

EARTH SCIENCES IN ENVIRONMENTAL ASSESSMENT AND MANAGEMENT

The Geological Survey of India, Northern Region organised a Symposium on "Earth Sciences in Environmental Assessment and Management" during 9th to 11th April, 1996, at Lucknow. The objective was to discuss and share the experiences of the earth scientists and engineers for evolving a rational approach to overcome complex problems related to environmental imbalances caused due to indiscriminate developmental activities and exploitation of natural resources.

In all 150 papers and eight invited keynote addresses were received and brought out in a 205 page volume. Besides keynote addresses, 43 papers were presented in 10 Technical Sessions. Thirtysix poster presentations were also made.

The topics covered include : (i) Geoenvironmental Assessment - Regional case studies; (ii) Geoenvironmental impact related to anthropogenic activities, urbanisation, water resources development, communication and transport, industries, mining activity, oil spill and blowouts, disposal of radioactive wastes and tourism; (iii) Natural hazards and their mitigation, including floods, landslides, glacial activity and avalanches, earthquakes, volcanoes, land degradation, desertification, siltation, coastal erosion, endemic health hazards; and (iv) Techniques and trends in quantification of environmental practices.

Based on intensive and extensive deliberations on various aspects discussed during the symposium, the following broad conclusions and recommendations emerged:

1. Thematic maps should be prepared which would be useful in locating additional sources of groundwater, aid in proper and sustainable landuse planning, help in the identification of future urban centres and of solid-liquid waste disposal sites compatible with land capability.

2. The geoenvironmental impact assessment indicates dwindling resources of groundwater, deterioration of the water quality due to ingress of toxic wastes as a result of urbanisation and industrialisation, problems of waterlogging due to engineered constructions and other natural causes; problems of environmental degradation associated with mining activity; road and rail road development and large man made reservoirs; and problems of coastal erosion and degradation and ingress of saline ocean water into fresh water coastal tracts due to number of reasons. A need for detailed study to document the earth science linkages of the anticipated adverse impact and to evolve rational remedial measures has been emphasised.

3. The discussions on natural hazards like landslides, floods, earthquakes and volcanic eruptions and their mitigation highlighted the inherent importance of earth sciences in understanding the mechanism and in identifying the locales prone to such disasters.

4. The acoustic sounder (SODAR) may be used as a new tool for environmental modelling. The geochemical modelling techniques may be applied for the natural aqueous system.

5. There was a general agreement that the geological data are to be continuously generated for creating base line information and subsequent monitoring. For this

purpose the earth sciences should be given institutional representation in all apex bodies at national level dealing with environmental policy formulation and management. To achieve this, it is essential to suitably amend the Environment Protection Act-1986; Environmental Waste Management and Handling rules-1989 and EIA notification-1994, particularly sections 10, 11 and 12 of the Environment Protection Act 1986 and schedules I and III of the E.I.A. notification (1994) to provide rightful role of Geological Survey of India through statutory provisions.

Undermentioned three publications of GSI were also released during the Seminar.

1. GSI's Contribution in Environmental Geology, GSI, Spl.Pub. No.43, 1996.
2. Palaeontologica Indica NS Vol. L, 1996.
3. Killari Earthquake, GSI Spl. Publ. No.37, 1996.

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INTERNATIONAL CONFERENCE ON ENVIRONMENTAL POLLUTION, BUDAPEST, HUNGARY

The above Conference on Environmental Pollution (ICEP-3) was organised by the European Centre for Pollution Research and Hungarian Academy of Sciences at Academy Centre in Budapest from 15-19th April 1996. More than 150 delegates from both developed and developing countries participated in the deliberations.

The inaugural address was delivered by his Excellency Baja Fereng, Minister of Environmental and Regional Policy, Government of Hungary. Keynote addresses of different sessions were delivered by Mohamed T.El-Ashry of World Bank, on Global Environment Facility and the countries in transition; Prof. K.Curi of Turkey, on Soil Waste Management for developing countries; Prof. E. Meszaros of Hungary, on European Air Pollution Management and Prof. V. Abernety of U.S.A., on Population Theory and Future Population Size. Eighty Research Papers covering various aspects of Environmental Pollution were presented and discussed.

The Congress further deliberated on Sustainable Development, Policy and Management Issues; Soil, Air and Water Pollution; Solid Waste Disposal; Eco-compatible Technologies and Educational innovations.

The consensus that emerged during the deliberations was that a proper balance should be struck between sustainable development and protection of the environment.

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