

Sustainable Development and Environmental Education

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1. Introduction

Industrialization and urbanization, which progressed rapidly since 1960's, deteriorated living and natural environments. Environmental problems in Korea reached a degree which can no longer be ignored. Environmental education has become important than ever to all people who should conserve and care environment.

The objective of environmental education is to educate on knowledge, technology, attitude, motivation, and responsibilities to be taken by an individual or a group in order to be aware of and have interests in environmental issues, to resolve existing problems, and to prevent any new problems. In order to meet the objective, there are many concepts which can be applied to environmental education. In terms of harmony between economic & social development and environment conservation, today, the ESSD concept is drawing keen attention at home and abroad.

The ESSD concept refers to 'Environmentally Sound and Sustainable Development', which is selected by the UN as its guideline for international environment conservation movement. As far as development is concerned the concept allows only Eco-development which seeks development within the limit where the order of nature is allowed under ecological consideration, i. e. within the scope of environmental capacity.

In particular, the concept includes sustainability which stresses ethical values for government and public to make joint efforts to conserve environment not only for the welfare of themselves but also for that of future generation. Therefore, each ecosystem is regarded to have its own 'carrying capacity' to maintain a particular number of species including humankind in the system.

Identifying quantitative capacity to maintain a certain qualitative level of circulation and to regenerate resources by circulating materials in the nature is called carrying capacity or environmental capacity. Self-purification capacity of nature may be increased by man-made efforts.

Today's problem is serious in a sense that people's desire exceeded that limit environment can sustain. Especially since Korea has to accommodate large population in a limited land area, it needs to determine appropriate level of development considering self-purification capacity of environment and, based on this, set an adequate development plan.

We should be committed to solve environmental problems faced by Korea by introducing and implementing the ESSD concept. Through environmental education which allows all people to be aware of the new concept of relationship between humankind and environment based on the ESSD concept, the value of environment should be reflected to lifestyle of each individual, corporate environment awareness, and government decision-making process.

In environmental education, the ESSD concept should stress how environment conservation and economic & social development can be pursued in parallel.

The concept should be included in environmental education for students and adults in general as well as education for government officials of legislative ministries or administrative ministries which can proactively integrate development and environment conservation beyond political interest and ministry's interest.

Procedures to apply the ESSD concept to socioeconomic development plan or national land use plan are still under development. Therefore by re-evaluating the present system to educate experts on environmental issues, the design of educational program and the study of educational methodology to train environmental experts who can cope with not only short-term reality but also with future development issues based on the ESSD concept.

This paper will (1)review how environmental education is stressed in the Agenda 21, Local Agenda 21, and Habitat Agenda which demand sustainable development, (2)present responses by Korea so far, and (3)make a brief conclusion.

2. Environmental Education Mentioned in Agenda 21 and Habitat Agenda

The United Nations Conference on Environment and Development, having met at Rio de Janeiro from 3 to 14 June 1992,

- (1) Notes that the United Nations Framework Convention on Climatic Change and the Convention on Biological Diversity were opened for signature at the United Nations Conference on Environment and Development and were signed at Rio de Janeiro by 154 States and one regional economic integration organization and 156 states and one regional economic integration organization respectively ;
- (2) Adopts the Rio Declaration on Environment and Development, Agenda 21 and the Non-legally Binding Authoritative Statement of Principles for a Global Census on the Management, Conservation and Sustainable Development of All Types of Forest, which are annexed to the present resolution ;
- (3) Recommends to the General Assembly of the United Nations at its forty-seventh session that it endorse the texts referred to in paragraph 2, as adopted(United Nations, 1993)

2.1. Agenda 21

Chapter 36 (PROMOTING EDUCATION, PUBLIC AWARENESS AND TRAINING) of Agenda 21 provides strong guidance to environmental education. The chapter states that education, raising of public awareness and training are linked to virtually all areas in Agenda 21, and even more closely to the ones on meeting basic needs, capacity-building, data and information, science, and the role of major groups. This chapter sets out broad proposals, while specific suggestions related to sectoral issues are contained in other chapters. The Declaration and Recommendations of the Tbilisi Intergovernmental Conference on Environmental

Education organized by UNESCO and UNEP and held in 1977, have provided the fundamental principles for the proposals in this document.

Programme areas described in the present chapter are :

- (a) Reorienting education towards sustainable development ;
- (b) Increasing public awareness ;
- (c) Promoting training.

Meanwhile, Local Agenda , supported by chapter 28 of Agenda 21, states environmental education to be included. In particular, a list of books on green issues targeted for children, students, and companies has to be made to promote public relations(김귀곤, 1996).

2.2. Habitat Agenda (UNCHS, 1996)

Even though environmental education is not specifically mentioned in the Habitat Agenda, education, raising of public awareness and training are linked to virtually all areas in Habitat Agenda. The areas include as examples :

(1) B. Sustainable Human Settlements

(g) Ensuring the availability of education for all and supporting research aimed at building local capacity that promotes adequate shelter for all and sustainable human settlements development, given that the challenges make it necessary to increase the application of science and technology to problems related to human settlements ;

(2) 98. Recognizing the need for an integrated approach to the provision of those environmental services and policies that essential for human life, Governments at the appropriate levels, in partnership with other interested parties, should :

(aa) Incorporate the principles and strategies contained in Agenda 21 and the Rio Declaration on Environment and Development in an integrated manner : the precautionary principle approach, the polluter pays principle, the pollution prevention principle, the ecosystem approach, including strategies pertaining to carrying capacity, and environmental and social impact assesment

(3) 98 bis. In order to promote a healthy environment that will continue to

support adequate shelter for all and sustainable human settlements for current and future generations, Governments at the appropriate levels, in partnership with all relevant interested parties, should :

- (d) Ensure that children have access to the natural world on a daily basis through free play outdoors, and establish education programmes to help children investigate their community environments, including their natural ecosystems.

(4) 5. Sustainable energy use

101. In order to promote efficient and sustainable energy use, Governments at the appropriate levels, in partnership with the private sector, non-governmental organizations, community based organizations and consumer groups, should, as appropriate :

- (i) Encourage and promote public education and media campaigns to encourage recycling, reuse and reduce energy consumption.

(5) 9. Balanced development of settlements in rural regions

119. To promote the sustainable development of rural settlements and to reduce rural-to-urban migration, Governments at the appropriate level, including local authorities, should :

- (e) Promote education and training in rural areas to facilitate employment and the use of appropriate technology.

(6) 2. Implementation at the national level

158 bis.

"... National mechanism should be established or improved, as appropriate, to coordinate actions at all relevant government levels that have an impact on human settlements and to assess this impact prior to governmental actions. Local authorities should be supported in their efforts towards implementing the Habitat Agenda in as much local action is required. All appropriate participatory mechanisms, including local Agenda 21s, should be developed and employed."

3. Korean Responses to Agenda 21 and Habitat Agenda in Terms of Environmental Education

3.1. Response to Agenda 21

While still in advanced draft form, the National Action Plan(Draft) for Agenda 21 (ROK, 1996) clearly stated that :

" The Government will promote environmental awareness in the public, in international efforts to protect the global environment, to support environmental education and organizational activities of environmental agencies, and to increase investment for environmental protection.

3.2. Response to Habitat II Agenda

A Korean delegation led by the Minister of Construction and Transport attended the 2nd United Nations on Human Settlements (City Summit) to present the Korean government' s position on the sustainable human settlement development. The Minister has promised that the Habitat Agenda in view of its deep interests in promoting sustainable development. However, environmental education for achieving sustainable human settlement development is not specifically mentioned in the National Report for Habitat II.(ROK, 1995)

3.3. UNESCO and UNDP Project on Development of Environmental Education Programs for Community Based Organizations : Environment and Sustainable Human Development Linkages

The objective of program is to contribute in promoting peoples awareness and practice of sustainable development by developing environmental education program for community leaders and by training environmental leaders involved in diverse government and private fields.

4. Conclusion and Suggestions

The Korea Society of Environmental Education and Korea Commission for

UNEP, sponsored by the Ministry of Environment had decided to host 'International Symposium on Environmental Education' as a part of UN Environment Conference to be held in Korea in June 1996. The main theme of the conference is 'Sustainable Development and Environmental Education.' There will be presentations and open discussions international movements and reactions of each country. Cooperation and participation by those who have interests in preparation process and the conference will be welcomed. For reference purpose, 'The Istanbul Declaration on Human Settlements'(UNHS, 1996) adopted in istanbul, Turkey, on 14 Jan. 1996 is enclosed. Environmental education experts should participate actively in drawing up Local Agenda 21 and Habitat Agenda and contribute in attaining objectives of the both Agendas

참고문헌

- 1 United Nations, Report of the United Nations Conference on Environment and Development, Rio de Janeiro, 3-14 June 1992, Volume 1, Resolutions Adopted by the Conference, New York, 1993, p.2.
- 2 김귀곤, 지방의제 21 : 범지구적 도전과 지방적 해결, 도서출판 대한미디어, 1996, p.31.
- 3 United Nations Centre for Human Settlements, Habitat Agenda as Adopted at the United Nations Conference on Humans Settlements (Habitat II), Advance Unedited version, 96-16390.
- 4 Republic of Korea, National Action Plan(Draft) for Agenda 21, 1996.
- 5 Republic of Korea, National Report for Habitat II : Final Report, Prepared by Ministry of Construction and Transportation and Korea Research Institute for Human Settlements, December 1995.
- 6 United Nations for Human Settlements, The Istanbul Declaration for Human Settlements, Istanbul, 14 June 1996.

초 록

환경교육의 목적은 환경문제점에 대하여 자각하고 관심을 가지며 현존하는 문제점들에 대한 해결과 새로운 문제점의 예방을 위하여 개인적으로나 집단적으로 일할 지식, 기술, 태도, 동기 그리고 책임에 대하여 교육시켜 가는데 있으며 이와 같은 목적을 충족시키기 위하여 환경교육의 대상이 되는 개념으로서 경제사회 발전과 환경보전의 조화라는 관점에서 관심을 모으는 ESSD개념은 유엔이 국제환경보전운동의 지침으로 삼고있는 환경적으로 건전한 지속적 개발(Environmentally Sound and Sustainable Development)개념으로서 개발은 환경용량의 범위 내에서 추구되어야 하며 지속성의 관점에서 정부와 모든 국민들은 그들 자신의 복리는 물론, 그들의 후손을 위해 환경을 보전하는데 공동의 노력을 쏟아야 할 윤리적 가치를 강조하고 있다.

우리나라가 현재 직면하고 있는 환경문제를 ESSD개념의 도입과 실천을 통하여 해결하고자 하는 의지가 있어야 할 것이며, ESSD개념에 입각하여 인간과 환경간의 관련성의 새로운 개념에 대한 인식을 국민모두가 갖도록 하는 환경교육을 통하여 환경에 관한 가치가 개개인의 생활양식은 물론 기업 환경의식이나 정부의 의사결정 과정에 구현되어야 할 것이다.

ESSD개념은 환경교육에서 환경보전과 경제사회발전이 어떻게 양립될 수 있는가를 강조하는 것이 되어야 할 것이며 학교환경교육이나 일반성인을 대상으로 하는 환경교육에서는 물론 정치적 관심이나 각 부처간의 이익을 초월하여 개발과 환경보전을 역동적으로 통합시킬 수 있도록 입법부나 행정부처의 공무원을 대상으로 하는 환경교육에도 포함되어야 할 것이며 환경문제에 관련된 전문가를 교육하는 현행제도를 재평가하여 단지 단기적인 현실만이 아니라 ESSD개념에 바탕을 둔 장래 개발문제에 대처해 나갈 수 있는 환경전문가를 위한 교육과정의 설계와 교육방법론의 체계적인 연구조사가 있어야 할 것이다.

이러한 환경교육의 중요성에 대해서는 의제 21, 지방의제 21 그리고 인간정주 의제에서 계속적으로 강조되어왔으며 국내에서도 이에대한 체계적이며 종합적인 차원에서의 대응이 준비되고 있으며 이에대한 많은 각별한 관심과 참여가 요구되어진다.