The remedial measures to be adopted to control pollution depends on the degree of awareness of the society towards these problems and the cost/benefit economic ratio in the treatment of industrial effluents, liquids and gases. Even if this ratio is tilted more on the cost aspects, the programme of a clean environment has to be implemented in order to pass on a better world to live in for our future generations.

Psychology and Educational Sciences

Psychological Dimensions of Environmental Management by Uma Shankar, Psychology and Educational Sciences, Management Development Institute, Jeevan Tara Building, New Delhi 110001.

Primitive man worshipped nature whereas modern man armed with science and technology considered himself as the master of nature. With the growing needs of man today, the pace of interference with the environment increased. This has led to the present-day environmental crisis.

There is need to manage the environment for improving its quality for the benefit of mankind. Since environmental degradation has resulted due to human intervention, man's attitude and behaviour need to be studied by psychologists. Hence environmental psychology emerged as a distinct field of psychology to study man in his natural setting. This requires an interdisciplinary approach. Because of complex nature of physical settings within which human activitiy occurs, our task is to develop research techniques which are sensitive to this complexity. About two decades after the emergence of environmental psychology as a discipline, the results of research are applied to various environmental projects. However, the integration of psychological findings and planning is a slow process.

Maintaining and improvising the quality of the environment which also includes the quality of life have been established as the major aims of public policy at national and international levels. Despite the energy crisis, high inflation, economic recession and increased levels of unemployment, there is growing public concern about conservation of natural resources and the protection of the environment. Besides the environmental hazards of industrial activities such as Bhopal gas tragedy are matters of utmost public concern and require strict implementation of environmental legislations. The solution to environmental problems can be of two kinds; preventive and curative. Environmental management, therefore is a challenging task and involves developing innovative approaches, such as impact of technology on the environment; encouragement of public participation in planning new projects; prediction of future trends in environmental management etc. Social scientists and others should view environmental management from a wider perspective and conduct meaningful studies to arrive at realistic remedial measures in our everchanging and dynamic universe.

Agricultural Sciences

Optimising Soil Environment for Sustained Agricultural Production by N. N. Goswami, Dean and Joint Director (Education), Indian Agricultural Research Institute, New Delhi 110012.

By 2000 A D, India will have to produce 225 million tonnes of foodgrain for feeding the projected population of around 936 millions. This target can be achieved by bringing more area under cultivation and/or increasing the production efficiency per unit area. Out of 328 million hectares of geographical area, 175 million hectares are subjected to serious erosion hazards, shifting cultivation, waterlogging, salinity and alkalinity, etc. Annual losses of arable land through soil erosion alone are estimated at 4 to 7 million hectares with an estimated soil loss of 6000 million tonnes. Salt affected soils, which are unfit for cultivation, account for 7 million hectares and the dangers of fertile soils turning into potential salt affected soils have increased with the developments of net work of canal irrigation system. Thus, area under cultivation is dangerously shrinking as a result of either natural catastrophies or man made calamities like deforestation and inefficient utilization of production inputs. Hence the viable alternative at present is to increase production per unit area.

This will become possible only with the adoption of high production technology, often with enormous stress on soil fertility. Increased production is associated with greater degree of exploitation of the soil and increased use of water, fertilizer and pesticides, all of which unless efficiently and judiciously used can lead to land degradation and environmental pollution.