

ENVIRONMENT AND ECOLOGICAL IMBALANCES IN THE YEAR 2001 A.D.

Environment and Development axis has been the most important underlying theme of the last decade. While development is essential to bring prosperity and feed the teeming millions the world over, the realization of back-lash effects on environmental balance and ecology has made us to think that unguarded development could be self-destructive. The reconciliation of the two concepts has led to coining of the word "Sustainable Development" which was the main highlight of the "Earth Summit" at RIO held in June 1992.

Two years have passed since the famous RIO conference. The implementation of Agenda 21 is yet to take its practical shape. But a feeble realization has come in India to try for ingraining the concept of sustainable development in our planning process. Three years of 8th Five Year Plan have already passed in this atmosphere but soon the Planning Commission may ask the States to start making exercises for drafting the 9th Five Year Plan also which hopefully may lay greater stress on practical steps at a large scale in this direction.

The Deptt., of environment here takes a synoptic view to determine the extent and quality of environmental damage occurring by that time due to socio-economic changes. It feels that the present development strategy is neither based on the principle of sustainability rather helplessly nor on repairing the damage already done.

The environment in our state will be in the midst of an accelerated process of deterioration in the following ways:-

- (1) Population explosion
- (2) Insanitation
- (3) Discharge of untreated waste water in towns.
- (4) Large scale use of pesticides and fertilizers.
- (5) Haphazard growth of cities and towns.
- (6) Vehicular pollution.
- (7) Inadequate use of non-conventional sources of energy.
- (8) Rapid Industrialization.

Each issue is elaborated briefly below:-

(1) Population

The population of Haryana State for the mid year of 1992-93 is estimated to be 171.07 lacs as against only 91.10 lacs in the year 1967-68. This shows a net increase of 80.00 lacs over a period of 25 years showing a 3.2% simple growth rate per year or 2.2% compound growth rate. At this rate, the population of the State will definitely jump to 2 crores figures by the year 2001.

Population is the basic cause of deterioration of the environment because the State has to resort to intensive use of natural & financial resources to feed, engage and sustain the teeming millions after ignoring the environmental damage caused in the process. The 2.2% annual increase is

still a staggering figure and above the national average growth rate of population and obviously the present means employed by the deptt. Of Health to control the population has proved unequal to the task.

Therefore, the state needs to take a second look to reduce the new additional increase of 35 lacs human beings during the next 7 years. If this problem is not tackled effectively; all our development plans will go away and the efforts will be hardly adequate to meet the demands. Some measures suggested are; enforcing compulsory registration of marriage, births and deaths, raising the minimum age of marriage, restricting jobs in offices of all types and other facilities to families fulfilling the limited family norm (maximum two children) etc etc.

(2) Insanitation

Due to haphazard & sudden growth our towns and cities are now virtually stinking with insanitation. The insanitation is largely due to unpaved streets, inadequate drainage, open defecation, animal litter, cess-pools of stagnant waste water and dumping of solid waste in open plots. The Municipal Committees have miserably failed to bring about any substantial improvement. Insanitation of late has deteriorated the local environment both in towns and villages. In villages, the insanitation is mainly due to mounds of Cow dung, lack of drainage, poor drainage and accumulation of solid waste in streets. The net effect of insanitation of environment is the generation of stench, breeding of fly and mosquitoes which cause many communicable diseases. In villages, the leachate from mounds of cow-dung leads to water pollution of village ponds.

(3) Discharge of untreated municipal waste water

Out of 83 towns in Haryana, only 37 towns have some partial sewerage system. The faecal matter is just allowed to pass in municipal drains, people from the low-income groups resort to open defecation. But even where partial sewerage facilities exist, the waste-water generated from the towns is discharged untreated into the open drains of fields. This is causing lot of water and air pollution in the local surroundings, leading to spread of diseases. Only the waste-water from seven towns, Yamuna Nagar, Jagadhari, Karnal, Panipat, Sonipat, Faridabad and Gurgaon will be treated in the future under Yamuna Action Plan. Therefore, the department of local bodies should be provided adequate funds to provide sewerage system and treat the waste water through affordable techniques e.g. oxidation ponds or agroforestry.

(4) Large Scale use of fertilizers and pesticides

There seems to have developed an irreversible trend in the consumption of insecticides and fertilizers in agriculture & agriculture policy does not seem to advocate reversing this trend in an appreciable manner. Currently, the annual consumption of pesticides in Haryana is 5000 tonnes. These pesticides are lethal poisons and what is most dangerous is that these are non-biodegradable. For example, the half-life of aldrine is 15 years meaning that even after 15 years of its use its remnants will retain 50%

poisonous character. Thus we are discharging 5000 tonnes of such lethal poisons into our soil and water annually. Unscientific use of insecticides has led to serious contamination of foodstuffs & milk which has been established in studies conducted by the ICMR. The use of insecticides also disturbs the biodiversity as they kill the untargeted micro-organisms also. Similarly the consumption of inorganic fertilizers which has gone upto 10 lakh tones has also left harmful residues in the soil. Therefore the agriculture policy needs to be framed to reverse these trends of unbounded consumption of fertilizers and pesticides and educate farmers to increase the use of organic manure. The droppings of grazing animals in fallow-lands previously used to maintain the nutrient cycle of agricultural land. The intensive agriculture in an effort to get 3 crops a year under the pressure of burgeoning population has greatly reduced the practice of land-grazing by animals. Besides, most of the cow-dung is used as domestic fuel. This calls for a conscious policy to popularize the bio-gas plants.

(5) Haphazard Growth of Towns and Cities

Due to heavy migration of rural population in towns and cities, there is shooting growth in the urban population. This has led to haphazard growth of towns and cities to monstrous sizes. What is most deplorable is that this growth is at the cost of agricultural land. The area of most of the district towns in Haryana is more than 40 to 50 sq. Kms. The farmers of adjoining villages are selling the agricultural land to develop unauthorized colonies. There are no facilities for drainage, W/S, sewerage and solid-waste collection and the colonies are being converted into slums. The Government therefore needs to formulate a definite policy on town and country planning to check the expansion of urban areas and controlling the slums.

(6) Vehicular Pollution

Both the petrol and diesel vehicles cause significant air pollution. The effect is more pronounced in congested areas where natural aeration is unable to take away the pollutants. No doubt the State Government has made it mandatory for every vehicle to take suitable measures to control the emissions to prescribed norms w.e.f. 1-11-94, but this step alone will not solve the problem. The ban on the use and parking of individual vehicles in congested areas will achieve the desired break-through. This will be possible only if improved Public Transport system is introduced and sensible traffic regulation measures introduced.

(7) Vehicular Pollution

Solar energy and bio-gas energy are the two areas which can drastically change the energy scenario particularly in rural areas. Unfortunately both solar cookers and "gobargas-plants" have not been used for mass applications so far, Sun rays and cow-dung present opportunities for inexhaustible source of energy. Conversion of solar into electrical energy has, however, not been economically viable for the present. But both the source can be extensively used for meeting domestic energy requirements for all times to come. Therefore it needs to be investigated why these

sources have remained untapped so far or why they have failed. It should be a top-priority therefore for a future development strategy that these two sources are used in every home by the year 2001 A.D.

(9) Rapid Industrialization

Industrial activity is the backbone of present day development and progress as it provides products, brings revenue, created employment opportunities and provides a supporting service to other activities and programmes e.g. agriculture, irrigation etc. At the State level, however, the industrial policy has so far not been geared to greatly encourage industries or units using environment friendly products like fly-ash bricks etc. have not all been encouraged and promoted. The industrial policy may have to be thoroughly overhauled to incorporate these provisions.

In India power is mostly generated by oil and coal which are both non-renewable and exhaustible resources. Therefore time has come when we should direct the attention towards the development of hydro-electricity. Unfortunately, there is no hilly terrain in Haryana. The sites for building hydro-power projects in Himachal Government has thrown a great opportunity to any state to develop hydro-power there-after giving, say 12% free power to the Himachal Govt. It is an opportunity which must be grabbed by all possible means. Hydro power development of energy is also suggested because it is pollution free unlike thermal power plants or oil fired boilers.

It is therefore suggested that future development strategy of the State should accord due priority to these eight activities to meet the test of environmental safe-guards and sustainability.