

The Right To A Healthy Environment: International Law Perspective*

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Kesadaran akan pengaruh yang merusak terhadap manusia dan kualitas hidup dari polusi lingkungan dalam beberapa dekade terakhir telah meningkat secara tajam. Kesadaran ini diikuti penurunan kualitas dari lingkungan dunia – darat, laut, dan udara – selama dua abad terakhir ini. Ketika kegiatan manusia selalu memberikan perhatian terhadap alam, dampak negatif dari kegiatan ini meningkat selama periode tersebut. Tulisan ini mencoba menggambarkan bagaimana hak atas lingkungan yang sehat itu diperoleh yang dikaitkan dengan pengaturan dalam hukum internasional.

Introduction

In the past few decades awareness of the damaging effects of environmental pollution on human beings and their quality of life has increased dramatically. This awareness has followed upon very substantial degradation of the world's environment – land, water and air – over the past two centuries. While human activity has always taken a toll on the natural world, the negative impact of this activity has increased exponentially during this period. There

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** Penulis adalah peneliti senior yang mempunyai kapasitas, baik nasional maupun internasional yang memiliki spesialisasi di bidang hukum lingkungan internasional. Beliau menempuh jenjang pendidikan formal untuk S1 di Fakultas Hukum Universitas Indonesia dan gelar master diperolehnya dari Osgoode Hall Law School at York University, Canada. Selain itu juga dikenal sebagai salah satu pendiri dari Indonesian Center for Environmental Law. Saat ini beliau menjadi *Legal Advisor* di *Partnership for Governance Reform in Indonesia*.

appears to be general agreement on the impact of a few specific changes.¹

One has been population growth – initially in Europe. As the population there grew from an estimated 80 million people in 1500 to 266 million by the end of the nineteenth century, forests were cut down, water became polluted and the fertility of the land was drained from overuse. In part as a result of the crowded conditions, populations began to leave Europe for other continents, including the Americas, Africa and parts of Asia. In recent decades the populations in these regions have expanded exponentially.

With European migration and colonization went a mind-set that encouraged the exploitation of the earth and its natural resources. This has had a vast impact on the state of the environment over the last 200 years. During the past century, socialist societies took a similarly exploitative attitude towards the earth, with the result that socialist countries also suffered serious environmental degradation.

In a related development, science and scientific research connected to political and economic power have not only provided enormous benefits to humankind, but have also seriously disrupted the environment. The most awesome manifestation of this has been, of course, the atomic bomb.

Not all cultures, of course, have taken these same approaches, and some have sought to resist the changes (including environmental damage) wrought by capitalism and science. Over the centuries, some Europeans also protested the negative environmental damages happening in their own countries as a result of the industrial revolution and related changes. In the aftermath of World War II, concern about the accumulating negative impacts of all these developments on the environment heightened substantially. Environmental damage that had occurred and continues to occur in countries around the world was increasingly documented and discussed.

Development or Destruction India - A Case Study

“On Independence, two contrasting ideologies. Gandhian (sustainable) and Nehruvian (modernization) struggled for shaping India’s future. The modernizers, representing the aspirations of India’s urban elite, had easily prevailed, signaling the launch of massive state-sponsored development of the country’s natural resources to encourage industrial growth. Terming dams and power stations temples of modern India. Nehru called on tribals and peasants to sacrifice for the larger national interest.

“Sacrifice they did. When their lands were submerged under dams, they received a pittance in compensation. Paper mills were granted bamboo at throw-away prices, which they promptly exhausted, switching to eucalyptus when bamboo was no longer available. But millions of rural artisans dependant on bamboo had no such option and were turned into ecological refugees. There were two major contradictions in the development strategy. While we talked of modernization, no serious effort was made to educate the masses of illiterate Indians. For these ecosystem people who lived close to the earth, modernization merely meant destruction of the natural resource base on which they had been traditionally dependent. Indeed, development had quickly been equated to channelising nation’s resources to a narrow elite omnivores powerful landowners and urbanites in the organized industries and service sectors. These resource flows were driven by large-scale, state-sponsored subsidies. This created a system of highly inefficient resource use, a system that led to resource exhaustion even as it fostered social inequities and regional imbalances. Inevitably, these contradictions prompted corrective responses giving rise to a whole spectrum of environmental initiatives.”²

Development of the Right to a Healthy Environment

Although there were attempts to develop international environmental law in the nineteenth century (focused on the conservation of wildlife), it was not until the Stockholm Conference in 1972 that the right to a healthy environment was explicitly recognized in an international environmental law document. The conference adopted what is known as the Stockholm Declaration, consisting of three non-binding instruments: a resolution on institutional and financial arrangements; a declaration containing 26 principles; and an action plan containing 109 recommendations.

The Stockholm Conference is considered an important starting point in developing environmental law at the global as well as national level. Principle 1 of the Stockholm Declaration linked environmental protection to human rights norms, stating,

Man has the fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality that permits a life of dignity and well-being, and he bears a solemn responsibility to protect and improve the environment for present and future generations.

The Stockholm Conference influenced legal and institutional development for the next two decades. One of its influences was the creation of the United Nations Environment Programme (UNEP). It also led to the development of the 1982 United Nations Conventions on the Law of the Sea (UNCLOS), a comprehensive framework for the establishment of global rules on the protection of the marine environment and marine living resources. The Stockholm Conference was also followed by important regional developments, including the adoption of new rules and regulations by the European Community, and the creation of an Environment Committee at the Organization for Economic Cooperation and Development (OECD).

In 1983, the UN General Assembly created the World Commission on Environment and Development (WCED), chaired by Norwegian Prime Minister Gro Harlem Brundtland. The WCED

was established as an independent body linked to, but outside the control of both government and the UN system. In December 1987, the WCED published the Brundtland Report, which, among other things, created a new terminology - sustainable development - and placed economic development activities within the context of environmental limitations. The Brundtland Report also called for a second UN conference to address the question of environment and development.

Twenty years after Stockholm, in June 1992, the UN Conference on Environmental and Development (UNCED) was held in Rio de Janeiro, Brazil. The purpose of the conference was to elaborate strategies and measures to halt and reverse the effects of environmental degradation and to strengthen national and international efforts to promote sustainable and environmentally sound development in all countries. The Rio Conference had unprecedented participation from thousands of non-governmental organizations from around the world.

UNCED adopted three nonbinding instruments, one of which was the Rio Declaration, which identifies 27 principles. Principle 1 of the Rio Declaration states that human beings are "at the centre of concerns for sustainable development. They are entitled to a healthy and productive life in harmony with nature". While it fell short of recognizing a healthy environment as a basic human right. Principle 1 points in that direction. The Rio Conference also adopted what is known as "Agenda 21" a far-reaching program for sustainable development that constitutes the centerpiece of international cooperation within the United Nations system.

Current Global Situation

The years that have elapsed since the Rio Conference have been characterized by globalization. Although economic growth, reinforced by globalization has allowed some countries to reduce the proportion of people living in poverty, for others poverty and marginalization have actually increased. Too many countries have seen economic conditions worsen and public service deteriorate.

Income inequality has also increased among and within countries, and unemployed has worsened.

During the same period, as noted in the Global Environment Outlook of UNEP (1997), the state of the global environment has continued to deteriorate. Toxic emissions and green house gases are increasing, the rate of deforestation has not been reduced, and the loss of biodiversity continues.

Environmental Degradation and the Politics of Blame

“As the environment has become a prominent issue globally and in each country of South East Asia, so culprits as well as causes of problems such as deforestation, soil erosion, water storage, loss of biodiversity and pollution have been sought. The critique of mainstream development as a primary cause of environmental problems has been turned around by agencies of mainstream development to see these problems as resulting from backwardness, underdevelopment and poverty. Environment has entered the public arena through what might be termed the “politics of blame”-that is, seeking out and putting the responsibility on a particular socioeconomic actor or group of actor. Not surprisingly, such politics of blame is open to the creation of scapegoats.

“At the national level, less different, less educated, less urban farmers, peasants, and upland dwellers in particular have been singled out as the culprits who are destroying the environment at the expense of lowlanders. At a local level, the politics of blame take on a more specifically ethnic dimension. In northern Thailand, in Laos and in Vietnam, ethnic minority uplanders are portrayed as backward and destructive in their agricultural practices, most notably through shifting cultivation. The discourse of the dominant politics of blame in this case employs and exploits ethnic difference.”³

The Right to a Healthy Environment as a Human Rights

International standards

The Environment is mentioned directly in the ICESCR in article 12 (2) on the right to health:

The steps to be taken by the States Parties to the present Covenant to achieve the full realization of this right shall include those necessary for... (b) The improvement of all aspects of environmental and industrial hygiene.

As mentioned previously, the right to a healthy environment was first explicitly recognized in the Stockholm and Rio declarations as nonbinding principles. Those declarations were not intended to create legal rights and obligations. However, they did contribute to the development of international and national law.

In relation to environmental obligations, certain treaties of potentially global application include:

- The 1972 World Heritage Convention, whose purpose is to create a list of natural and cultural sites whose irreplaceable value should be preserved for future generations and to ensure the sites protection through international cooperation. As of January 1996, there were 469 properties on the World Heritage List.
- The 1985 Vienna Convention, whose purpose is to set up a framework within which countries can cooperate to tackle the problem of ozone depletion. Signatory nations agreed to take “appropriate measures...to protect human health and the environment against adverse effects resulting or likely to result from human activities which modify or likely to modify the ozone layer.”
- The 1987 Montreal Protocol on Substances that Deplete the Ozone Layer (UNEP), which aims to reduce and eventually eliminate the emissions of man-made ozone depleting

substances. The Protocol has been amended four times since 1987. The amendments established mechanisms for transfer of technology and financing, and added chemicals to the list of those ozone-depleting substances that should be phased out.

- The 1989 Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (UNEP), which obligates parties to reduce to a minimum the transboundary movements of hazardous wastes: to ensure that such wastes are managed and disposed of in an environmentally sound manner, as close as possible to their source of generation; and to reduce to a minimum the generation of hazardous wastes at the source.
- The 1992 Framework Convention on Climate Change (UNEP), which requires parties to achieve “stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system.” It aims to protect the climate system and mitigate against the adverse effect of climate change, and recognizes that the parties “have a right to, and should, promote sustainable development.” It also seeks to avoid placing a disproportionate burden on developing countries in the implementation of the convention, and encourages policies and procedures that take into account different socio-economic contexts.
- The 1992 Convention on Biological Diversity (UNEP), whose objectives are to conserve biological diversity as well as encourage sustainable, fair and equitable use and benefits of genetic resources. It requires parties to create national strategies, plans and programs for conserving biodiversity and to integrate biodiversity conservation into national economic planning. The convention also requires that parties take specific measures, including creating a protected area system, establishing means of managing modified organisms, and preventing or controlling alien species. It recognizes the importance of indigenous and traditional peoples’ lifestyles and knowledge with respect to biodiversity conservation.

UNEP's 1989 *Register of Environmental Agreements* lists a total of 139 treaties. In addition, there exist treaties that do not primarily address environmental issues, but deal with environmental obligations. These include agreements relating to trade and other international economic matters (such as GATT), regional free trade agreements, the EEC Treaty, the agreements establishing the World Bank and the regional multilateral development banks, and the multilateral development assistance agreements such as the 1990 Fourth Lome Agreement. Additionally, there exist bilateral environmental agreements, which have contributed significantly to the development of international environmental law.

The Rio Declaration, although it is not a treaty, stipulates certain state obligations. The Commission on Sustainable Development (CSD) has been mandated by the UN General Assembly to be a central forum for reviewing progress and for urging further implementation of Rio documents.

National constitutions and laws

Many national constitutions and laws recognize the right to a healthy environment derived from the obligations of states to adopt the principles reflected in the Stockholm and Rio Declarations. Some domestic courts have also referred to principles enshrined in these Declarations. Obviously, the legal status of a healthy environment as a human right varies among different systems. Many countries, such as South Africa, have developed constitutional provisions that guarantee the right to a healthy environment. South Africa's Constitution stipulates as follows:

Everyone has the right (a) to an environment that is not harmful to their health or well being; and (b) to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that (i) prevent pollutions and ecological degradation; (ii) promote conservation; and (iii) secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.⁴

South Korea's Constitution contains provisions recognizing that "all citizens have the right to a healthy and pleasant environment." Other countries that have devoted constitutional provisions to the right to a healthy environment include Ecuador, Hungary, Peru, Portugal and the Philippines.

Other countries, such as Mexico and Indonesia, recognize the right to a healthy environment in national legislation. The first objective of the Mexico General Act for the Protection of the Environment and Ecological Equilibrium, which was amended in 1996, is: "To guarantee the right of every person to live in an adequate environment, for the sake of his or her development, health and well being." Article 15/XII reiterates that right and mandates the competent authorities to take measures to guarantee its exercise. However, those provisions mean little because they cannot be enforced in the courts, which regard them as insufficient to provide legal standing to anyone who cannot give evidence of personal and direct environmental harm.⁵

The Indonesian Environmental Management Act (EMA) also recognizes the right to a healthy environment. Article 5(1) stipulates "every person has the same right to an environment which is good and healthy." This provision is accompanied by provisions that guarantee "the right to environmental information" (public access to information) and "the right to participate in environmental decision making process". To help affected people and NGO's fight for the right to a healthy environment, the EMA also guarantees various environmental procedural rights, such as the right of NGOs to bring lawsuits as class/representative actions.

As a result of pressure from pro-democracy and pro-reform activists in Indonesia, the Special Session of the People's National Assembly that was held in October 1998 (after Soeharto's resignation) promulgated the National Human Rights Charter, which also includes "every person's right to a good and healthy environment."

Indivisibility and Interdependence

There is, of course, an integral link between the right to a healthy environment and other human rights. Indeed, it may often be easier to address environmental concerns through other human rights than through the as yet not well-defined right to a healthy environment. The deterioration of the environment affects the right to life, health, work and education, among other rights. Pollution of lakes and waters in a large number of countries has seriously affected the ability of fisherfolk to earn a decent living from their traditional work. Health problems caused by air and water pollution resulting from effluents of nearby (or distant) factories have been well documented. Poisoning from lead – in paint, gasoline and other sources – has been shown to affect children's ability to learn. Examples abound.

Moreover, environmental degradation caused by economic activities is often accompanied by and related to violations of civil rights and political rights, including lack of public access to information, citizen participation, freedom of speech and association. In many cases where industrial development and resources extraction (e.g. mining or oil development) impact communities, those who question the negative effects of the development activity are subject to harassment or suppression by government or project authorities. The Brundtland Report, mentioned above, itself recommended that governments recognize the right of individuals to know and have access to current information on the state of the environment and natural resources, the right to be consulted and to participate in decision-making on activities likely to have a significant effect upon the environment, the right to legal remedies and redress for those whose health or environment has been or may be seriously affected.⁶

Environmental degradation has also in various contexts been related to issues of ethnic identity, with the result that concerns about equality and nondiscrimination are related in a close and complex manner to concerns about environmental rights.

The Interdependence of Rights Ogoni of Nigeria – A Case Study

Mobil, Texaco, Agip, Chevron, Exxon and Royal Dutch/Shell Oil Companies have operations in the Niger Delta, one of the largest wetlands in the world. Shell Nigeria, a branch of the Royal Dutch/Shell Oil Company, was the first of these companies to strike oil in the Niger Delta region, much of it on or near Ogoniland, when Nigeria was still a British colony in 1958. Since 1958, Shell Nigeria has extracted an estimated \$.30 billion worth of oil from Ogoniland. The company builds massive oil wells and pipelines that intersect indigenous communities. They take little responsibility for oil spills and air pollution from their operations. Most of the drinking water in Ogoniland is contaminated. Deep layers of oil from leaking wells and pipelines have covered fertile farmland with result that many Ogoni today are left with no means of livelihood. The company refuses to fully inform the approximately 500.000 people in Niger Delta about the environmental impact of its operations. Instead, activists charge, it has intentionally turned communities against each other, paid and provided logistical support and arms for the Nigerian military, and bribed witnesses to testify against environmental activists.

For over thirty years, Ken Saro-Wiwa, an environmental and human right activist, struggled alongside others in the Ogoni community to make the international community more aware of how societies tend to impose the brunt of their ecological damage on the people least able to cope with it, in most cases impoverished minorities such as the Ogoni peoples. In November 1995, the Nigerian military regime executed Saro-Wiwa and eight of his colleagues, ostensibly for murder, but in reality, for seeking ESC rights for the Ogoni people.

Shortly afterwards, members of the Commonwealth revoked Negeria's membership. In addition, several members of the Commonwealth and G-7 nations imposed economic sanctions on

the country. In 1998, Nigeria regained its Commonwealth status after General Abubakar replaced General Sani Abacha as head of the government. Today the economic sanctions have been lifted; the government of Nigeria is once again dependent on oil for 80 percent of its revenues. A human rights organization reports that Shell Nigeria and other companies continue to fund security agencies that unleash violence on communities who oppose the oil industry.

Implementation and Enforcement Mechanism

The recognition of the right to a healthy environment in the constitution, legislation and other national policy arrangements will not have a real effect if it is not accompanied by the availability of means to implement the right and adequate mechanisms of enforcement.

In the international context, the Rio Declaration with its Plan of Action ("Agenda 21") contains measures to be taken for implementation of the Rio principles and the other major treaties produced in Rio. The measures are (1) provision of financial resources and mechanisms; (2) transfer of environmentally sound technologies; (3) support for capacity-building; (4) education and awareness; (5) development of enforceable international legal instruments; (6) environmental impact assessments; and (7) information and tools for measuring progress.

Increasingly, environmental issues are brought to the attention of UN human rights mechanisms. In 1989, for example, the UN Sub-Commission on the Prevention of Discrimination and Protection of Minorities received two complaints on the right to health and the right to a healthy environment, presented by the US-based Sierra Club Legal Defense Fund. One of the cases is about Yasuni National Park in Ecuador.⁷ This complaint challenged a proposal by a US oil company to build an access road in Yasuni National Park. The road would divide the territory of indigenous Huaorani Indians and would accordingly damage their culture and

way of life. The report claimed that this road construction would violate, among other rights, the right to self-determination and the rights to life and health.

A representative of Friends of the Earth and the Sierra Club Legal Defense Fund made a statement to the sub-commission, urging its members to pay attention to the issue of human rights and the environmental. The sub-commission responded to these interventions by adopting a draft decision on the subject of the environment and its relation to human rights, and appointed a Special Rapporteur to study the relation between the environment and human rights.⁸ In her final report, the Special Rapporteur recognized that the right to health includes protection from natural hazards and freedom from pollution, including the right to adequate sanitation. She explained that the term "healthy environment" has been generally interpreted to mean that the environment must be healthy in itself (ecological balance) as well as healthful, which requires that it is conducive to healthy living.

Action at the National Level

Measures to be taken at the national level include:

- Effective spatial planning management systems (the effectiveness would depend on the participatory process of the spatial planning)
- Participatory Environmental Impact Assessment (EIA) as a tool for the government to make environmentally sound decisions
- A system for monitoring development activities
- The existence of a public/citizen complaint mechanism that provides the opportunity for citizens to lodge complaints and grievances about the violation/infringement of their rights
- The existence of the practice of public involvement in every stage of the environmental decision-making process, and public access to information to enable the public to effectively participate

One of the best examples of national implementation is the Canadian government's Auditor General Act.⁹ This act includes three key features. First, it establishes a new office of Commissioner for the Environment and Sustainable Development under the overall function of the Auditor General. The commissioner reports to the Parliament on the progress made by the government towards achieving sustainable development. This is done through annual reports in which the commissioner can analyze matters of his or her choosing concerning the environmental and sustainable development mandates of the different federal government departments.¹⁰

Secondly, the act requires that government departments prepare, by the end of 1997, sustainable development strategies. These were to address both the policies and programs of the department, as well as its environmental stewardship of its own operations. Thirdly, the amendments to the act include different mechanism for government accountability to the public. These begin with a special petition procedure for members of the public to inquire about governmental activities relating to sustainable development.

National human rights commissions can also be utilized for protecting the right to a healthy environment. For example, Decision 12/1991 of the Council of the National Commission for Human Rights in Mexico assigns to the commission responsibility for dealing with complaints on ecological matters. In this connection, the commission has drawn up a program on human rights, ecology, and health. In 1991 and 1992, the commission made six recommendations. Recommendation 110/91 of 8 November 1991, for example, was in response to a complaint lodged by individuals who maintained that the authorities responsible for controlling and eliminating pollution had failed to keep the public informed. The commission recommended that the authorities concerned should publicize widely through the media the harmful effects of environmental degradation on health and the specific measures the public should take.¹¹

There have been successful domestic court cases guaranteeing the right to a healthy environment in various countries. The Supreme Court of Costa Rica affirmed the right to a healthy environment.¹² The plaintiff brought the action on the grounds that his and his neighbor's right to life and a healthy environment had been violated because a cliff in their neighborhood was being used as a dump. The court ordered that the dump be closed immediately and held that the authorities had not been effective or diligent enough in carrying out their obligation to protect life and the environment. The court stated that life "is only possible when it exists in solidarity with nature, which nourishes and sustains us – not only with regard to physical food but also with physical well being. It constitutes a right, which all citizens possess to live in an environment free from contamination."¹³

**Minors Oposa v. Secretary of the Department of
Environmental and Natural Resources**

This Philippine case involved an effort to have logging licenses revoked because of deforestation resulting from extensive logging. It was contended that the logging was causing irreparable injury to present and future generations and violated their right to a healthy environment. The plaintiffs consisted of a group of 43 children who were represented by their parents. They maintained, *inter alia*, that of the 16 million hectares of rain forests that existed 25 years ago, only 1.2 million were left. The plaintiffs requested that existing timber licenses be revoked, and that new timber licenses not be granted. They invoked Sections 15 and 16 of Article II of the Declarations Principles and State Policies of the 1987 Constitution that set forth the right to health and ecology.

The lower court rejected the claim, holding that there was no legal right involved and that it concerned a political issue, which, due to "separation of powers," was not a matter of the courts. The question arose before the Supreme Court of whether the plaintiffs,

the group of minors, had *locus standi*. The court decided that they did, and that they could also represent generations yet unborn. As regards the merits, the court held:

While the right to a balanced and healthful ecology is to be found under the Declaration of Principles and State Policies and not under the Bill of Rights, it does not follow that it is less important than any of the civil and political rights enumerated in the latter.... As a matter of fact, these basic rights need not even be written in the constitution for they are assumed to exist from the inception of humankind.

In saying this, the Philippine Supreme Court made a plea for the indivisibility and interdependence of civil, political, economic, and social rights in the Philippine Constitution. It continued: "The right to a balanced and healthful ecology carries with it the correlative duty to refrain from impairing the environment... The said right implies, among other things, the judicious management and conservation of the country's forests."

The court denied that the question was a political one that could not be adjudicated before court of law. It declared that "a denial or violation of that right (to a healthy environment) by the other who has the correlative duty or obligation to respect or protect the same gives rise to a cause of action." It concluded that all licenses were to be revoked or rescinded by executive action. Accordingly, the court ruled that the state had an "obligation to protect" the right to a healthy environment of the complainants.¹⁴

In India the enforcement of the constitutional right to a healthy environment can be seen in the case of *M.C. Mehta v. Union of India*. This case is about pollution by a number of tanneries and the failure of the authorities to take appropriate steps. The petition asked the court to restrain certain industries from discharging trade effluents into the Ganges River. The Supreme Court ordered the tanneries to close down unless the trade effluents were subjected to a pre-treatment process by setting up primary treatment plants as

approved by the State Pollution Board. The court noted that "closure of tanneries may bring unemployment (and) loss of revenue, but life, health and ecology have greater importance to the people."¹⁵

"Creating their Own World as a Form of Protest"

"Walking through a community area near Pak Moon Dam in Ubon Ratchathani (Thailand) one would think it was just an ordinary farming village. Cooking smoke comes from houses, teenagers are busy with their washing, some children play on the ground while others help carry home drinking water.

"But the five-month-old Mae Moon Man Yuen (Longevity of the Moon River) village is no ordinary village. The community is the protest site of 5,000 farmers who are affected by the dam and other state projects. They have been staging a peaceful rally since March 1999, and have vowed to continue till they get proper response from the government.

"The farmers' nonviolent protests now take the form of a community system that parallels normal society, including establishing a temple, a community library and a school for children who follow their parents to the protest site. A health care centre community halls and a guest house are also being built. Security guards are being trained to ensure a peaceful protest and sanitation and health campaigns are provided.

"Every morning the core members of each group gather at the community centre to discuss problems concerning their members. They also discuss strategy, problems and future plans. In the evening, they hold a community meeting to which each group sends a representative. Sometimes outsiders are also invited to join the discussion.

"Apart from their daily routine, farmers also have an opportunity to expand their political awareness. The political school curriculum includes leadership, law, community business,

organic farming and ecology systems. Many academics are invited to give talks and discuss social issues with the community.

“Each member contributes one Bhat a day to a central fund overseen by a committee. Accounts are maintained and audited to ensure transparency.

“Spiritual solidarity among the protesters can be clearly seen. Early in the morning, the old and young alike make their way to the village’s temple. They give alms to the monks, practice meditation and listen to Buddhist’s teachings. There are about 17 monks among the protesters.....”¹⁶

Notes :

1. The following summary is taken from Donald Worster, “The Vulnerable Earth: Towards a Planetary History,” in *The Ends of the Earth*, ed. Donald Worster (New York: Cambridge University Press, 1988).

2. Taken from Madhav Gadgil, “The Emerging Paradigm,” *The Hindu*, 1 June 1997.

3. Philip Hirsch, “Seeking Culprits: Ethnicity and Resource Conflict,” *Watershed* (Bangkok) 3, no.1 (July-October 1997): 26.

4. Article 12 of the Constitution of the Republic of South Africa, as adopted on 8 May 1996 and amended on 11 October 1996 by the Constitutional Assembly

5. Alberto Szekely in *Background Paper on National Implementation in Mexico*, Workshop on National Implementation of the Principles Contained in the Rio Declaration on Environment and Development, UN Headquarters, 12-14 January 1999.

6. Cited in Lloyd Timberlake, “Freedom of Information on the Environment,” *Index on Censorship* (London: Writers and Scholars International) 18, nos. 6 and 7 (1983): 7... The relationship between protection of the environment and the right to information and participation was extensively explored in this very interesting issue of *Index on Censorship*.

7. The description of this case is taken from Brigit C.A. Toebes, *The Right to Health as a Human Right in International Law* (Intersentihart, Groningen: School of Human Rights Research, 1999).

8. Commission on Human Rights, Final Report of the UN Special Rapporteur on Human Rights and the Environment, Mrs. Zohra Ksentini. UN Doc. E/CN.4/Sub.2/1994/9 (6 July 1994).

9. An act respecting the office of the Auditor General of Canada and sustainable development monitoring and reporting, S.C. 1995, c. 43, now incorporated in R.S.C.A-17.

10. Howard Mann, "Implementing Principle 11 of the Rio Declaration: An Example of Best Practices in Canada," prepared for UN Department of Economic and Social Affairs Division of Sustainable Development, November 1998.

11. Commission on Human Rights, *op.cit.*, 92.

12. Costa Rica Constitutional Chamber of the Supreme Court Vote No. 3705, 30 July 1993.

13. Commission on Human Rights, *op. cit.*, 92.

14. The summary of this case is taken from Toebes, *op. cit.*

15. *Ibid.*, 215

16. *Supra* Janchitfah, *Bangkok Post*, 29 August 1999.