

Environmental Education Project

Osamu ABE
Project Leader

1. Project name

Environmental Education Project

2. Project period

April 1, 2001 to March 31, 2004

3. Expenditure in FY2001

51,244,996 JPY (external funds: 2,813,802 JPY)

4. Budget in FY2002

61,639,000 JPY (external funds: 2,170,173 JPY)

5. Objectives

Environmental education is the process of transferring wisdom, knowledge and information to a learner so that the learner is able to modify his/her overall behaviour towards the realisation of a sustainable society. The exact approach of education depends on the type of learners, their ability, the learning environment and so forth. However, the research works carried out in the first phase (1998-2002) under the rubric of the Environmental Education Project (hereinafter called the Project) indicates that varieties of pioneering activities are in place in the Asia-Pacific region mainly to improve the environmental quality. The results also show that the region is saddled with a diverse range of educational problems including rigid curriculum, lack of trained manpower, lack of national policy, inadequate data and information and so forth. Nevertheless, many countries have initiated innovative educational programmes; some are successful; some are mediocre and some have just failed. In deed, they are not making any significant impact on the society because they are small in scale, scattered and occurring in isolation. These efforts alone are not enough to foster the cause of environmental education in the region. These countries also share a set of common approaches to deal with the problems of the environment. Some of the common points are their concerns to develop the process of transition to a sustainable future, producing qualified manpower, developing educational materials and so forth. The common points can be promoted at the regional level, if they are brought together under the scheme of a regional collaboration and cooperation. It is, therefore, necessary to develop the mechanism of international cooperation that promotes and fosters the forces, expeditious in the implementation of environmental education at the grassroots.

In the first phase the Project reviewed the current issues, trends, problems and constraints of environmental education in the Asia-Pacific region. In partnership with regional organisations, and partners, the Project formulated a comprehensive strategy of environmental education for the region. While the importance of these studies is becoming increasingly clear in improving the overall status of environmental education in the region, the formulation of the strategy alone is not enough in the absence of, and/or without any consideration of its implementation on the ground. In other words, its implementation is indispensable in changing people's knowledge, attitude and behaviour towards a sustainable future. Our experiences with the partners also indicate that the Project must put its findings and strategy into practice so that environmental awareness can be fostered in the region. That is the reason why the Project has given emphasis on the implementation of the strategy on the ground.

Taking the above-mentioned contexts into consideration, the Project redefined its goal in the second phase. Accordingly, the revised goal is to provide leadership in promoting and fostering citizen to work towards achieving a sustainable future. With a view to realise this mission, the Project has set its objective

as follows; to develop a realistic mode of disseminating environmental knowledge, wisdom and information at the grassroots. In order to reach this end point, the following tasks have been identified.

- (1) To develop appropriate educational materials for the sustainable management of the environment.
- (2) To undertake a training programme for developing the capacity of human resources to deal with the environmental issues in the region
- (3) To develop an innovative model of education for community-based eco-tourism

Ultimately, it is intended that the Project will enable its partners and stakeholders to formulate policy proposals on environmental education and build up the framework of IGES as a hub of environmental education for the region

6. Members and collaborators

[Core Staff members]

- Osamu Abe: Project Leader/Rikkyo University
- Bishnu Bhandari: Senior Research Fellow
- Masahiro Takahashi: Research Associate
- Akihiro Nakahata: Research Associate
- Tomoe Karasawa: Research Secretary

[Collaborators]

- Ranjana Saikia: Visiting Researcher/TERI, India
- Adiyasuren.Ts. Borjigdkhan: IGES Trustee member, Mongolia
- Khieu Muth: IGES Trustee member, Cambodia
- Koji Tagi: Wetland Specialist, Japan
- Mika Omura: Travel Agency, Japan

Other collaborators were included from South Asia (Bangladesh, Nepal and India), Southeast Asia (Cambodia, Indonesia and the Philippines), Northeast Asia (China, Japan, Korea and Mongolia), the South Pacific (Kiribati and Vanuatu), Africa (Botswana and Kenya) and Central America (Costa Rica).

7. Major activities and achievements

Major activities undertaken to achieve the stipulated tasks of the Project are briefly listed below, along with the major outputs and achievements.

7.1 To develop appropriate educational materials for the sustainable management of the environment

Preliminary research works conducted in partnership with our collaborators and national partners resulted in the formulation of a regional strategy on environmental education. The strategy was published and distributed in the first phase. The continuation of our research work led to the publication of the book entitled *Environmental Education in the Asia-Pacific Region: Status, Issues and Practices*. The book is a compilation of status reports from 34 countries and two special areas of the region. It provides a bird's-eye view of the patterns of environmental education in the region and looks at how environmental education is moving towards education for sustainability. It also makes recommendations to promote regional cooperation, capacity building and mobilisation of resources in environmental education. The book has already been disseminated in the region.

Then the Project collaborated with partners to document some pioneering examples of education, the compilation of which gave rise to the book entitled *The Path to Success: Some Pioneering Examples of Environmental Education*. The synopsis of the book is as follows. It documents exemplary cases of environmental education in the region. These exemplary works have been called pioneering examples, to mean innovations in the field of environmental education. These examples are not necessarily the best in their field, but are certainly worthy of merit because many lessons can be learnt from them. The book

presents 69 cases of good examples of environmental education, accompanied with some failed programmes, from 15 countries of the Asia-Pacific including two countries from Africa and one from Central America.

With a view to facilitate the collaborators in the implementation of action agenda (as stipulated in the regional strategy), particularly the recommendation one entitled enhance the capacity of stakeholders, the Project developed two kinds of educational materials for raising awareness of secondary students and an entire community. These materials are; (1) a booklet on making sense of climate change and (2) a package of community-based educational material. Their short descriptions are given below.

(1) Booklet on making sense of climate change

This booklet aims at raising awareness of secondary school students about climate change and its impact on different ecosystems. It attempts to enhance their understanding towards global efforts and responses. It is written in simple and easy-to-understand language. Furthermore, the general public also can benefit from the use of the booklet. The booklet is being pilot-tested in India.

(2) Package of community-based educational material

The package is targeted primarily at the different groups in a community. It is based on two assumptions: (1) environmental problems are a common concern, the solution of which requires the active and responsible involvement of the entire community; (2) collective community action is possible only when these groups develop a common point of understanding, especially learning about the issue, its application on the ground and the participants' responsibility for dissemination. These assumptions lead us to conclude that materials should be organised in a sequence of "learn, experience/evaluate, adapt, and promote" steps so that the participant would be able to adapt the ideas and disseminate to others. The participant should undergo four steps; learn about the issue thoroughly, experience and evaluate the knowledge, adapt the knowledge for their community, and promote (pass on) the knowledge to others. The first letters of each step is taken together to name it as the LEAP method. The materials have been organised in each module according to this sequence.

The package consists of four modules, which are; (1) Let us keep our wetlands healthy, (2) What is happening to our freshwater resources?, (3) Developing an objective-oriented programme and (4) Participatory rural appraisal (PRA). Each module is directed to different groups of people in a community on the issue of wetland conservation. The first four modules have already been discussed in a seminar called "Workshop on the Evaluation of Educational Materials" held in Bangkok, Thailand in January 2003. The package is now under review and is intended to undergo pilot testing before it is disseminated in the region.

7.2 Undertake a training programme to develop the capacity of human resources to deal with the environmental issues in the region

The Project has been running environmental training programmes entitled "Environmental Education Training for NGO Staff in Indonesia" annually since 1999. The training was given to the participants representing different NGOs from Indonesia. The programmes were organised in Japan in collaboration with the Japan International Cooperation Agency (JICA). The programme has been continued into the second phase as well. The goal of the training programme is to provide an opportunity for participants to understand the needs of improved international cooperation between Japan and Indonesia in the field of environmental education. Its major objectives are as follows: (1) deepen the understanding and knowledge of the environment and environmental education, (2) improve the management ability of NGOs, (3) build a network of relevant NGOs in Japan and Indonesia, and (4) provide hands-on information and know-how on environmental education. Different methods of problem-solving techniques such as lectures, hands-on activities, observations and discussions were used to give the first-hand training to the participants. In FY 2003, the Project will conduct an evaluation of the effectiveness of the training and its impact on the Indonesian society.

7.3 To develop an innovative model of education for equitable eco-tourism

The Project conducts research works on the role of environmental education on promoting eco-tourism. Its objectives are to (1) show the inter-linkage between resource conservation and socio-economic condition particularly income generation activities, community participation, equity in sharing benefits and advantages. The other is to (2) explore ways to distribute benefits of eco-tourism equitably in the community. In order to achieve these objectives, participatory research techniques (such as collection of secondary data, field visits, community meetings, interviews with knowledgeable persons, and so forth) are employed to collect information. The study is being limited to some countries in the region; Cambodia has been selected as a case study. As part of the case study, in-depth socio-economic information is being collected from Tonle Sap Lake using the ‘do-it-yourself’ (DIY) activities, including participant observation and PRA techniques. The outcome of this activity will be used to propose a community-oriented eco-tourism plan to governments, NGOs and travel and tour industries in the region.

7.4 Supporting the TEEN initiative

The Project continues to support the activities of Tripartite (China, Japan and Korea) Environmental Education Network (TEEN) in organising a conference annually on a rotation basis in each country. It also provides technical inputs to the conference. The primary goal of this initiative is to provide forums for educators to share their new experiences, constraints, frustration, new patterns of development and new problem-solving approaches in environmental education. Through these activities, the Project attempts to enable this network to prepare a sub-regional strategy of environmental education, modeled after the regional strategy formulated for the Asia-Pacific region.

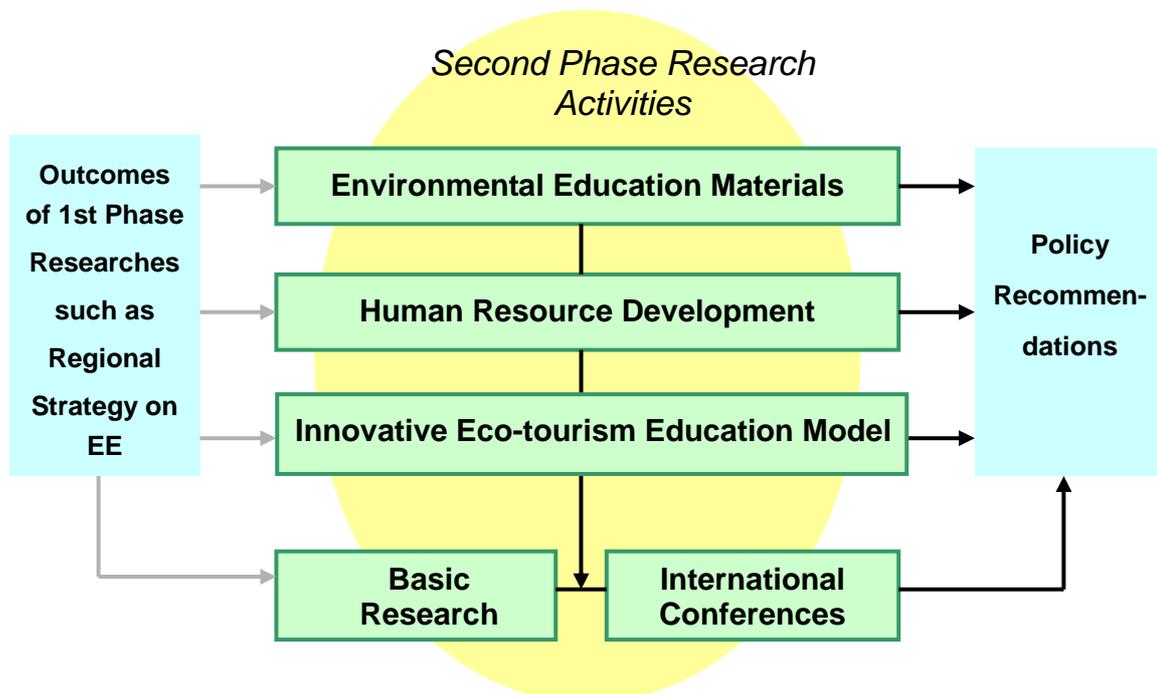


Figure 1: Research structure and research activities

8. Plan by the end of FY2003

The research schedules of the Project for the second phase (FY 2001, 2002 and 2003) is presented below:

[FY 2001]

- Collected pioneering examples of environmental education, from 15 countries of the region, including two countries from Africa and one from Central America.
- Gathered environmental education materials used in the Asia-Pacific region.
- Identified the best sites to undertake field works on eco-tourism education.
- Prepared an awareness-raising material on climate change and its impact on the society.

[FY 2002]

- Compiled and published pioneering examples of environmental education.
- Continues to work on the package of community-based educational materials on wetland conservation.
- Collaborate with Tour and Travel Industries to run pilot tests on eco-tourism.

[FY 2003]

- Revise and test the package of community-based education materials.
- Prepare an innovative IGES eco-tourism education model.
- Revise and update the regional strategy, prepared in the first phase to meet the needs of the rapidly changing society.

[Others: Linkages]

- The Project will work closely with Wetlands International (WI), Ramsar Center Japan, IUCN Wetlands and Ecosystem Program, WWF and other NGOs in developing and distributing the community-based educational materials.
- The Project will maintain close contact with the regional offices of UNESCO and UNEP, and Griffith University for the development of educational materials and teaching guides.
- The Project will cooperate with ASEAN, SACEP, SPREP, ICIMOD and other regional organisations in the implementation of their sub-regional environmental education plans and strategies. The Project will also support these organisations with new data and information and synergy building initiatives.
- The Project will support the activities of the Tripartite Environmental Education Network (TEEN) developed under the scheme of the Tripartite Environmental Ministerial Meeting (TEMM) of Japan, China and the Republic of Korea.
- The Project will reflect the experiences of an international organisation in its research activities.

9. Assessments of major outputs (April 2001- December 2002)

9.1 *An aspect of influence on policy-making process*

As described earlier, the Project has been striving to make positive influences on policy-making process in the field of environmental education. Some areas, where the Project has attempted to promote environmental education in the Asia-pacific region are:

- The implementation of environmental education program by the government at the national level
- Integration of environmental education in the activities of different stakeholders.

In addition, the Project has published two reports to influence the policy-making process (Details can be found in Section 7).

9.2 *An aspect of timeliness to stakeholders' needs*

It is important for the Project to reflect timeliness in its activities to suit to the needs of stakeholders. In order to address this concern, the Project has considered the following activities:

- Building capacity of educators, practitioners and facilitators, particularly through training, PRA, the development of educational materials, providing forums and so forth. The Project has been conducting training programmes entitled “Environmental Education Training for NGO Staff from Indonesia” since FY 1999 and facilitated in establishing a network of environmental educators of NGOs in Indonesia.
- Establishment of focal points and environmental education networks in the region.
- Increase in the budget for the Official Development Assistance (ODA) for environmental education programmes.

9.3 An aspect of uniqueness, originality and effectiveness

The Project has several aspects of uniqueness and originality in its activities. The first is its networking of government officers, researchers, NGOs and experts to reach out to a larger community in the region and facilitating their dissemination of their innovative and pioneering examples. Besides, the Project is attempting to promote the following:

- Evaluation of the effectiveness of the education policy using a new environmental education evaluation framework.
- Establishment and implementation of international environmental education programmes
- Eco-tourism research activity is a good example of the Project’s uniqueness and originality in its activities. Under this activity, conservation is considered to be an instrument (or a force) for realising sustainable development, and conservation and income generation activity should go hand-in-hand. Ecotourism education activities attempt to promote the income generation capacity of local communities through resource conservation. To substantiate this statement, case studies and pilot trials of eco-tourism are undertaken in collaboration with local communities, NGOs and travel and tours industries.

10. Suggestions for improving the overall project performance in FY 2003

The Project will continue the activities of FY 2001 and 2002 into FY 2003. The activities are the development of environmental education materials, enhancing the capacity of human resources and the development of an innovative eco-tourism education model.

Concerning the development of education materials, the Project will finalize the package of community-based educational materials for the wise use of wetlands. This package was discussed in an international workshop of wetland educators and will be revised for a pilot test, after which it will be disseminated in the region.

With regard to human resource development, the Project will conduct a comprehensive evaluation of its training programmes, which have been organised since 1999. Trainees’ performance vis-a-vis Indonesia’s situation on environmental education will be analysed and the future course of action charted out.

Regarding the innovative eco-tourism education research, the Project will continue its research activities into FY 2003 in order to prepare “IGES eco-tourism education model”. This research output will be published and disseminated in the region.

11. Self-evaluation of the overall performance of the project (April 2001-December 2002)

Details omitted.

12. Proposal for the third phase (FY2004-FY2006) research project

The Project proposes the following activities in the third phase.

The first activity is on some new system of international cooperation on environmental education in order to assist promoting the “UN Decade on Education for Sustainable Future” and to contribute to the stability of the environment in the Asia-Pacific region. It means that the Project will collect new

information on the status and implementation of environmental education programmes in the region and prepare the policy recommendations for national governments, local governments and NGOs by analysing those data in some analytical frameworks. This research will be relevant because we have already achieved some outputs and results in this field and have maintained networks on environmental education in the Asia-Pacific region.

Since the Project is concerned with the training of manpower that is aware, informed and willing to work in the community, the training will be based on the principles of the face-to-face direct interaction between the participants and the catalysts. Various types of problem-solving techniques such as issue-based, activities-oriented, intensive discussion and flexibility will be used, together with various methods. Each training activity will be output-oriented and tailored to the preparation of “guidelines” or “handbook”, as the case might be. Therefore, the ultimate intention of the Project is to develop a framework of appropriate training on the environmental education at the end of the session.

The secondly is on eco-tourism education. Eco-tourism is comprehensive activity which has many subjects such as advancement of economic independence, promotion of basic education, and achievement of gender. In the third phase, the Project will produce a “Guideline on Comprehensive Eco-tourism Education (tentative)” by compiling case studies on second phase and action researches into a concrete policy proposal, which will aim to assist developing countries to identify particular areas on environmental education activities. Eco-tourism is not only the scheme expecting economic efficacy but also a nucleus force of environmental education in the fields. The Project wants to continue tackling this innovative research activity in order for local communities in developing countries to operate overall environmental education and construct areas of eco-tourism activities on sustainable development via activities of eco-tourism.