

Presidential address

by

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**INTERNATIONAL WORKSHOP
ON**

**"GULF OF MANNAR BIOSPHERE RESERVE: AN ECOLOGICAL MODEL FOR
BIODIVERSITY CONSERVATION LIVELIHOOD AND SUSTAINABILITY"**

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**Organised by
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&
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India is very rich in Biodiversity and associated traditional knowledge. India with only 2.4% the world's area, it is the Home for over 8% of its Biological Diversity and is also one of the 17 mega-diversity countries of the world. It has been well recognized that valuable and productive biological resources are crucial for sustainable economic development. The rural populations of India always believe that biodiversity is important for their livelihood and survival. Protecting and conserving biodiversity is our own interest and industries such as pharmaceuticals, cosmetics, pulp and paper, construction, Agriculture and agro industries, between 70-80% of the population in India relies on plants as the only source of medicine. To conserve and sustainably use the biodiversity of India, the Government has established The National Biodiversity Authority (NBA) in 2003 at Chennai in accordance with Biological Diversity Act, 2002, with the following objectives:

- i. To regulate access to biological resources, of the country with the purpose of securing equitable share in benefits arising out of the use of biological resources, and associated knowledge relating to biological resources.*
- ii. To conserve and sustain able use of biological diversity.*
- iii. To respect and protect knowledge of local communities related to biodiversity.*
- iv. To secure sharing of benefits with local people as conservers of biological resources and holders of knowledge and information relating to the use of biological resources.*
- v. Conservation and development of areas of importance from the standpoint of biological diversity declaring them as biological diversity heritage site.*
- vi. Protection and rehabilitation of threatened species and*
- vii. Involvement of institutions of State Governments in the broad scheme of the implementation of the Biological Diversity Act through constitution of committees.*

A three tiered structure at the national, state and local level is established under the Biological Diversity Act, 2002. All matters relating to requests for access by foreign individuals, institutions or companies, and all matters relating to transfer of results of research to any foreigner will be dealt with by the **National Biodiversity Authority (NBA)**. All matters relating to access by Indians for commercial purposes will be under the purview of the **State Biodiversity Boards (SBB)**. The Indian industry will be required to provide prior intimation to the concerned SBB about the use of biological resource. The State Board will have the power to restrict any such activity, which violates the objectives of conservation, sustainable use and equitable sharing of benefits. Institutions of local government (Panchayat, District and Municipalities) will be required to set up **Biodiversity Management Committees (BMC)** in their

respective areas for conservation, sustainable use, documentation of biodiversity and chronicling of knowledge relating to biodiversity. NBA and SBBs are required to consult the concerned BMCs on matters related to use of biological resources and associated knowledge within their jurisdiction.

The present International workshop on "Gulf of Mannar Biosphere Reserve: an ecological model for Biodiversity Conservation, livelihood and sustainability" is organized mainly to find more elucidation to conservation and Management of Biological resources and open the opportunity for the livelihood options for the coastal villagers along the coast of Gulf of Mannar Biosphere Reserve.

The Gulf of Mannar (GoM) Biosphere Reserve was established by the Government of India and the State of Tamil Nadu as the first marine protected area to be declared in South and South East Asia. The GoM has been chosen as a biosphere reserve primarily because of its biological and ecological uniqueness. The region has a distinctive socio-economic and cultural profile shaped by its geography. It has an ancient maritime history and was famous for the production of pearls, an important item of trade with the Roman empire as early as the first century A.D. All the 21 islands (only 19 islands are above surface waters) have been notified as reserve lands under section 26 of the Tamil Nadu Forest Act, 1882. This was reinforced by a renotification of the State Government on 10, September, 1986 as Gulf of Mannar Marine National Park under section 35(1) of the Wildlife (Protection) Act 1972. Under the Man and Biosphere Reserve Programme of UNESCO, Government of India set up in February 1989, The Gulf of Mannar Marine Biosphere Reserve, the first of its kind in the country and probably, in Southeast Asia. The Gulf of Mannar biosphere reserve has an area of about 10,500 km² running along the mainland coast for about 170 nautical miles including the 21 islands in the gulf. The Gulf of Mannar is considered as "Biologists Paradise" for it has 3600 species of flora and fauna.

In recent decades, however, the coral reef ecosystems in Gulf of Mannar region have come under increasing pressure from environmental stress, unsustainable fisheries and harvesting methods, climate related coral bleaching and diseases, land-based sources of pollution, sedimentation, dredging and coral mining, and from inappropriate coastal development caused by insufficient planning, management, and policy decisions. These negative impacts erode the livelihoods provided by healthy coral reefs to local people. The impacts vary among stakeholder groups, but in general the poorest stakeholders are finding that their livelihoods are declining more than other coastal stakeholders and they are the least able to respond to this change. If coral reef management is to be successful on the longer-term, it has to effectively address the needs and aspirations of the poor people depending on reefs, ensuring the benefits are equitably distributed among all stakeholder groups. Almost any form of resource management will affect the way people interact with reef resources, and dramatic changes in their access to reefs are likely to influence their livelihoods. And where people's livelihoods are marginal and subjected to stress and conflict, this will likely seriously affect their ability to pursue a sustainable livelihood. To avoid this situation, informed and holistic reef management that address the concerns of local reef users is vital.

The present International workshop on "Gulf of Mannar Biosphere Reserve: an ecological model for Biodiversity Conservation, livelihood and sustainability" has identified the following priority themes for workshop:

- Biological diversity of Gulf of Mannar Biosphere Reserve;
- Biodiversity conservation into sustainable development interventions.
- Integrated management of marine resources for food security;
- Assessing Gulf of Mannar ecosystem dynamics for poverty alleviation.
- Coastal livelihoods and policy options for the benefit of coastal population (such as seaweed culture, ecotourism);

- Scenarios and policy options for good governance in the context of global change;
- Aquaculture for sustainable use;
- Management of natural and man-made disasters- natural ecosystem recovery models using GoM as case;
- Sustainable development and knowledge sharing;
- Environmental degradation and promoting rehabilitation;
- Protecting and safeguarding the corals in Gulf of Mannar.

It is envisaged that the final outcome of this workshop direct the efforts towards an integrated approach to the conservation. Socio-economic and biological monitoring will be viewed as an integrated activity. Developing the capacity of different institutions working on Gulf of Mannar to provide in-house training and guidance can assist fulfill the long-term training requirements of a constantly changing workforce. Using locally-based institutions with a pre-existing role and relationship with the community will assist establishing a monitoring programme and help ensure that information feeds into the policy process or management efforts more effectively. The more precisely the socioeconomic and biological monitoring meets the information requirements at the local and national levels, the more likely is it used and will receive long-term national support. Formal and informal networking and sharing of expertise among network partners, government departments, NGO's, private sector and stakeholders at both local and national level is required for effectively producing and disseminating socioeconomic and ecological information into management and policy processes.

It is my privilege to preside over the International workshop and I take this opportunity to welcome all the delegates to this International workshop who have come to make this function and workshop a grand

success. I am sure that T the workshop will bring out implementable recommendations for conservation and protection of Marine Biodiversity in Gulf of Mannar Biosphere Reserve.