



Workshop on Media and
the Environment
in the Asia-Pacific Region

16-17 Feb, 1999
Hayama

Organized by
Institute for Global Environmental Strategies (IGES)

Workshop on Media
and the Environment
in the Asia-Pacific Region



Contents

Introduction	3
Program	4
Status Report	
<i>"Blue Sky and Clear Water are Not Dreams"</i> Zhu Ping Yun/China	8
<i>"Environmental Conditions in Korea and the Role of Journalism"</i> Lee Gunho/Korea	12
<i>"The Present Environmental Issues and Journalism in Myanmar"</i> U Tun Naing/Myanmar	15
<i>"State of the Environment and Journalists' Response"</i> Mohan Mainali/Nepal	19
<i>"Environmental Degradation Hints at Foggy Future"</i> Zaffarullah Kahn/Pakistan	24
<i>"Environmental Journalism in Pakistan"</i> Zaffarullah Kahn/Pakistan	26
<i>"The Present Environmental Conditions & The Role of Journalism in Russian Far East"</i> Ivan Egortchev/Russia	29
Discussion Paper	
<i>"Environmental Education at IGES: Conceptual Framework and Methodological Approaches"</i> Bishnu Bhandari	34
<i>"Promoting Public Awareness through Environmental Journalism: From the Media Effect Perspective"</i> Shunji Mikami	44
Presentation	
<i>"New Development Pattern and the Role of Mass Media"</i> Kazuo Matsushita	52
<i>"Introduction of Activities, World School Japan"</i> Jun-ichi Ohmae	57
<i>"Introduction of Environmental Policy and Situation in Japan "</i> Sukio Iwatare	60
Discussion on Environmental Education	63
Chairperson's Summary	
Kenichi Mizuno	77
Participants List	81

INTRODUCTION

Osamu ABE

Project Leader, IGES Environmental Education Project

The workshop on “Media and the Environment in the Asia-Pacific Region” was held by the Institute for Global Environmental Strategies (IGES). The Sustainable development in the Asia-Pacific region and the relation between the environment and Media were the issues discussed in this workshop.

This workshop was organized by the Environmental Education Project of IGES, in cooperation with the Japanese Forum of Environmental Journalists (JFEJ).

The media produce a significant influence on society. Our field of study is varied, from mass media and local media to new media, such as the Internet. Based on the profound and progressive discussion in this workshop, we will develop further study, and explore ways to develop extensive networks of the Asia-Pacific region’s environmental journalists.

Program

Tuesday, February 16, 1999 13:00 - 18:00

- 13:00 - 13:15 Registration
- 13:15 - 13:30 Opening Remarks by Mr. Shigeyuki Okajima, IGES and
Mr. Osamu Abe, IGES/Saitama University.
- 13:30 - 14:40 Presentation
“New Development Pattern and the roles of Mass Media”
by Mr. Kazuo Matsushita
“Introduction of Activities, World School Japan” by Mr. Jun-
ichi Ohmae
- 14:40 - 15:20 Questions and Answers and Discussion
Chairperson: Mr. Shigeyuki Okajima
- 15:20 - 15:35 Coffee Break
- 15:35 - 16:05 Video Show
- 16:05 - 16:35 Presentation
“Introduction of Environmental Policy and Situation in
Japan” By Mr. Sukio Iwatara
- 16:05 - 17:45 Discussion: “Sustainable Development and Function of
Media in the Asia-Pacific region”
- 17:45 - 17:55 Summary of Discussion by Mr. Shigeyuki Okajima
- 17:45 - 18:00 General Information
- 18:15 - Reception

Wednesday, February 17, 1999 8:30 - 12:00

- 7:30 - Breakfast Service
- 8:30 Opening
- 8:35 - 8:55 Presentation: "Environmental Education at IGES: Conceptual Framework and Methodological Approach" by Dr. Bishnu Bhandari
- 8:55 - 9:10 Questions and Answers
- 9:10 - 9:30 Presentation: "Roles of Media in the Advancement of Environmental Awareness" by Mr. Shunji Mikami
- 9:30 - 9:45 Agenda Proposal: "Direction of future Discussion" by Mr. Shigeyuki Okajima
- 9:45 - 10:30 Questions and Answers
- 10:30 - 10:45 Coffee Break
- 10:45 - 11:30 Discussion
Chairperson: Mr. Kenichi Mizuno
- 11:30 - 11:40 Summary of Discussion by Mr. Kenichi Mizuno
- 11:40 - 11:45 Closing Remarks by Mr. Kazuo Matsushita, IGES
- 12:00 Departure for Execration

Status Report

Blue Sky and Clear Water are Not Dreams

China's Environmental Protection Status and the Reporters' Role

Zhu Ping-Yuan
Liaoning Daily
China

Environmental problem is a worldwide problem. It is a great challenge to the mankind, and for the Chinese people, this challenge is even more crucial.

As a member of China press delegation visiting USA last October; the writer had several discussions on China's environmental issues with the American people of all circles. Today, I am very pleased to be here and continue the talk about this problem in Japan.

China now has 22% of the world population yet the arable land only 7% of the world. The average arable land per capita, fresh water per capita, forest per capita and meadow per capita are respectively 32%, 28%, 14%, and 32% of the world average. Energy resource is even less. China has no much resources available for free consumption. Any environmental damage in China will incur more severe damage than most other developed or developing countries.

The increasing resource consumption due to China's industrialization and urbanization has made environment suffer from much heavier impact. Facts like the Huai River pollution, flow stop of the Yellow River, desertification, and ecological damage have clearly warned us that our environment should not be ignored any longer.

In the beginning of the 1970s, promoted by the Human Environmental Conference of UN, China's environmental protection started. Through the continuous efforts for over 20 years, particularly since the mid 1980s, progress has been made in environmental legislation, environmental management, pollution control, ecological reconstruction and nature preservation. Laws and policies on pollution control and resource management have been established and later modified. Investment in environmental protection is growing; the pollution control fee is up to 0.8% GNP. Forest protection system has been planned. Natural reserves account for more than 7% of the country's land. More effective actions have been taken in some seriously polluted areas in recent years.

From the trend of population growth and the economic development in the coming ten years, the tense relationship among the population, economy and environment will not be significantly relaxed. Huge population pressure,

poor and obsolete infrastructure, expanding urbanization and proceeding industrialization will exist for a long period of time. All these are imposing adverse impact on environment.

The most prominent environmental problem is the pollution in cities.

Firstly, air pollution is serious. Beijing's air condition is quite bad. Other cities are hardly any better. Approximately half of the 600 cities in China are more serious in air pollution than that in Beijing. Air pollution comes mainly from coal burning. China's energy consumption is heavily relying on coal. In order to reduce air pollution, clean coal technology has become remarkably important. Yet such technology needs investment which China cannot afford at the present time. China's economic condition is not able to meet the need of pollution control investment. China welcomes and is expecting the developed countries to transfer their advanced technology with more favorable policies. This is also in line with the spirits of international agreements concerned.

Secondly, water pollution is severe. At present, cities in China discharge 400 million metric tons of industrial and life wastewater every year. Only a part is treated and merely 13% of the discharged water has reached the state's standard. In other word, more than 80 % of the wastewater are directly discharged without any treatment. Water pollution is especially harmful for people's health and the environment.

For many years, our important work was to ask the factories to discharge wastes according to the regulations. Now around 70-80% of the large and medium-size enterprises discharges wastes according to the state's standard. However, domestic wastewater in cities is not under control yet. One of the solutions is to construct large and medium-scale central wastewater treatment plants. Around ten wastewater treatment plants are completed and put into operation. In the next 11 years, RMB 10 billion are needed for treating 40% wastewater from the cities. Financial aid from the government is limited. The main source of funds is from the local government, the enterprises, and also from the citizen. According to the laws and regulations, the polluters pay for the treatment.

The cost of wastewater treatment is RMB 0.80/mt in Beijing. Only RMB 0.10 is collected from the inhabitants; the rest, up to 100 million from Beijing municipal government. The municipal government feels much pressure. In Shen Yang, the city where the writer is living in, the situation is almost the same as in Beijing.

Facing the serious pollution in the whole country, the Chinese press circle has demonstrated high social responsibility. The "Cross Century Environmental Protection Program" is one of the influential actions by the

reporters. The reports exploring environmental issues have become an effective way to monitor environmental management, and help to form public opinion. For example, one of the most severely polluted rivers Huai River has caused the close attention of the central and local governments. This is because of the powerful reports shooting such issues. As a result, Huai River has received treatment and the pollution is basically under control now. Both good and bad news are reported. The program of “Cross Century Environmental Protection” has exposes 50,000 cases of law violation. Good conduction has been praised. This program is much welcomed by the public. It also has received accomplishment from other countries.

For six years, the “Cross Century Environmental Protection” has been playing an active role in exposing environmental issues and upgrading the public’s environmental awareness. Newspapers, radio and TV broadcasting and in many other forms of publicity, the environmental protection through the mass media has taken special characteristics and locality all over the country. According to an incomplete statistic, for the six years, 1,200 press organizations and 7,000 reporters have participated in interviewing and reporting environmental stories. Articles on environmental issues are around 4,800. In the Chinese report history, the “Cross Century Environmental Protection” is the most influential work for the large scale, long period of time and the wide and deep social effects.

The “Cross Century Environmental Protection” has shown four aspects of the role of environmental reports in China. Intensifying monitoring and opinion-forming of the public is an effective means to implement environmental laws; calling for environmental awareness is a powerful momentum; caring about people’s needs is the basic guarantee to make opinion monitoring successful; government support is the key factor to make opinion monitoring effective.

For example, the polluted Huai River made the people in the area no water to drink or use. People complained. Mass media continuously reported through the newspapers, radio, and TV. Mr. Li Changchun, secretary of Henan province committee, saw the news on TV when he was studying in the Party School of the Central Committee. He immediately made a phone back to Henan and called for an urgent meeting and treatment. Huai River pollution treatment was included into the agenda of the State Council and specific measures were taken without delay. As a result, the water quality has become improved. By the year 2000, the water in Huai River will become clear.

To sum up, China is facing serious environmental problems. Press circles have a long way to go in the role of environmental protection. The writer believes that blue sky and clean water are not dreams in China. All the reporters should take their responsibilities and stick to their believes.

China should take on a new look, with fresh air, clean rivers, green surroundings and blue sky. This prospect is hopeful as long as China persists the road of sustainable development which puts environment and development at the same line.

At the threshold of the 21st century, let the entire mankind embrace the magnificent sunrise of the green civilization.

Environmental Conditions in Korea and the Role of Journalism

Relating to the Reclamation of Lands

Gunho Lee
The Chosun Ilbo Co., Ltd.
Korea

Korea has given its spotlights to reclamation of lands. For Koreans having not enough flat lands for factories but looking for industrial development, reclamation was thought as one of the alternatives. The government thought it would give not only enough lands for production of goods, but also water in need. The government projected reclamation works including the tide-embankment, which would keep water for new factories.

But in the early 1990s, a new issue came out. The issue was that the reclamation could destroy the well-preserved environments, and eventually the factories might not be used, as it was purposed because the contained water inside of the tide-embankment would be polluted. Many environments NGOs projected this matter, and it became a hot issue in Korea. In terms of development, reclamation got an obstruction in its way.

After all, in 1998 Korean government gave up its Si-Hwa lake project, one of the two great reclamation plans in Korea. And the other, Saemankum project, is in crisis whether it can meet its purpose.

Started in the early 1970s, Si-Hwa Lake project was aimed to create a large agricultural and industrial region near city of In-Chon, the second largest harbor in Korea. And it might be another purpose to remove the factories in Seoul, the capital of Korea, and set them far away from it, because they caused environmental problems in the Capital, where more than 10 million people lived. The government covered the marshlands and shallow sea with a large amount of gavels and sands for the reclamation.

The plan, however, ended in fail, because the contained water quality inside of the sea-wall dropped down under the standard level even for industrial use. Finally, last December Korean government admitted that the water could not be used for the purpose. It meant more than 20-year-old effort was in vain.

Saemankum, which is under construction, is, as far as I am concerned, going to the similar way. The water quality keeps dropping down, because the project manager, Agricultural and Forestry Ministry, has already built more

than half of 33km sea-wall before they finish environment protection facilities around the site. It did not build the cleaning and refreshing systems on the two rivers rushing into the wall-blocked sea. By those rivers, there are so many cattle and pig farms and the messes from those animals are critical pollution donors to the water.

Considering the facts, NGOs and many environment professionals have continuously foretold that the Saenankum project would fail. In last January, the governor of Cholla-Buk Do, where Saenankum site is located, said that “We can change the plan, and we will think about it.” Starting the Project in the early 1970s, and spending more than 750 million US dollars so far, people begin to admit the possibility of the environmental problems of the Project, and think of some changes including complete abandonment.

Most Korean journalists, until the late 1980s, did not have enough knowledge about the environment. And the most powerful atmosphere that covered people’s minds was economic development at the time. So there was little consideration about the aftermath of the reclamation. Beginning of the 1990s, Korean journalism started to think about our future with the environment, and run much more stories about the issues than before. The tendency and trends gave the Korean people a chance to consider their surroundings.

But for me, journalism, especially in terms of newspaper and broadcasting for the public, has its rule. I think journalists can write and tell what they saw and heard, and their stories may contain many facts, not the values, as much as possible. And the facts must be the methods for the readers and viewers to think about the issues with.

No matter how big reporters think the issues are, and no matter how reporters confirm that the issues must go in a certain way, the reporters’ stories must show all the spectrums of thoughts as much as they can. If reporters want to write what they want to tell, they can use some special parts like “columns” or something like that in the media. I do not think it is a good idea to tell the reporters’ values in their general stories.

If it gives weight to values more than facts on some issues, I might say, it is not a public journalism but a special one, like an organ for some parties.

The rule goes to the environmental issues in the same way. Even though I cover environment and I love the nature as it is, there should be fairness in the story itself. The story might contain the importance of the environment and also have the issues of the counterparts such as pro-developments etc. That is the starting point of the news story of journalism.

The stories of reclamation issues in Korea covered many sub-issues like water quality, wetlands, and bio-diversity. Reporters also wrote about the optimistic future, if those projects end in a great success. With this information, the government made a final decision and is now thinking over the better solution for many kinds of hot issues. The decision-makers adopt people's diverse idea or consensus shown in the media to draw its conclusion.

The journalism must be a pitcher to throw various aspects of a certain issue to the readers and viewers. And so far as I know, the coverage over the procedures and results of Si-Hwa and Saemankum projects is the model of how the journalism covers environmental issues in Korea.

The Present Environmental Issues and Journalism in Myanmar

**U Tun Naing
UNDP
Myanmar**

Environmental Overview

Myanmar has a wide variety of natural ecosystems ranging from marine and coastal land to forest and mountain ecosystems. As a result of its varied climate and diverse topography, the flora of Myanmar ranges from the sub-alpine forests in the north through thorn forests in the central region to the tropical rain forests in the south. According to the assessment made in 1989, the forest cover still stands at 51 percent of Myanmar's total land area.

Due to its unusual ecological diversity, Myanmar is home to 251 known mammal species, 203 types of reptile species, 75 types of amphibians, 867 breeding bird species and a haven for about 7,000 different flowering plants. And about 40 percent of Southeast Asia's highest priority tiger habitat areas lie in Myanmar, all of them in border regions.

The degree of air or water pollution caused by industry or agriculture has been minimal due to the still low level of industrialization and relatively small amount of chemicals used in agriculture.

With the total land area of 676,553 square kilometers and the present size of population of (48) million, Myanmar's population density is only 71 per square kilometer. In addition, only 50% of its cultivable land is under agriculture and the other 50% still waiting to be utilized. Thus, Myanmar overall population pressure on its resource base seems not as threatening as in some of its neighbors.

And in comparison with neighboring countries, Myanmar, until now, enjoys a benign climate, droughts and floods are rare and incidence of natural disasters like cyclones and earthquakes few and far between.

Environmental Issues in Myanmar

Deforestation

During the 14-year period from 1975 to 1989 the total forest cover in Myanmar reduced at the rate of 15,000 ha per year. Deforestation in Myanmar,

unlike in some other developing countries (until recently at least), is not the result of commercial extraction of timber, but mainly due to shifting cultivation which is practiced by about 2.6 million people living in the Kachin, Kayah, Kayin, Chin and Shan States, and also due to the heavy dependency on the forests for the national fuel-wood requirement.

The consequence of a drastic reduction in tree cover is apparent; soil erosion accompanied by land degradation, and in dry areas, land salinity and saline scald increases. The above impacts have negative consequence on watershed, diversity of flora and fauna and changes in microclimate of the areas.

The majority of the people in Myanmar earns their livelihood from the agricultural sector and lives in rural areas. It has been estimated that by the year 2,000, as the population reaches 50 million, the demand for fuel-wood will also increase accordingly. Hence, it is highly probable that unless alternative source of fuel is provided, the rate of depletion of unclassified forests will be aggravated in different regions, particularly in the dry zone.

The rate of deforestation in Myanmar is said to be more than doubled during the past ten years primarily due to a rapid growth in logging in border areas.

Loss of Biological Resources

Biological resources conservation in Myanmar commenced in 1918, with the formation of game sanctuaries. There are 16 existing game sanctuaries and three parks totaling 7,231 square miles or 1.07 percent of the total land surface area of the country, have been established so far. Despite efforts by various line departments, the biological resources have dwindled considerably due to human disturbances and loss of habitat. Some of the wildlife habitats are degraded due to increasing human population pressure; some areas of degraded forests are being cut down and converted to cropland, while remaining areas are increasingly used for fuel-wood; extraction and livestock grazing.

Despite protection measures by the Forest Department, elephant, tiger and even nowadays snake populations are subject to illegal poaching for commercial purposes in a number of areas particularly at the borders.

Pollution and Climate Change

The extent of industrial pollution and accompanying environmental degradation is still rather localized until now. However, industrial expansion is expected, in the near future owing to the recent change in the country's economic policy. And growing use of chemicals always come together with

the expanding agriculture production

The consequences of greenhouse effect have become gradually noticeable in recent years. Records compiled by Meteorology and Hydrology Department indicate that there is less rainfall in the 1980s, which is a record in 100 years. There also is less number of depressions and cyclonic storms in the Bay of Bengal than before. Temperature is recorded to be 0.7 degree Celsius higher today than the average recorded temperature over the last two decades in most towns and cities of Myanmar.

Environmental Management in Myanmar

The history of environmental conservation in Myanmar can be traced back to the last dynasties of the Myanmar kings, who, with far-sightedness, proclaimed the valuable teak forests as royal property and levied royalties for the teaks properly extracted under royal permission. The systematic management of forest resources has also been in practice since 1856. Conservation of biological diversity in Myanmar also dates back to 1860 when King Mindon established 17,500 acres of sanctuaries. Wildlife conservation in the conventional way began in Myanmar in 1918 with the establishment of Pyidaung game sanctuary.

Despite Myanmar's long history of consciousness over nature conservation there was no central coordinating body for cross-sectoral coordination in environmental matter until early 1990. Myanmar's environmental management followed the compartmentalization system under which various environmental functions were directly and solely carried out by the respective ministries without central co-ordinating environmental institution.

With the introduction of a market-oriented economic policy in 1988, the situation demanded the need for a central institution to ensure environmentally sound practices in industry and other economic activities. In response to this need, the government of the Union of Myanmar formed the National Commission for Environmental Affairs (NCEA) in February 1990. The Commission acts as the national focal point for environmental matters vis-a-vis other countries and international organizations, co-ordinates the work of various line ministries and departments.

Myanmar has acceded to several environment-related international agreements and has already prepared and published the Agenda 21 for Myanmar.

At present Myanmar Government is implementing the program greening the arid zones in the thirteen districts in central part of Myanmar. In those areas, cutting of wood is restricted, firewood substitutes promoted,

and fuel-wood efficient stoves are being introduced to the public.

The promotion of environmental awareness is one of the main areas of concentration of the current activities of the NCEA. The Committee on Research, Education and Information and the NCEA Staff Bureau in cooperation with other government ministries particularly the Ministries of Information, Education and Forestry have been promoting environmental awareness mainly through government mass media.

Independent Environmental Journalism in Myanmar

Strictly speaking, there has been no free press since 1962 in Myanmar. The spectre of environment deterioration, so it seems, is not pervasive enough to unbearably affect the everyday life of the literate public yet. It looks as if there must be very limited (if any) concerned audience, who are really interested in environmental affairs judging from the fact that there exists no journal/periodical which could be claimed as fully environmental-oriented in the market. Within this general setting, it would be difficult, if not impossible, to have a full-time environmental journalist in this country. Most, if not all, who are in the know about environment situation usually are government staff. They write or talk for official fora only. The present situation, therefore, is not conducive for environmental journalism (especially “independent or investigative reporting”) to take root in Myanmar yet.

Even so, there are some windows of opportunities (government plus non-government channels) already exist through which environmental awareness can possibly be raised constructively for the sustainable development of Myanmar. These windows can be widened into doors. Environmental journalism has a big role to play in this very important endeavour... If there is a will, there is a way...

State of the Environment and Journalists' Response

Mohan Mainali
Nepal Forum of Environmental Journalists (NEFEJ)
Nepal

Nepal's economy is largely based on traditional agriculture. However, increasing number of modern industries have been established especially in urban and semi-urban centres. In recent times, haphazard urban growth has resulted in many environmental problems.

Nepal thus has been facing many environmental problems of both urban and rural nature. Urban problems include air, water and noise pollution. Kathmandu, the capital city was called the second dirtiest city after Mexico so far as the air pollution was concerned in the early 90s. The state of the air pollution has not been improved since then.

The problem of river pollution, especially in the urban areas, is increasing. Industries and domestic waste has been the main sources of the river pollution. Noise pollution is also on the increase.

Nepal has also faced serious natural disasters. One study reveals that landslides and flood hazards cause destruction of infrastructures worth \$2.5 million and about 400 death annually.

Agriculture in Nepal is in transition especially in Terai, the southern plain and those hilly areas served by road network. Consumption of pesticides by tea gardens, cotton farm and vegetable farms is increasing. Since there is no proper way of managing pesticide business, Nepal has been facing problem of obsolete pesticides stock. It has disposed off some 114 metric tons of pesticides in the early 90s. Still there are more than 80 metric tons of pesticides in different warehouses in different house of the country. The warehouses has been great threat the to the local people and the environment.

Tourism is Nepal's one of the main sources of foreign currency. Every year, about half a million (2.5 per cent of the total population of the host country) people visit Nepal. This has caused serious physical and cultural problems in main tourist destinations. In the early 90s it was estimated that there has been more than 50 metric tons of garbage piled up at the base camp and above in the Mount Everest, the highest peak in the world.

Nepal has designated about 17 per cent of its total landmass as

conservation area. However, depletion of bio-diversity is taking place mainly because of acute poverty. Nepal is one of the poorest countries.

Nepal is in danger of being disposal ground for obsolete technology.

Journalists' Response:

If nature conservation is everybody's business, then journalists have a greater role to play. These are:

- a. WATCH everybody's policy and practices. This includes the activities of a wide range of people right from the top policy makers to the grassroots, from commercial houses to scientific community,
- b. LOBBY for the better conservation policies, regulations and most importantly practices.
- c. DISSEMINATE conservation message to the wider masses.

Nepalese journalists have been making efforts to fulfill their responsibilities. The re-introduction of democracy has been very instrumental in creating the environment where journalists can utilize their skill for the betterment of the society.

However, there are many problems faced by Nepalese journalists in fulfilling their duties.

However, Nepalese journalists are struggling. They get together so that they can collectively face the challenges they are facing.

This paper tries to look at the state of the environment in Nepal, present status of Nepalese journalism in relation to nature conservation, problems faced and efforts being made to overcome the problem.

Environmental Degradation Hints at Foggy Future

**Zafarullah Khan
Green Press
Pakistan**

Pakistan was among a few lucky countries to have a full-fledged, National Conservation Strategy (NCS) in March 1992. It also had an opportunity to articulate G-77 (“developing world”) position at 1992 Earth Summit in Rio de Janeiro. However, the NCS was an unlucky document as its take-off co-inside with the launch of a donor-driven, Social Action Program (SAP). The latter had addressed at least four out of fourteen areas of the NCS. Secondly, the both programs simultaneously competed to solicit donors’ money to materialize their goals.

Eventually in the 8th five-year plan (1993-98) environment could not attract much resources and emphasis remained confined to mere awareness, advocacy, legal framework and institutional strengthening. However, approach towards environment in the 9th five-year plan (1998-2003) appears to be a bit different. Environment is seen as an activity cutting across all sectors. Similarly a need of action has been emphasized over mere awareness because the nation is already paying a heavy cost of inaction in environmental field.

The country now has a comprehensive environmental legislation but a unique apathy exists towards its strict enforcement. Most of the green non-governmental organizations (NGOs) and the federal ministry of environment are also prisoner of reports and research culture. Of course such a practice produced essential wealth of knowledge to comprehend the all-encompassing environmental concerns. But now is the time to act. A time to convert foreign funded pilot projects in to popular people’s practices. It is already too late. Unprecedented environmental degradation has already started hinting about our foggy future.

While searching the reasons behind such inaction, one comes across number of stereo types, which are used to mask shocking environmental realities. They include a competitive relationship between the economy and ecology, high cost of environmental protection, environment’s irrelevance to a developing country like Pakistan, environment as a Western propaganda, a non-tariff barrier, a rich man’s fare and above all an inhibitor of growth.

Can these excuses delay or avoid our imminent default on ecological account? Perhaps, not. The reality is alarming. One cannot mask Pakistan’s ecological crisis, which has spurred an economic shakedown since the late 80s. With the virtual exhaust and worst abuse of ecological resources such as

land, topsoil, water and forests. A study carried out by The World Bank in 1995 valued environmental damage in Pakistan at US\$ 1 billion to 2.1 billion per year i.e. 2.6 to 5 percent of GDP based on 1992 value. The 1997-98 Economic Survey rated it at 3 to 4 percent of GDP.

In December 98, Gallup Pakistan, in a survey listed the management of solid and liquid waste as the second most alarming problem of country's urban citizens. The unemployment was on the top. A chapter on environment in State of Human Rights in 1997 (HRCP) paints a more shocking picture that the daily production of solid waste in the country is over 55,000 tons. More than 60 percent is left to rest in open fields or in the drains. The situation in rural areas is even worse. Such open dumping of untreated municipal and industrial waste have caused contamination of surface and ground water resources and threatened the aquatic life to the diminishing level.

Mere emphasis on phantom economic growth has further worsened the country's ecological resource base. The result is that the 1990s have been a decade of what many describes "natural disasters," such as devastating floods, water logging and viral attacks on the country's major and medium crops such as cotton and wheat. These disasters have been man-made with their roots in overuse of fertilizers, pesticides, irrigation and reckless removal of natural vegetation.

As much as 26.5 million hectares, or 42 percent of the total land is estimated to be suffering to varying degrees from the afflictions like wind erosion, salination, water logging, nutrients depletion and overgrazing. According to conservative estimates over the past 30 years, use of fertilizers has grown 119 times, pesticides 95 times and irrigation 100 percent. The juxtaposed reality remains that the country is losing 25 percent of its potential crop production with a total value of US\$ 2.5 billion every year.

Similarly, industrial pollution is estimated to be worsening at a rate more than twice as fast as the growth of economy. A study of recent 25 years (i.e. 1963-88) calculated it at 6 to 10 percent whereas the industrial growth rate was just 3 percent. Out of country's 50,000 industrial units, according to the Economic Survey of Pakistan 1997-98 only 3 percent have proper waste treatment plants or technologies. The rest discharge their untreated effluent into rivers, lakes and sea. The pollutant industry is also reluctant to adhere to National Environmental Quality Standards (NEQS) introduced in July 1996. After series of negotiations it was expected that the NEQS will be voluntarily enforced January 1999 onwards. But the third deadline since July 1996 has once again passed silently.

The country's monitoring and implementation mechanisms are also weak. Though millions of dollars have been spent on strengthening provincial

environmental protection agencies, still many do not have proper laboratories and trained staff to handle new realities. The Baja lane incident (leakage of Chlorine gas at public place) in Lahore cost twenty lives in January 1997. But many industries are still reluctant to abide by safety standards.

There is plethora of green laws in the country, which make Environmental Impact Assessment (EIA) an essential prerequisite for all big and small ventures. But all motorways are being constructed without any authentic EIAs. Not only this industrial zones are being promised on agriculturally active lands of the country adjacent to the motorways. A catastrophe is in the offing. Already fertile agricultural areas like Sheikhpura, Chunian, Kasur and a few others have lost their traditional productivity, as instead of irrigation water they are flooded with amazing soup of industrial wastes.

Vehicular emissions have also made life miserable in Pakistan. It has been estimated that an average vehicle in Pakistan emits 15-20 times more pollutants than the average vehicle in the developed world. The number of vehicles has also tripled in the last 15 years and it is growing at an annual rate of 11.79 percent. Traffic jams, dust and smoke along with increasing noise pollution are resulting in less patience among people, which is adding to urban violence.

Country's 47 percent population is living without safe drinking water. 53 percent are without sanitation facilities. Another 45 percent without health services. Murders on water disputes are an ages old odd tradition in rural areas where only about 30 percent of canal water reaches the crops owing to high level of losses in the canal and watercourses network. Now street battles for clean drinking water and occasional water riots are becoming an urban phenomenon as well. Nearly 84 percent of rural population is without sanitation facilities. About 45 million people are living in makeshift shelters or in "katchi abadis" (urban slums or squatter settlements). All this does not augur well for quality of life in Pakistan.

"Yet no one is dying of hunger in Pakistan." One can agree with the official position about a country where 36 million people live below the poverty line. The poor can get free food at shrines, but clean water is not available there. The country's hospitals' record show that about 80 percent diseases are either water borne or are air borne. Water borne diseases account for 60 percent of infant deaths in the country. Improper disposal of toxic and infectious waste of hospitals is resulting in increased skin diseases. Now there are fears of nuclear radiation as well. The nations' health bill has increased. People are dying with mysterious diseases as a fate-accomplice.

Climatic changes have altered the weather patterns. These unusual

changes will hit the crops and halt country's food machinery. The fog and smog during December 98 caused severe disruptions in country's socio-economic mobility. Can we afford this for a long period?

In contemporary world the traditional security paradigm is also changing. Now, instead of inter states conflicts, intra-state clashes over control and share of natural resources are on rise. Isn't it a time to wake-up and check our rapidly depleting ecological resource bank? We must calculate the cost of inaction. It will be in millions, more than what we are begging from multi-lateral donors for our survival. A little care for our own natural environment and prudent use of resources can change the situation. Our land used to be the food basket for entire sub-continent, why can't it feed and sustain our 135 million people?

Box

Profile of environmental degradation

1	Forest & woodland	2.3 percent
2	Internal renewable water resources per capita (cubic meters per year)	1678
3	Annual fresh water with draws as % of water resources	62.7 %
4	Per capita with drawl	1269 (cubic meters)
5	Annual rate of deforestation	2.9 %
6	Annual rate of reforestation	3 %
7	Per capita CO2 emissions	0.6 metric tons
8	Loss of mangroves	78 %

(Source: Human Development Report 1998)

Box

If we prepare a list of top ten national priorities pursued by the government during 1998, while reserving two berths for the social sector (health, education and population welfare) and environment. The following picture would emerge:

- 1 Nuclear euphoria
- 2 Passage of the 15th Amehdment (Shariah)
- 3 Moves to save melting down economy through IMF/WB
- 4 Law & Order (Karachi operation)
- 5 Kashmir

- 6 Kalabagh Dam
- 7 Corruption/accountability
- 8 Motorways
- 9 Health/education/population
- 10 Environment

Box item

Five defaults on ecological account during 1998

1. The Pakistan Environmental Protection Council couldn't hold its single meeting since January 1997. Legally the PEPC is supposed to meet at least twice a year. Summery to summon the first meeting of recently re-constituted PEPC is lying with the Prime Minister since last five months.
2. Much promised Environmental Tribunals couldn't start functioning. The federal law ministry is planning to frustrate the idea by clubbing the environmental tribunals with existing banking tribunals.
3. The government failed to have done the Environmental Impact Assessment (EIA) of any of the much eulogized motorway project. Hence number of trees have been cut, natural flow of water stands hampered, bio-diversity is disturbed and people divided on both sides of motorways.
4. National Environmental Quality Standards (NEQS) have been diluted to appease the pollutant industries, ignoring the fact that if our industry has to remain compatible it would have to do necessary marriage with environment in the shape of ISO-14000.
5. The municipal/local administrations failed to supply enough water in many urban centers. In May 98 a person was killed in Hyderabad while he was demanding regular supply of drinking water. His body had to wait for hours to have the final bath. In many cities including the federal capital there was a hue any cry over water scarcity.

Environmental Journalism in Pakistan

**Zafarullah Khan
Green Press
Pakistan**

Journalism is perhaps the only profession in Pakistan for which one does not need a formal degree or a proper training. Any one can become a journalist, provided he/she can write or speak. About eight universities in the country, offer masters level program in journalism/mass communication. Journalism is also taught as a subject at graduation level. However, journalism graduates prefer to work for the government's information department and other public relations outfits.

Similarly, reporting is not beat specific in Pakistan. Usually rookie reporters love to cover social issues including environment. The universities offering journalism degree rarely focus on developmental journalism courses. It is only a recent phenomenon that couple of NGOs, like International Union for the Conservation of Nature and Natural Resources (IUCN), Sungi Development Foundation, Sustainable Development Policy Institute, Leadership for Environment & Development (LEAD-Pakistan), WWF, Sheri-Citizens for Better Environment, Green Press, Forum of Environmental Journalists Pakistan and a few others have started occasional training workshops for journalists on sustainable development reporting.

Green Journalism in Pakistan

There is a complete chapter on communication of green messages through over 300 newspapers, 100 weeklies and monthlies, electronic media and other performing arts in National Conservation Strategy adopted in March 1992. Since then the government has been allocating millions for awareness programs but that has not reaped any significant dividend.

Though the Pakistani media is writing and talking about deforestation, soil erosion, water logging and salinity since 1950s but these issues were not viewed as part of a broader environmental problem. However, the green issues in their integrated form started arresting the attention of newspapers/magazines, radio and television after Earth Summit in 1992. In Pakistan IUCN established a full-fledged Journalists Resource Center in Karachi in the late 80s. It publishes two monthlies: The Way Ahead (English) and "Jareedah" (Urdu). Only one national newspaper, daily Dawn, Karachi clubs its fortnightly environment section with health. During 1996 daily The News International used to publish a weekly environment page, but the practice was discontinued

as the new government after 1997 elections put green issues on the back seat of its' priorities. The regional press, especially the Sindhi press accords significant priority to environment.

Green Press, runs a feature service on environment, Green Wire and a weekly electronic magazine Green News. Rest of the publications casually covers environment. State controlled television and radio run jingles and programs to disseminate environmental messages. They occasionally telecast pro-nature programs like National Geographic, The Living Planet, and Life on Earth and Cosmos etc. Some programs have also been dubbed in Urdu. A private TV channel NTM accommodates much more on environment.

Internet and cyber culture is emerging as a more environment friendly medium. Sustainable Development Network (SDN) has an Eco-list, presently subscribed by over 60 people who shared more than 1826 messages and discussion topics during 1998. Mashal Books a private publication house in Lahore has published the AFEJ's Handbook for Environmental Journalists in Urdu-country's national language.

Advocacy journalism with pro-nature bias dominates Pakistan's environmental reportage. The environmental NGOs are major source of information in this regard. Thus their work is rarely examined critically.

Federal Ministry of Environment, the IUCN and All Pakistan Newspapers Society annually decorate environmental journalists with Green Journalism Awards.

Associations

Pakistan Forum of Environmental Journalists (PFEJ) was established in the late 80s but could not sustain its activities very long. In 1992, Green Press, Pakistan was launched by a group of Islamabad/Rawalpindi based journalists. In 1997, the IUCN mid-wive two forums: first in NWFP province, Frontier Forum of Environmental Journalists and later, a nation-wide Forum of Environmental Journalists, Pakistan (FEJP).

Box

Access to Information & Communication in Pakistan

Radios per 1,000 people	92
Televisions per 1,000 people	22
Only 18 out of every 1,000 people read a newspaper	
Printing and writing paper consumed	

(Metric tons per 1,000)	1.7
Post offices per 100,000 people	11.5
Main telephone lines	16
International telephone calls minutes per person	0.5
Cellular mobile phones subscribers per 1,000 persons	0.3
Fax machines per 1,000 people	1.2
Personal computers per 1,000 people	1.2
Internet & e-mail users more than 120,000	

(Sources: UNDP's Human Development Report 1998 & Green Press's State of Media Report-Pakistan)

The Present Environmental Conditions and The Role of Journalism in Russian Far East

Background and Perspectives

Ivan EGORTCHEV
UTRO ROSSI
RUSSIA, Vladivostok

Russian Far East - it's a great territory with very much problems: economical, social, financial... not only environmental. But the strategic relations between the Nature and the region population is the base of the our consciousness what is going on. It is the main goal of ecological movement and journalism, too.

The present environmental situation in Russian Far East is not good and it is going to be worsened in general. No attention was paid to the environment for a long time. There had been no means for the open collation & dissemination of any environmental information. As for example we'll take the Vladivostok City that has originated in the sixtieth of the last century. From the very beginning Vladivostok was erected as a naval sea base. The social structure of the city has become a hostage of an army technological infrastructure. The majority of territories and water areas, adjacent to Vladivostok and included in its structure, were long time kept inaccessible to civilians, as the compelled reserves.

There was a constant local petroleum pollution of the all area of Peter the Great Bay during decades. Shipwrecks were simply decommissioned and left to lie there, where they sank. Influences of liquids that are seeping down from such vessels are especially dangerous for coastal biota. Such policy in management of territories and water areas could result in the following. At the same time the control of some part of military territories was handed over to civil administration, but all ecological problems is existing. For instance, the ecologists take notice to the prevention of the radioactive contamination while utilizing the atomic submarines. As a result, the population knows too little about the degree of the area pollution. The natural resources (including Far East wild forests - "The Taiga") are being exhausted, the global ecological balance of some areas is disturbed, the species of flora and fauna disappear. The industrial pollution created the acute problem also.

We need the more wide legal propaganda & environmental education. There are some state and public ecological organizations, unofficial environmental movements & funds in Vladivostok, Nakhodka, Magadan, Khabarovsk etc. The "Green Peace" and "Green Cross" members conduct all

kinds of environmental actions and they inform the public about the methods and results of this activity. Since Goskompriroda (Federal Agency of Environmental Protection) had been created in the late 80-th, this government structure tried to brake existing destructive practice of land and resource management. There are some environmental laws and decisions by the region administration and central government. But Russia is the country of the low legal culture, where no rules or laws are really respected. Unfortunately, those efforts never got full success, either on federal or regional level. However, it is my own opinion.

Now Russian Far East became the stage of activity for any international organizations and funds. It is WWF (World Wide Fund For Nature), ISAR, IREX, GSN (Global Survival Network), TRN (Taiga Rescue Network), EPT-USAID, EurasiaFoundation, FOE-Japan (Friends of the Earth) and other. Their efforts are quite successful as a whole. For instance, the problem of surviving the Amur Tiger attracts the attention of US scientists and some international funds. The programme of tigers' radio tracing supporting by HWI (Hornocker Wildlife Institute) and holding by Russian and American specialists, is very important and perspective. The Primorye Tiger Patrol (anti-poaching group), subsidizing by WWF and GSN, assist to preservation tiger population, too. It is an example of successful solution of a separate problem - the restore tiger's number.

Unfortunately, another acute ecological problems are not solved. The global problem of the Russian Far East environment is THE PROTECTION OF NATURAL RESOURCES AND WILDLIFE OF CENTRAL SIKHOTE-ALIN REGION AND THE CONSERVATION OF THE ECOLOGICAL SYSTEM AS A WHOLE. Mountains-taiga system of Sikhote-Alin outstands as a unique biogeographical knot of the world level. The system is particularly valuable or "key region" of the Earth biosphere. Within Sikhote-Alin regulation of waterpower and biological potentials of many different basins in ecological systems of the Amur River and coastal zones of the Sea of Japan, proceeds successfully. Biodiversity of Sikhote-Alin is extraordinary in comparison with the most of the highland territories in moderate latitudes. Landscape of this system is full of the rare relict & endemic flora and fauna species. The main cultural & ethnic centers as well as areas of the traditional economic activities of indigenous people the Udege are also concentrated here. It is advisable to consider the question of creating the ecological and economic region with the special regime of investing and other privileges.

The list of serious environmental problems of Russian Far East could be continued. It is an ECOLOGICAL ASPECTS OF THE SAKHALIN-2 OIL PROJECT, THE MAINTAINING OF THE BIODIVERSITY OF FLORA AND FAUNA, THE PREVENTION OF PETER THE GREAT BAY WATERS FROM FURTHER WASTES POLLUTION, THE CREATING NEW PRESERVES

TRRRITORY.

I would like to touch the following: THE UNITING ALL THE EFFORTS OF ECOLOGICAL FUNDS AND ENVIRONMENTAL MOVEMENTS, THE INFORMATIONS EXCHANGE and THE COORDINATION OF ACTIVITY.

Consequently, the role of journalists is very important under these conditions. Some regional issues tried to influence on people to raise their awareness of pollution danger. But Russian Far East ecological activists have not their own mass-media unit.

Discussion Paper

If you are thinking a year ahead, sow seed;
If you are thinking ten years ahead, plant a tree;
If you are thinking one hundred years ahead, educate the people

Chinese Poet, 500 BC

Environmental Education at IGES: Conceptual Framework and Methodological Approaches

Bishnu B. Bhandari

Introduction

The primary purpose of this paper is to acquaint its readers with the conceptual framework and methodological approaches adopted by IGES in implementing its Environmental Education Project. The paper begins with major environmental problems that have emerged at the global level, followed by key factors responsible for environmental deterioration and degradation. The paper also argues that human action is the number one reason for contemporary environmental problems and crises. It is necessary for us to modify human behavior and action, which will be possible only when we are able to bring about some kind of change in their knowledge, attitudes and skills. Then the paper attempts to explain that human behavior needs to be modified if we want to prevent, stop and reverse the process of environmental deterioration, for which environmental education has been given the topmost priority. The second section focuses on methodological approaches and modalities adopted by the Project.

I. Conceptual Framework of the Environmental Education Project

“Environment” is a broad and comprehensive term denoting all that surrounds us: air, water, soil and light. It is a condition or circumstance that affects living beings. It usually means surroundings. For example, let us take the example of air. It is an environment because it surrounds us. The houses we live in, water bodies, roads, plants, animals, rivers, mountains, villages, cities and the planet we live in, are good examples of the environment because they all surround us. It extends from where we are standing to the farthest stars in the sky or the deepest point in the earth. So we are a part of this environment. Environment is not something that is separate from us. In other words, we are inside of it.

Deep ecologists also share a similar viewpoint that human beings are the part and parcel of the environment. Palmer (1998) mentions:

... it (deep ecology) holds that humans are intimately a part of the natural environment - and are one with nature... Deep ecologists try to live with nature's ways and rhythms, rather than opposing them ...Deep ecology fundamentally rejects the dualistic view of human and nature as separate and different.

“Environment” means many things to many people. The analogy of the description of an elephant by four blind persons may hold true in the case of the environment too. For example, we have people around us: our family, friends, and fellow citizens. This is what we call the social environment. Intangible things such as language, customs, morals, institutions, norms and values make up our cultural environment. Such living things as trees, animals, insects, birds, microorganisms around us fall under the category of the biological environment. Tangible things such as air, water, mountains, wetlands, sea, landmass, rock and forests make up the physical environment and so forth.

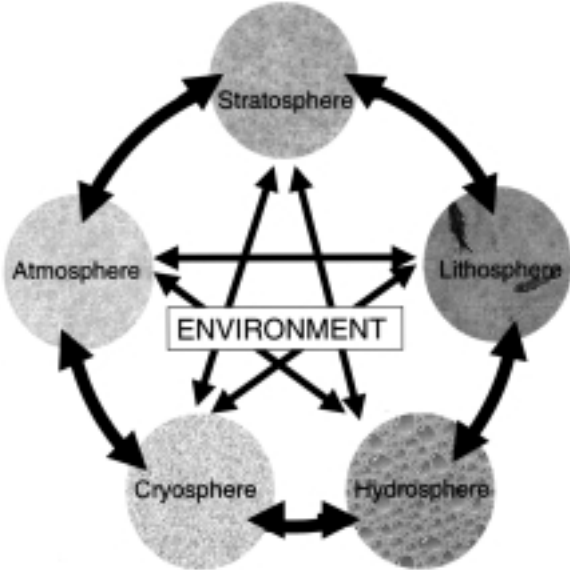
Figure 1 shows what the environment is like, how complex and complicated it is and how different spheres are inter-linked with one another. Each sphere (regime) plays a key role in maintaining the state of environmental equilibrium. For example, activities in the earth affect the atmosphere as well as the hydrosphere, which, in turn, affects other spheres. In other words, a slight change in the lithosphere (solid part of the earth) directly affects the hydrosphere (water body), which, in turn, affects the atmosphere (mixture of gases around us), the cryosphere (ice and snow surface) and the stratosphere (upper layer of the atmosphere above 7 miles). So environment (E) is the sum total of functions (f) of, and/or influences in stratosphere (S), atmosphere (A), cryosphere (C), hydrosphere (H) and lithosphere (L), which is encapsulated as follows:

$$E = f(S+A+C+H+L)$$

It is, therefore, important to know, first of all, the meaning of the term, “environment” to understand the depth and extent of environmental deterioration and degradation. The inter-linkage among various spheres is so intricate that it gives rise to a multitude of problems, which are both complex and complicated, thus making them formidable. These problems are; 1) global climate change, 2) depletion of ozone, 3) population growth, 4) transboundary pollution, 5) urbanization and industrialization (solid, toxic and industrial waste and noise pollution), 6) acid rain and deposition, 7) poverty, 8) desertification, 9) loss of biodiversity, 10) diminishing wetland and coastal

resources, and 11) environmental deterioration. In addition to these problems, Asia and the Pacific Region is also plagued with a number of environmental woes comprising 1) domestic and transboundary air pollution (dust, transportation and smoke), 2) change in water quality and quantity, 3) change in forest coverage, 4) insanitation, 5) light pollution, 6) dense haze episodes, and 7) loss of soil and soil fertility (Moriya, 1997; Abe and Bhandari, 1998).

Figure 1: Schematic Diagram of the Environment



A cursory review of literature indicates that these problems are the outcome of the interaction of three factors which are natural factors such as calamities (earthquake, cyclones, epidemics, drought, draught, avalanches, mudslides, etc.), man-made factors (such as cities, dams, roads, structures, etc.) and direct human actions. Human actions are found to be the most important factor because humans have to depend on these resources for their basic needs, material wellbeing and recreation. Abe and Bhandari (1998) have mentioned:

The growing environmental deterioration and degradation in the Asia-Pacific Region is the direct result of thoughtless human intervention occurring around the world. This situation has been further exasperated by the advancement of science and technology, conflicts of interest and a growing tendency towards a materialistic society.

Thus the problems arising out of this interaction are so intricate and inter-connected that these are called a global problematique, a complex of interacting complex problems (Paoletto, nd).

Environmental resources are definite and human wants are unlimited. If this problematique continues to grow rampantly, then resources will be completely exhausted, thereby leading to some kind of horrible consequence of environmental disaster, which means:

The earth will crash if we assume it is a plane,
The earth will sink if we consider it is a ship, and
The earth will explode or burst if it we think it is a spacecraft.

So the burning questions mankind is urgently facing today are; can we prevent it? Or, is it possible to stop it? Or, will we be in a position to reverse this process? Prior to giving answers to these questions, it is necessary to reiterate once again that man-made factors and human intervention are the factors most responsible for the deterioration and degradation of environmental resources. If we agree on this statement, then we can say yes to these questions. Then another question that immediately enters in our minds is “how”? The first and foremost thing is to control human intervention and bring about desirable changes in, and modify human behavior through the promotion of eco-consciousness (environmental literacy, citizenship, awareness and ethics). This is where environmental education (EE) plays a key role because EE is one of the most powerful proven tools for changing or modifying people’s knowledge, attitude, skill and commitment. And the ultimate goal of EE is to assist individuals in becoming environmentally knowledgeable, skilled and dedicated to working individually and collectively towards maintaining a dynamic equilibrium between quality of life and quality of the environment. The final report of the Tbilisi Conference (UNESCO, 1977) endorsed three goals and five objectives of environmental education identified at the Belgrade Charter (UNESCO-UNEP, 1976). They are:

1. To foster clear awareness of, and concern about, economic, social, political and ecological inter-dependence in urban and rural areas.
2. To provide every person with opportunities to acquire the knowledge, values, attitudes, commitment and skills needed to protect and improve the environment.
3. To create new patterns of behaviors of individuals, groups and society as a whole towards the environment.

The Belgrade Charter (UNESCO-UNEP, 1976) has set objectives for environmental education, which were endorsed by the Tbilisi Conference.

1. **Awareness:** to help individuals and social groups acquire awareness of, and sensitivity to the total environment and its allied problems,
2. **Knowledge:** to help individuals and social groups acquire basic understanding of the total environment and its allied problems,
3. **Attitude:** to help individuals and social groups acquire social values, strong feelings of concern for the environment and the motivation for actively participating in protection and improvement.
4. **Skills:** to help individuals and social groups acquire the skills for solving environmental problems.
5. **Participation:** to help individuals and social groups develop a sense of responsibility and urgency regarding environmental problems to ensure appropriate action to solve these problems.

Secondly, Palmer (1998) has presented the UK model of environmental education as follow:

... education about the environment...in educating from (in) the environment...to be education for the environment... there are three threads that have contributed to our present ideas and it has become almost commonplace nowadays to characterize these as education either about, from or for the environment.

In other words, environmental education has been portrayed as education about the environment (empirical knowledge such as discovering/ investigating nature and amassing information), education from (in) the environment (aesthetic elements, educating from the environment, where teachers use the environment as a source of instruction and as a source of materials to investigate other disciplines), and education for the environment (teaching for ethical values, attitude and positive thinking so as to make their action positive for the benefit of the environment).

Thirdly, the International Commission on Education under the auspices of UNESCO has recommended four main pillars of education: 1) learning to know, 2) learning to do, 3) learning to be, and 4) learning to live together (Rao, 1997).

These are the reasons why IGES has chosen environmental education as one of its 6 strategic research areas, which is called the Environmental Education Project, or in short, the EE Project. The detailed plans of action can be found in the Institute's Research Project Plans (IGES, 1998; Moriya, 1998). The primary purpose of the EE Project is to promote the overall eco-consciousness of society vertically as well as horizontally through undertaking

strategic research, adopting and diffusing results, empowering partners and providing forums for the exchange of genius, knowledge and ideas amongst researchers and scholars from the Asia-Pacific Region.

The principal aim of the Project is to formulate a comprehensive regional strategy on environmental education in partnership with national collaborators from countries of the Asia-Pacific Region. The other aim is to facilitate the implementation of the strategy on the basis of availability of resources. Its specific objectives as stipulated in the Research Project Plans (IGES, 1998) are mentioned below.

1. To develop and propose proven means of encouraging all countries in the region to develop appropriate environmental education programs.
2. To design and support networks which provide generic assistance to countries and NGOs in the region to encourage and improve environmental education.
3. To establish collaborative projects with other countries in the region to promote the implementation of environmental education model.

In order to develop the strategy, the Project has chosen four key sectors: (1) formal education, (2) business and industry, (3) NGOs, and (4) media. These areas are selected because of the crucial role they play in influencing people in sustainable development. Government and non-governmental organizations cut across all segments of the society through formal and informal channels of education. NGOs are effective in areas, where governments have not been successful, nor have been able to penetrate. The media disseminates news and information effectively and efficiently. Business and industry are powerful and can mobilize their tremendous resources. We, therefore, believe in using the synergy of these sectors to promote environmental education in the region. The conceptual framework of the Environmental Education Project is presented in Figure 2.

Environmental education is viewed as a comprehensive lifelong process. It should prepare an individual for life and make him responsive to changes in a rapidly changing world with new knowledge, skills and behavior. IGES (1998:65) stipulates:

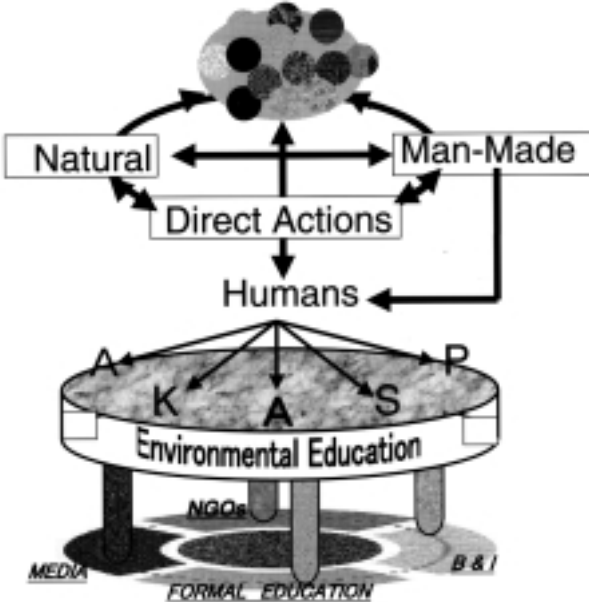
The success of environmental education is an interaction of various factors and depends on commitment from various levels and functions of society, such as children, teenagers, adults, urban and rural people, administrative organs, politicians, entrepreneurs, journalists, NGOs and so on.

So the Project encompasses a wide range of targeted entities, which include (1) government agencies, (2) international organizations, (3) universities and research institutes (4) schools, (5) private and corporate sectors, (7) NGOs, (8) media, (9) businesses and industries, (9) scientists, (10) policy makers, (11) elected officials (2) the judicial system, and (13) civil society at-large.

II. Methodological Approaches

Environmental education is not like a musical education, nor a vocational education. Environmental education is as complex and complicated as the environment is. It is related to each and every thing that surrounds us. For example, if we want to educate people to protect and conserve the migratory Siberian Crane, then we have to educate people not only in Siberia, but also people in Kazakhstan, Afghanistan, Pakistan and India because they migrate all the way from Siberia to India for the winter season. That is why we need to adopt an integrated approach and methodology in EE.

Figure 2. Conceptual Framework of Environmental Education Project



1. Approach: Since we are formulating a regional strategy, it is crucially important to build the project on the foundations already laid down by international organizations, governments, NGOs and civil society from the Asia-Pacific Region. The approach of the Project will be as follows:

1. **Synergy:** It attempts to achieve the combined strength of four sectors and believes that the whole is more important than its sum total.
2. **Partnership development:** It firmly believes in networking (sharing experience and expertise), collaboration (working together with national partners, government agencies, NGOs, research institutes and universities) and exchange of scholars.
3. **Participatory focus:** Participatory exercises will be encouraged to secure the active and informed participation of educational experts and organizations in the region.

2. Phases: The Project has a three year time framework (1998-2000) and its activities have been divided into five phases (Abe, 1998).

Phase 1: Assessment of the EE Situation in the Region: A preliminary review of environmental education activities will be conducted in the region. Based on this assessment, some countries will be selected as sites for case studies, if necessary, to gather additional information. Secondary data and participatory techniques will be used to undertake case studies. Some 37 countries have been contacted to prepare country reports for their respective countries.

Phase 2: Identification of Key Issues and Development of Principles and Guidelines: Data and information obtained from the country status reports and case studies will be analyzed to identify key issues such as the range of strategies used, context and factors influencing the relative degree of success of environmental education activities, the obstacles faced and means adopted to overcome them. This analysis will be used to develop principles and guidelines for 'best practice' in environmental education in each of the four sectors.

Phase 3: Development of a Framework for the Strategy: Workshops and seminars will be organized involving regional specialists, experts and national collaborators to review and revise issues, principles and practices obtained at Phase 2 and then prepare a draft framework (skeleton) of a comprehensive strategy.

Phase 4: Development of a Comprehensive Strategy: A preliminary draft of the strategy will be prepared within the accepted framework of principles and guidelines. The draft strategy will be reviewed and

revised involving regional experts, specialists and national collaborators.

Phase 5: Publication and Dissemination: The strategy will be published and disseminated to agencies responsible for, and concerned with environmental education in the region.

3. Techniques: The Project will employ research techniques which include country report preparation, secondary information, field visits, interactive meetings, workshops, seminars, conferences, case studies, and reviews.

Conclusion

The EE Project attempts to provide an Asia-Pacific perspective to sustainable development and promote eco-consciousness in all spectra of society. The outcome is intended to be used as a contribution to “Rio Plus 10” to be held in 2002, ECO ASIA (Environmental Congress for Asia and the Pacific), APEC (Asia-Pacific Economic Cooperation) and GEA (Global Environment Action) forums. It will also be used to promote cooperation and partnership among various regional and sub-regional organizations and enhance the GLOBE Program (Global Learning and Observation to Benefit Environment), initiated under the US-Japan Common Agenda for Cooperation on the Global Perspective, to establish a forum for environmental education experts in Asia and the Pacific Region.

Reference

- Abe, Osamu. 1999. Progress and Future Plans for Strategies Research on Environmental Education Project (1st Draft). IGES/Inf/1999/5, 29 Jan 1999.
- Abe, Prof. Osamu. and Bishnu B. Bhandari. 1998. IGES and The Environmental Education Project in Asia and The Pacific Region. Proceedings of the 4th Asia and Pacific NGOs Environmental Conference, 26-27 Nov. 1998, Singapore.
- IGES (1998) IGES: Research Project Plans. IGES (Institute for Global Environmental Strategies), Kanagawa, Japan.
- Moriya, Masaru (1997) First International Workshop for Strategic Research on Global Environment. Organized by the Preparatory Organization to Establish the Institute for Global Environmental Strategies/Environment Agency of the Government of Japan/Kanagawa Prefecture Government. Hayama, Kanagawa, Japan, November 5 (Wed) - 6 (Thurs), 1997.

- Moriya, Masaru (1998) Second International Workshop for Strategic Research on Global Environment. Organized by the Preparatory Organization to Establish the Institute for Global Environmental Strategies/ Environment Agency of the Government of Japan/Kanagawa Prefecture Government. Hayama, Kanagawa, Japan, February 8 (Sun) -10 (Tue), 1998.
- Palmer, Joy A. 1998. Environmental Education in the 21st Century: Theory, Practice, Progress and Promise. London and New York: Routledge.
- Paoletto, Glen. nd. Re-evolution: New Development Patterns in a Changing World. (Draft manuscript). IGES, Japan.
- Rao, Digumarti Bhaskara (Dr). 1997. Education for the 21st Century. New Delhi: Discovery Publishing House.
- UNESCO. 1977. Intergovernmental Conference on Environmental Education. Tbilisi, USSR, 14-26 1977.
- UNESCO-UNEP. 1976. The Belgrade Charter. In Connect, UNESCO-UNEP Environmental Education Newsletter. Vol. 1, No. 1 January 1976.

Promoting Public Awareness through Environmental Journalism: From the Media Effect Perspective

Shunji Mikami

**Faculty of Sociology
Toyo University, Tokyo, Japan**

1. Introduction

In this presentation, I would like to outline a framework for understanding the role of the news media in promoting public awareness of the environmental problems from the media effects perspective.

In his classic 1922 work, *Public Opinion*, Walter Lippmann pointed out that the news media create our pictures of the world, “pseudo-environment”, through daily reports. The reality which the news media provide us is usually selective, somewhat biased and distorted. Yet, these pictures often become our perception of the real world. Today, as our environment is becoming more and more complex, interdependent and globalized, the role of the news media in creating our perception of the environment is becoming much more important than ever.

Another reason for our dependence on the news media is that we usually pay attention to only several prominent issues in our daily life. In order to adapt ourselves to the changing environment, we always watch what is going on around us, what issues are important for us, and try to understand what these issues are about. The main source of information is the news media for most people in Japan.

In the following sections, we examine the effects of the news media upon the people’s perception of the environmental problems, by analyzing our survey research data. We have been conducting opinion surveys on the environmental issues annually since 1992 in the Tokyo metropolitan area. These data provide us a rich source for understanding the role of the news media on promoting public awareness of the environmental issues.

2. Effects of the News Media on Public Concerns about the Environment

Almost every year since 1992, we have conducted opinion surveys of the population of Tokyo metropolitan area about global environmental problems and found a consistently high level of public concern about

environmental problems, as shown in Table 1. Each year, more than 40 % of the population is very much or fairly concerned about the environmental problems in general.

Table 1 Degree of Public Concern about Environmental Problems (1992 - 1998)

	1992 ^a	1993 ^b	1994 ^c	1995 ^d	1996 ^e	1998 ^f
Very much concerned	17.8 %	19.1 %	15.1 %	17.9 %	18.4 %	14.9%
Fairly concerned	28.1	29.5	26.6	33.4	22.6	35.3
Somewhat concerned	42.5	46.3	56.3	38.7	50.6	41.2
Not much concerned	11.5	3.9	-	6.3	7.0	8.0
Not at all concerned	-	-	1.6	0.7	0.8	0.6
No answer	0.3	1.2	0.4	3.1	0.6	0.0
Total (N)	(581)	(434)	(760)	(587)	(875)	(502)
%	100.0	100.0	100.0	100.0	100.0	100.0

Notes: All data were drawn from surveys conducted on a randomly selected sample of the residents aged from 20 to 74, living in the following area: a. Tokyo City (23 wards) b. Bunkyo ward, Tokyo c. Itabashi Ward, Tokyo d. Tokyo City (23 wards) e. Tokyo metropolitan area (within 30km from downtown) f. Tokyo City (23 wards). The wording of the questionnaire is the same every year: "To what degree are you concerned about environmental problems?"

We also asked the respondents whether they regarded any of the ten major global environmental problems as important or not. The items of ten major global environmental problems and the percentage of the respondents who said them important are shown in Table 2. These data enable us to analyze yearly fluctuation in the salience of each global environmental issue. From the table, we find that most of the public in Tokyo is concerned about global warming and ozone layer depletion. Radioactive contamination is also a salient issue for many people in Japan, reflecting a strong anxiety about nuclear power.

Table 2. Concerns about the global environmental problems (1992 - 1998)

Year (Sample size n)	1992 (581)	1993 (434)	1994 (760)	1995 (589)	1996 (875)	1998 (502)
1. Wildlife preservation	13.6 %	32.3 %	40.7%	36.5 %	41.1 %	28.4 %
2. Deforestation and desertification	39.2	49.3	54.2	47.4	58.1	44.2
3. Global warming	52.3	71.0	64.9	61.5	72.0	75.5
4. Ozone layer depletion	60.9	75.1	71.8	68.8	74.9	72.9
5. Population explosion	16.5	23.0	29.5	24.9	33.9	19.5
6. Radioactive contamination	30.6	58.3	50.3	63.9	67.4	57.6
7. Acid rain	37.2	58.3	50.3	63.9	67.4	51.6
8. Export of hazardous materials to the developing countries	16.0	39.4	32.0	31.9	42.3	33.7
9. Marine pollution	19.8	51.8	45.5	45.8	50.2	40.8
10. Pollution in the developing countries	11.3	26.3	26.6	30.7	35.0	26.5
11. Other	0.4	1.4	2.2	0.9	4.0	2.8

Notes: The respondents were asked to choose any pre-coded items that they regarded as important problems for them. Multiple answers were allowed. The figure shows the response rate for each item.

It is interesting to note that in our annual survey, global warming surpassed ozone depletion as the top public concern for the first time in 1998. This may be related to the heavy media coverage of the United Nations Convention on Climate Change (COP3) in Kyoto, December 1997.

3. Effects of the Environmental News on the Perception of Reality

Many studies on communication research have revealed that the news media influence our perception of reality, by presenting specific issues selectively and with varied priorities.

The agenda-setting research

According to the agenda-setting research, the new media influence public perception of what are the most important issues of the day. The underlying assumption is that the audience learns what issues are important from the priorities of the news media and incorporates a similar set of weights in their own personal agenda. An increasing number of agenda-setting studies have been carried out on environmental topics (Atwater and Anderson, 1986; Protesse et al., 1991; Mikami et al., 1995).

Table 3 The most important issues the nations should deal with *
(Multiple answers are allowed)

Issues	%
Economic recovery	79.5
Environmental problems	67.1
Pensionary system	58.2
Consumer tax rate	50.8
Medical reform	48.8
Unemployment	47.2
Aging problems	42.2
Monetary reform	42.0
Adolescent education	41.4
Political ethics	40.4
Income tax	39.0

*The data is drawn from the survey
Conducted in 1998 to the residents in Tokyo.

Table 4. Cross tabulation of the TV news viewing with the salience of
The environmental problems (1998 survey)

Length of TV News Viewing	Environmental problems is important			
	Yes	No	Total	N
Less than 45 minutes	59.7%	40.3%	100.0%	196
Less than 90 minutes	67.5	32.5	100.0	200
90 minutes of more	80.2	19.8	100.0	106

(X^2 : $p < .01$)

Table 3 shows what kind of major issues people are aware as important in daily life. The environmental problems are ranked as the secondly most important issues for the public in Japan. It is also shown that the longer the respondents they watch television news, the more they tend to think the environmental issues as important (Table 4). This relationship suggests the agenda-setting function of the news media on the public awareness of the environmental issues in Japan.

Takeshita analyzed our 1992 survey data and content analysis of the two national newspapers, and found the agenda-setting effect of the newspaper about the environmental issues (Mikami et al, 1995). He found a relatively weak correlations between the most recent two-week coverage period. The correlations, however, increased as the media agenda receded in time and accumulated two-week by two-week interval, reaching a peak reached in six to ten cumulative weeks. Thereafter the correlations declined

slightly. This suggests that the effects of newspaper agenda-setting are relatively long-term and cumulative.

Cultivation Research:

Cultivation analysis, which was originated by George Gerbner and his associates in the 1960s, studies how heavy and repetitive exposure to television influences a viewer's conception about the real world. Shanahan (1993) applied cultivation analysis to the environment and found a negative relationship between television viewing and environmental concern. Based on this finding, Shanahan argued that constant portrayal of the environment as clean and sound on television could contribute to public apathy toward the environment. Shanahan et al. (1997), using data from the 1993 and 1994 General Social Survey, found that television viewing was associated with a general apprehension about the state of the environment, but was not consistently related to viewers' perception of threats from specific sources.

Kawabata analyzed the cultivation effects of environment-related television viewing on environment-friendly practices, using our 1992 survey data (Mikami et al, 1995). We asked the respondents 16 questions on how they incorporate environmental practices into their daily lifestyles. In order to examine between environmental behavior and exposure to environment-related television programs, we performed cross-tabular and correlation analysis. The cross-tabular analysis revealed that people who viewed more environment-related television programs were more likely to engage in pro-environment behavior. Most interestingly, even those who were less concerned with environmental issues showed a significantly positive association between the amount of environment-related television viewing and the index of environment-friendly behavior.

These data suggest that, at least among those subgroups, environment-related television viewing influences their behavior in some way. It should be noted, however, that the relationships found here might be reciprocal: Some people tend to watch environment-related television programs because they are concerned about environmental issues or involved in environmental activities.

4. Conclusion

In this presentation, I examined the influence of the news media on promoting public awareness of the environmental issues, using our annual survey data since 1992.

From our survey data, it was suggested that the news media exert strong influence upon our perception of the environmental risks. In agenda-setting,

we found a salience arousing effect in a longitudinal time-span, suggesting the cumulative effect of mass media upon public awareness of global environmental issues. This strongly indicates that continuous reporting, not event-centered, is important to keep public awareness. Some agenda-setting studies call attention to the “agenda-building” process in which scientists, media, government officials and NGO participate and negotiate each other (Hansen, 1993). Such studies help us understand why certain environmental issue emerge and enter the media agenda. Cultivation studies promise to give us insights into the longitudinal and cumulative influences of mass media upon the public conception of global environmental issues. So far, however, the findings from these studies are not consistent. Further research is necessary to explore the mechanisms of mass media influence on public awareness of environmental issues. In particular, we need to probe the mediating variables in eco-consciousness and carry out comparative cross-cultural comparative surveys.

References:

- Atwater, T., Salwen, B. and R. Anderson, R., 1985, “Media Agenda-Setting With Environmental Issues”, *Journalism Quarterly*, 62: 394-397.
- Gerbner, G., L. Gross, M. Morgan, and N. Signorielli, , 1986, “Living with Television: The Dynamics of the Cultivation Process”, In: J. Bryant and D. Zillman (eds.), *Perspectives on Media Effects* (Hillsdale, NJ: Lawrence Erlbaum Assoc., Inc.): 17-40.
- Hansen, A., 1993, “Greenpeace and Press Coverage of Environmental Issues”, In A. Hansen (ed.), *The Mass Media and Environmental Issues* (London: Leicester University Press): 150-178.
- Lippmann, Walter, 1922, *Public Opinion*. New York: Macmillan
- McCombs, M. and D. Shaw, 1972, “The Agenda-Setting Function of Mass Media “, *Public Opinion Quarterly*, 36: 176-185.
- Mikami, S., T. Takeshita, M. Nakada, and M. Kawabata, 1995, “The Media Coverage and Public Awareness of Environmental Issues in Japan”, *Gazette*, 54: 209-226.
- Mikami, S., T. Takeshita, M. Nakada, and M. Kawabata and N. Otani., 1997, *A Study on the Influence of Mass Media on the Public Awareness of Global Environmental Problems*. The Official Report to the Ministry of Science and Education (in Japanese).
- Protest, D.L., F.Cook, J.Doppelt, J.Ettema, M. Gordon, D.Leff and P.Miller, 1991, *The Journalism of Outrage: Investigative Reporting and Agenda*

Building in America. New York: Guilford.

Shanahan, J., 1993, "Television and the cultivation of environmental concern", in: A. Hansen, ed., *The Mass Media and Environmental Issues* (London: Leicester University Press): 181-197.

Shanahan, J., M. Morgan and Stenbjerre, 1997, "Green or brown? Television and the cultivation of environmental concern", *Journal of Broadcasting and Electronic Media*, 41(3): 305-323.

Presentation

New Development Pattern and the Roles of Mass Media

Kazuo Matsushita
Institute for Global Environmental Strategy, Japan

First of all, I would like to express my heartiest welcome to all of you who have come to Shonan Village Center, IGES, to attend this workshop on Media and Environment in the Asia-Pacific region, particularly to those who came all the way from abroad.

Before going into the substance, let me introduce briefly about IGES. IGES started its activities in April, 1998. We are currently undertaking five strategic research projects. These five projects are; climate change, urban environmental management, forests conservation, environmental education, and environmental governance. In addition to these five projects, we are planning the sixth project which is called New Development Patterns Project.

Now, I would like to talk about the significance of Kyoto conference, the so called COP3, Conference of the Parties of the Climate Change Convention, which was held in December, 1997. At the Kyoto conference, Kyoto protocol was adopted, which mandated in industrial countries to reduce emissions of greenhouse gases by 5% on average. As for Japan, for example, 6% from the 1990 level by the years of 2008 to 2012, and for US 7%, for European Unions 8%. What does it mean? It means that, at least for industrial countries, it is not allowed to increase the consumption of fossil fuels, like coal and oil, in the future. So that means future economic activities, particularly for those industrial countries, will be limited by environmental constraints. We have to develop within the limitation of environmental constraints. What we need is an Eco-industrial revolution.

Next I would like to explain the background and objectives of new developmental patterns project planning. The aim of the new developmental pattern project is to explore new developmental patterns to arrive at a resource recycling, and circular or symbiotic society based on the reevaluation of existing economic development in each country. The project will be carried out in line with the basic objectives of IGES and particularly keeping, close collaboration with five other ongoing projects.

This project will ultimately encompass global perspective, but it will focus on Asian region. Why will we focus on Asian region? This is partly due to objectives of IGES, which is focusing on Asian regions. However the fundamental reason for this is that future trends of the global environment in the 21st century will greatly depend on how the Asian countries, such as China and India with large populations and fast economic growth, and the ASEAN

countries and Korea will develop. So the future impact on global environment vary greatly depending on what patterns of development these countries will take. These Asian countries will be able to benefit from the experiences of other developed countries, but at the same time, since these countries are experiencing very rapid change, they are facing various economic and social problems and fragility due to such rapid change of their societies. It is urgently needed to propose new developmental patterns which are different from prevailing resource intensive, throw-away economies and to initiate consultation with the governments and research institutes in these countries in order to realize new development patterns. Basically the objectives of this new developmental pattern project at IGES is to contribute to such a process.

Then what kind of society and economy are we aiming at? I have listed five principles. Actually, this is not entirely my invention. The first three principles were proposed by Dr. Harman Daly, American environmental economist, and also these three principles are listed in the famous report by Brunttland Commissions "Our Common Future".

The first principle is to use renewable resources within renewable production. Renewable resources are, for example, forest, fishery, water and soil. We can use them within the renewable limits. The second principle is about non-renewable resources such as coal, oil, metals and minerals. These are limited resources so that we are allowed to use them only within the speed of production of substitutes. We should try to recycle and reduce the use of non-renewable resources and try to produce the substitutes for non-renewable resources as much as possible. The third principle is for wastes, especially, toxic and hazardous wastes. We are allowed to discharge them within the absorptive capacity of nature. We should not use those substances, which cannot be decomposed and cannot be absorbed by nature, such as dioxin and PCB and CFCs. We should try to minimize the use of those substances.

There are two additional guiding principles. One is to increase Eco-efficiency, which means that we should increase outputs or service while reducing inputs such as natural resources or energy. A famous German scholar, Prof. Schmitt-Bleek, proposed factor 4 or 10. By using advanced technologies, we can reduce the material or energy inputs by the factors of 4 or 10. This is the direction we have to aim at and try to build the society with the system of recycling and reuse. The last principle is somewhat different from others, which concerns with equity. Equity is important in arriving at sustainable society. I have listed two kinds of equity: North and South equity and intergenerational equity. The second equity is equity between present and future generations. We have to balance the rights and opportunities for present generations and for future generations. These are what I think for the principles for sustainable development.

In order to achieve Eco-industrial revolution, how are we going to do? What we have to do first is to have a clear vision for our future society. We have to draw our vision for the 21st century through participatory process. Secondly, having arrived at the clear vision, policy measures and schedules to attain such a vision should be clearly stated in order to give messages to various entities such as academic circle, business circle and civil society. Based on the messages, investors can invest their resources for developing sustainable technologies and educators can prepare for new education for sustainability, and mass media campaign for new ideas. Particularly, disseminating and sharing of information is very important in this process. By sharing information, we could build a so-called epistemic community so that we will be able to arrive at a better decision with informed knowledge. In the process of decision making or arriving at a vision for the future, it is important to have wider participation of citizens, business, local authorities, and NGO/NPOs.

Now, let me just briefly propose some ideas why mass media is important. Mr. Khan has already proposed some ideas and maybe my presentation will overlap with what he said. In the present society, basically there are two factors. One is market force that is controlled by business sector and the other is government sector that provides laws, regulations, public facilities and infrastructure. But there are certain limitations for both the market and government mechanisms.

Market mechanism is a good at allocating resources efficiency. However this mechanism inherently lacks the ability to provide common social goods, such as environment, education and welfare services. We have to redress the deficiency of market mechanism and the limitation of government activities. Mass media usually criticize the government. That is a healthy sign of a democratic society. I worked as a government official for a long time. I used to read the newspapers to find criticisms to us. There are certain reasons why the government is always slow to act. Governments put priority on continuity and stability, and also equity in the sense that we can not go too far in certain part. Governments are slow to react to new situations and there is little incentive to change the status quo, particularly in the global environmental issues. When the government delegations gather to discuss how to deal with global environment, each government sticks to its own national interests. It is difficult for government officials and politicians to look beyond the future or to think about the global common interests.

NGOs and mass media have the potential to advocate global interests or rules to manage global environment. Then what kind of role mass media can play? I would like to propose some ideas in order to stimulate your discussion. I think the first role of mass media is to find the facts. For example, about the concentration of dioxin in Tokorozawa or PCB or what is happening

in Pakistan after nuclear explosion. Of course, if we talk about facts, there is a certain value judgement: what is important, and what is not important, and what to report and what not to report. A famous example is when a dog bites a man, it will not be reported, but if a man bites a dog, it will be reported. What is the fact? That is one question.

When you report, Japanese big newspapers say that they are neutral, but I doubt that their neutrality. They have certain tendencies. Some European or American newspaper companies make their positions clear. For example, in the case of US presidential election, some newspapers say that they support a certain candidate. Japanese newspapers usually don't do that. I don't know which is better. Sometimes mass media barks: criticize government, and criticize business activities. I think to the certain extent that these constructive criticisms are a healthy sign of a society.

Some journalists advocate certain issues. Sometimes propose policy alternatives. Recently there is a trend of networking. Not only for mass media, but also for small NGOs. By using various electric devices, they can network globally by themselves so that they can enhance their influences and their knowledge.

What kind of roles are we expecting from mass media? One of the roles of the mass media is to bridge the gap between civil society or ordinary people and experts in various fields. Environmental issues are particularly very complicated both scientifically and socially. It is difficult to have a holistic picture. What we expect from environmental journalists is to translation of expert's knowledge into the level of laymen's words. This is a very important role that we expect from mass media.

The second point is to try to link local issues, national issues and global issues. Sometimes various events or various happening occurs in locally, but if you collect local phenomena, then there may be national trends or global trends. I think good environment reporter can detect from local events to longer effects or global effects. One of the examples is a book written by an American scientist and a journalist, Dianne Dumanoski and Theo Colboen, et al. The book is called "Our Stolen Future". It is a very good work of the combination of a scientist and a journalist. Similarly, mass media can play as a bridge between scientists and administration, business and local communities.

Sometimes mass media work with NGOs and they can set the global agenda or campaign for certain issues. By playing such roles, the civil society in the 21st century will be able to arrive at a better-informed decision making through information sharing. These are the roles of mass media that I think would be important.

Lastly, I will talk about Eco-Asia since this is closely related to new

development patterns project that IGES is preparing. Eco-Asia stands for Economic and Environmental of Asia. Eco Asia is a high-level policy consultation forum initiated by the government of Japan in 1991. High level participants include ministerial level. Ministers of Environment are invited to attend policy consultation almost every year. Within the framework of Eco Asia, there is a project called Eco Asia Long-term Perspective Project. This project carried out such activities as evaluation of the state of the environment of the regions, projection for the future, provision of policy options for sustainable development, capacity building in participating countries and proposals of regional action models. Objectives of Eco Asia overlap those of new developmental patterns project of IGES. In the future, starting next fiscal year, which starts in April, we will work closely with Eco Asia, and we propose environmental policy options for the long-term sustainable development in Asian regions on the basis of analysis of socioeconomic conditions and future trends.

Thank you very much for your kind attention.

Introduction of Activities, World School Japan

**Jun-ichi Ohmae
Asahi Shimbun**

Introduction

I would like to share with you my experiences from my 20 some years in journalism and some civil activities. Actually, I had been writing articles for a newspaper for about 20 years. I was just a typical news writer. Then I switched my position to the digital world. I established a new service division of Asahi Shimbun using the Internet. If you can log onto my web-site, <http://www.asahi.com/>, you can read about Japanese information, some of which is in English, but most is in Japanese.

What is the "World School Network"?

You can access current Japanese news in Nepal, South Africa or the top of the world or bottom of the world. I also do some voluntary activities for an NGO named World School Japan.

I would like to introduce some activities of World School Japan. The name itself will be changed on April 1, 1999 to "World School Network". We have so many participants, not only from Japan, but also from many places in the world, so we decided to change the name.

It is really international. The idea of World School is to connect schools or youth groups in the world by the Internet in order to share real experiences in every place in the world, such as checking water, watching birds or eating vegetables in different places. This is the activity in 1998. We have 21 organizations in Japan, and 35 schools and teachers, mainly schools, from South America Europe, France, and US. Unfortunately, there were no participants from Asian countries. I really want to have some contact with each region. We have a lot of volunteers to translate English or Japanese information. Some professionals, like Japanese professors of plants, birds, nature, wild life, or culture, are the advisors for our activities.

Several activities of "World School"

We have several projects on our program. We have a water project, wild life project and a garbage project. We have common themes and organize small groups of all of the participants. For example, for the garbage project school in Sapporo, a school on Small Island in Micronesia, and a school in the

U.S., compare their trash boxes on the same day, and what type of garbage they have in the trash box. Through such activities, children can share the meaning of garbage or trash. For me water project, there are many experimental sites, for example Tama River. A junior high school in the Tokyo area is doing some observation of the Tama River. In particular, they check insects in the water so that they can evaluate whether the water is healthy or not. That information they provide and share with other participants around the world. As one of the highlights of our activities each year, we have some special events to attract worldwide attention.

Micronesia project

We have a project in Micronesia. It is a small island. It only has a population of 600. There are only two flights a month on a plane with a twin engine, and only 6 seats are available. People live a very self-sufficient life. You can see children in a school on that island. They can wear very simple materials. This is the garbage they collected. You can see that all of the garbage is leaves from coconut trees. Actually they don't have a word for garbage. Their life is so natural, they don't understand the idea of garbage.

This sort of report from a small island is very big news for Japanese and American children. American children found a lot of garbage in their kitchens and classrooms. Of course, this is a very small island and there are no communication tools. As I mentioned, there are two flights a month and one ship a month, so they were unable to exchange information with the outside world before.

We brought in some very small satellite communication tools with a computer and set up a connection to the world. Actually the government of the Federated States of Micronesia is now installing such communication facilities in each island in order to provide information access for the children. Sooner or later, some sort of modernization or development will come to this island.

Garbage Problem in Small Island

Last year, there was much shortage of water because of El Nino. The Federal Emergency Management Agency of U.S. provided a lot of water tanks, a lot of food, packed pet bottles, a lot of flour in plastic bags, and canned food for these islands. Now, there is a lot of garbage on this island. Just one year after this special aid from the outside world, the island now has a lot of garbage. But they do not know how to treat plastics, papers, pet bottles and cans. They keep everything on the island. They dump plastics everywhere. Small Island is now covered with such garbage. Our project at that time was very good. Educators and we conducted activities how to think and treat garbage, and

how to adopt new development from the outside world.

Prospect of future mass communication

We are in a time of mass production and mass consumption in the 20th century. I actually come from a company of mass newspapers. We consume a lot of paper, a lot of forest. But in the near future or even now, we, our society can share information without mass consumption, just with something like a small PC and probably next year we will have small satellite data telephones. With those small PCs, we can access information from the foothills of the Himalayas or in Myanmar.

Now I believe the function of mass media and journalism will also be changed or challenged by such a huge new trend. I am not simply an admirer of technology nor a technomaniac. But I feel it is the most cost-effective method of communication we have. I want to now ask you one question. What is the role of journalism in the 21st century? With no mass consumption, with collaboration and with such new technology, how can journalism survive or be accepted by the public? That is my very short presentation. Thank you.

Introduction of Environmental Policy and Situation in Japan

Sukio Iwatara

Former State Minister, Director General of the Environment Agency

Introduction

This is the third time for me to attend the IGES workshop. I am not a member, but I am always delighted to participate as a guest. We have a long history on the environmental problems and also had a lot of lessons. I hope that people from Asia would learn something useful from those lessons and the history.

Brief history about the Minamata disease

As you know, the Minamata disease was one of the most popular well-known pollution-related disease happened in Japan. I could solve the problems related to compensation of the victims of this disease with Prime Minister, Tomiichi Murayama when I was the Director General of the Environment Agency. We also built the research center in Minamata City and have been doing international exchange of information and the research not to repeat those sad diseases or problems of environmental pollution. The Minamata disease happened not only in Japan, but also you can observe similar diseases in several other countries. I hope that we should work together to prevent these diseases so that we do not have these sad experiences again.

We had Minamata disease as well as other health and social problems caused environmental pollution during our high economic growth. NGOs or other organizations also have made efforts to the solution of the problems to say nothing of the Japanese government. Some organizations had good results but some sometimes did not. I hope you can learn something from these lessons.

To tell you the truth, today, we have a lot of key authorities on environmental issues in this room. They sometimes encourage us, and also sometimes criticize us in some aspects. We can learn each other. I think it is very important to exchange our ideas through this environmental journalist's forum.

Recent correspondence for new problems

I heard you would visit Tokorozawa, which has become a popular place

of dioxin. You know Vietnam is in the most serious situation by dioxin. We are also worried about Tokorozawa because it is very famous for combustion of industrial waste. It is also very serious that some dioxin has been found in mother's milk. The endocrine disrupters can cause serious problems for women. We are trying best efforts with other parties to establish a new law to solve these problems. To make it possible, I am putting a lot of efforts toward it.

The role of Media for pollution and environmental administration

In Japan, many people said "It would cost a lot of money and prevent the economic growth to take environmental measures". So corporations and anti-pollution movements have always been in the struggle. But factories are no longer allowed to do the things like discharging of polluted waste water as people's health and bodies are directly in danger,. In Kawasaki city, where is my constituency and I used to live, the main industry was the steel industry. A lot of people suffered from asthma. Many sufferers from pollution diseases thronged the corporations to criticize what they had done.

At the end of 1960's, media reported about people who suffered from pollution diseases on a large scale. The people raised their awareness through media about the environmental disruption caused by pollution. People begun to think "it isn't their problems now, but there is a possibility that it would be ours". Then, the public opinion changed very much. These movements made local politicians difficult to continue their political activity without considering anti-pollution measures for pollution. Because of that, the local governments sometimes had to take new anti-pollution measure before the national government did. So, sometimes the national government had to learn from the local governments to change the national policies. And then, if corporations continued to pollute the areas, it would be very negative for their images and also they would be sued to the court, and have to pay a lot of reparations for sufferers. Consequently, policies and actions of corporations changed very much, and they realized they had to consider pollution prevention. As consumers are becoming environmentally conscious as well it is natural that the cost of infrastructure for environmental conservation is quite high. However, it is very difficult for companies to raise their product prices.

I would like to talk about the Japanese car industry as an example. The car industry has developed technology very much in terms of this field. This was because that the car industry had been criticized for emission pollutants. They were forced to develop the technology in order to answer such criticisms. The Japanese car industry developed advanced technology such as reducing pollutant emissions and improving fuel efficiency. As a result, the Japanese car industry evolved into the world and led the world car industries. We said anti-pollution measures could raise corporation images. In other words, it

brings a lot of good effects to the society and to corporations themselves.

I'd like to say something from my own experience. I know many people suffered from asthma in Kawasaki. Some people were killed by disease and some people had to go to the hospital and some people were paralyzed. The media put a lot of efforts into reporting these causes. And the people responded to the report by raising a lot of public opinions about this. I was grown up to be a politician in this situation. These movements produced anti-pollution measures in my country. What I want to say is that suffering people existed in our society. The media took up these people. From media reporting, public awareness was raised. Local and national governments turned to have to answer the public opinion. In a word, I believe that the movement against environmental pollution has raised and consolidated democracy in Japan and this is still continuing. As it was significant in the past, it should be significant in the future as well.

I heard an episode from a friend who was a teacher. He said children drew the sky by using gray colors in their pictures. He thought that the color of the sky should be blue. But he said it only looked gray for children. At that time, when I went to work, I put a clean shirt on in the morning, but when I came back, it became gray. Even the laundry, when I took and put them outside for all day, became black. That was the evidence how much the air was polluted. I can say that from that sort of situation we have promoted anti-pollution measures, and have regained blue skies and white clouds we can see today.

Recently, many committees for anti-pollution measures that differ from the municipal assembly have been established in the local governments. From these point of views, you can say that the public has a great influence on these situations and also governments. The Japanese government has set up many committees, and these committees can input their opinions to policies. As a case of civic participation, there are also many groups that are very active in local areas. If we think about their activity, it does not still arrive at an international level. For example, one of the largest NGO in Japan is "Wild Bird Society of Japan", and this society has approximately 60,000 members. "Natural Conservation Society of Japan" has about 50,000. We have no NGOs consisting of millions of members in Japan. It may be said that the level of NGOs is still not at the level of other developed countries like European countries or America. I believe that we should enforce and encourage the activities of Japanese NGOs.

Discssion on Environmental Education

Discussion on February 17, 1999.

MODERATOR

Ladies and gentlemen, from just now, we would like to begin the discussion about environmental education from the point of views of Media or Journalist. Mr. Kenichi Mizuno is expected to be a chairperson in this discussion.

CHAIRPERSON (Mr. Kenichi Mizuno)

Thank you very much. The objective of IGES is not only the research but also more importantly, the strategic research. That means that, we hope some sorts of output, proposals, and good ideas will come out of it and might be used, for instance, by the Japanese government in official developmental assistant programs. We are in a position to propose those activities and at the same time to get funding for them. So I will ask you to think about that and to commence the next discussion from that point of view. We invite Japanese participants to concentrate on what Japan can do and what Japan should do in the context of Asia-Pacific strategy for environmental education and, at the same time, media development. And we also invite participants from Asia-Pacific countries to give us suggestions and demands relating to what you want IGES or Japanese journalists to do in terms of encouraging environmental reporting activities. So, first, we ask Mr. Okajima to give us your ideas and suggestions.

Mr. Shigeyuki Okajima

I'd like to give one concrete example. I have a lot of friends in Asian countries. Many journalists tell me that in Asia, ordinary people, they have no chance to have an environmental news. Usually in English media, English newspapers, they print environmental issues. But newspapers written in local language, they usually do not print environmental issues. So that is very big problem. It means that most of Asian people ignore the environmental issues. Only intelligent people understand or know the issues. That is a very big point. What can we do? The purpose of this seminar started from that point of view. As the first seminar, we invited journalists who are working in local media so then we discuss on lots of things. Mr. U Tun Naing, program officer of UNDP told me to give a chance to the journalists who are working in the local media to learn the environmental issues. That is why we tried to have this seminar. Today is different but the purpose of the first seminar was to educate or give a chance to learn to the journalists working in the local language in Asia. That was our first purpose. But after discussing with Asian

journalists, Japanese journalists realized very much we do not know anything about Asian situations. Then from last time, we gradually changed and just equally discussing. But, at the sometime I like to point out the fact that we still have a lot of people who has no chance to know environmental news. What shall we do? It is also one point in Asian media, especially the role of mass media. So we have lots of literacy people and printing matter is not useful. Radio and TV are also useful for providing the issues to village people. I think that radio is one of the best tools in Asia. Religious leaders talking, NGOs activities, picture programs with songs and entertainment are very useful. Mixing religious and entertainment aspects, to provide important basic knowledge of environmental issues through radio is very useful. Digital is also very useful but digital should solve the problem of English literacy. If digital machines can provide moving pictures, we can also use it. This is one point. As I mentioned, education is in the temple. Maybe radio is in the temple. Let's try to provide such kind of local media and I like to develop some programs all together.

Mr. Zafarulah Khan

I have three proposals. First, for instance, getting a point from the experience of those who are part of this study group. We would have to classify journalists into two or three categories: news reporters, columnists, article writers, TV producers, etc to devise strategies for all differently. Environmental reporting, as we all agree that it has so many faces, scientific, economic etc. Just having acquaintance or introduction with the problems does not solve the problems. You need skills to write good environmental communicative story. Not in scientific, but in understandable language. I think, if possible, like the IGES is doing the study about environmental education, we can have some sort of report from all countries that what kind of environmental journalism at all these three stages is being done i.e. news form, television programs and writers work. On the basis of that, you can develop training programs and maybe internships with the newspapers who are more environment-friendly so that reporters from some Asian countries could come in and learn, and maybe someone going from Japan to see the situation in other countries. Another thing that I would like to suggest is sharing of success stories both in written form and in documentaries, because similar problems might be existing in some part of Asia. However, people might not realize them unless they get some audiovisual image or written words about that problem which was solved in some other part of the Asia. So sharing of that kind of success stories could be one of the options to network journalism and journalists in Asia. Of course we do have an international federation of environmental journalist as well. What about a bilateral cooperation if some problem which is of Trans-boundary nature. I would like to give an example. When India and Pakistan conducted the nuclear tests, there was very little

information about impact of radiation and very little information how to do story about that situation. So we had to share that information from Japanese experience because Japan is the only country who went through this odd experience, and were in a position to tell what are the symptoms and other things to deduct radiation. If such situation arises we can share our experiences through some organization or some other mechanism, relevant type of background information that could be disseminated through briefing papers or through Internet or booklets etc. These are a few suggestions that I have.

CHAIRPERSON

First, training programs, success storied and Trans-boundary networking. It's very impressive when we hear Indian people and Pakistani people talking about nuclear power, I mean environmental journalists have common interests in both countries from that point of view. Mohan, do you have anything to add?

Mr. Mohan Mainali

Of course, I would like to add something. Establishment of information clearinghouse is an important way to help journalists in improving environmental journalism in country like Nepal. It's very difficult for journalists and others in Nepal to find background information on environment, among others. For example, if you want to write on one of the degraded wetland it's very important for journalists to find out background information on it—what was the condition of wetland, how many people and wildlife are affected by it etc. Also, newcomers in journalism should know whom to consult on any specific issue. They also should know why they should care about degrading environment. For all these things, they have to easy access to basic and updated information. Also information clearinghouse helps journalists to identify issues, new angle to old story. Then, in Nepal local media can play a vital role in informing and educating public as the national media has one or the other disadvantages. Nepal's condition is such that national media can't reach the general public. Rugged topography and different languages spoken by the people are main obstacles for it. Nepal's poor transportation system hampers the distribution of newspaper. Further, less than 60% of the people are illiterate which means they can't get written message. Nepal Television, for example, doesn't reach more than 40% of its population. On the other hand only 15% of Nepal 21 million people have electricity without which one can't receive TV signals. Further its very expensive for average Nepalese people to buy TV set. In this condition, localized radio station —FM station can do a lot in disseminating environmental message. We at Nepal Forum of Environmental Journalists are trying to establish local level radio station, which are run by community

themselves. Also we want to network of such radio station to share information/ideas/attitude/experience of one community with other. Another example of localized media is Wall newspaper produced by children in eastern Nepal. They identify story, collect information, edit and publish it. They have been able to convince/force their guardian to give up bad habits. If we help grow such initiatives it will really help disseminate environmental information.

CHAIRPERSON

Thank you. Could you explain what kind of media in terms of concrete methods are used to reach out to 35% of the illiterate people. Is it radio or what other kind of media in your mind? Do they listen to the radio?

Mr. Mohan Mainali

It is very difficult question. Radio seems to be the most effective means to send environmental message. But again there is question of language. Nepal is composed of many ethnic groups. They have their own language. In many places settlements are so scattered that it is very unwise to establish radio station for every settlement. So one blanket policy can't be applied to every community. In urban and semi-urban areas, TV might be very effective. In other areas, localized radio station might be useful. And in other areas community newspaper might make a difference. So we have to take different approach for different situation. We have to use all these media: radio, television, print and local media—street theatre and others.

Mr. Shigeyuki Okajima

I think journalists can translate into dialects. For example, in Nepal, journalists come from northern point of Nepal, some of them can understand Newal and Tibetan language, and they can translate Newal to Tibetan language. Journalists can play a big role. Journalists, we are using words usually. And we have a good network. Journalists can translate one another. I think it very good role.

Mr. Zhu Ping Yuan

I think I might have some suggestions for those illiterate people. I read that in India and many other countries, local communities, like those very remote villages, have other special ways to communicate. People gather together and make the drama and ballads and dance. The ballads, drama and dance conveys the moral or their beliefs. Therefore, if they can integrate the environmental protection ideas, like reforestation, into such kind of non-formal

education, it would be effective to promote environmental protection messages.

Dr. Bishnu Bhandari

What I was thinking has already been expressed. I just like to share with you religion and conservation. For example, monastic education is popular in Cambodia, Myanmar and other Buddhist countries. In Philippines, they use church as a forum to disseminate conservation messages. Once they wrote a letter one million letters on environmental conservation and the letters were read by thousands of churches reached ten million people. Like in Nepal, some of the plants are associated with the god, which means that people do not cut these trees. In Asia-Pacific region, particularly in Papua New Guinea, some ethnic groups adepts plant and don't cut them. So, we should learn some innovative and indigenous techniques from other countries. Another point I would like to mention is the role of local media, particularly performing arts, such as story telling, songs, oral history, drama type, and so forth. These are very powerful means and the media should attempt to promote these arts. My last comment is about the translation of environmental terms into local languages. For instance, when we started wetland program in Nepal, we have no equivalent term for wetland. Whenever we say Nepalese translation, it means many things to many people. To avoid this confusion, the media could play a vital role in making a good translation in local languages.

Mr. U Tun Naing

In fact, Myanmar forestry department, which is a government department, once published Myanmar Forestry Journal quarterly. That was the only environment-related journal, I would say. Right now we don't have any environment periodical journals in Myanmar. Only in two newspapers in Sunday supplements we can read environmental articles once a while. That's about it. So can Japanese government, in one way or the other, think about subsidizing to be able to initiate publishing on environment periodical in Myanmar. In our country, there are many old, retired foresters who are very much concerned about environment and who also have knowledge to write about environmental issues. But where can they write? Right now there probably is not enough audience who will pay the full price and buy and read this type of environmental magazines. So somebody has to subsidize at least for a certain initial period of time to launch these environment magazines. Could Japanese government provide this kind of assistant? Or could you buy TV time for environment program, say one hour a week? Another thing we can do is just like what UNDP, HIV, AIDS UNDP project is already doing. They talk with pop singer groups. We have pop singers in our country and let

them sing about HIV, AIDS. We can also organize them to sing environment songs. AIDS projects also have videos about HIV. In our country, we have very few villages that have electricity. But we have battery-powered video parlors in all big villages and I think if we can negotiate with these video parlors to show environment-oriented videotapes, we can spread environment message through this media also. Last thing, if you can convince your Japanese government, this is a little bit self-centered. Our UNDP program right now is implementing three projects focused on environment. One is in Shan State water shed protection project, another is reforestation in the dry-zone area, and the third is mangrove's rehabilitation project in the delta. All within UNDP money. We have a lot more to do. UNDP doesn't have enough money. If Japanese government is interested, you can co-finance. If you don't want to assist directly to the present government, you can assist through UNDP for the people of Myanmar. Even Some western governments are now thinking about taking this approach.

CHAIRPERSON

In such a situation like that of Myanmar, the UNDP is playing the role of NGOs and other donor countries. We can demand Japanese official assistance but it always goes to the government: from government to government. But the Japanese government is now reviewing all schemes to make it easier for the NGO channels to allocate aid money in cooperation with Japanese NGOs and the NGOs of every country. So, that may happen.

Mr. Takeshi Hara

What are the basic human needs? Usually, basic human needs mean basic education, basic food supply, medical care, I think. So we should propose to build new concept in basic human needs, that is, environmental education to establish environmental information center in Nepal. I am so interested in environmental education by monk. We could show the methodology and guidance for environmental education by Buddhist monk.

CHAIRPERSON

I think we need some additional explanation. Whenever we ask for some kind of change in concept and category of official assistance programs, the government always says we are going directly to basic human needs. That is why he explained what basic human needs are. So when we look at environmental aid programs, the first thing the government says is drinking water. That is true. Education comes last. But the concept of government officials is changing little by little.

Mr. Zafarullah Khan

I would like to make one point that is related to Pakistan. With the Japanese ODA assistance we have a solid waste management program and people know very little about that. Information about such initiatives is very important and I fully support the idea floated by my friend from Nepal that we need information clearing centres. I had reported on that solid waste management program. It is for the community collecting primary waste. Japanese government provided a lot of equipment but people don't know how to use them. People will put bags of garbage just beside the container. So for that, you have to spread awareness. That is very important. If you provide equipment and people don't know how to use it, it will be of no value. So I think if possible, you can convince that ODA can support NGOs information dissemination. That will make their projects more effective. Green journalists can write about basic needs and built bridges in a more meaningful manner.

Mr. Zhu Ping Yuan

Two suggestions. First one, I think the mass media should encourage more environment-oriented advertisements on TV. For example, China's Central TV has launched a series of environment protection advertisements. One advertisement is very impressive to me. It says, if we just waste water like what we are doing now, the last drop of water will be the tear of ourselves. Watching Japanese TV's advertisement, I have not yet found many such special environmental advertisements.

CHAIRPERSON

Let me ask Ivan what the situation is in Russia.

Mr. Ivan Egortchev

There are maybe 10 newspapers in Vladivostok, maybe 200 in Russian. And any ecological and environmental issues are very rare. For a whole Russian Far East there are special environmental pages in Vladivostok newspapers "UTRO ROSSII" only. I don't know what a reason of some situation - a present Russian life difficulties, maybe. Russian Far East now is a scene for the activity of many international funds and organizations as the WWF, ISAR, IREX and another. They are provides an environmental education actions and programs, prints ecological literature. For instance, the only one special environmental magazine on Russian Far East is "Zov Taigi" ("The Voice of Taiga" in Russian). It's supported by WWF. There is one ecological programme by TV broadcasting - it is supported by international fund, too. Central government and local administration in Russia are not supporting this activity - it moved by enthusiasm only. For instance, me and my wife

founded the children ecological newspaper two years ago, but we printed 5 or 6 issues only because of financial problems. My own responsibility is high, but it is not enough for successful solution of ecological and environmental problems. The environmental education in Russia is existing but not wide spread. The various ecological programs were established as a part of the official school education system in 80th. But there is not any common or whole ecological educational complex. Some volunteers or eco-activists training children by different ways and methods - ecological games, study tours, excursion, youth camps etc. There are much study and popular ecological literature printing in Russia and aboard. If an environmental education for children in Russia is in progress, the most of the adult population have not any successful results in this way. Russian people are not involved in environmental matters because of social and financial problems. I can write a passionate article about the rare animal from The Red Book - the Siberian Tiger but the Russian hunters have not money for the good and healthy life. He read my article and going to the wild forest trying to kill the tiger and sell it's derivatives. Poachers killed approximately 25-30 Siberian Tigers only last year. It's a problem - not environmental, a social one. Finally, the ecological knowledge level of Russian people is too low. I don't know anything about the environmental educational programs for the all population - for schoolteachers and journalists only. It's not bad, but it's not enough.

CHAIRPERSON

Thank you very much. There are a lot of proposals and suggestions. We have rather concentrated on local communication. So, now we open the discussion to include mass media and at the same time, electronic media too. We invite Mr. Ohmae's comment in addition to IMAX that was presented before.

Mr. Jun-ichi Ohmae

During discussion, there are some various study to know so many new things which are unknown things for myself that I've discovered. Today, I had a strong interest in Mr. Bhandari's comment about the trees. The story was very impressive for us. Not only just for the support from the northern countries to the southern countries, from developed countries to developing countries, probably the Nepal's traditional way of life can be the teacher for Japanese people. We can share such information together as material of environmental education. These days we can share such information very easily, so I got the idea of the name "Eco News Asia Network" for such type of news pool from which we can share information to each project in the environmental education. Put some real experiences and real situation to the pool and then, share together. In old time, we can not have such function

without huge investment, but these days, there is the technology, we can share such information very easily not only as text data but also as pictures and as video images very easily. So my ideas, my concerns and also my hope may be to establish some kind of news pool or information to share with all of our friends in Asia-Pacific area. Each of all of us can serve as a teacher for other people and also can be a student for others. That is my idea.

CHAIRPERSON

How do you think news should be conveyed or the news pool made? The Internet is probably not enough, because there are countries where it is not easy to get access to the Internet.

Mr. Jun-ichi Ohmae

In such a case, for example, our experience in very small islands in Micronesia, we can support them to grab the data by normal mail, so we can get some real experiences. We can also print those material, digital to analog form, then provide to pass those information to the people who can not reach such network access. So I am not saying that just about digital. We can add the layers of digital over the traditional toll of education or mass media.

CHAIRPERSON

Thank you. Is there any additional comment on mass media implication?

Mr. Zhu Ping Yuan

I want to go on with the second suggestion, about the environmental protection advertisement. In China, it could be practical that the central and local governments legislate the advertisement on TV and asks them to put on only environment protection advertisement. The mainstream of the Chinese has realized the importance of environmental control, but the problem is that the implementation is bad due to short of money. One of the breakthroughs is the environment protection industry. Japan is transferring her sewage technology to Shenzhen city. We hope there will be more such kind of project in the future. Especially, in North China. For example, the technique in dealing with the sewage and the technique of sewage processing, yet the Problem is lacking money.

CHAIRPERSON

Just one question to Mr. Zhu. Actually, the Japanese government is thinking about helping particularly Chinese industries to assist desulfurization

facilities and sewage systems. But what do you think about the involvement of media in programs such as improvement of industrial pollution? What can media do in that particular project?

Mr. Zhu Ping Yuan

I think it plays a great role in upgrading public consciousness. In my early education in primary school and middle school, we were encouraged to write a composition. The teacher praised us in describing development with the words like the forests of chimneys, smokes and roaring engines. Now I have been aware that this causes pollution. I believe this awareness come from the mass media in China. Therefore, without the active commitment of mass media in China, there could be no environmental protections.

CHAIRPERSON

Thank you very much. That is a very good suggestion. If there is any particular project by the Japanese government, for instance, we should follow it up and disseminate its effects through the media. Nobody would know about it without media report.

Mr. Lee Gunho

For me, the environment educational systems are must be various according to each country's situation. This time, I do not want to talk about educational system in other countries. I will talk about Korea, my country. I think, technically, Korea has been prepared for disseminating information about the environmental issues for years. We already deliver newspapers to most houses, and more than 90% of households have their TV sets. They can read and watch the news through these media. They also learn about the environmental issues. What I'm concerned about is there are 2 blocks to prevent news people from conveying their environmental issues recently. One is lack of will and the other is lack of money. These are coming from the economic crisis that is permeating in Korea now. With this economic crisis, so-called IMF crisis that started about 1 year ago, many government and news people began to stop thinking about environment. I might say they emphasize just on economy. Korea had been a very poor country. About 30 years ago, the Korean President made economy drives for the development. Korea is now between developed countries and developing ones. The government people seem to think that we are in the crisis that makes Korean economy 30 years back to the poor situation. That's the starting point that I want to talk about. With the economy drives, we learned a lot and developed a lot in the sense of techniques and money and welfare etc. Even primary school students can use Internet and they can get information, including environmental matters,

through the computers. But the media people in 1999, the time of so-called economic crisis, especially the owners of the media, do not seem to like to print or air the environmental issues, so general people can hardly get the chance to see environmental information in the media and even through the internet. We are focusing on the economic development again rather than environment. If we are not in the economic crisis, I might say, this kind of situation never happened. This is why we should have our will to convey the environmental issues. And this is why we need money. Two things must go together. Without economic wealthiness, we do not have enough room to focus on the environment. Even though the government has strong will to emphasize the environmental issues, the commercialism in capitalistic society cannot allow the things go in that way. If people want the things go to the environmentally sustainable situation, the will and money should go together. And for the educational system, I want to talk one more thing. People who live in deep valley, even though there are few of them, can hardly get electricity that they cannot have enough chance to get information. For them, old-fashioned way of disseminating information is good. Some kinds of group meetings of environmental themes can help to understand the issues. We can also dispatch a schoolteacher to meet them to talk about the issues. In these instructions, they can discuss the issues of cattle farms bad influence to the environment etc. These things can be connected to an educational system monitored under the governmental policy. That's the Korean situation I know of.

CHAIRPERSON

It is surprising that such regions still exist in Korea. In terms of economic crisis, Japanese situations are quite similar and many Asian countries are in the same situation as well. I recall one experience when the oil shock happened, it was a hard time for environmentalists. Everybody who had started to think about the environment was forced back to economic growth. At that time, all the NGO people who were keen to combat environmental problems went to the education of young people and village people. What do you think about this?

Mr. Zafarullah Khan

I have to make one point. Perhaps that might make a bit large job of our friend who is the looking after the strategies of environmental education. We really have to think and see whether the present economic crisis in Asia has anything to do with environment, bad loans, bad banking system or bad management of our industry. In Pakistan, the situation of industry is not different from in many other Asian countries. We have to do cost benefit analysis. I have no reasons to believe that if there is environmental mess in

industries and it can remain compatible or competitive in the market. That will increase the job of environmental educators, especially those working with industry to convince them to become environmental friendly.

CHAIRPERSON

That is right. It affects both the economy and environmental degradation. They come from the same root, unsustainable development. I would like to ask to Mr. Glen to make a comment, because IGES is now thinking about future programs, on training or other aspects.

Mr. Glen Paoletto

I make a comment concerning also training on IGES. In particular, it is my job to develop the training activities this year. I think the first point is that it can be seen that there are the close linkages with the environmental education project. And there are number of activities that we are talking about already. We are thinking about a couple of workshops with ADB. It is organized by ADB, but co-organized also by IGES. Looking at the areas of corporate governance, for example, in relation to the governance project at IGES and also public private partnership that is more in relation to Dr. Bhandari and the environmental education group. But another area that came up last week for possible consideration is the area involving the training of working with NGOs also in the area of endocrine disrupters. And I am wondering also what you think about this in that would a small workshop at relatively local levels be better? One way to train, for example, is to go to the beach, get an oyster and cut it, and then you can see immediately that oyster is impotent or have some sort of hormone problems. Packaging the information for NGOs, and possibly include the media, can educate others or take the message on. I am very keen to see what sort of ideas you have, in terms of training the media specifically, and also in terms of NGOs. Endocrine disrupter is a hot type of issue. It may be something that the media is maybe interested in. But I want to put this back to you.

Chairperson's Summary

CHAIRPERSON'S SUMMARY

I do appreciate all of your constructive suggestions that will certainly help to contribute to some kind of agenda recommendation for IGES, on what action must be taken maybe immediately, including suggestions for Japanese government programs. So, I hope you can understand what I summarize in the final part of this discussion. There were a lot of things announced by you. Let's see. We could use some of them as important agenda recommendations. The first thing is that we should exert pressure on the Japanese government to support the activities of environmental journalists in terms of environmental education, and that includes reviewing the items and contents of the ODA program. Particularly, we need innovative assistance programs to reach out to environmental education particularly at the local level. In that case, we should use a variety of methods including media, in order for it to reach the local level, villages and even illiterate people. There must be some invention of methods. That is one thing. Also, as Mr. Zhu mentioned, media involvement is essential in any environmental program. Otherwise, people have no way of knowing about them. The second point is training programs. I don't think we have much to say. Everybody understands. But this time, it is not just traditional or academic based training that is needed, but also a sort of information clearing house mechanism to disseminate information from nations to nation, from region to region. There are a lot of interesting stories and episodes that will be conveyed to other parts of Asian regions, and background information is also necessary. All journalist educators can share basic information. That is the information clearinghouse project. It also includes a digital sphere as the most efficient communication tool. Mr. Ohmae said that it is not expensive to carry out that kind of facility building in all countries. Pressure on the government a review of programs of development training programs and an information clearing house, these are the major points that have been raised in this discussion. Another interesting idea is commercial messages and television advertisement control. In a country like Japan, buying commercial message time is too expensive. But in some countries like China, commercial messages and advertisements are under government control. It is easy to use that in reality. Mr. Mohan said that democracy issues and how to build up civil society through communication is important. That is the basic problem that we should challenge. Media can do something. We recall when the Soviet Union collapsed, eastern European people had their own green communication network. It was actually an underground network. The environmentalists took initiatives when communism broke down. That is a fact. This kind of communication network has been working, actually. That is probably the target of our efforts not only for NGO people but also media people too.

This summary, I don't think is sufficient, but you can keep all the

suggestions in mind. We will continue from the Japanese side to realize those proposals as soon as possible.

And finally, thank you very much for your participation, on behalf of IGES. We have just started a program on environmental education that is particularly focused on media. We will intensively continue program development. Thank you very much.

Information

Environmental Education Project
Institute for Global Environmental Strategies

Research building of the Shonan Village Center
1560-39, Kamiyamaguchi, Hayama-machi,
Miura-gun, Kanagawa Prefecture, Japan 240-0198
Phone: +81-468-55-3850
Facsimile: +81-468-55-3809
E-mail:iges@iges.or.jp
URL : <http://www.iges.or.jp>

[Tokyo office]
Nippon Press Center Bldg. 8F 2-2-1, Uchisaiwai-cho,
Chiyoda-ku, Tokyo, Japan 100-0011
Phone:+81-3-3595-1081
Facsimile:+81-3-3595-1084

Workshop on Media and the Environment in the Asia-Pacific Region

Editor: Osamu ABE

Editorial Staff: Masaru MORIYA, Michio TAKAKU, Bishnu BHANDARI
Masahiro TAKAHASHI, Masahisa SATO, Ko NOMURA
Kayo MORIMOTO, Ryoko FUKUHARA, Susan HENDY

Published by The Institute for Global Environmental Strategies

All rights reserved
© 1999 IGES

