

# **HILL WETLANDS: CONSERVATION STRATEGY & ACTION PLAN**

## **RECOMMENDATIONS FOR THE NILGIRIS**

16 September 2006, Kotagiri, Nilgiris

### **BACKGROUND & CONTEXT**

Water resources in the hill district of Nilgiris in Tamil Nadu, play a crucial role not only in ensuring access to water for drinking and other uses to the rural and urban communities in the district, but also serve as the upstream source to four river basins serving the states of Tamil Nadu, Karnataka and Kerala. The water resources of the district are used for power generation and account for more than a third of total hydro-power generated in Tamil Nadu. Natural forests (sholas) and products therefrom, tea and coffee plantations, agricultural activities, tourism, and trade and commerce constitute the economic edifice and provide livelihoods to residents of the district. The district is located over an elevation range of 1,000-2,636 m above sea level, comprising hilly peaks, plateau and lower plateau regions - most of the settlements are located in the latter two elevation ranges.

Nilgiris located in the north-western part of Tamil Nadu state and spread over an area of 2,549 sq km, supports a population of 0.76 million (Census of India, 2001). About 41 percent of the population resides in the 900 rural habitations of the district, whereas the four urban centres of Udhagamandalam, Kotagiri, Coonoor and Gudalur, comprise the balance. The district is home to a number of indigenous communities and they include the Todas, Badagas, Kotas, Kasavas, Irulas, Kurumbas, Jenu Kurumbas, Mullu Kurumbas, Bettu Kurumbas, Kattunaickens, Paniyas, Mandadan Chettis and Wynnaadan Chettis. Of these a population of about 30,000 have been categorized as Scheduled Tribes. These tribal communities, apart from other communities who are

residents of the Nilgiris, have settled in specific altitudes and are dependant upon livelihoods characteristic of these regional resources, apart from their own historical and cultural traditions, including those pertaining to management of water.

## **GROUP I: CONSERVATION & LIVELIHOODS**

**Mr. Elangovan (TWAD), Mr. Balashanmugam (TWAD), Mr. Robert Leo, Mrs. Anita Verghese, Mr. Senthil Prasad, Mrs. Samita.**

1. Livelihood & Conservation cannot be separated. It has to go hand-in-hand
2. Identify the traditional dependency of Rural and / or Urban inhabitants on wetland ecosystems to address issues
3. Revival of traditional source management through community participation.
4. Protection and restoration of identified and sensitive wetlands through community participation and eco-tourism
5. User beneficiaries should contribute for source management
6. Enforce the existing local laws for proper sanitation, sewage and solid waste management and monitor the status.
7. Innovative institutional mechanisms for proper management of wetland and surroundings. For example - Wetlands - tea estates & wetlands – vegetable cultivation- responsibilities for protecting sources.
8. Regulating the usage of quantity of water drawn from wetlands for agricultural purposes.
9. The lessees normally don't take initiative for the wetland conservation so the leased land owner and lessee can be brought under the community control.
10. TWAD Board's initiative (Total Community Water Management) has to be encouraged with the community with participation from local NGOs.

## **GROUP II: POLICY, LEGAL & INSTITUTIONS**

**Mr.T.S. Dange, IFS, Mr. Rathin Barman, Ms. Jayati Chourey, Mr. Ramesh Bellie, Mr. T. Samraj, Mr. Kunal Sharma.**

1. Definition for different types of wetlands in the Nilgiris according to agro-climatic zones. Identification and delineation of wetlands
2. Identification of existing policies and analyze them with respect to wetlands.
3. Ownership – complete or partial under Forest / Wildlife Act or Biodiversity Act.
4. Joint management of wetlands by communities and Government.
5. Encroachments should be dealt with legally
6. In protected areas / Reserve Forests there is a need for a wetland ecosystem management plan or form a policy for wetlands inside protected areas.
7. Scientifically well-balanced agriculture policy in areas near wetlands to reduce siltation and to minimize pollution level due to agrochemicals.
8. Regulation of diversion of water from wetlands
9. Afforestation and protection of native spp. In/around the wetlands.

## **GROUP III: Wetland Inventory Assessment and Monitoring**

**Mr.Mohanraj, Dr. Narendra Prasad, Mr. Madhusudan, Dr. Madhu, Dr. Suprava Patnaik, Ms. Shiny Mariam Rehel**

1. Development of database on hill wetlands
2. Assessment: Define and classify wetlands in the Nilgiris
  - a. Inventorization and Monitoring of different types of wetlands in the district ( Suggested parameters: Season wise, Land use pattern on catchment area, Biological Magnification,

- b. Biodiversity inventory (Indicator Taxa)
    - c. Plants
    - d. Insects
    - e. Amphibians
    - f. Birds
    - g. Abiotic components
    - h. Soil physico-chemico parameters
    - i. Water quality etc
- 3. Temporal Change in different types of wetlands
  - a. Land use- mapping
  - b. Incorporation of human population census data
  - c. Climate Data
  - d. Agricultural practices
  - e. Agrochemical usage
  - f. Health impact
- 4. Traditional ecological knowledge and biodiversity register
- 5. Cost Benefit analysis of the wetland watersheds
- 6. Hydrological impact of different types of wetlands under different catchment characteristics
- 7. Development of effective outreach programs to highlight the issues and strategies for wetland protection and conservation
- 8. Wetlands tour for awareness and sensitization

All the above will be collected using the following tools

Questionnaire based surveys

Field surveys conducted by the organization

Enhancing capacity building by disseminating information

Generation of GIS database

Information collated from partner organizations – climate, geology, land use, Biological data

## **Output:**

Electronic databases

Posters

Brochures

Reports

Press release

Articles in peer reviewed journals

Interaction meeting among stakeholder

Do's

1. Wetlands in Nilgiris are small in size and tend to be ignored. They should be mapped and protected and their role understood by the users.
2. Document biodiversity species that are found in and around the wetland
3. Hill wetlands importance should be highlighted to agencies such as the Hill Area Development Programme
4. Wetland hill areas should be given a special status in Nilgiris.
5. Protect and conserve wetland through scientific management of catchment area and vegetation

Don'ts

6. Draining, land filling, changing landuse or polluting the wetlands should be totally avoided.
7. Wetlands should not be considered as waste lands to be encroached.

Prof. KC Malhotra & Pratim Roy facilitated the session.