

Workshop on Biodiversity and Bioresources Conservation Awareness
Jointly Organized by National Biodiversity Authority (Government of India), Chennai
and Indian Institute of Spices Research (ICAR), Calicut
21 January 2006

Venue : Indian Institute of Spices Research, Calicut

PROGRAMME

08.30-09.30 Registration

09.30-10.30 Inaugural Session

09.30-09.35 Invocation

09.35-09.40 Welcome : Dr. V. A. Parthasarathy, Director, IISR, Calicut

09.40-10.00 Presidential address : Dr A.K. Ghosh, Director, Centre for Environment and Development, Kolkata

10.00-10.25 Inauguration and Inaugural address : Prof. S. Kannaiyan, Chairman, NBA, Chennai

10.25-10.29 Vote of thanks : Dr. K. Venkataraman, Member Secretary, NBA, Chennai

10.29-10.30 National anthem

10.30-10.45 Tea

10.45-13.15 Session I

10.45-11.15 Overview of Biological Diversity Act, 2002
Prof. S. Kannaiyan, Chairman, NBA, Chennai

11.15-11.45 Peoples Biodiversity Register
Dr A.K. Ghosh, Director, Centre for Environment and Development, Kolkata

11.45-12.15 Coastal and marine ecosystem
Prof. L. Kannan, Director (Research), CAS, Parangipettai

12.15-12.45 Biodiversity and its conservation
Dr. K. Venkataraman, Member Secretary, NBA, Chennai

12.45-13.15 Diversity in medicinal plants
Dr. S. Ganesan, Director, TBGRI, Palode

13.15-14.00 **Lunch**

14.00-16.00 **Session II**

14.00-14.30 Kerala state Biodiversity Board-Activities and Programmes
Dr J. K. Sharma, Member Secretary, KSBB, Trivandrum

14.30-15.00 Biodiversity of Spices
Dr. V. A. Parthasarathy, Director, IISR, Calicut

15.00-15.30 Diversity of insects of forest plantations
Dr. R. V. Varma, Head (Entomology), KFRI, Thrissur

15.30-16.00 Microbial diversity and their conservation
Dr. M. Anandaraj, Head (Crop Protection), IISR, Calicut

16.00-16.15 **Tea**

16.15-17.00 **Open Session**

17.00-17.25 **Concluding Session**

17.25-17.30 **Vote of Thanks**

Dr. S. Devasahayam, Principal Scientist, IISR, Calicut

**Summary of lectures delivered during Workshop of Biodiversity and
Bio-resources Conservation Awareness jointly organized by
National Biodiversity Authority, Chennai and IISR,
Calicut**

1. Topic: People Biodiversity Registry

Dr. A.K. Ghosh, Director for Environment and Development, Kolkata delivered a talk on People Biodiversity Registry. Dr. Ghosh emphasized the importance of involving grass root level local people in the awareness campaign on the Biodiversity. He spoke of the West Bengal model of creating awareness in local language for the easy understanding by local, public and students. The role of UNPD appreciated *Village Based Biodiversity Resource Information Centre* in imparting awareness about need for serving the diversity for sustainable development of a nation. He further mentioned about the role of printing biodiversity related documents in local languages for the benefit of local people and tribal who are the real custodians of biodiversity. The benefit of biodiversity should be shared between all stakeholders of biodiversity. Dr. Ghosh further stressed the importance of preserving the biodiversity in agricultural crops such as rice.

2. Topic: Coastal and Marine Ecosystem

Prof. Kannan of Annamalai University gave a talk on Coastal and Marine Ecosystem. In his speech he enlightened the audience with information about the wealth of biodiversity that exist in Coastal and Marine Ecosystem. He mentioned about ecosystems such as mangroves, corals, sea weeds and sea grass. The use of biodiversity of marine ecosystem in India for commerce and trade, human welfare, spiritual purpose was highlighted in his speech. While presenting the diversity of coastal and marine ecosystem he further cautioned the potential threats to these biodiversity. The human intervention is one of the most important threat to marine biodiversity, he opined

3. Topic: Biological Diversity Act 2002

Prof. Kannaiyan, Chairman, NBA delivered a talk about the genesis of Biological Diversity Act and gave a detailed account of biodiversity related topics. He further mentioned about salient features of biological diversity act 2002, the setting up of

National Biodiversity Authority (NBA), the organization set up of State Biodiversity Board (SBB) and Biodiversity Management Committee (BMC). Prof. Kannaiyan also mentioned the definitions and its origin in his speech. About the threats for Biological Diversity of nature, he further emphasized the role of NBA in minimizing human interventions in biodiversity. While mentioning about the Biodiversity as a source of livelihood for several million people, the chairman gave an overview of Convention on Biological Diversity and its role in preserving the biodiversity in India.

4. Topic: Biodiversity of Medicinal Plants

Dr. Ganesan of TBGRI, Palode gave a talk on Biodiversity of medicinal plants and the role of TBGRI in conserving such germplasm for the welfare of the country. He briefed the genesis and objectives of botanical gardens around the globe. The gradual transformation of mandates and programmes of botanical gardens from simply treating human ailments to conserving the germplasm of medicinal plants. He also stressed that the plants should be preserved in its wild form as they dependent on other biological partners for their dispersal and perpetuation. Targets for Botanical gardens for the year 2010 was also set up for exploiting medicinal plants health.

5. Topic: Kerala State Biodiversity Board Activities

Dr. J.K. Sharma, Director, Kerala Forest Research Institute and member Secretary of Kerala State Biodiversity Board presented the chronological, historical events and genesis of the State Biodiversity Board in Kerala. Kerala is the first state in India to implement the act. KFRI is the nodal agency for the implementation of the board's programmes in the state. He further mentioned about the functions and organizational set up of the board in Kerala. The functioning of Biodiversity Management Committee at Panchayat level by the Panchayat President was also mentioned by the speaker. The Biodiversity Social activities will be implemented in Kerala in the first phase in 8 districts in 2006 and the remaining districts will be covered in 2007, he added

6. Topic: Diversity of insects of forest plantations

Dr. Varma of KFRI delivered a talk on diversity of insects of forest plantations. In the annual Kingdom more than 40% belong to insects. In India about 75,000 species are identified. The tropical forest insects are the least studied. KFRI has a collection of more than 1000 spp. He has given an account on various major insect pests of important forest trees. Bees and wasps play an important role in the pollination of trees. Some of the insects are vectors of forest tree diseases. Seven rare species of termites were recorded in Kerala. He also pointed out that the insect diversity is more in natural forest than in replanted forest. The difficulties in collection of forest insect were also discussed.

7. Topic: Biodiversity and its conservation

Dr. Venkataraman delivered a talk on biodiversity and its conservation. The diversity of ecosystem in India ranges from the icy arctic to hot desert is prevalent in India. He enlightened the audience with wide varieties of species of life forms in India. He made an analogy between terrestrial environment and aquatic environment and further unified their nature. The interrelationship between terrestrial environment and aquatic life was also pointed out by the speaker. The threat to biodiversity can be grouped into two viz., natural threat and human induced. The human induced one is more damaging than the natural ones. The conservation of biodiversity can be grouped into traditional and modern, he further added

8 Topic: Conservation of spices biodiversity

Dr. V.A. Parthasarathy, Director, IISR, Calicut delivered a talk on spice biodiversity in India. The speech centered on important spice crops such as black pepper, cardamom, ginger, turmeric, tree spices, seed spices, vanilla and paprika as they are widely traded in India and abroad. Spices are conserved by dedicated efforts of IISR, Calicut, AICRPs, NRC on seed spices and spice board, besides they are conserved in biosphere reserves. The diverse nature of few spices resulted in release of improved varieties of spices for commercial cultivation, he added. The diversity in spice crop in India can be exploited for identification and exploitation of novel genes for curing certain disease in these own crops for eg foot rot of black pepper. Director also briefed the various research activities

of the institute too, aside from mentioning about the use of Geographical Information System (GIS) in spice collection from forest.

9. Topic: Microbial diversity

Dr. M.Anandaraj gave a talk on microbial biodiversity, the infant among all the life forms documented by human on the earth. The speaker clearly mentioned the wide gap between the estimated species and the documented ones till 2004. The role of microorganisms in novel application clearly brought out new dimensions for use of such a diverse group of organisms for human welfare. The further pointed out the potential for exploiting such a wealth for commerce while citing the example of enzyme producing bacteria called *Thermus aquaticus*. The speaker stressed the need for conserving the microorganism in repositories