JR railway station, and a roadside rest and food area; exhibits at Miyako Ecology Center (on the change in waste quantity and quality over time); field-based programs by

the Learning and Ecological Activities Foundation for Children (LEAF); a green rooftop at Arakawa Elementary School, and other initiatives. She then proposed the development of awareness-raising documents to encourage better practices. Her expressive presentation mesmerized the audience of high school students (Photo 4). In another presentation, a woman from Green World Foundation told of how her organization conducts 60 to 90 projects on an ongoing basis, sharing how they are practiced and evolved in an upward spiral model (experience → think → learn → think → …). She also mentioned that some of the projects are inspired by and/or incorporate input from children.

Thongdee made well-considered comments on all these presentations, comparing situations in Japan and Thailand. Some of the students then asked questions about waste separation activities in Japan.

In Session Three, presentations were given by three groups of high school students. The first group made a presentation on efforts by four high schools to reduce waste and promote volunteerism; the second group's presentation was on a animal survey project (on the monitor lizard); and the third group's was on "The ZERO to hero" environmental volunteer project, in which three schools got together to determine and establish waste separation rules, which they have since been practicing. I found all the presentations to be expressive and the projects they described were conducted in line with the basic rules of project management. For instance, one project started by setting a goal for waste reduction goal and another started with a basic survey before further engaging in exploration. Photo 5 shows all the participants in the seminar.

With support from various organizations, Thailand has been making steady progress in education for sustainable development, environmental management, and environmental policies and programs. The "Sufficient Economy" concept advocated by the King of Thailand, which seeks a balance between production and consumption has contributed to this progress. Bangkok seems to be particularly active in these efforts, given the great number of individuals and organizations participating in an intraregional workshop held in November 2009, "ASEAN + 3 policy dialogue on ESD."

I also visited The Japan Foundation's Bangkok office, although the visit was not on my itinerary. With over 20,000 books and more than 2,000 audiovisual materials in Japanese, English, and Thai, the library is accessed by approximately 6,700 visitors a month. I was particularly impressed by the wide selection of Japanese animation, which must be the result of a great deal of effort by director Katsumi Kakazu, deputy director Hiroshi Uchida, and the 20 staff members working at the Bangkok office.

Finally, I would like to express my gratitude to Katsumi Kakazu and Hiroshi Uchida of The Japan Foundation, Bangkok for their support and assistance during my stay.

Photo 1: Roong Aroon School (Source: the School's website)

Photo 2: Waste separation workshop

Photo 3: With JENESYS alumni

Photo 4: Japan's presentation at Session Two

Photo 5: Group photo of all seminar participants

Materials

List of Participants

	Country	Name	Position & Affiliation	URL	Specialty
1	Australia	Michelle Ann Gane	Project Manager, Institute for Sustainable Resources at Queensland University of Technology	http://www.qut.edu.au/	Natural Resource & Environmental Management for Sustainable Development
2	Australia	Alexandra Hilvert	Teacher, Spensley St Primary School	http://www.ssps.vic.edu.au/index.html	Education
3	Brunei	Haji Ryni Sofian Bin Haji Othman	Forestry Officer, Forestry Department, Ministry of Industry and Primary Resources	http://www.bruneimipr.gov.bn/public/portal/?id_menu=1	Park and Recreation
4	Brunei	Muhammad Zul-Akmal Bin Haji Zainuddin	Education Officer, Ministry of Education	http://www.moe.edu.bn/web/moe/home	Geography
5	Cambodia	Panchakneat Oeurn	Assistant to the General Director of Technical Affairs, Ministry of Environment	http://www.camnet.com.kh/moe/index.htm	Economic Development
6	Cambodia	Sreyroth Heal	Technical Officer & Project Assistant, Ministry of Environment	http://www.camnet.com.kh/moe/index.htm	General Management, Business Administration
7	China	Song Xi	Nature Education Project Officer, Friends of Nature	http://www.fon.org.cn/channal.php?cid=774	Environmental Education/ Nature Experience
8	India	Jasmine Kaur	Senior Lecturer, Lovely Professional University	http://www.lpu.in/index.php	Environmental Plannning
9	Indonesia	Elisa Sutanudjaja	Teaching Staff, University of Pelita Harapan	http://www.uph.edu/	Architecture, Sustainable Design
10	Indonesia	Reza Fahlevi	Technical Staff, Environmental Impact Assessment Division, Ministry of Environment		Petroleum Engineering
11	Korea	Kim Myoung Shin	Assistant Programme Specialist / ASP net National Coordinator, Korean National Commission for UNESCO	http://www.unesco.or.kr	International Commerece / Education for Sustainable Development
12	Malaysia	Chuah Chiew Yen	Environmental Educator, Water Watch Penan	http://www.waterwatchpenang.org/	Environmental Education
13	Malaysia	Intan Sazrina Binti Saimy	Lecturer, Universiti Industri Selangor (UNISEL)	http://www.unisel.edu.my/	Underground water, Education, Health Promotion, Biostatistics
14	Myanmar	Ye Khaung	Project Manager, Friends of Rainforests in Myanmar (FORM)	http://formuk.org/uk/index.php?option=com_frontpage&Itemid=1	Forestry and Environment, Plantation
15	New Zealand	Lee Ja Yeun Alexandra	PhD Student, University of Auckland	http://www.auckland.ac.nz/uoa/	Architecture

	Country	Name	Position & Affiliation	URL	Specialty
16	Philippines	Lisa Ito Tapang	Program Coordinator, Research, Education and Advocacy (REA) Unit Center for Environmental Concerns (CEC) Philippines	http://www.cecphils.org	Environmental Education
17	Philippines	Ratunil Casiano Oliver Patrick Talaroc Paderanga	Instructor, Camiguin Polytechnic State College Graduate Student, Silliman University	http://www.su.edu.ph/	Marine Biology, Coastal resource management
18	Singapore	Chen Dexiang	Volunteer Member, Singapore Environment Council (SEC) Student, National University of Singapore	http://www.sec.org.sg/ http://www.nus.edu.sg/	Marine Biology, Coral Reefs
19	Singapore	Kumaran Kephren Ayanari	Volunteer Member, Singapore Environment Council (SEC) Student, Tamasek Polytechnic	http://www.sec.org.sg/ http://www.tp.edu.sg/main/default.htm	Mobile & Wireless Computing, IT
20	Thailand	Watcharaporn Kaewdee	Lecturer, Faculty of Education Chulalongkorn University	http://www.edu.chula.ac.th/edueng/aboutus.htm	Science Education, Environmental Science
21	Thailand	Nantawan Lourith	Dissemination Technical Officer, Department of Environmental Quality Promotion, Ministry of Natural Resource and Environment	http://warehouse.mnre.go.th/dnn/Home/tabid/36/Default.aspx	Environmental Education (Formal, Community and Contemplative Education)
22	Vietnam	Do Van Nguyet	Director, Live and Learn for Environment and Community	http://www.livelearn.org/default.asp	ESD, Community Empowerment
23	Vietnam	Nguyen Hue Phuong	Project Officer, Action Center for City Development	http://www.vidothi.org/	Economics, Environmental Management
24	Vietnam	Nguyen Van Luan	Environmental Education Manager, Center of People and Nature Reconciliation (Pan Nature)	http://www.nature.org.vn	Environment Education

Itinerary

DATE	ACTIVITIES		
April 11, Sun.	Arrival		
April 12, Mon.	09:00	Program Orientation	Tokyo
	10:30	Participants' Presentations & Small Discussions	
	17:30	Lecture on ESD by Prof. Yoshiyuki Nagata	
	19:00	Welcome Dinner	
April 13, Tue.	09:00	Participants' Presentation & Small Discussions Wrap-up of Presentation Sessions	Tokyo → Minamata
	12:15	Leave Tokyo for Minamata	
April 14, Wed.	09:30	Lecture by Former Mayor of Minamata city, Mr. Masazumi Yoshii	Minamata
	11:00	Minamata Disease Municipal Museum	
	13:15	Minamata city Tour; Coast area, Landfill park, Drainage outlet, Chisso Chemical Plant (from bus) by Ms. Yukiko Takashima of Soshisha	
	15:30	Gaia Minamata	
April 15, Thu.	09:10	Jimotogaku Lecture and Orientation for the Fieldwork by Mr. Tetsuro Yoshimoto at Village Lifestyle Museum in Ohkawa Region	Minamata
	10:10	Fieldwork in groups	
	13:40	Group discussion & Presentation	
	17:00	Waste Sorting activity in Susubaru region	
	18:00	Dinner Party with Mr. Yoshimoto	
April 16, Fri.	09:30	Landfill Site, Waste Recycle Center	Minamata → Sasebo
	10:00	Voice of a storyteller, Ms. Ohya	
	12:30	Minamata Wrap-up Workshop by Prof. Yoshiyuki Nagata	
	14:00	Leave Minamata for Sasebo	
April 17, Sat.	09:20	Leave Sasebo for Nozaki Island	Sasebo → Nozaki Island
	13:30	Tour of Nozaki Island; ruins of the once existed community, the old church	
April 18, Sun.	09:00	Leave Nozaki Island for Ojika Island	Nozaki Island → Ojika Island
	09:30	Eco & Study Tour of Ojika town	
	12:00	Lecture on Eco Tour System of Ojika by Mr. Junji Kametsu of Ojika Island Tourism	
	14:00	Homestay Experience	
April 19, Mon.	10:50	Leave Ojika Island for Nagasaki	Ojika Island → Kyoto
	14:30	Nagasaki Atomic Bomb Museum	
	16:00	Leave Nagasaki for Kyoto	
April 20, Tue.	09:15	Cultural experience: Zen meditation	Kyoto → Tokyo
	10:45	Cultural experience: Kiyomizu Temple	
	14:00	Miyako Ecology Center	
	16:00	Leave Kyoto for Tokyo	
April 21, Wed.	10:00	National Museum of Emerging Science and Innovation (Miraikan)	Tokyo
	16:00	Courtesy call to the Ministry of Foreign Affairs	
April 22, Thu.	AM	Individual Site Visit	Tokyo
	13:30	Final workshop	
	18:30	Farewell reception	
April 23, Fri.	Departure		

Map of Japan

http://technocco.jp/

Contacts

Institutions	Address	URL link
The Japan Foundation	4-4-1 Yotsuya, Shinjuku-ku, Tokyo 160-0004	http://www.jpf.go.jp/e/index.html (in English)
Ministry of Foreign Affairs	2-2-1 Kasumigaseki, Chiyoda-ku, Tokyo 100-0013	http://www.mofa.go.jp/index.html (in English)
Soshisha, Supporting Center for Minamata Disease	34 Fukuro, Minamata, Kumamoto 867-0034	http://www.soshisha.org/english/index_e.htm (in English)
Minamata Disease Municipal Museum	53 Myojincho, Minamata, Kumamoto 867-0055	http://www.minamata195651.jp/ (in Japanese only)
Gaia Minamata	1-39 Fukuro, Minamata, Kumamoto 867-0034	http://gaia.iinaa.net/index.html (in Japanese only)
Ojika Island Tourism	2791-13 Ojika-cho, Kitamatsuura-gun, Nagasaki 857-4701	http://www.islandtourism.jp/ (in Japanese only)
Nagasaki Atomic Bomb Museum	7-8 Hirano-machi, Nagasaki 852-8117	http://www1.city.nagasaki.nagasaki.jp/peace/index_e.html (in English)
Nanzenji Zen Center (Zen meditation)	59 Nanzenji Kitanobocho, Sakyo-ku, Kyoto 606-8446	http://zencenter.jp/main.html (in Japanese only)
Miyako Ecology Centre	13 Fukakusa ikenouchi cho, Fushimi-ku, Kyoto-shi, Kyoto 612-0031	http://www.miyako-eco.jp/ (in Japanese only)
Miraikan (National Museum of Emerging Science and Innovation)	2-41 Aomi, Koto-ku, Tokyo 135-0064	http://www.miraikan.jst.go.jp/en/ (in English)

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