
The Global Forum

for Environmental Education



Global Network of
Teachers and Students

volume 1 number 2, november 1990

Colofon

This magazine has been printed by the department of townmanagement of the city of The Hague, The Netherlands.

Layout: apocare

Photograph frontpage: Cusco Mountains

The Global Forum for Environmental Education is a publication of Caretakers of the Environment International. The Forum is to be published four times a year. Contributions, articles, drawings, cartoons, pictures are actively solicited and suggestions are most welcome and invited. Any of the above or inquiries about subscriptions should be sent to:

The Global Forum of Environmental Education

c/o CEVNO

Nassauplein 8

1815 GM Alkmaar, The Netherlands

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Esta revista ha sido impresa por el ayuntamiento de la Haya, Países Bajos.

Composición: apocare

Fotografía página delante: Cusco región.

The Global Forum For Environmental Education (El Foro Global de Educación Ambiental) es una publicación de Caretakers of the Environment International. El Foro será una publicación cuatrimestral.

Estamos abiertos a todo tipo contribuciones, artículos, dibujos, y fotos, invitándoles encarecidamente a que nos hagan sugerencias. Si desean información o participar en cualquiera de las posibilidades arriba mencionadas, deberán dirigirse a:

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Editors of the Global Forum (Yomi Noibi and Chris Leibner were absent at the time)

From the editor.

Somewhat later than I expected we finished the second issue of the Forum. I hope everybody will like it. The quality is better than the first one.

From the questionnaires we received during the conference in Bristol it appears that you would like to have articles on successful environmental education projects. This forum contains two of those. I would like to receive more. So please send me more articles for the next issue, preferably before January 1.

You may send them in Spanish, we will translate them for you

We also received some material from students. We hope to receive more from you.

The conference in Bristol was a great success. I hope the conference in Peru will have the same impact. Richard's article gives a good impression for those who missed it.

We encourage everybody who receives complimentary copies of this issue to subscribe and contribute to the Forum. The annual subscriptions fees (€ 15,- / individuals, € 30,- / school for four copies of each issue, and € 60,- / institution, library, business) are kept at a minimum, but if you cannot afford it you can request a subscription fee waiver or reduction. Please bear in mind that we are having trouble cashing the cheques that are being sent in. Hence, we urge you to send us international money orders preferably made out in Dutch guilders.

Again we are excited to present to you contributions from six different countries and four different continents. I hope reading the second issue will give you as much pleasure as it gave us making it.

Jan Apotheke, chief editor.

Del redactor jefe.

Un poco mas tarde de lo que esperé hemos terminado el segundo ejemplar del Global Forum of the Environment.

Espero que les gusta a todos.

Es de mejor calidad que el primer ejemplar.

De los cuestionarios que recibimos durante la conferencia en Bristol resulta que les gustaria a ustedes leer articulos sobre proyectos acertados en cuanto al enseñanza ambiental.

Este Forum contiene dos.

Me gustaria recibir mas.

Envie, por favor, mas articulos para el ejemplar siguiente, de preferencia antes del primero de enero. *Se puede enviarlos en Español, los traduciremos para usted*

Ademas recibimos articulos de parte de estudiantes. Esperamos que recibiremos mas de ustedes.

La conferencia en Bristol tuvo mucho éxito. Espero que la conferencia en Peru tendrá el mismo impacto.

El articulo de Richard Parish da una buena impresion para aquellos que faltaban.

Tenemos dificultades cobrando los cheques que han sido enviados.

Por favor, envíenos giros postales internacionales extendidos en florines holandeses.

Gustamos de presentar articulos de seis paises y de quatro continetas. Espero que el segundo ejemplar les de tanto gusto leyendolo que lo daba a nosotros - los redactores, cuyo foto se ve arriba (Yomi Noibi y Chris Leibner no estaban) haciendolo.

Jan Apotheke, redactor jefe.

The fourth Caretakers of the Environment International Conference

By Richard Parish*



Abstract: A short report is given about the activities that took place during the 4th Caretakers conference in Bristol. The 190 delegates from 33 countries visited Bristol, and studied various aspects of its environment and exchanged views and ideas concerning environmental education with each other.

Abstract: Se informa brevemente acerca de los actividades que tuvieron lugar durante la 4a Conferencia de los Caretakers en Bristol. Los diputados de 33 países visitaron a Bristol, estudiaron varios aspectos del ambiente e intercambiaron opiniones e ideas concernientes a la educación ambiental.

The fourth International Conference on environmental Education for Secondary School Teachers and Students was held in Avon between 25 and 29 June 1990. It was attended by 190 students and teachers from 33 countries. The conference was a successful culmination of two years work for the huge number of sponsors and supporting agencies. Without a major sponsor and with no governmental underwriting the conference organizers obtained financial support and assistance from companies, industries, government, environmental organizations and educational organizations at local, national and international level. The organizers are especially grateful to the many individuals within these organizations who gave not only support but enthusiasm and personal commitment.

The real drama for many delegates started in the weeks preceding the conference, awaiting tickets from the UK, with funding being arranged at the last minute. The organizers had to rely upon the diplomatic bags of the Foreign Office in London to deliver the tickets. Such was the determination of the delegates to get to the conference that the Zambians, who had to watch a plane on which they were booked take off without them, due to non-delivery of tickets, managed to re-arrange their flights via Nairobi, Mauritius and Moscow to arrive after two and a half days travel. The delegates from the Philippines refused to allow

a major typhoon to prevent them from arriving in England, albeit not until the last day.

Organizers and delegates were heartened by the warm hospitality afforded by the parents and friends of Churchill School.

The enthusiasm, humor and quality of the delegates became apparent when the exhibition hall began to fill with a stunning variety of top quality projects, displays and textiles from around the world. The excitement of the evening was quickly assessed by the Under-Secretary of State for Education, Mr. Alan Howarth, whose address to delegates emphasized the importance of environmental education and the tasks which lay ahead. After the euphoria of the evening many delegates found sleep difficult, despite the long and arduous journeys experienced earlier in the day, and chose to dwell upon the myriad of new contacts and ideas they had experienced during the evening. Visiting sponsors were so impressed with the co-operation and friendship shown by all that they could not believe that delegates had only met for a mere six hours.

The official opening on Tuesday morning at the Playhouse Theatre in Weston-super-Mare, was by Jonathan Porritt whose keynote speech elaborated on the conference theme "Environment- Conflict and Co-operation". An appreciative and attentive audience gave Jonathan a rousing applause. The need for a balance between industry and environment was advocated by Ivor Whitting from British Gas. Ivor concentrated on the efforts made by industry to achieve industrial development whilst ensuring that environmental damage is kept to an absolute minimum.

The next 2 days involved numerous visits into the local environment where teams of teachers had prepared activities designed to present environmental issues in an exciting and inventive format. These visits included studies as varied as nuclear power, food manufacturing and schoolgrounds.

Even though work was important, the organizers did not fail in their duty to develop a holistic approach to the delegates visit! Firstly, delegates were exposed to the doubtful culinary delights of traditional English Fish and Chips. The following evening after extracting buses from a major traffic jam, even by Bristol standards, delegates were able to marvel at the artistic skills of David Sheppard at a special evening arranged for delegates and



Richard Parish is president of Caretakers of the Environment International, and organizer of the UK conference in June 1990. He teaches Geography at Churchill School, Churchill, Avon.

public at the Playhouse Theatre. The undoubted highlight of the conference however was the barbecue provided by the Parent Teachers Association at Churchill School where entertainment was provided by Morris Men and a local folkgroup. Many talented delegates added an international tone to the music by sharing songs and



dances from their home countries.

A visit to the Wildfowl and Wetland Trust at Slimbridge was followed by the launch of a major schools initiative: Wetland Watch. Delegates appreciated the work

done by the Wildfowl and Wetlands Trust, and the tranquility of the center was much appreciated. Lectures by Dr. Chris Baines and Pete Wilkinson bolstered those delegates who were flagging while their passionate pleas for continued action denied those who thought that the well appointed lecture theater would provide an ideal place to steal 30 minutes of much needed sleep.

Finally, the weary delegates, some in national costume, were wine and dined at the Grand Hotel, Bristol with Minister of Environment Mr. David Heathcoat-Armory providing the after diner speech.

A hectic week with a varied program. The success or not of the conference will be judged not by the events of last June, but by the contacts and actions of delegates over the next few months and years. With a growing number of countries represented and creating national networks we can look forward to a future where we are much more aware of each others problems and actions.

With lessons learnt from conferences and from future projects such as the Wetland Watch project, it is hoped that Caretakers of the Environment International will continue to grow and to perform an important and useful function in International Environmental Education.

Ecology Workshop 90

The following are some of the thoughts of students of the summer language bursary program. In conjunction with second language learning in traditional literacy area's these students from Quebec are participating in ecology workshops. Students and teachers alike recognize the importance of earth literacy. Kate Graves, Halifax, Nova Scotia.

Untitled

I can see the sky in your eye
I can hear the birds in your heart
Your hair grows like the wind
And your nose blows like the wind
You can shout like the wind
You can shout like the waves of the ocean
So, like the earth, you need love and protection.

Marie-Dominique Cote, July 1990

Future Nature

The sky is blue
The leaves are green
The sun is yellow
The pollution is grey
The pollution is very heavy
In the future what will
Become of the sky, the leaves, the sun,
And the pollution...

Nancy Roy, July 13, 1990

Gratitude

Nature, a beautiful thing that man has abused since his beginning...
And now we regret this influence.
Nature gave all to us and we- we gave just pollution.

Patrice B. July 13, 1990.

Wake up

Life without life
Is not a life
The natural environment is alive
So life without this is not a life
It's time for us to stop this LIFE'S destruction
If you want to stay alive

Dave Lalancette, July 13, 1990

Untitled

Do you know the earth?
Do you have a heart?
If you can say "Yes" to these questions
You can stop polluting.

Marie-Dominique Cote, July 1990

WORKING TOGETHER FOR A HEALTHY PLANET

BY JANICE PALMER, ADRIENNE DOWN AND GABBY SLAYTON*



Abstract: The authors provide a description of an environmental education course in which various subjects are studied. Science is the basis of the course. During the course, students take positive action towards the environment. In 1990 the school took part in a program called Visions 2020, in which one aspect of an environmental problem was studied. Reports from schools in the province of Ontario were gathered and published in a book. Schools are invited to join in a worldwide version of Visions 2020.

Abstract: Se describe un curso en el cual se estudia varios asuntos ambientales y naturales. Física y química forman la base del curso. Durante el curso los estudiantes ejercen acciones positivas hacia el ambiente. En 1990 el instituto participó en un programa que se llama Visions 2020, en que se estudiaba un aspecto de un problema ambiental. Juntaron y publicaron memorias de institutos en la provincia de Ontario. Se invita a institutos a incorporarse a una versión mundial de Visions 2020.

Environmental education in Canada.

Environmental education is extremely important in every country of the world. It holds the key to a healthy future for life on earth. Many feel that environmental concepts and ethics should be taught within every subject area. We agree, but it is also important that the students have a chance to study environmental issues in greater depth, perhaps in a separate course. Such separate courses are established in various parts of Canada. They are not mandatory, but they can be taken as optional courses by students during senior secondary school. Our school, North Toronto Collegiate, has offered such courses since 1974; other schools have slowly begun to offer them also. The courses are full courses running throughout the entire school year and having the same number of hours as more regular subjects, such as mathematics and history. At our school, approximately 175 students between the ages of 16 and 19 take these courses every year.

After a basic introduction to ecology, students go on to study a wide range of topics including: acid rain, endangered species, water quality, forestry, toxic chemicals, solid waste, population growth, energy and the conservation society. Each topic includes a wide range of subunits involving causes, results and solutions. Science forms the basis of each study, but we usually end by discussing people's attitudes and values related to the problems and their solutions.

Taking Positive Action.

Students often feel that the problems are caused by both industry and government. It is sometimes difficult to recognize, and admit, that we, as individuals, are often the real causes.

It can be depressing to learn about the many environmental crises humans have caused. Individuals often feel helpless to solve the problems. It is also easy to suggest that business and government have to be the ones to do something. They do; however, individuals can, and must, also take steps towards a healthy planet.

One of the most significant aspects of the environmental courses at North Toronto is that students are given many different opportunities to take positive

action to make the earth a better place. Some of the ideas come from the teacher, but many come from the students themselves.

Projects carried out.

These are just some of the on-going projects carried out by our environmental students: newspapers, bottles and cans have been collected for recycling since 1972; fine quality paper has been collected for recycling since 1979; we have planted trees and added mulch to them



every year since 1983; we've been cleaning up various parks and streams since 1981; we have raised money for rainforest preservation and other environmental projects and also supported the annual care and feeding of four Canadian owls at a facility for breeding threatened species in captivity. We also help educate ele-

mentary school pupils by acting as leaders at special environmental events and educate the general public by creating displays for public places or distributing information on environmental issues to homes.

Having a Vision.

Public Focus is a non-profit, non-governmental organization involved in various aspects of environmental education. Its staff got the idea for Visions 2020. Visions 2020 is a program in which secondary school students throughout the province of Ontario (in Canada) discuss sustainable development and set goals they want our province to reach by the year 2020. Background materials are made available by Public Focus. They had previously solicited these materials from government agencies, industries and environmental groups.

Janice Palmer is a teacher at North Toronto Collegiate. Adrienne Down and Gabby Slayton are two of her students.

A total of 6000 secondary students actually participated in 430 groups called focus groups. Each focus group was asked to concentrate on one of twelve topics illustrated in our display at the fourth Caretakers of the Environment conference. Our group at North Toronto Collegiate chose Natural Habitat and Wildlife. We were then linked with 7 other focus groups working on the same topic, forming a network. Each group created three goals for the year 2020. We included a rationale with each goal. Goals written by all groups within a network were shared and criticized. To be valid, each goal had to promote co-operation among various special interest groups involved with the issue rather than create conflict. Through a voting process, each network chose the best goals written for each of the twelve topics and publicized them in a book which has a chapter devoted to each issue (Visions 2020). Visions 2020: Ontario's Youth, Ontario's Future was published in April 1990 by Public Focus and was formally presented to the provincial government. Our school's group is especially proud because the book contains two goals from our school, as well as poetry, artwork and a closing essay also submitted by our students.

Goals.

Goal #1: Cradle to grave Chemical Management. As in most industrialized regions, Ontario has many companies which create chemical products/wastes which have devastating effects on wildlife and natural habitat. Yet, these effects often play a small role in product research and development, and companies remain relatively unaware of the pathways taken by products/wastes they produce. Even invisible chemicals can cause irreversible damage. By the year 2020, only companies which demonstrate responsible cradle to grave chemical management plans would be permitted to produce, distribute, use and dispose of chemicals. Such management would dramatically reduce toxic contamination of habitat and wildlife.

Goal#2: Saving Forests, Saves Wildlife.

Forests are Ontario's most valuable resource. When they are harvested, the wildlife habitat they once provided is lost. Neighboring Aquatic communities are also harmed by

increased soil erosion. Forest do not regenerate quickly on their own and current efforts at reforestation by industry and government are weak. We will always need to use our forest resources; however, we must do it wisely. By the year 2020, Ontario must have an enlightened public and government which will reduce the need to destroy forests by implementing extensive recycling programs. Proper forest management policies, concerning both the initial harvesting quotas and replanting programs, must be established and enforced.

Visions 2020.

The Visions 2020 focus group at North Toronto chose the topic Natural Habitat and Wildlife because we felt that we could relate well to these things. Ontario, the province in Canada in which we live, is extremely rich in wildlife and natural habitat, such as wetlands, but these areas are threatened because of spreading urbanization. Through the goals each school wrote, we tried to present environmentally sound solutions to these problems in a manner feasible to both governments and industries in the hopes of gaining their co-operation.

In September 1990, the Visions 2020 project began again but this time it includes secondary schools from across our entire country of Canada, rather than just our province of Ontario. The goals will relate to our entire country.

There is also a plan for Visions 2020 to become a global project starting in the fall of 1991 or 1992. We encourage you to be part of that global project. Public Focus in Canada will organize the program but we need the participation of many countries. The program involves students thinking and writing about the kind of world they want to have in the year 2020. The students must also write goals which will have to be reached to obtain the world they want to have. The final product will be a book published by Public Focus. It will contain the global environmental visions for the year 2020 written and illustrated by students of the world.

References:

Visions 2020: Ontario's Youth, Ontario's Future, published by Public Focus, 489 College St, Suite 500, Toronto, Ontario, Canada, M6G 1A5.



Two stories from the "ESCOLA SECUNDÁRIA DE BENFICA PORTUGAL"

Deep in the depths.

By Inês, 8th form.

The inhabitants of the sea held a meeting at Mrs. Whale's. They wanted to discuss a terrible creature that doesn't live in the water but pollutes it in a frightening way - MAN.

Mr. Octopus, the chairman, started the assembly: "My dear fellows of the depths, I came to inform you all -- though it seems unnecessary to me, we are all aware of it now-- that something must be done against the pollution of our homes. And above all something must be done against the cause of all this- MAN. This is all I have to say."

Let's listen to our dear hostess Mrs. Whale now: "As pointed out by my colleague Mr. Octopus, something must be done to avoid the destruction of our future. I suggest we should take some measures accordingly. First, we must be in constant alert to stay away from our enemy. Then those of us who are big enough should be placed in position to give alarm of any possible discharge of toxic waste in our beautiful waters. They should try to avoid the discharge at any cost. Thirdly, we should take a final measure for our own protection. We should abandon those zones where any spill of oil has occurred. Thus I'm sure, we'll be able to live in better conditions. That's all I have to say."

The whole community of fish applauded the whale for this wonderful speech. They were happy to listen to the words of wisdom of Mrs. Whale. They all promised that within a short time all those measures would be accomplished by the WFA (World Fish Association).



Untitled

by Claudia, 8th form.

Mr. Salmon, who was standing in the street, casually met Mrs. Sardine and greeted her:

"Hello, my dear friend," he said. "How are you?"

"Oh, fine, thanks, and you?"

"Well, I'm not in very good shape. I feel strange, in fact."

"What have you been doing?"

"I've been around the cities," Mr. Salmon answered and he felt angry. (Why on earth was she asking such a question?)

"Everything is very clear to me now," said Mrs. Sardine.

"So you didn't know that near the big cities there are drain pipes pouring a lot of filth into the rivers?"

"As a matter of fact I didn't," answered Mr. Salmon. "And where does this trash come from?"

"Most of it comes from factories. You shouldn't pass nearby. It's very dangerous. You'd better see a doctor".

"Should I see Dr. Oyster?"

"Oh, yes, definitely, he's a wonderful doctor," Mrs. Sardine agreed.

At the doctor's, Mr. Salmon explained his problem and told him everything he had heard from Mrs. Sardine. This helped Dr. Oyster a lot. He rapidly came to a conclusion: "I have no doubt. You are affected by this disease-pollution."

"What shall I do? Can you treat me?"

"Well first you must avoid those drains. If it wasn't for the humans none of this would have happened. For many years we have lived in peace and quiet, now we must be very careful."

When leaving the doctor's office, Mr. Salmon couldn't help thinking of his situation. Mrs. Sardine was in the waiting room. She was frightened by the look on Mr. Salmon's face. He looked so pale.

"Is it serious?" she asked. "Is it curable? What did the doctor say?"

"Take it easy," he said. "My problem is pollution. It's serious all right. If Man doesn't do anything about it, we're lost!"

"And so are they!" Mrs. Sardine shouted.

"You are absolutely right. Now tell me where did you learn all that?"

"In the books, man, in the books," said Mrs. Sardine as she walked proudly away.

A survey of the perception of global environmental issues and action among members of Caretakers of the Environment International.

By Yomi Noibi*



Abstract: An investigation of the extent to which members of Caretakers of the Environment International attain their central objective of thinking globally and acting locally to protect the earth's environment was made. 82% of the teachers' and 74% of the students' local environmental actions were influenced by their knowledge of global environmental issues. The new environmental paradigm (Arcury, 1985) is suggested as a framework for secondary school environmental education that will foster the habit of thinking globally and acting locally to protect and preserve our common future- planet earth.

Abstract: Investigaron hasta qué punto los miembros de Caretakers of the Environment International alcanzan su objetivo de pensar mundial y actuar a nivel local para proteger el ambiente del mundo.

Con el 80% de los profesores y el 74% de los estudiantes las acciones ambientales y locales fueron influidas por su conocimiento acerca de cuestiones ambientales y mundiales. El nuevo paradigma (Arcury, 1985), que fomentará el hábito de pensar mundial y actuar a nivel local para proteger y preservar nuestro común planeta tierra para el futuro, es sugerido como cuadro para la educación ambiental en la enseñanza secundaria.

Introduction.

Over the past two decades, people in both developed and developing countries have become more aware of environmental issues. This growing environmental awareness has been spearheaded by the activities of issue-oriented organizations, such as the Sierra Club, Greenpeace, and Friends of the Earth. None of these is specifically oriented towards targeting young people as a resource for achieving environmental goals.

Teachers and students provide great hope for improving and protecting the environment through environmental education (Noibi, 1988; Miles, 1975). It was the recognition of the important role of teachers and students in protecting and enhancing the environment that led to the birth of the Caretakers of the Environment International in 1986.

The goals of the Caretakers of the Environment International (Jowett, 1989; Wals, 1990) are generally reflected in the planning, structure and activities of the annual conferences. A key goal of the conferences to enhance the skill of thinking globally and acting locally to protect the earth's environment. It is assumed that the extent to which this goal is achieved among the members of Caretakers of the Environment International is a reflection of their perception of global issues and their local activities. Based on this the extent to which this goal is being achieved is here examined.

Methodology.

Out of the 283 participants of the June 1989

Continent	Number	percentage
Africa	3	1.5
Australia	0	0
Asia	15	5.5
Europe	116	42.5
America		
North	121	44.3
Central	13	4.8
South	5	1.8

Dr A.S.Noibi is a lecturer at the institute of education, University of Lagos, Akoko, Yaba, Nigeria.

Table 2. Caretakers' Perception of Global Environmental issues of importance (sample size of each group 75)

Global issues	Teachers		Students		Average
	#	%	#	%	
Global warming	65	87	58	77	82
Deforestation	50	66	63	84	75
Wastes	48	64	62	83	73.5
Overpopulation	48	64	50	66	65
Acid rain	32	42	42	56	49
Erosion	21	28	12	16	22
Wildlife	12	16	18	24	20

conference 150 were selected in such a way as to have an equal number of teachers and students as well as a representation of most of the 33 countries at the conference. A four part questionnaire was designed to gather relevant data.

Results and Discussion.

Results and discussion of the responses are presented as they relate to the questions made.

Question 1: What global environmental issues do members of Caretakers perceive as important?

87% of the teachers and 77.3% of the students perceived global warming as an important environmental issue while 16% of the teachers and 24% of the students perceived conservation of wildlife as an important global environmental issue.

The data collected suggest that according to the participants the four most important global environmental issues of the decade are: global warming, deforestation, waste management and overpopulation. It is noteworthy that the four global environmental issues that members of Caretakers of the Environment International perceived as important were among the environmental challenges of the decade on the UNEP agenda.

Question 2: To what extent have Caretakers participated in, or organized environmental education seminars and workshops?

A majority of the teachers (76.9%) participated in environmental education seminars or workshops for teachers and/or students during the period of 1980-1989. A noticeable trend from the available data is that the

sample's participation in environmental education seminars increased over the years. This trend suggests that members of Caretakers are interested in improving their environmental knowledge, skills and attitude through a variety of options. Also this reflects growing environmental awareness of the new paradigm in society (Arcury, 1985). However only 30% of the teachers and only 5 individual students had organized seminars or workshops in their community. This result suggests that students' environmental activities may have focused on individual or group research projects for classes rather than on involvement in environmental action in their communities. There seems to be a need for both secondary school teachers and students to organize more environmental education seminars or workshops on global and local environmental issues for the community. It is important to make use of the multiplier effects which can be achieved when people are exposed to such environmental concepts and led into appropriate local action.

Question 3: How do members of Caretakers of the Environment International perceive actions taken to solve or reduce global environmental problems?

Most of the actions taken to solve or reduce environmental problems were thought of as legislative and technological, and only a few as educational. This perception should be reversed. Environmental education can become a driving force for action or change once it becomes an integral part of teaching and learning in schools and in

environmental actions were influenced by their knowledge of global environmental issues. This suggests that knowledge of global environmental issues is vital for quality of environmental thinking.

Furthermore, Caretakers' knowledge of global environmental issues seems to have influenced the way in which many Caretakers learn, teach and live. Most teachers seem to have developed and adopted new strategies for teaching at the secondary schools as a result of their environmental knowledge. 89% of the teachers and 67% of the students not only consume resources more conservatively, but also use renewable resources where feasible.

A few of the participants responses are quoted below in order to bring out the flavour of their meanings.

"I teach geography and I try to look at all levels from local to Irish, European and world content".

"I never use plastic forks, or any other disposable things"

"My environmental work actually rules my life and causes a spiral effect, the more I learn the more I do."

"I am a member of active environmental organizations both at work and in my private life"

83% and 76% of the teachers and students respectively seem to have been able to translate their knowledge of global environmental issues into positive, local action.

Above all, it appears that the Caretakers' knowledge of global environmental issues influences the manner in which many members of Caretakers conduct themselves in all aspects of life. They care for the environment in a manner similar to the way a parent cares about a child. Finally, the sample of teachers and students who participated in the 3rd International environmental education Conference in Oak Park, Illinois, from June 24-30-1989, seems to have a strong moral conviction regarding the necessity to protect the local environment. This conviction may have developed from local, national and global concern for the environment.

Conclusions.

It is believed that the Caretakers' awareness of, and concern for the environment, arose out of their experience with global and local dimensions of the environment. The challenge for them now is to use their abilities to promote the dissemination of information on the environment and promote a more meaningful experience of the environment.

It is important to stress the major findings in this study, i.e. that members of Caretakers of the Environment International actually do think globally and act locally. 82.6% of the teachers and 75.6% of the students gave specific experiences of their ability to translate global environmental knowledge into positive local environmental action. It is reassuring to note that the few members of Caretakers that could not translate their knowledge into positive local environmental action, expressed a desire to acquire further knowledge about the ways and means of engaging in local environmental action. One participant put it like this:

Table 3. Classification of Caretakers Perception of actions to solve or reduce global environmental problems.		
Classification of actions	%	Extracts from sample response
1.0 Legislation/policy	60	- Legislation to dump waste in the sea - National Environmental Pollution Act - Montreal Protocol on the ozone layer
2.0 Technological	25	- Use of catalytic converters - Use of lead free gasoline - Scrubbers
3.0 Educational	15	- Media Awareness programs on the environment - Environmental education

communities.

Members of Caretakers of the Environment International felt that non-governmental organizations had a world-wide impact on environmental problems. For example global, non-governmental organizations have influenced African governments to make policy statements to protect the environment. However, most African governments are very slow to translate environmental policy statements into substantive actions that will control pollution arising out of poverty and development. There is a need for environmental activism in African countries by community supported non-governmental organizations similar to those who gave birth to the first "Earth Day" in the United States in 1970.

Question 4: To what extent have Caretakers' knowledge of global environmental issues influenced their local environmental actions?

82% of the teachers' and 74% of the students' local

"I am not sure how to go about it, which parts to focus on, who to get in touch with, however, maybe after the Conference, I will have more success."

This desire to help is a sign of hope for the realization of the aims of Caretakers of the Environment International.

Finally, Martin Luther King looked at changes in the world and observed:

"Through our scientific technological genius we have made this world a neighborhood. Now, through our moral and spiritual genius, we must make it a brotherhood."

As one looks back at the Oak Park Caretakers of the Environment Conference as a participant, one recognizes the neighbourhoodness and brotherhoodness which are necessary for more success stories from Caretakers of the Environment International. As long as these elements are present Caretakers of the Environment will be able to continue to provide secondary school teachers and students, an opportunity to enjoy caring for the environment.

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A FRIENDLY GLOBAL COMPETITION DESIGN LOGO FOR A REUSABLE SHOPPING BAG

Caretakers of the Environment International are invited by UNEP to produce a logo for a reusable shopping bag.

Guidelines

The logo should:

* Reflect the goals of Caretakers of the Environment* Promote the idea of being a Caretaker: protecting the environment by conserving resources and avoiding waste.

* Be drawn in color

* Be drawn on 8x10 inch paper

* Be neatly done.

On a separate sheet,please provide the following information:

- artist's name
- teacher's name
- school name and address
- brief explanation of the meaning of the logo.

Remember: the reusable shopping bag will probably be made of a natural material such as cotton or jute. It is going to be a very light weight mesh bag that folds easily and fits into a purse or pocket. It will be big enough to carry a bag of groceries. The design should be easy to recognize and to reproduce. The logo should be so attractive that people all over the world will want to carry the reusable shopping bag wherever they go. Mail two copies of the logo in a protected envelope to:

Isabel S. Abrams
2216 Schiller Ave.
Wilmette, Illinois 60091,USA

It must arrive at the above address by **January 1, 1991.**

Keep a copy of the logo. None of the logo's will be returned. Five logo designs will be chosen by the Caretakers of the Environment International/USA board. The United Nations Environment Program will make the final choice.

COMPETICION MUNDIAL LOGO PARA UNA BOLSA REUTILIZABLE.

UNEP invite a Caretakers of the Environment International a proyectar un logo para una bolsa reutilizable.

Parides

El logo tendria que:

- reflejar los objetivos de los Caretakers of the Environment International
 - llevar adelante la idea de ser un Caretaker: proteger el ambiente conservando recursos y evitando derroche.
 - ser dibujado en color
 - ser dibujado sobre una hoja de papel de 20x25 cm
 - ser hecho de modo pulcro
- Seruega dar la información siguiente en un pliego suelto:
- nombre y apellido del proyectista
 - nombre y apellido del profesor
 - nombre y dirección del instituto
 - explicación breve del sentido del logo.

Recuerde: la bolsa reutilizable probablemente será hecha de una materia natural como algodón o yute. Será un redécilla de peso ligero que plieque fácilmente y caba en un bolso o un bolsillo.

Será tan grande que pueda contener la compra.

El proyecto tendria que ser fácil de reconocer y reproducir.

El Logo tendria que ser tan atractivo que gente en todo el mundo querrá llevar la bolsa reutilizable por dondequiera que van.

Envie dos copias del logo a: Isabel S.Abrams

Tiene que llegar a la dirección susodicha el primero de enero 1991.

Guarde una copia del logo. Los logos no serán devueltos. Los Caretakers of the Environment International junta directiva de los Ee.Uu. esogerá cinco proyectos. El UNEP hará la elección final.

Environment and Poverty

By Eduardo Gil Mora*



Abstract

En la región andina se manifiestan problemas ambientales como son la pérdida de suelos fértiles por erosión, incendios forestales y deforestación, uso de suelos marginales para agricultura, el crecimiento no planificado de las ciudades etc. El deterioro producido por la pobreza, que obliga al hacinamiento de las personas en barrios marginales sin canalización de aguas ni de alcantarillado y sin suministro eléctrico, tiene efectos innegables sobre el medio ambiente, cuya única solución sería la planificación sostenible de los recursos y una mejora.
Abstract: In the Andes region a number of environmental problems have become manifest, like the disappearance of fertile soil by erosion, forestfires, and deforestation, the marginal use of soil for agriculture, unplanned growth of cities etc. This decay is caused by the unplanned growth of the population, and causes poverty, especially for people living in slums without water and other bare necessities. This whole situation has grave consequences for the environment. The only solution can be a better planned use of resources, and a raising of the standard of living for all.

One of the main problems our country (Peru), and more specifically, our region (Cusco Mountains), faces at the present day, is to serve the needs of the population without destroying the basic resources, e.g. the environment from where we get the elements to fulfill those needs.

The growth of the population, without proper planning, causes a series of environmental problems and hinders development. We need to meet the most primary human needs if we are to avoid the environmental consequences of the population growth. The only way to break the vicious circle of poverty and population growth would be to carry out an adequate socio-economic development. Therefore the policies of development will have to bring together the population and the actual resources. In some areas like: La Convención, Madre de Dios, Lars, etc, people will need to start a self-sustainable development in order to restrain the impact of the population on the ecosystems.

The pressure on agriculture due to the increase of the population causes a considerable shortage in the food production required to cover the demands of the population. Since 1950, Peru has been undergoing an accelerated process of urbanization with the population concentrating in a few cities. This effect is due to rural-urban migration and other economic and socio-political factors. This phenomenon has produced a severe environmental impact, such as cultivation on steep slopes of mountains and "slash and burn" agriculture which affects subtropical forests and increases the risk of floods and landslides, as is happening now in the Cusco mountains. There are many examples that show how these short term benefits cause longterm environmental damage which in the long run, reduces food production.

But some of the environmental problems are due to a deficient development. Thousands of people in our region cannot satisfy their primary and basic needs such as: food, housing, clothing and health care, and others do not have access to primary education or regular work. This situation is not only unbearable from a humanitarian point of view but it has at the same time serious environmental

Eduardo Gil Mora is a director at the Universidad Nacional de San Antonio Abad del Cusco, and organizer of the 1991 Caretakers of the Environment Conference in Cusco, Peru.

consequences. It causes the destruction of forests, the loss of arable land, the decrease of the productivity due to the malnutrition and diseases of the people and the permanent pressure on the fragile ecosystems. These are the most significant consequences of the pollution caused by poverty, which on the whole are as important as the ones caused by industry: both lead to a rapid depletion of the basic natural resources. Many of the problems of human settlements also have their origin in the lack of proper development.

The spreading of poverty generates patterns of human behavior which are environmentally dangerous. There is a constant degradation of soil, water, forests and other resources. The dependance of the peasants on wood to obtain fuel is an example of the relationship between poverty and environment. In a peasant's home, wood is frequently the only source of energy for cooking and heating. The cutting down of trees and bushes results in erosion of arable soils.

The pressure of a life of subsistence can force the peasants to cultivate marginal lands intensively year after year in the same way. The water used does not have the minimal health conditions and therefore it becomes a transmitter of many water related diseases which are most prevalent in the slums of our region.

In the urban areas the inhabitants of these slums, deprived of access to the basic services like water, waste disposal, sewage, etc. are forced to break the city water pipes in order to get the water they need. The humiliating life conditions in such shanty towns demand urgent action, not only in the name of social justice, but also because those areas can become a source of diseases such as salmonellosis, parasitosis, hepatitis, etc... We therefore have enough environmental and social reasons, both in urban context and in the rural one, to promote an improvement of living conditions for the less fortunate. Perhaps this might be partly achieved through a process of environmental education.

[Note from the Editor: Mr. Gil Mora hopes that the fifth Caretakers conference to be held for the first time in a developing country, will inspire more secondary school teachers and students to address issues of Environment and Development in their Education (See also page 15,16).]

Environmental education in Mártírok street, Budapest.

By Andrea Seregdy*



Abstract: The project material of the Hungarian delegation of the Arpad Grammar School, Budapest presented at the 4th International Conference held in the UK, describes one of the most crowded areas in Budapest. Mártírok street, a quite narrow road between a hill and the Danube. Depicting the overall Hungarian situation, the article describes air pollution which goes above the critical level, partly due to the uncontrolled motorization. The school project measures air pollution and evaluates the results.
Abstract: El material presentado por la delegación de la escuela Arpad de Budapest durante la cuarta Conferencia Internacional celebrada en el Reino Unido, describe una de las áreas más congestionadas de Budapest. Mártírok es una calle bastante y estrecha, situada entre la colina y el Danubio. La calle sufre una contaminación atmosférica que está por encima de los niveles críticos. Esto se debe, en parte, a la motorización sin control. El proyecto evalúa los resultados apartir del polvo analizado en este area despues de haberse adoptadas las medidas adecuadas.

Among the 36 European countries the average life-span is the shortest in Hungary. One of the main causes is the environmental pollution caused by traffic.

Budapest lies in the Carpatian basin. Protected by mountains, it is an enclosed space only open from the north-western side. In accordance with this the main wind direction is also north-west. Because of the deep and closed position of the basin, environmental pollution from the neighboring countries reaches Hungary only to a small extent, but our own pollution is trapped, so the present state of the air in the country largely depends on the prevailing weather conditions.

Hence, the state of the environment, mainly our air, depends first of all on us Hungarians. For example, two years ago, as a result of the unfavorable meteorological conditions, smoke, soot and industrial filth accumulated to such an extent, that for the first time in our history a smog alarm was issued. According to some surveys, the situation in Hungary might become dangerous in a few years.



Andrea Seregdy is a teacher at the Arpad Gimnazium in Budapest Hungary.

Considering the air pollution of Budapest we have to take into account the fact that the surrounding mountains -mainly from the north and west- make the city even more enclosed and unventilated. Furthermore, poor city planning concepts also play a role:

Budapest, as the capital of the country, is overlaid with traffic, industry, and trade. Most educational institutions are located there as well. One-fifth of the country's population lives in the capital. This is a fact unparalleled in the world. The main roads of the country meet in Budapest. Trans-european routes also cross it, for example, all the truck-car traffic between Turkey and Western-Europe goes through Budapest. There are no routes that keep traffic away from the city, so the total traffic of the highways, which are arranged radially, is forced to cross through the city. The M0-ring (a by-pass around the city, Ed.) which as a part of the highways could reduce the transit traffic of the city, is being built too slowly. The situation becomes even more serious since the eight overlaid Danube-bridges of the town cannot handle the traffic passing over them. Since 1985 the average speed in the town decreased by 3 km/h.

It is well known that Hungary faces economic decline and that there are no financial means to provide for environmental development. Hungary is the only European country where environmentally friendly consumer goods, like lead free gasoline and special washing powders (not containing poly-phosphates) are more expensive than the polluting materials.

Most of the country's cars are old fashioned. 40% of the them, even when they are new, do not meet the requirements of the environmental regulations, which are less strict than those of Western Europe.

44 % of the buses of Volan, which is one of the biggest transport companies of the country, should not be used anymore.

The underdeveloped infra-structure causes the exchange of information to take place in an almost medieval fashion which includes manual data-transport. This makes our traffic even more crowded.

Besides the detrimental effects on health caused by asbestos from brakes and by the asphalt dust from roads, motorvehicles primarily pollute the environment

through the emission of exhaust fumes. This is the way pollutants enter the atmosphere.

Motor vehicles, as sources of pollution, differ from any other source of pollution in that they move around on the surface and thus issue their pollution into the atmosphere under very unfavorable circumstances, i.e. at ground level and in narrow streets. Exhaust fumes are produced when fuel is burnt, and contain several pollutants, among which carbonmonoxide, hydrocarbons, lead and nitrogenoxides.

Harmful substances distributed in the air affect the human and other organisms directly and indirectly. They first have a detrimental effect on plants, animals, material goods and our climate. Eventually they damage our health.



The schoolproject.

The project evaluates the different biological effects of exhaust fume components detrimental to health. It illustrates the program of action of the workgroup "Air" that deals with the air pollution and the specific Hungarian circumstances. It also describes the measurements of a small group of pupils who tried to evaluate the quantity of dust at various points in one of the most polluted areas in Budapest.

Finally, it describes the environmental project that resulted in 1988 in the placing of a sign in one of the most polluted points in Martirok Street, to call your attention and stop your engine while waiting for the green light, and in doing so reducing the quantity of pollutants. The exhibition also includes a couple of interviews illustrating how the average citizen reacts to the project in present day Hungary with a complete lack of awareness of environmental dangers.

More information on the action program of the workgroup "Air," as well as on the project itself is available from Andrea Seregdy, H-1124 Budapest, Furj u. 8/a, Hungary.

GLOBESCOPE

News from Brazil

The "Caretakers of the Environment Brazil" is the newest partner of Caretakers of the Environment International. Since the launching of the idea through an article published in Brazil's leading scientific magazine: "Ciencia Hoje" (Science Today) last July by Dr. Walter Leal Filho, approximately 250 letters of teachers willing to join in were received.

According to Walter, one of the priorities of the network in Brazil will be the formal implementation of the "International Tropical Rainforests Program in Primary and Secondary Schools" and the preparation of teaching materials focussing on the problem of the depletion of the Brazilian Amazon. He also hopes to start the development of teaching materials (in English) to be used in schools in Europe, Africa, and Asia. In conducting a rainforest awareness project, Walter has visited a number of countries including England, Germany, Denmark, Holland and France. Schools interested in taking part in the International Rainforest Awareness Program should contact him at the following address: "Dr. W. Leal Filho, Institut für Erziehungswissenschaft, Zimmer 27, Universität Hamburg, Sedanstrasse 19, Hamburg 13, D-2000, West Germany.



ENVIRONMENTAL EDUCATION IN AN URBAN SETTING.

A 4-DAY CONFERENCE FROM JUNE 10TH TO 13TH, 1991 IN THE HAGUE

The aims of the conference are:

1. to demonstrate the importance of environmental education in an urban setting.
2. to study the aspects of city-planning and landscape architecture dealing with areas and accommodations for environmental education in an urban setting.

Participants.

The conference may be attended by such different and complementary professionals as:

-policymakers, teachers, education officers, townplanners, landscape architects. The maximum number of participants will be 50. Participants from all European countries, as well as non-European Mediterranean countries are welcome.

Costs.

The conference fee will be Dfl.50,-, to be paid upon arrival. Lodging and travel to The Hague are to be arranged and paid for by the participants.

The conference is organized by the department of city-management The Hague, section Environmental Education.

For information:
Department of City Management
Mr. T. Klumpers
Huygenspark 39
NL-2515 BA The Hague
The Netherlands

FIFTH INTERNATIONAL CARETAKERS OF THE ENVIRONMENT CONFERENCE: ENVIRONMENT AND DEVELOPMENT

AUGUST 27TH - SEPTEMBER 1TH 1991 CUSCO PERU

Environmental education has become an important goal in most countries, but the way it is practiced and organized differs widely, mainly because of differences in points of view on aims, content, methodologies, etc.

That environmental education must have its place in school education - therefore in formal education curricula - is no longer a matter of discussion. Taking into account the above, the organizers of the Fifth International Conference, formulated as an overall aim: the improvement of the relation between Man and environment, to enhance and achieve a sustainable development. Hence, the main theme of the Conference will focus the relationship between ENVIRONMENT AND DEVELOPMENT, a willingness to change today's behavior for tomorrow's world.

AIMS OF THE CONFERENCE

- *To acquaint participants with developments, approaches and strategies in environmental education in different countries.
- * To increase the individual's ability to look deeper into environmental problems.
- * To stimulate developments, innovation and dissemination and to discuss strategies.
- * To enhance cooperation, discussion and professional as well as scholarly exchange.

PARTICIPANTS

- Professionals who are involved in environmental education such as; teacher-trainers, curriculum developers, staff members of Research Centres.
- Teachers in Primary, Secondary and Tertiary Education.
- Policy makers and professionals who are involved in Environmental Science and Education.
- Delegates from schools from all over the world.

Participants will be selected from those who submit an environmental project and for their active participation in environmental education.

PROGRAM: The Conference Includes:

- Discourse on main environmental problems.
- Plenary speeches based on Environment and Development strategies.
- Workshops and discussion groups.
- Poster presentations and network meetings.
- Fieldwork excursions.

SEAT OF THE CONFERENCE:

The conference will be held in Urubamba, located in the Sacred Valley of the Incas and in Cusco, the Cultural Patrimony of the World. August is Autumn time with an average temperature of 14°C. Bring clothes suited for this weather and for fieldwork.

The conference is in commemoration of the three Centenarian anniversary of the National University of Cusco. Please bring your national costumes with you, whereas the program includes a parade with Peruvian and Inca's flag hoisting.

COST AND INFORMATION:

The conference fee will be U.S.\$ 250,00. (depending on sponsorship this fee may be reduced). This includes all food, accommodation and travel within the 6 day conference.

All communications should be made to/Toda comunicación debe se dirigida:

M.Sc. Eduardo Gil Mora
National University of Cusco
Zaguán del Cielo L-9
Cusco- Perú
Telex: 52209 PE UNSAAC
Telephone: 051-084-228146
Fax: 051-84-232102

Peru Conference (see backpage)

Registration form/ Ficha de pre inscripción

Name/nombre _____

Institution/Institución _____

Position/Cargo _____

Mailing address/dirección _____

Telex: _____ Fax: _____

Detailed information will be sent after the registration.

Mayor información se remitirá después de la preinscripción

QUINTA CONFERENCIA INTERNACIONAL SOBRE EDUCACION AMBIENTAL:
DESARROLLO I MEDIO AMBIENTE
AGOSTO 27 - SETIEMBRE 01 - 1991 CUSCO PERU

En la mayoría de los países la Educación Ambiental constituye una meta importante y debe tener un lugar preponderante en la curricula de la educación formal. Los organizadores de la V Conferencia Internacional formulan como objetivo el mejorar de conseguir un desarrollo sustentable de ahí que el tema de la Conferencia es: DESARROLLO I MEDIO AMBIENTE en el entendido de que éste sea una acción que conduzca al cambio para un desarrollo en armonía con la naturaleza.

OBJETIVOS DE LA CONFERENCIA:

- Informar a los participantes respecto de las estrategias de la Educación Ambiental en diferentes países.
- Debatir el rol de la Educación Ambiental en los procesos del desarrollo.
- Analizar los problemas ambientales y sus efectos en el desarrollo.
- Impulsar la cooperación y el intercambio de experiencias.

PARTICIPANTES:

- Profesionales que vienen desarrollando trabajos en E.A. tales como investigadores, administradores de la Educación, etc.
 - Profesores de Educación Primaria, secundaria y superiores y equipos de estudiantes involucrados en proyectos de Educación Ambiental.
 - Políticos y Profesionales que desarrollan Ciencias Ambientales y Educación.
- Los participantes serán seleccionados en consideración a sus trabajos y en base a su activa participación en Educación Ambiental.

PROGRAMA:

- Discursos de Orden sobre problemas ambientales.
- Plenaria sobre estrategias en DESARROLLO I MEDIO AMBIENTE.
- Exposición de Paneles.
- Talleres de Trabajo sobre tópicos especiales.
- Trabajos de campo y excursiones.

SEDE DE LA CONFERENCIA:

La conferencia se desarrollará en Urubamba, ubicada en el Valle Sagrado de los Incas y en Cusco Ciudad Patrimonio Cultural de la Humanidad.

La Conferencia es en conmemoración al tricentenario de la Universiada, se programa un desfile de trajes típicos e izamiento de las banderas del Perú y del Tahuantinsuyo. Se recomienda traer el traje típico de país de procedencia.

COSTO E INFORMACION:

Los derechos de inscripción son de U.S.\$ 250.00 los que incluyen alojamiento, comida y viajes durante los 6 días de la Conferencia.

Toda comunicación debe ser dirigida:

M.Sc. Eduardo Gil Mora
National University of Cusco
Zaguán del Cielo L-9
Cusco- Perú
Telex: 52209 PE UNSAAC
Telephone: 051-084-228146
Fax: 051-84-232102

Mayor información se remitirá después de la preinscripción.

Ficha de pre inscription
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