

**National Workshop on
Conservation of Rivers and Floodplains in India
New Delhi, 23-24 November 2001**

RESOLUTION

Being aware of the rapid deterioration of the water quality of our rivers and lakes to the extent that in most cases it does not even meet standards for bathing, let alone those for human consumption;

Being concerned at the high levels of abstraction of water from rivers and lakes for agriculture, industries and domestic supplies, to the extent that many downstream reaches of rivers and many other water bodies have no water during the dry season;

Recognising the need for maintaining adequate flow in rivers during the dry season for improving water quality and sustaining the biodiversity,

Further recognising the need for a holistic approach by treating rivers as living ecosystems which harbour and sustain a significant proportion of the country's biodiversity;

Reaffirming that rivers, lakes, wetlands and other water bodies cannot be considered in isolation of their watersheds, and that all inland surface water systems need to be treated together as part of a river basin;

Asserting the need for a river basin approach and for treating each river basin, with its specific geological, climatic, hydrological, biological and socio-cultural features, separately;

Stressing the importance of maintaining the ecological integrity (physical, hydrological, chemical, and biological characteristics, and natural functions) of rivers, lakes and all inland aquatic ecosystems;

Further stressing that floodplains are an integral part of river ecosystems, and that any change in the river flow (volume, velocity, quality, etc.) affects its floodplain;

Emphasizing the functions and values of floodplains for moderating floods, recharging groundwater, production of valuable natural resources, improving water quality, sustaining high biodiversity (especially fisheries), and providing aesthetic beauty to the landscape;

Noting the paucity of information on various aspects of river ecosystems and the absence of appropriate mechanism for retrieving, compiling and disseminating the available information on rivers, lakes and other surface waters, and

Acknowledging and appreciating the legacy of traditional knowledge and practices concerning use and conservation of water resources;

Conscious of the need for giving highest priority to protecting the upper watersheds of rivers (near origins) for checking erosion and improving flow;

Having noted the efforts of the National River Conservation Directorate (NRCD) in the Ministry of Environment & Forests (MOEF) towards improving the water quality of rivers through interception, diversion and treatment of sewage, and enforcing measures for industrial pollution control; and

Recognising the urgent need for coordination between different ministries of the Central and State Governments and various agencies concerned with water resources and their use and management;

We, the participants of the National Workshop on the Conservation of Rivers and Floodplains in India (held in New Delhi during 23-24 November 2001), call upon the Ministry of Environment and Forests, Government of India,

- 1.** To treat all rivers, lakes, reservoirs, wetlands, etc. as integrated components of a river basin, and to develop a mechanism for coordination between all programmes for their conservation and management;
- 2.** To take necessary actions to ensure adequate flow in rivers for maintaining their ecological integrity, water quality and biodiversity;
- 3.** To regulate the abstraction of river/surface water for various uses (including agriculture, industry and domestic supplies) in consonance with the hydrological conditions of the river basin and in a manner that under no circumstances the abstraction exceeds a maximum prescribed proportion of the total flow;
- 4.** To ensure return flow of adequate quality by promoting sustainable land use, and recycling and reuse of wastewater;
- 5.** To take necessary steps towards issuing a notification under the Environment Protection Act, to protect river floodplains, and areas surrounding all inland water bodies, from uncontrolled anthropogenic activities (tentatively called as **River Regulation Zone** notification)**.
- 6.** To declare certain rivers and/or their reaches as "National Heritage Rivers" and restore them;
- 7.** To initiate measures, on highest priority, for the **conservation and restoration of floodplains, and protection of upper watersheds** of rivers throughout the country;

8. To establish a network of **Protected Areas of River Systems** for the conservation of riverine biodiversity;
9. To establish a **National Institute for Inland Waters** for research on inland surface waters, focusing especially on rivers and lakes;
10. To set up a **National Authority for the Conservation and Restoration of Inland Waters** which should coordinate between various ministries and departments, and function under the NRCA.
11. To coordinate with the Ministry for Urban Development and other concerned ministries and Departments to take measures on priority to **decentralise treatment of domestic sewage** by requiring the housing boards, housing societies, builders, etc. to treat domestic sewage at their end and to recycle treated water;
12. To promote **alternate energy-efficient technologies for wastewater treatment** (e.g., root zone./ constructed wetlands) that will help reduce costs of both capital and O&M.
13. To promote and support **research on river-floodplain systems** in the following areas of priority for achieving the goals of river conservation:
 - A. adequate flow in various rivers/ stretches of rivers
 - B. hydrology of rivers in relation to their ecological functioning
 - C. river-floodplain interactions, emphasising nutrient dynamics
 - D. biological diversity of freshwater ecosystems
 - E. relationships between groundwater and river flows
 - F. biological/ecological integrity of rivers, monitoring and assessment
14. To establish an **ENVIS Center** exclusively for inland surface waters;
15. To promote and support **socio-economic studies** of communities dependent upon rivers (including floodplains) and lakes;
16. To promote and support detailed studies on **Ecological Economics**, particularly of river-floodplain systems emphasizing water quality, biodiversity and natural resources, and
17. To promote **Education and Awareness** about river-floodplain systems. Year 2002 is the Year of Mountains. India must focus on mountain rivers. Similarly, Year 2003, the International Year for Water, should be observed in India by the MOEF as the **Year of Flowing Waters**.
18. To adopt a **Vision Statement (motto)** of the National River Conservation Directorate to reflect a holistic integrated approach to the conservation of rivers and other inland surface waters;

(suggestion:
Ensuring ecological integrity of inland waters for sustainable development)

We urge the MOEF to initiate immediate action towards implementation of these recommendations at the earliest.

***Elaboration of the Recommendation concerning River Regulation Zone Notification:*

- a. The notification could be similar to the CRZ notification, and should restrict, regulate or prohibit various activities in specified stretches of rivers to a specified distance on both sides from the natural levee. The distance will vary from a minimum of 500 m to the point reached by the 10- year peak flood in the plains.
- b. River courses need to be divided into various “ecozones” or ‘reaches’ depending upon their climatic and geomorphic features, state of degradation, human use and potential for restoration. The activities to be regulated may be site-specific for each zone. The activities to be regulated include: various forms of encroachment on river beds and floodplains, particularly all permanent constructions; further channelization by levees; disposal of solid wastes, and landfills in floodplains; intensive agriculture using agrochemicals and manure; uncontrolled extraction of sand; intensive grazing and excessive harvesting of vegetation; immersion of idols (especially those using non-degradable and toxic substances); disposal of dead bodies, and religious offerings in indiscriminate manner, etc. Even mass bathing, wallowing of cattle and washing of clothes should be regulated.
- c. The MOEF should set up a Committee to draft the notification which must take into consideration all scientific, technical, socio-economic, cultural and administrative aspects. The Draft should be discussed in another Workshop with representatives of different stakeholders, government agencies and administration, before circulation to the States for comments.

New Delhi, 23 December 2001
 Signed by participants