

Tree of life at Flamengo Park



The author: presenting a paper in a session of the Global Forum

ENVIRONMENTAL ISSUES, DEVELOPMENT STRATEGIES AND DISASTERS IMPACTS IN ASIAN COUNTRIES

The countries in the Asia-Pacific region are at different stages of socioeconomic development and are facing varied environmental problems. Except for a few countries almost all the countries have common environmental issues. These countries are facing disasters of different nature and undertaking various development strategies.

The common issues of the Asia-Pacific region countries are summarized below:

- Rapidly expanding and heavy population pressure is creating tremendous impacts on the natural resources base resulting in environmental degradation and ecological imbalances. Poverty, unemployment, lack in purchasing power and shortage of adequate facilities are the common problems.
- Frequent and regular occurrences of natural disasters like floods, droughts, windstorms, earthquakes, tsunamis, volcanic eruptions, etc., disrupt economic activities and socioeconomic development.
- Industrial, domestic and other pollution, irrational use of chemical fertilizers/pesticides, massive deforestation, depletion of biomass and energy shortage, excessive abstraction of groundwater, improper construction of dams and embankments are responsible for environmental degradation and ecological imbalances.
- Rapid, unplanned and uncontrolled industrialization and urbanization are creating haphazard growth and environmental deterioration.
- Shortage of safe drinking water and sanitation, safe disposal systems for urban debris/garbage, emission of black smoke from factories and vehicles are rampant mostly in the slums and squatter areas creating health hazards and associated diseases.
- Possible inundation of coastal areas due to climatic change/global warming/sea level rise is likely to occur in the low-lying, island-dominated and

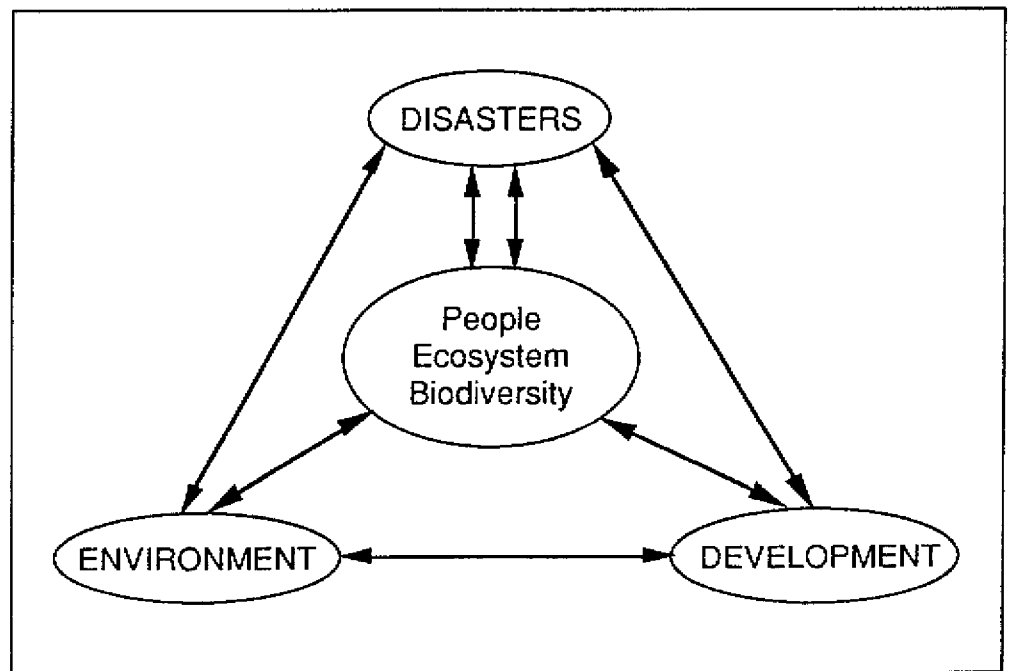
coastal countries.

- Dearth of knowledge regarding the preservation of balanced and sustainable environment, lack of mass awareness and public education/sense of responsibility are very common in many countries.

The overall development strategies of the Asian countries vary considerably from country to country but the trends are almost the same. All countries have the following critical objectives and development strategy:

- Self-reliant and people-centered development with an objective to increase national income growth, to alleviate poverty and to generate employment.
- Development of human resources and formation of skilled manpower in the country to undertake economic activities with optimum capacity utilization in all sectors like industry, modern agriculture, transport, communication, education, health, etc.
- Decentralization of participatory planning and people-oriented development through integration of group-based and sector-based approaches, i.e., taking the poor and disadvantaged groups and women in the mainstream of development activities.

The interactions and impacts of disasters on environment and development are schematically explained in the following figure and this concept must be integrated in the development process:



Environmental degradation threatens humans and other fauna and floral species. In the Asia-Pacific region, where it is expected that population will increase by about 40 percent over the next 15 years (in cities by some 90 percent), the economic activities will double the demand for natural resources⁽¹⁰⁾. For the optimal use of natural resources, minimization of environmental impacts and attaining ESSD, the following actions are needed:

- Energy should be used more efficiently and alternate sources of energy should be explored. Shifting from fossil fuels to renewable sources such as wind, geothermal and solar may be a possibility.
- Deforestation should be stopped and emission of carbon dioxide and other greenhouse gases should be limited at 1990 levels by 2000.
- Population growth should be slowed down and be stabilized.
- Pollution-free environment should be created by using pollution-free and environment-friendly technology.
- Global partnership and international cooperation should be strengthened to attain a pollution-free environment and a balanced and sustainable society.

The basic principles of a sustainable society (Box C) have been elaborately described in a UNEP Report⁽¹¹⁾.



Letting themselves be seen and heard as others decide their future (Earth Summit)

Box C

PRINCIPLES OF A SUSTAINABLE SOCIETY

Respect and care for the community of life. An ethic based on respect and care for ourselves, each other and the Earth is the foundation for sustainable living. Development ought not to be at the expense of other groups or later generations, nor threaten the survival of other species. The benefits and costs of resource use and environmental conservation should be shared fairly among different communities, among people who are poor and those who are affluent and between our generation and those who will come after us.

Improve the quality of human life. The aim of development is to improve the quality of human life. It should enable people to realize their potential and lead lives of dignity and fulfillment. Economic growth is part of development, but it cannot be a goal in itself; it cannot go on indefinitely. Although people differ in the goals they would set for development, some are virtually universal. These include a long and healthy life, education, access to the resources needed for a decent standard of living, political freedom, guaranteed human rights and freedom from violence. Development is successful only if it makes our lives better in all these respects.

Conserve the Earth's vitality and diversity. Development must be based on conservation to protect the structure, functions and diversity of the world's natural systems on which our lives depend. To this end we need to:

- conserve life-support systems. These are the ecological processes that keep the planet fit for life. They shape climate, cleanse air and water, regulate water flow, recycle essential elements, create and regenerate soil and enable ecosystems to renew themselves;
- conserve bio-diversity. This includes all species of plants, animals and other organisms; the genetic range within each species; and the variety of ecosystems;
- ensure the sustainable use of renewable resources. They include soil, wild and domesticated organisms, forests, rangelands, cultivated land, and the marine and freshwater ecosystems that support fisheries. A use is sustainable if it will allow the resource to regenerate.

Minimize the depletion of nonrenewable resources. The depletion of nonrenewable resources like minerals, oil, gas and coal must be minimized. While these cannot be used sustainably, their 'life' can be

extended, for example by recycling, by using less of a resource to make a particular product, or by switching to renewable substitutes where possible. These practices are essential if the Earth is to sustain billions more people in the future and give everyone a life of decent quality.

Keep within the Earth's carrying capacity. There are limits to Earth's carrying capacity, and they depend on the number of people in a region and on how many resources each person uses or wastes. Stabilizing human numbers and putting resource consumption on a more sustainable footing are the greatest challenges of our time, and they touch human sensitivities deeply. Policies that bring lifestyles into balance with the Earth's carrying capacity must be complemented by green consumer power and sharing resource-efficient technologies.

Change personal attitudes and practices. To adopt an ethic for living sustainably, people will need to re-examine their values and alter their behavior. Society must promote values that support this new ethic and discourage those incompatible with a sustainable way of life. Information to support these values should be integrated into all our educational systems in schools, in places like zoos and parks, and in the news and entertainment media.

Enable communities to care for their own environments. People who organize themselves to work for sustainability in their own communities can be a powerful and effective force, whether they are rich, poor, urban, suburban or rural. Through their actions they can sustain and maintain resources for the benefit of local people. But community environmental action will not work unless all citizens have a right to participate in decisions that affect them and unless they can share information, skills and technologies to manage their resources.

Provide a national framework for integrating development and conservation. All societies need a foundation of information and knowledge, a framework of law and institutions, and consistent economic and social policies if they are to advance in a rational way. A national program for achieving sustainability should involve all interests and seek to identify and prevent problems before they arise. It must be continually adaptive in response to experience and new needs. National measures should:

- treat each region as an integrated system, taking account of the interactions among land, air, water, organisms and human activities;
- recognize that each system influences and is influenced by larger and smaller systems—whether ecological, economic, social or political;

- consider people as the central element in the system, evaluating the social, economic, technical and political factors that affect how they use natural resources;
- relate economic policy to environmental carrying capacity;
- increase the benefits obtained from each stock of resources;
- promote technologies that use resources more efficiently;
- ensure that resource users pay the full social costs of the benefits they enjoy.

Create a global alliance. No nation is self-sufficient. If we are to achieve global sustainability, a firm alliance must be established among all countries. Levels of development in the world are unequal, and the lower-income countries must receive equitable economic treatment so they can develop sustainably. Shared resources - especially the atmosphere, oceans and many great river systems- can be managed only on the basis of common purpose and resolve. The ethic of care applies on the international as well as the national and individual levels. All nations stand to gain from worldwide sustainability and are threatened if we fail to attain it.

SOURCE: 1992 United Nations Environment Program (UNEP) Document, CARING FOR THE EARTH—A LEARNER'S GUIDE TO SUSTAINABLE LIVING, pp. 29-30.