# **Environmental Education Project**

Osamu Abe Project Leader

# 1. Overview

#### 1.1. Background, objectives, and approach

#### 1.1.1. Background

Burning problems such as inappropriate development, poverty, bulging populations, unsustainable production and consumption patterns, human rights, and gender discrimination have been recognised as being linked to environmental deterioration. The gravity of the deterioration cannot be lessened without effective use of environmental education. This was first recognised at the 1992 United Nations Conference on Environment and Development (UNCED) and then reinforced at the 2002 World Summit on Sustainable Development (WSSD) in Johannesburg. Environmental education has been identified as the key factor for reversing this deterioration. The recently developed concept of education, i.e., education for sustainable development (ESD), maintains that environmental education (EE) is, in fact, the predecessor of ESD. And only by broadening the scope of environmental education, can we realise the goal of a "sustainable society." In the true sense, it can be said that the problem concerned with unsustainable environmental management cannot be tackled at all without promoting environmental education.

The issue of environmental degradation is complex and transboundary in nature and requires holistic education that deals with the environment, the economy, and social equity.

EE is the process of transferring wisdom, knowledge, and best practices to a learner so that the learner is able to modify his/her overall behavior towards the realisation of a sustainable society. The exact method of delivery depends on the needs and abilities of the learner, the learning environment, inputs, teaching/learning methods, and so forth.

The EE Project reviewed the situation of environmental education in the Asia-Pacific region in its first phase of research. The findings suggest that it is saddled with a multitude of problems, such as lack of national policy, nationally controlled curricula, lack of trained manpower, inadequate data, information, and so forth. Nevertheless, many countries have initiated innovative educational activities. Some have been quite successful, while others are mediocre. Still others are not even up to the mark. Indeed, successful activities are not making any significant impact because they are confined to isolated places and go largely unrecorded. Analysis also suggests that many countries share some common points, which includes the concerns to develop the process of transition to a sustainable future, producing qualified manpower, developing appropriate educational materials, and so forth. The common points can be promoted at the regional level, if they are brought together under the common framework of regional cooperation, which needs to be developed urgently, or the scope of the existing mechanism of cooperation should be broadened specifically to include environmental education, so that the process of putting these commonalities on the agenda can be accelerated for improving the quality of the environment. Environmental problems are often intricate, and the efforts of a single country alone are not sufficient. This can never be solved; in order for change to occur, there needs to be support and mutual cooperation at all levels, from all quarters, and at all times.

With a view to putting the process of regional cooperation on track, the EE Project formulated a comprehensive strategy for promoting environmental education in the region. This was carried out in close partnership with collaborators and partners. While the strategy is increasingly important in improving the overall status of environmental education, the strategy alone is nothing if it is not implemented simultaneously by all those concerned. Our experiences also indicate that actions should be facilitated to put both findings and strategies into practice in order to make a real difference on the ground.

Activities in the first phase were ambitious but preliminary in nature from a global perspective. They lacked practical application and action to meet the challenges, and there was a large gap between perceptions and reality. Also, the United Nation agencies, international non-governmental organisations (NGOs), and other partners have been urging IGES to play a major role in accelerating the process of environmental education and lead initiatives in the region, as there has been no one organisation dealing comprehensively with the problem of environmental education in the region.

Under these considerations, the mission of the EE Project was redefined as follows: "*To provide leadership in promoting and fostering citizens to work towards achieving a sustainable future.*" This theme was later developed further to identify the appropriate mode of disseminating environmental information, knowledge, wisdom, and best practices in the Asia-Pacific region. In other words, its purpose was to promote environmental education through action research, i.e., identifying the problem, then finding solutions and applying them through participatory techniques.

It is hoped and believed that practical actions by the EE Project will encourage its partners and stakeholders to formulate policy proposals on environmental education and help build up the framework of IGES as the hub of environmental education for the region.

## 1.1.2. Objectives

In view of the theme identified above, the EE Project set forth the following objectives (tasks):

- 1. Develop appropriate educational materials to promote sustainable management of the environment.
- 2. Organise training programmes for developing the capacity of human resources to deal with environmental issues in the region.
- 3. Develop an innovative model of education for community-based eco-tourism.

#### 1.1.3. Approach

The methodological approach was primarily based on the philosophy of action research, with an emphasis on adapting the plans and schemes that were based on field application and input received from real users. An interdisciplinary framework, such as the combination of development economics, policy studies, or other subjects, was employed in each activity so that it did not become biased and skewed.

Different tools of participatory rural appraisal (PRA) were employed in collecting and analysing information, formulating specific programmes, pilot-testing them, and molding them for adaptation to different situations. In other words, the EE Project employed the cycle of "identifying the issue" to "planning" to "implementing" to "revising" in an active, participatory manner. Specific tools of PRA that were used in these activities ranged from documentation of pioneering examples to literature review, from field studies to interactive meetings and training, from commissioned reports to roundtable dialogues, and from strategic exercises to problem-solving methods. More than one tool was used for each task, depending on its nature and importance, and sometimes a cluster of techniques was used to address a particular problem.

The EE Project also collaborated with the Japan International Cooperation Agency (JICA) to continue its learnercentered and activities-based training programme for NGO staff from Indonesia. The sequence of methods included the following:

- 1. existing information was reviewed and consolidated to scope out the ranking of priorities;
- 2. problems were assessed and appraised through discussion and dialogue with stakeholders—sort of a "rapid reconnaissance" technique;
- 3. different forms of strategic exercises were employed to formulate the programme to deal with the issue;
- 4. each programme underwent the process of pilot-application, particularly in collaboration with our stakeholders in the region, to determine its usefulness, applicability, relevancy, and points that are adaptable to different situations; and
- 5. the inputs hence received were incorporated to regenerate the new programme for wider application and dissemination.

# 1.2. Review of achievements

#### 1.2.1. Developing materials for raising environmental awareness

Educational materials developed under this task are summarised below.

- *Environmental Education in the Asia-Pacific Region: Status, Issues and Practices* This book is the compilation of 36 status reports (34 countries and two special areas) from the Asia-Pacific region. It provides a bird's-eye view of the overall status, constraints, and opportunities of environmental education, and looks at how education is moving towards education for sustainability. It also makes recommendations to promote regional cooperation, capacity building, and mobilisation of resources.
- *Regional Strategy on Educational Education in the Asia-Pacific* This document was prepared in collaboration with educators, facilitators, and parishioners from the Asia-Pacific region. It identifies five action agendas with suggested activities at the regional, sub-regional, and national levels: strengthening stakeholders and their capacity, developing partnerships, reviewing curricula, improving governance, and mobilising resources.
- *The Path to Success: Some Pioneering Examples of Environmental Education* This book identifies good examples of environmental education from 18 countries and shows how they are exemplary. The examples are called "pioneering examples" to mean innovations in the field of environmental education. These are not necessarily the best in their field, but they are certainly worthy of merit. The book presents 69 such cases, including some failed education programmes, from 15 countries of the Asia-Pacific, two countries from Africa, and one from Central America.
- *Making Sense of Climate Change* This booklet aims at raising the awareness of secondary school students about climate change and its impacts on different ecosystems, and attempts to enhance their understanding of global efforts and responses. Because the language of the book is simple and easy to understand, high school students were the primary targets for this booklet; however, the general public can also benefit from it.
- *Package of community-based educational materials* The EE Project prepared a package of educational materials for the conservation and wise use of wetlands, which was developed on the assumption that environmental problems are collectively the responsibility of the community and that their solution requires collective understanding. The package consists of four modules, each designed for a different target group in the community. The modules are written in the framework of the LEAP

method, which represents the first letter of each sequence of the "learn, experience and evaluate, adapt, and promote" approach. In other words, the learner should (L) learn about the issue thoroughly, (E) experience and evaluate the knowledge, (A) adapt the knowledge to their community, and (P) promote the knowledge. The modules were pilot-tested in Bangladesh, Nepal, and India. Following an intensive discussion in a regional workshop, they were revised, and the following were published in booklet form: Let us Keep our Wetland Healthy (for high school teachers), What is Happening to Our Freshwater Resources (for high school students), Developing Objective-oriented Programs (for NGOs and community organisations), and Participatory Rural Appraisal (for teachers, NGO representatives, researchers, and practitioners). The topic on the wise use of wetlands was chosen because wetland degradation is a serious concern that requires the collective efforts of the whole community to address. This means that no one single educational material would be sufficient to raise the awareness of the diverse groups in a community, because their concerns, interests, and knowledge about the issue vary greatly. This necessitated the preparation of this package for the entire community. It was discussed in the workshop, "Communication, Education, Public Awareness (CEPA)," at the 17th Global Biodiversity Forum, held in Valencia (Spain) in November 2002, where the material was acclaimed for being simple, timely, and systematically organised. The entire package was also discussed in an international workshop of wetland educators, planners, and managers in Thailand in January 2003. Then it was pre-tested in Bangladesh, Nepal, and India, and has now already been translated and adapted in India and Thailand.

- *Doing Education at Wetland Sites* This book is the product of a regional workshop on the evaluation of educational materials held in 2003. It consists of 14 good examples of wetland education, and describes how they became successful in the conservation and wise use of wetland resources. It also contains a first-draft version of the modules of the community-based educational materials.
- *Education of Sustainable Development: Views and Vision* This was produced as the report of a workshop on ESD in Nepal. It is the first of its kind on ESD in the Asia-Pacific, in general, and in Nepal, in particular. It consists of 22 papers written by renowned Nepali scholars and experts on the subject. It was also included in the United Nations Department of Economic and Social Development (UNDESD) Framework for a Draft International Implementation Scheme for enhancing general understanding about ESD and illustrating how the collaborative process has been moving ahead under the leadership of UNESCO.
- Globalism and Education of Sustainable Development: Some Viewpoints This book contains a compilation of papers presented at the first pioneering symposium on globalism and education for sustainable development, organised by the EE Project in collaboration with Rikkyo University in mid-2003. Some 20 participants attended the symposium and presented papers on ESD, including topics such as environmental education, development education, citizenship education, and so forth.
- Education of Sustainable Development: Putting Research Knowledge into Action IGES was one of the co-organisers of one session, "ESD for Implication for Wetland Conservation," chaired by the project leader of the EE Project (the author), at the Symposium on Mangroves in Brunei. Some 13 papers were presented in the session, and all of them are included in this book, which was published by the Ramsar Center Japan together with IGES. It deals with how ESD has been applied in the conservation and wise use of mangroves in Southeast Asia. This publication is a good example of productive collaboration between organisations.
- *Mangroves in Southeast Asia: Status, Issues and Challenges* This book is also an outgrowth of the above-mentioned symposium held in Brunei. It contains many papers on mangrove conservation from the sub-region. Like the previous one, this book was also published by the Ramsar Center Japan together with IGES.

## 1.2.2. Organisation of a training programme for NGO capacity building

The EE Project continued to run its training programme, "Environmental Education Training," for NGO staff from Indonesia, which was first organised in 1999 in collaboration with the Japan International Cooperation Agency (JICA). Since then, the EE Project has continued running it annually. In the second phase, the EE Project organised two training programmes, in 2001 and 2002, respectively, in collaboration with JICA, with the objectives of (1) deepening the understanding and knowledge of the environment and environmental education, (2) improving the management capabilities of NGOs, (3) building a network of relevant NGOs in Japan and Indonesia, and (4) obtaining information and know-how about practical activities on environmental education by visiting actual sites in Japan and conducting interactions with related organisations. By employing various methods of teaching, such as lectures, hands-on activities, observations, and discussions, the programme provided an opportunity for participants to understand the need for improved international cooperation between Japan and Indonesia in the field of environmental education.

#### 1.2.3. Developing innovative educational materials for eco-tourism

The EE Project also conducted research on eco-tourism education that took into account socio-economic conditions, including local income generation, community participation, and equity. Data and information from various sites were collected. Among the note-worthy activities was the case study of Tonle Sap Lake in Cambodia, where an in-depth socio-economic study was conducted using participant-observation and PRA techniques. In order to obtain pragmatic information, a trial eco-tour (with eight participants) was organised in the area, in cooperation with Cambodia's Ministry of the Environment, travel agencies, and local communities. The tour was useful for raising the concern of the local communities about the importance of eco-tourism as a way towards achieving sustainable development in the region. It also enhanced a closer relationship among the various stakeholders.

#### 1.2.4. Other activities

- 1. The EE Project continued its research in support of the activities of the Tripartite Environmental Education Network (TEEN), made up of China, Japan, and Korea, in collaboration with the Japan Environmental Education Forum (JEEF).
- 2. A mini-study was conducted on how monks have been greening their curriculum for monk education and promoting the cause of the importance of nature in Buddhism. A small report is under preparation.
- 3. The network of environmental education has been expanding and has served as the most important platform for sharing new experiences and improving knowledge and best practices on environmental education in the region.

## 1.3. Degree of attainment of the objectives

While dealing with attainment of the objectives as stipulated in the research plan, two things need to be taken into consideration. One is the quantitative aspect and the other is the qualitative aspect. From the quantitative viewpoint, it can be said that the EE Project has, despite its resource constraints, been successful in achieving its major objectives. Qualitatively, however, it is difficult to pinpoint its achievements, but based on discussions with our collaborators, it can be said with a fair degree of confidence that the EE Project has been successful in influencing policy-makers in the region. The reports produced provide hands-on information to policy-makers; however, an in-depth analysis of critical issues is still required in order to convince them about the gravity of the issues in question. The EE Project also produced an impressive record of hosting workshops and meetings with an impressive participation of collaborators. These were useful in sharing experiences and expertise among collaborators, securing their participation, and making them feel that something was actually happening in the region. The EE Project has shown its effectiveness in reaching out to a large audience in the region in a cost-effective manner using methods such as networking, partnerships, workshops, case studies, and collaborative works.

# 2. Self-evaluation

# 2.1. Evaluation of achievements

## 2.1.1 Influence on policy-making processes

As described earlier, the EE Project is striving to have a positive influence on policy-making processes in the field of environmental education. The project leader, who is a member of the Steering Committee of ESD-Japan (Japan Council on the UNDESD for Sustainable Development), has already taken active and productive steps towards the formulation of a draft framework for an international implementation scheme for the Decade of Education for Sustainable Development (DESD) prepared by UNESCO. Another step taken is that its team members have become associated with The World Conservation Union (IUCN)/Commission for Environmental Cooperation (CEC) in the formulation of a regional strategy on the DESD for Asia. The EE Project has already promoted the idea among the policy-makers of Brunei Darussalam and Nepal through its workshop and symposium. Another sign of the EE Project's influence can be seen in the implementation of the regional strategy that it prepared by different countries and its endorsement by international organisations. And one of our researchers has been nominated to the Ramsar's CEPA (Communication, Education and Public Awareness) Specialist Group to integrate the concerns of CEPA into ESD. The EE Project also contributed to the activities of TEEN and JEEF.

#### 2.1.2. Timeliness in terms of stakeholders' needs

The regional strategy prepared by the EE Project was timely, because no plan of action on environmental education for the region existed before its formulation. There were many sub-regional plans, but not one for the whole region. This was a creative and unique thing in the field of environmental education. Similarly, the EE Project's organisation of the ESD workshop in three different places was not only timely in raising the profile of ESD in the region, but it was also the first of its kind. The preparation of the community-based educational package is new and unique in the sense that it takes the holistic approach in raising the environmental awareness of an entire community. The framework, within which different modules have been presented, received acclaim from environmental facilitators, practitioners, and educators. Another example of timeliness can be witnessed in Indonesia, where a young, energetic participant, trained by IGES, has established an environmental education centre, called Kampung PENDING, to cater to the educational needs of the entire community, as well as to provide them with opportunities for self-employment. The establishment of a network of environmental NGOs in Indonesia, called Jaringan Pendidikan Lingkungan (JPL), is another example of successful promotion of environmental education activities in the region.

#### 2.1.3. Uniqueness, originality, and effectiveness

The uniqueness of the EE Project includes the preparation of a status report compiled from 15 separate status reports from the region. This is a single book that summarises the activities of many countries in environmental education, including 69 pioneering examples. The community-based educational package is original in the sense that it attempts to meet the needs of the entire community in raising awareness and that the contents are organised in a systematic manner. All these reveal the originality of the idea and of the project's activities in environmental education. The existing network is equally effective in sharing the improved knowledge, genius, and best practices across the region. The initiatives of organising seminars on ESD have been the most creative, appreciated, and effective means to raise the profile of ESD.

The EE Project's eco-tourism research also contains elements of uniqueness and originality. Conservation was considered to be an instrument or force for realising sustainable development. In order to enhance public awareness of resource conservation and to promote the income generation capacity of local communities, the

case studies and eco-tourism pilot trial, in collaboration with local communities and NGOs, were found to be effective and pragmatic in some selected countries.

The educational materials that the EE Project produced received a good ranking from experts and specialists, and IGES conducted a trial on developing educational materials before their final dissemination. Both experts and specialists were involved in enhancing environmental awareness in the region. Efforts were made to reach out to those specialists and experts to ensure their active cooperation and assistance. It was in this sense that the EE Project is considered to be most unique and creative in its endeavors.

In the first phase, the EE Project did not initiate the application of its findings and recommendations on the ground. To address this, in the second phase more attention was paid to both research and its application. Owing to this new emphasis, the researchers are satisfied with what they accomplished in the second phase, because they were involved in implementing its strategies on the ground and receiving input. Furthermore, the EE Project has worked on translating our research outputs into concrete actions. For example, it produced and disseminated simple, effective, and community-oriented educational materials in the Asia-Pacific region. Similarly, it prepared an eco-tourism education model for the region by involving local communities. All these activities were related to and built upon the research findings of fiscal years 2001 and 2002.

## 2.2. Evaluation of project management

In terms of project management, basically, the project leader assumed overall responsibility. Taking account of the fact, however, that the post of project leader was a part-time position, a project manager was appointed from amongst the full-time researchers to assist the project leader and handle the daily management and administration of research activities. The project manager coordinated and managed daily activities and attempted to maintain a harmonious environment within the project, among researchers, and between the project and the IGES Secretariat.

The EE Project, despite its budgetary constraints and limited manpower, was successful in undertaking a relatively large amount of work, along with its regular evaluation and monitoring activities.

# 3. Conclusion

Unlike the activities in the first phase, the second phase activities were concentrated on disseminating environmental knowledge, wisdom, and best practices in the region. Because of the nature of this focus, the EE Project adopted the philosophy of action research, and thus made its activities more specific and practical. These were further enhanced by the United Nations declaration that the ten-year period (2005–2014) will be the Decade on Education for Sustainable Development. The EE Project was successful in organising some brainstorming sessions on ESD and in championing its cause around the region. Indeed, IGES has emerged as the pioneer institute in the advocacy of ESD. Three reports on ESD are testimony of its efforts to raise the profile of ESD. This is the niche that should be taken into consideration by IGES to promote environmental education in the future.

Despite its success, the EE Project has come to end its activities at the end of its second phase. Earnest efforts to merge it with the existing Capacity Building Programme into a new proposed Capacity Building for Sustainability (CBS) Project could not be materialised. The idea was inadvertently aborted in the middle of the process, followed by the decision to close the EE Project for good. This is a most unfortunate event for the research. Nevertheless, the idea and spirit of environmental education has not been eliminated completely, as each IGES project is carrying on its activities in different forms and shapes. This features the indispensability of environmental education in the dissemination of strategic research findings in the future. With this short note we would like to announce the successful termination of the EE Project.