

## **PERSPECTIVES FOR THE IMPROVEMENT OF BIOS IN ASIA**

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### **INTRODUCTION**

Global community, world interdependence and international cooperation are basic principles which are required to sustain the environment of bios (life). This bio-environment includes the whole world of life, that thin terrestrial envelope of the atmosphere, hydrosphere and lithosphere where bios exists. It has been the ground of evolution and survival, since life began.

It is hardly an overstatement that 'bio-environment' has become one of the key words of our time. Its significance rings out across all cultures, classes and creeds, regardless of national boundaries. Its perspectives embrace the whole gamut of political, social, economic and philosophical persuasions from firebrands of ecological movements to the feet-dragging universal order of bureaucracy. For some of us, bio-environment suggests solemn fund-raising activities to safeguard the survival of ancient animal species or to promote organic non-chemical methods of agriculture. For many millions more it means a vicious cycle of poverty, rodent-infested slum dwellings, contaminated water and unsafe food.

The bio-environment is endowed with a marked stability with respect to external influences. It usually derives consequential plasticity. In some large areas of the globe, limits have already been transgressed resulting in the deterioration of considerable parts of the biosphere; as well as the disappearance of numerous plant and animal species, fresh water basins and soils. Therefore, the protection of the bio-environment, in order to secure ecological balance, is of great importance to all.

Ecological balance is a significant dimension for the improvement of bios. Ecological balance in this paper refers to the maintenance of an equilibrium with the ecosystem, in relation to the habits and modes of living organisms, and to the bio-environment.

The word "environment" means the "world we live in". It can relate to our personal world with limited horizons like health, home, village, town, district, country and region; or it can relate to the earth itself, including the sea and air.

Bio-economics, on the other hand, deals with the interaction of humans with the environment in the production, distribution and consumption of wealth and income for the needs of people.

### **CREATION OF THE WORLD COMMISSION ON ENVIRONMENT AND DEVELOPMENT**

Four years ago, the United Nations General Assembly commissioned a group to study the environment and development with a view to producing innovative, concrete and realistic proposals to deal with them. The group was called the "World Commission on Environment and Development" (WCED), whose members came from all parts of the world and were experts in their own respective areas of discipline.<sup>1</sup>

The WCED made a comprehensive review of how the world's bios is being degraded. They proposed measures to deal with existing problems and to maintain necessary growth and development without further depleting or damaging the elements needed to sustain life. In this report one hears the voices of farmers, housewives, students, native tribes and slum dwellers; as well as heads of governments, scientists and industrialists from around the world - sharing a common concern for our planet earth.

The committee discovered that the world holds no sanctuaries and that the effects of waste and poverty cannot be quarantined. It further discovered that decision-making on development and environment issues is often determined by parochial interests and traditional boundaries of geography, politics and ideology, and indicated a profound recognition of the legitimate claim of all people to a hospitable and life-sustaining environment.<sup>2</sup>

### **STATEMENT OF THE PROBLEM**

In many developing countries, particularly in Asia, poverty has been identified as the main cause of bio-environmental degradation. Those who are poor and hungry often destroy their immediate environment in order to survive. This explains why environmental damage is occurring in most developing countries.

It is only natural that if the commodities of poor people bring in little money they must produce more to earn the same amount or at times, a reduced income. To do this, they cut down trees, bring under cultivation marginal lands or overgraze their pastures and in the process make deserts out of previously productive land. In these actions the poor have no choice. They cannot exercise the option to die today, so that others might live tomorrow.

The nature and scale of bios degradation which the world is experiencing is enormous. The world is seemingly faced with risks of irreversible damage to the human environment that threaten the very life support system of the biosphere, the basis of man's survival and progress.

The United Nations has estimated that up to a total of 20 million hectares of tropical forests, an area nearly the size of the United Kingdom, is calculated to be lost every year. Consequently, it is estimated that as much as half to one million species of life on earth will become extinct over the next two decades.<sup>3</sup> With the consequence that the world is now caught up in a complex web of interrelated crises of 'bios', linked to socio-economic, political, as well as cultural development, which could ruin the next millennium unless something is done now. All nations must ultimately share the same destiny. Bios and our economics have become so intertwined that we can no longer choose to remain isolated.

The overriding political concept of bios in the next millennium, however, is founded on a sustainable development, a broad perspective for a multi-disciplinary concept, defined as "paths of human progress". This concept should meet the needs and aspirations of the present generation without compromising the ability of future generations to meet their needs. It requires reforms, fair access to knowledge and resources, and a more just and equitable distribution within and among nations.

The lion's share of the world's natural resources has supposedly been pre-empted by a few countries. The average citizen of the industrialized countries appears to consume 10 times more fossil fuels and minerals than the average citizen of the developing world. The world's resources cannot seemingly sustain such profligate consumption of energy and materials.

Invariably, some developed countries are exporting toxic materials, insecticides, fungicides and other poisonous products to underdeveloped and developing countries. They are also exporting their industrial wastes. This was revealed in an environment brief issued by UNEP.

One company, for example, according to UNEP, tried to encourage developing countries to establish their own waste disposal facilities which would generate jobs and give economic benefits to the recipient countries. In the Philippines, for instance, there are plans to put up incinerators as a solution to the huge garbage problem. Recently in Iligan City, Mindanao, alert ecologists, engineers and doctors opposed a city council's proposal authorizing a foreign firm to put up incinerator plants in Lanao del Norte that would burn the toxic wastes of other countries. Some scientists and doctors in the area told the Secretariat for the "Ecologically-Sound Philippines" that the toxic wastes included refuse from nuclear and industrial plants. The opposition said that it is improper, immoral and illegal to trade health and well-being for \$2 million a month.

## **BIO-ENVIRONMENTAL PROBLEMS IN ASIA**

The United Nations is concerned with all issues relating to the protection, preservation and improvement of the world we live in, especially the growing evidence of dangerous levels of pollution in water, air and living things, and of disturbances in the balance of nature. This is amplified through the destruction and depletion of irreplaceable resources, of environmental deficiencies harmful to the physical, mental and social health of man, as well as the environmental impact of rapid population growth with the resultant hiring of millions below the minimum age levels.

Bio-environmental problems of many developing countries in Asia are becoming acute and need urgent attention in terms of investment, planning, expertise and equipment. It is not efficient to consider the environmental problems in isolation from other facets of development in the region. It is feasible to achieve cost-effective integration of environmental, economic and social considerations in several fields, through careful planning and use of appropriate institutional, legislative and policy instruments.

Forests are one of the earth's most valuable natural resources. Yet they are among the most threatened. They sustain people and their environment by protecting soil and water resources and provide a habitat for half of the world's plants and animals.

It is a fact that rural people need trees and forests to alleviate poverty. Trees offer the poor a means of increasing food production and income. However, in some places in Asia, insufficient attention has been given to increasing the benefits and returns which rural people and communities derive from the forests. Trees and forests help fertilize land and stabilize the environment. Deforestation, on the other hand, is the principal cause of soil erosion. Erosion not only affects hill slopes and grazing lands, but increases the potential for flooding in the valleys and the silting-up of costly reservoirs.

Scientifically, a forest stripped of trees reduces the supply of oxygen-producing greenery and inhibits good soil development and maintenance. Poor drainage procedures near a housing development produce unstable soil, resulting in earth slides. Unauthorized dumping affects the beauty of the countryside and later pollutes the nearby river or well. Direct pollution of discharged soap and detergent suds greatly affects a

stream and kills the fish and other living organisms.

Organized forestry had seldom encouraged rural people to plant and tend their own trees, or improve the uses they made of forests on a self-help basis. This approach is designed to help the rural people help themselves.

Sustainable development, therefore, recognizes that there are positive thresholds imposed by nature but no limits to growth itself. In a world ridden by poverty, growth is absolutely necessary. Growth is one answer to the problems of developing countries. But the context of growth must change. If the world economy is to move to more sustainable paths of development, then the crucial requirement is to widen the options available to developing countries for development.

## **DECLARING 1988 AS YEAR OF THE TREE IN ASIA AND THE PACIFIC REGION**

To help mitigate the growing problem of forest development, the United Nations Environment Program (UNEP) declared 1988 as Year of the Tree in Asia and the Pacific. Countries are urged to strengthen public awareness of the importance of nature conservation, particularly the valuable roles and benefits of trees. It also aims to increase public awareness of the present state of degradation of forest resources in the region, as well as increase the participation of locals in preventing deforestation. It further encourages tree planting activities in order to improve the quality of life of the people.

Countries that have responded to the program include Sri Lanka, which has launched "100 million trees by the year 1988"; Afghanistan, which has an extensive program for popular and fast-growing trees to produce firewood and timber on a nationwide scale; Bangladesh, with a community program for farmers and the business community; Bhutan, with the establishment of mother nurseries and tree planting on a main avenue; Pakistan, with a big national tree planting program and the Maldives, with its tree planting program. In 1986, many government leaders, including President Corazon Aquino of the Philippines accepted UNEP's invitation to plant "Trees for Peace" on June 5, World Environment Day. A number of countries have initiated public awareness programs such as issuing stamps to commemorate the Year, raising and distributing seedlings, organizing forest guides, organizing essay, painting and photograph competitions and producing radio and television programs.<sup>4</sup>

## **THE NEED FOR FORESTS AND TREES**

According to the Food Agriculture Organization (FAO), forests and trees provide several important benefits: jobs and income; fuel, food, fodder and building materials for the home; and a range of environmental enhancements.

People find extra income in working the forests resources on a small-scale, informal basis such as: harvesting roundwood or selling fuelwood; collecting fruits and nuts; tapping trees for resin or "gums"; manufacturing furniture and handicraft products, as well as raising livestock within the forest environment.

In many parts of Southeast Asia, including the Philippines, tree gardens form a multi-storey canopy around the house, starting with coconut trees, then fruit trees, and still smaller tree-shrubs like ginger, sweet potatoes and pineapples lower down. All of these contribute to the household economy providing fruit, nuts, fodder, oil, fuelwood, building materials and thatch.

Conclusively, where hillside forests are cut, soil erosion, landslides, flooding and disruption of the water balance soon follow. Trees provide shade, and shelter from wind and rain thus keeping a potential desert in check.

## **CONCLUSIONS AND RECOMMENDATIONS**

In well-developed cities, golden plains of grains, the meandering of highways, the warmth of living rooms, in homes, factories, forests, farms and seaside resorts - we see the tracings of man's intellect and imagination. Unlike other creatures, man's energies are not directed merely toward survival but to the challenge of creating his own environment. Economic development is closely bound to environmental concerns. Man cannot hope to improve his world without economic growth. But the quality of life cannot advance unless the bio-environment is nurtured and valuable natural resources are protected.

For centuries, man has played games with his environment without knowing nature's ground rules and it has become apparent, even to children, that the tools that mould the stuffs of nature to man's liking, are double-edged. Now man must begin to grapple with causes that have more than one effect. It is time for man to meditate on his heritage and to act remembering that "knowledge is a foundation of life to him who possesses it."

The earth's barren slopes, leached soils, lost croplands and depleted fisheries, require attention. The world's food-yielding croplands are

becoming more scarce. Without positive action to replenish soils, crop output will surely decline.

In most of the developing countries in Asia, low levels of industrial development coupled with high population growth rates, low productivity in the agricultural sector and unequal patterns of land ownership, have resulted in various development problems. These are mainly: surplus rural labor force; rural poverty; "pseudo-urbanization" and inequalities between regions, sectors and individuals. In most Asian countries, industrial development has rarely been able to grow to a degree where the surplus labor force could be absorbed within the desired length of time and bring about interregional, intersectoral and interpersonal equalities as well as aggregate national economic growth.

UNEP plays a critical role in this growing global action to reclaim and protect the world's natural resources on which all economic progress and human security rests. It has improved environmental health conditions, conserved soils, reclaimed rangelands, and protected forests, watersheds and wildlife. Consistently, in order to implement a meaningful global cooperation, the industrialized world must take a full share of responsibility to ensure that the international economy helps rather than hinders sustainable development. Commodity markets must be strengthened. Restrictive trade practices should be abolished. Trade terms must change to favor developing countries rather than to impoverish them.<sup>5</sup>

Specifically, there is a need to highlight a two-way linkage between mass poverty and bio-environmental quality, and the consequent need and urgency of planning harmonious action on these two fronts in the face of rapid population pressures and limited availability of natural resources in the region.

Apart from providing pointers for national policy and planning, there is a dire need to underscore the bearing of international economic and technological cooperation on the promotion of bio-economic growth with environmentally sound lines. Transnational investments, as well as development assistance, still play significant roles not merely in relative size, but in terms of style and content.

It is recommended to discuss the possibility of setting up an international environmental security fund from resources saved as the result of reducing military expenditures. Relatedly, management of the environment must be a shared responsibility with both developed and developing countries playing their respective role to ensure policies of bio-economics and bio-environmental protection go hand in hand.

Consequently, there should be a full integration of the bio-environment and bio-economics into decision-making at all levels, nationally and internationally. We should attack the problem at its source with sustainable development as the central goal. We must learn to accept the interdependence between bio-environment considerations and bio-economic growth, as a unified management of planet earth. It is imperative therefore, that consideration of implementing bio-economics and bio-environmental objectives be reflected in programs and projects of Asian and international agencies to achieve world understanding, cooperation and peace.

Subsequently, it is doubly urgent that countries of the world should join hands and work out programs of cooperative activities aimed at preserving ecological balance. They should work to further develop the rational uses of all natural resources. This recommendation should also concern the preservation of the knowledge of the origin and structure of the biosphere, the interrelationships of its components, and the mechanisms maintaining its functions in nature.

Finally, the critical objectives for bio-environment and development policies must include: preserving peace, reviewing growth, changing its quality and remedying the problem of poverty, as well as merging environment and economics when making decisions. With the creative human mind and political will, we have the ability to make the world a better planet to live in the fullest sense of the word "bios".

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