

An Overview of Nepal's Fragile Environment and Development

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INTRODUCTION

We subsist on, all around the delicacies of the nature. The universe is getting fragile and the nature can no longer defend herself. We need conscious efforts to appreciate and to protect the diversity that is available for us. There is something to be inherited by the generation that will follow us. The development concept should be placed in the anvil of radical metamorphosis and should try to address it sustainable. Sustainability connotes making things last, permanent and durable. There is a critical linkage of the environment with the process of development. Caring for earth is a strategy for sustainable living. Economic development and sound environmental management are complementary to each other i.e. without adequate environmental protection, development will be undermined and without development, environmental protection will fail. The question is not of maximum efficiency but of satisfactory accomplishment.

Environment generally encompasses an extremely broad spectrum of areas assimilating natural world of land, sea, air, plants, people, things and events around them that influence their life. With the emergence of the notion of sustainable development in the 1970s which gained momentum after the publication of Our Common Future (1987), the conflict between economics and ecology has brought about a new paradigm of environment and sustainable development with the interface between growth and equity. People have altered the earth everywhere in order to cater more effectively to their own needs. Forests have been replaced by crops and

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pastures, many species have been domesticated or eliminated and an industrialising society has polluted the earth on such a scale that even the climatic balance is in peril.

PRINCIPAL ISSUES IN NEPAL

Nepal has raised the issue of environment conservation from 1960 onwards. Nepal was one of the 113 nations participating in the Stockholm Conference of 1972. Nepal actively participated in the Earth Summit at Rio (1992) as well. Nepal's environment has undergone swift deterioration mainly due to rapid population growth and steadily increasing pressure on natural resources.

Economic Issues

With regards to the interlinkage between sustainable development and environment, what really matter is the lives of the people, their health, knowledge and productivity, and the capacity of the country to continue improvements in these realms on its own after a reasonable time; rather than simply keeping the stock of resources intact while people remain unemployed. Unskilled illiterate, poor, malnourished people suffer from numerous diseases, while available potential resources remain unexploited, and foreign aid is perpetually required even to provide vital necessities such as food, clothes, clean air and safe water.

Nepalese economy is characterised by poverty and stagflation with less than US\$ 170 percapita GNP. Fifty to seventy percent of the people live in an abject poverty and illiteracy. Predominantly an agricultural country, Nepalese economy is a manifestation of staggering disguised unemployment and subsistence farming where foreign aid has played a critical role to sustain the process of economic development.

Industrial development shows no good sign for future prospect. Most of the industries are found to be of assembling type. Cottage and small industries have been at the verge of collapse.

Contribution of manufacturing sector is merely 5 percent of GDP as against 60 percent of agricultural sector. For the period 1965-90 the average annual growth rate of GNP percapita has confined to 0.5 percent. Productivity data for the last several years indicate that there had been more exploitation of natural resources which in future, not only reduce the level of average index of food production percapita but will also encourage internal migration. Fifty three percent of GNP as total external debt and annual deforestation of 0.8 thousand of sq. kms. reflect the deteriorating environment (WDR 1992).

Nepalese economy is basically comprised of excessive growth of luxury imports sustained by artificial demand with a circular flow of profit to traders, commission agents and so-called power-hawkers. The bleak prospects for export promotion, joint venture and private foreign investment, and persistent constraints to harness and utilise water resources have made the economy more vulnerable, dependent and a center of classic poverty.

Ecological Issues

In the hills and mountains, the people of Nepal are shrieking out from the out-rage of environment. In the plains below, people are throwing more and more poison into the air. Siltation and sanitation on the fields are on rise, increasing amount of insecticides and pesticides are being applied to the fields, resulting in poisoning of the soil and the annihilation of species of beneficial flora and fauna; more wastes are being thrown out of industrial plants. In the forest, wild animals and birds are being killed in a wanton manner. All the problems of soil degradation, deforestation, air and water pollution, and extinction of species, have act together to detract from the biodiversity of nature; the main balancing component in our complex environmental system. These are all results of inadequate management or mismanagement or even no management at all of our environmental resources.

Biomass fuels account for 95 percent of energy consumption; 75 percent of which from fuel wood and the rest from agri-residue and dung cakes. The forests alone are the source of almost 96 percent of rural household energy needs. Over reliance on fuel wood and other traditional biomass fuels with insufficient end-use technology results the pollution and respiratory and other illness, especially women who are suffering with high exposure to such a practice. (Dahal and Gurugharana 1992)

Besides the over exploitation of resources such as forest, Nepalese economy facing the problem, of underutilizing of many potential renewable resources and energy sources, such as water resource and hydropower, solar energy, wind power, biogas etc. The country is endowed with immense water resources (about 2.27 percent of the world stock for about 0.35 percent of world population). There are about 6000 rivers and rivulets with an average density of river, over 0.31 km/sq.km. The potential hydropower is 83000 MW of which over 50 percent is considered economically feasible. So far, only about 238 MW hydropower, less than 0.6 percent of economic potential, has been installed. Similarly negligible fraction of potential solar power of 26.6 million MW, potential biogas plants of over one million family size plants based on over nine million cattle, and non of potential wind power of 400-500 MW in Manang and Mustang alone, have been installed and utilized. (Dahal and Gharana 1992). Such underutilization of renewable sources of energy and the rising energy demand in the country have kept the dependence on biomass unabated resulting in the process of environmental degradation and productivity decline, where development and environmental protection have complementarity instead of trade off.

Although, the country is overwhelmingly rural and industry is still minor sector, contributing 10 percent of GDP, the environmental impacts of land, water and air pollution due to untreated industrial wastes, accumulating household wastes, and lack of safe drinking water and drainage etc. are in a alarming stage in urban sector. These problems most acute in densely

populated urban, semi-urban and industrial areas, severely affect the poor and middle income households who are unable to protect themselves from these hazards, resulting in various water-borne and respiratory disease. If the environment impacts and social costs are taken into account, the on-going urbanization and industrialization in the country can not be considered as symptoms of development. A progress which worsens the life of majority of people can hardly be called development, be it modernization, industrialization, urbanization or per capita income growth. Recent studies show that environmental pollution resulting from untreated open sewage disposal in natural drainage systems, traffic noise and emissions from vehicles, and industries, are gradually reaching to disturbing proportions. Urban environmental safety regulating, monitoring and implementing mechanisms simply do not exist. (Sharma 1992)

The annual internal renewable fresh-water resources of Nepal is 8.88 thousand cubic meters per capita about four times the figures for India and Pakistan (WR 1993). In a country with immense water resources, it is a pity that only 66 percent of urban population and 34 percent of rural population have access to safe drinking water, which too is not really safe for drinking without further treatments by households such as boiling and filtering, and is available only for few hours per day (Sharma 1992). There are also acute shortages of waste water disposal facility, sewerage system and solid waste collection and display system. In addition, the lack of latrines in most semi public places, roadsides, the bank of ponds, rivers and streams etc. lead to contaminated water supply and widespread transmission of excreta related diseases such as diarrhoea, dysentery, typhoid and parasite infections.

STRATEGY

It is instructive to note that the terms environmental crisis and development in the case of developing countries have yet to

make even a dent on their basic problems like poverty and unemployment, purely environmental approach is not justifiable. Even though the ecological security, economic efficiency, and social quantity do remain common across counties, their relative significance varies by context and stage of development. This naturally precludes a unique recipe for sustainable development. Recognition of this reality is critical when designing policies especially at the national level. Although technological advancement and its indiscriminate use have been said to be the major factors for environment degradation and economic development, sustainable development, in the ultimate analysis remains basically an ethical issue. Therefore, the policy designer must strive for modifying value so the people revive, preserve, and promote ethical commitments and moral obligations under and almost changed socio-political environment.

CONCLUSION

Prof. Roland Paepa, a geologist and chairman of the Earth Technology Institute at the University of Brussels, Belgium, has warned that if immediate measures are not taken to curb the present trend of increasing population pressure and mismanagement, Kathmandu will share the fate of Mexico city, which has the dubious honour of being the city with the highest level of air pollution. Mexican authorities have had to impose fixed timing for operation of transport vehicles and factories in an attempt to curtail pollution.

Thus, it is really imperative to make a comprehensive and meticulous examination of the declining situational arrangements, undertaken to address environmental problems, their strengths and draw backs and make recommendations for their improvement, and to provide judicious opinions on explicitly identified environmental issues.

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