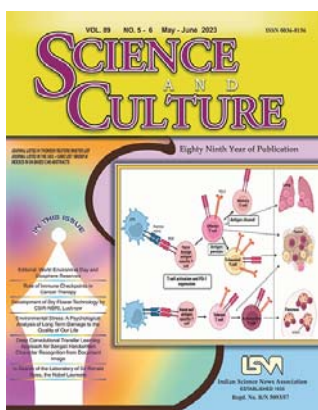


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EDITORIAL

## WORLD ENVIRONMENT DAY AND BIOSPHERE RESERVES



The concern for the protection of our environment is deeply expressed throughout the subcontinent on the World Environment Day on 5<sup>th</sup> of June. One of the facets of environment conservation is the creation of biosphere reserves. A check on the increase of accelerated depletion and destruction of

natural ecosystem through continued urbanization and industrialization had been the basic philosophy of the UNESCO's Man and Biosphere programme executed in cooperation with the International Union for Conservation of Nature and Natural Resources (IUCNN). Several areas have been designated as Biosphere Reserves throughout the world where the basic objective is the conservation of life in its totality at certain restricted areas of occurrence. The *In situ* preservation of diverse biotic communities as an integral component including both plants and animals and the conservation of genetic diversity in a proper milieu for its continuing evolution are safeguarded in such research. Evidently those areas can serve as ideal substrate for ecological and environmental research; education; training and finally generation of *culture* of environment.

In view of several factors associated with the cultural evolution of man who has mauled the environment to suit their own means resulting in considerable imbalance in the natural ecosystem; several adaptive features had to be incorporated in the-biosphere reserves. It normally consists of a core zone which is rigidly conserved and the buffer and fringe Zones to enable human activities in the ecosystem. As extensive areas which may reach to a

maximum of more than half a billion hectare-cluster concept has been developed where several biosphere reserves have contiguous buffer zones. Several biosphere reserves have been demarcated all over the world' which is mostly a product of post Stockholm Conference enthusiasm nearly a decade back. The Departments of Environment; Environmental Protection Agencies in different parts of the world have become fully conscious of the need for biosphere reserves as a measure to safeguard the nonjudicious utilization of the fruits of Science and Technology.

As far as Indian scenario is concerned there has been a plethora of agencies and voluntary organizations dealing with the problems of the environment; leaving aside the Department of Environment and National Council for Environment and Planning; the official bodies at the federal level supposed to be the custodian of Indian Environment. Several areas have so far been identified as potential biosphere reserves by the Man and Biosphere Committee of the Department of Environment which include Mysore Plateau-Wynad in the Nilgiris with the Silent Valley, Khang Chendzonga National Park on Sikkim; the Nanda Devi Sanctuary; Valley of flowers and Kedarnath in U.P.; Simlipal and Joypore Hill Forests stretch in Orissa; Kanha National Park, Madhya Pradesh, North Island of Andaman and Jarawa Tribal Reserves and Sunderbans in West Bengal, Namdapha, Lalichopra, Pakku, Tawang and Walong in Arunachal Pradesh, Gulf of Mannar in Tamil Nadu and Tura Ridge in Meghalaya. The Declaration several other potential Biosphere reserves is also under consideration. One of the principal criteria in the choice of biosphere reserves are the representativeness; genetic diversity, natural growth and natural inaccessibility for preservation as a conservation unit.

Notwithstanding the fact that India is fortunate in having Botanical, Zoological and Geological Surveys of India often non-existent in several of the developed countries of the world; a complete documentation of the flora; fauna; soil, air and water of these areas is rather, meagre. This inadequacy might have emanated from a different emphasis embodied in the charters of these organizations where species was considered as individual units and not population and the entire flora and fauna in the ecosystems-was not considered in its totality. It is heartening to note that such charters are undergoing revision; a process which is imperative in the present era of conservation against the impending threat of destruction of our ecosystem.

In fact, even now, it is well recognized that in India the devastation of land is carried out in a systematic fashion in the name of resource exploitation; rehabilitation of landless and the poor and lastly paramountcy of the importance of balance of trade in national interest. With due respect to the Department of Forestry which indeed provided the classical treaties of the flora of India during the British Regime; the entire operational mechanism of this department geared towards resource exploitation with less regard for conservation. This culture is hardly commendable and needs a thorough reorientation with enlightened foresters being available in different states of India.

Legislation is another factor which is coming in the way of management of biosphere reserves. Forests are under the jurisdiction of the state whereas the onus of

creation of Biosphere reserves and their management lies at the federal level. A coordination between the two is imperative for creation and harmonious management of the reserves in India which is as much a concern for the centre, the state as well as the individual. At the federal level the establishment of the Department of Environment is indeed a remarkable step taken by our Prime Minister. In the fitness of things the responsibility of management of biosphere reserves should be entrusted to the Department of Environment to which it rightly belongs as in all other parts of the world. It is true that in this subcontinent agricultural research has paid very high dividends but the very objective of the Department of Agriculture is resource exploitation no doubt through judicious means. Unfortunately there has been less emphasis on the latter aspect leading to the indiscriminate use of fertilizers and pesticides; some of the primary causes of the destruction of our natural ecosystem.

In view of the past; experience; existing practice in the world; coupled with the fact that a full fledged Department of Environment is functioning at the Federal level there should be no delay in entrusting this task to this newly created Department. It is indeed commendable that a few states including West Bengal have already created a Department of Environment which can function in a harmonious way with the Department at the centre having forestry, under its jurisdiction. This bold step once taken would be a signal contribution on this World Environment Day. □

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**Editor's Note :** This is reprinted from *Science and Culture* published in June 1982. This is still relevant in India to discuss the problems raised by Professor Sharma to have satisfactory answer. On the basis of this article, the Govt. of India in 2003 established the National Biodiversity Authority to facilitative, regulatory and advisory functions on issues of conservation, sustainable use of biological resources and fair and equitable sharing of benefits arising out of the use of biological resources.