

**Implementation of the Ramsar Convention in General,  
And of the Ramsar Strategic Plan 1997-2002 in particular,  
during the period since the National Report prepared in 1995  
for Ramsar COP6 and 30 June 1998**

Contracting Party: **India**

Designated Ramsar Administrative Authority **Ministry of Environment and Forests**

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**Ramsar Strategic Plan - General Objective 1**  
**To progress towards universal membership of the Convention**

- 1.1. No regional or sub-regional meetings have been held to encourage others to join the Convention.

**Ramsar Strategic Plan - General Objective 2**  
**To achieve the wise use of wetlands by implementing and further developing the Ramsar Wise Use Guidelines.**

- 2.1 - 2.4 Several wide ranging policies, strategies and action plans have been formulated by Government of India which directly or indirectly support wetland conservation in India. The National Conservation Strategy and Policy Statements on Environment and Development (1992) highlights conservation and sustainable development of wetlands, including coastal areas, riverine and island ecosystems. The National Forest Policy and the National Wildlife Action Plan emphasize conservation of wildlife on scientific principles of evolution and genetics, as well as social and cultural ethos of the country.

The National Committee on Wetlands, Mangroves and Coral Reefs in the meeting held in December 1996 emphasized the need for formulating a National Policy/strategy on Wetlands. Under MoEF/UNDP sponsored project on Capacity 21 programme, a draft National Strategy has been formulated which is under consideration of the Government of India.

- 2.5 - 2.6 Government of India have enacted several legislation for the protection of environment and conservation of natural resources. Some of these Acts which have relevance for wetland conservation include Forest Act, 1927; the Forest (Conservation) Act, 1980; the Wildlife (Protection) Act, 1972; the Water (Prevention and Control of Pollution) Act, 1974, the Water (Prevention and Control of Pollution) Cess Act, 1977 and the umbrella provisions of the Environment (Protection) Act, 1986. A Notification has been issued declaring the coastal stretches of seas, bays, estuaries, creeks, rivers and backwaters which are influenced by tidal action in the landward side up to 500 meters from the high tide line and the land between the low tide line and high tide line as the Coastal Regulation Zone Notification, 1991 under the provisions of Environment (Protection) Act, 1986. This imposes graded restrictions on setting up and expansion of industries, operations and processes. This Notification is of great importance for regulating the activities in the coastal areas which are under pressure due to human activities. The Environment (Protection) Act also specifies protection of ecologically fragile areas under which a number of wetland ecosystems in the country are being notified.

In order to ensure protection of Ramsar sites, efforts are being made to notify these wetlands under the provisions of Environment (Protection) Act, 1986, as ecologically fragile areas. Portions of the listed sites have been declared as Wildlife Sanctuaries for protection of wildlife. However, Keoladeo National Park has already been notified as a National Park.

- 2.7 Ministry of Environment and Forests has published several reports/documents on various issues of conservation and wise use of wetlands. WWF-India with the support of Ministry of Environment and Forests has brought out a series of publications on the Ramsar sites in India which could be of great help for other countries in the region for management of Ramsar sites (e.g. Guidelines for Ecotourism Development - Chilika Lake published by Wetlands International - South Asia highlights wise use of wetlands integrating ecotourism development).
- 2.8 In general, the Ramsar sites in India are not subjected to toxic chemical and heavy pollution. However, lakes and wetlands situated in the urban areas are under pressure due to human and industrial activities. Considering this, Government of India constituted National Lakes Conservation Plan which among other activities has a focus on prevention and treatment of pollution from point and non-point sources.

Most of the wetlands in India are directly or indirectly associated with river systems. Ganga floodplain wetland system constitutes the largest wetland regime in the country. For improving the water quality of this river system, Ganga Action Plan was initiated by the Ministry of Environment and Forests in 1985 under which a comprehensive programme has been developed for pollution abatement of the river and water quality monitoring. The methodology for water quality monitoring has been developed for four major components namely surface water quality, sediment characteristics, drain/outfall effluent quality and sewage treatment plant performance to control pollution. These components cover measurement of water quality of the river, long term changes in the river ecosystem and efficacy of the reduction of pollution load into the river from point sources through the implementation of the pollution abatement schemes.

Several other river stretches in the country *viz.* Yamuna, Western Yamuna Canal, Gomati, Hindon, Damodar, Upper reaches of Ganga, Additional towns in Bihar under GAP Phase II and for rivers Satluj (Punjab), Khan, Kshipra, Wain Ganga, Narmada, Chambal, Tapti, Betwa (Madhya Pradesh), under NRCP have been taken up for water quality monitoring. Recently, the proposals for undertaking water quality monitoring for rivers Godavari (Andhra Pradesh), Damodar (Bihar), Subernrekha (Bihar), Chambal (Rajasthan), Tunga, Bhadra, Tungabhadra, Cauvery (Karnataka) have been undertaken for water quality monitoring and assessment of pollution load. Overall 42 parameters have been identified for monitoring purposes out of which nine have been selected as core parameters in addition to some site specific parameters. The water quality monitoring of these stretches are at various stages of progress. The agencies involved for monitoring include Central Pollution Control Boards, State Pollution Control Boards, university departments and research institutions.

- 2.9 Ministry of Environment and Forests has identified economic valuation of wetlands as a priority area under wetland programme. Economic valuation of Keoladeo National Park has been carried out by Indira Gandhi Institute for Development and Research under UNDP sponsored project on Capacity 21. Similarly, a project on Economic Valuation on Harike Lake has recently been initiated by Wetlands International - South Asia under Small Grant Fund of Ramsar Convention. Several other projects on economic valuation, including Chilika Lake, have been formulated by different agencies in India.
- 2.10 Environmental impact assessment is carried out for developmental projects environment, including wetlands.

2.11 Conservation and management of wetlands is a high priority area of the Ministry of Environment and Forests, Government of India. A programme for the conservation and management of wetlands, including mangroves and coral reefs was initiated in 1985-86. Based on the recommendations of the National Committee on Mangroves and Coral Reefs, 20 wetlands, 15 mangrove ecosystems and 4 coral reefs have been identified for intensive conservation and management purposes. Guidelines have been formulated for preparation of management action plans. The various activities under these action plans include protection, catchment area treatment, pollution control, weed control, wildlife conservation, sustainable fisheries development, environmental education and peoples participation. These management plans are supported by the Government of India under centrally sponsored schemes on "Wetlands" and "Mangroves".

The major activities carried out under the programme on conservation and management of wetlands are:

- ◆ An effective network of protected areas consisting of national parks, sanctuaries and biosphere reserves has been set up in the country. Many wetlands are included in this network. Efforts are being made to include the remaining identified wetlands under the network and the respective State Governments have been requested for taking the necessary steps. The State Governments have a well structured system to protect these areas. However, assistance is also being provided to the State Governments under the centrally sponsored scheme for Development of National Parks and Sanctuaries. Under the Mangrove Conservation Programme, State Forest/Wildlife Departments are being provided financial assistance for various protection measures.
- ◆ Catchment area is an integral component of the wetland ecosystem. The anthropogenic activities in catchment areas such as deforestation, overgrazing and developmental activities are causative factors for the accelerated soil erosion and consequent siltation of wetlands. In view of these factors, several activities for catchment area development, including afforestation, vegetative contour bunding, construction of water harvesting structures, gully control, check dams, stream bank erosion control, etc., have been undertaken in several wetlands such as Chilika, Loktak, Harike, Kanjli, Wular and Bhoj.
- ◆ The State Governments have taken elaborate measures to check the growth of weeds such as water hyacinth, *Ipomea* sp. *Paspalam*. While biological control measures have been successful to check the growth of water hyacinth in Loktak Lake, similar efforts are being made on an experimental basis in a controlled manner in some other wetlands such as Harike, Kanjli etc. Manual method for de-weeding is being adopted on an extensive basis in Harike, Kanjli, Bhoj and Chilika Lakes. There has been, however, recurrence of water hyacinth in some wetlands despite clearance due to its exponential growth. A comprehensive integrated long-term approach is being evolved to combat the weed menace.
- ◆ One of the important components of management action plans is conservation of endangered and threatened species. Several programmes have been initiated by the Ministry of Environment and Forests for the conservation of wildlife under in-situ conditions and supplemented through ex-situ conservation measures in identified cases. Some of the endangered species particularly Rhinoceros and Sangai - the brow antlered deer have been reintroduced in the wetlands. Certain portions of Chilika, Kabar and Loktak wetlands have been declared as sanctuaries especially for the protection and conservation of wildlife.

Construction of mounds and ponds has also been undertaken in some wetlands for developing them as suitable waterfowl habitats.

- ◆ Indiscriminate fishing and reclamation of wetlands have drastically affected the biological diversity and fish production. Construction of fish ponds and other manmade barricades, though initially triggered the fish production, proved counter productive in the long-term. Hence, conservation of wetlands for sustainable supply of fish resources is emphasized rather than the short-term maximisation of the resources. Guidelines for sustainable development and management of brackish water aquaculture have been drawn up. Some State Governments like Tamil Nadu and Andhra Pradesh have also developed their own aquaculture guidelines and regulatory measures in the coastal zone areas. The State Government of Orissa has formed a Task Force to look into the various aspects of prawn farming along the coastline.
- ◆ In order to provide scientific and technological inputs which could be utilized directly for conservation and management of the twenty identified wetlands in the country, the Ministry of Environment and Forests has identified nodal research institutions in the concerned states. These research institutions work in collaboration with the State Governments to provide solutions for the problems confronting these wetlands.
- ◆ A National Lakes Conservation Plan for 10 lakes has been formulated to address the problem of urban lakes subjected to severe stress due to pollution from industrial and domestic sources, siltation and encroachment.

2.12 People's participation is an important component of all the wetlands identified for conservation and management. Participatory processes are being developed with participation of local communities for the co-management of wetlands, including Ramsar sites. Recently, a community based project on Loktak Lake has been initiated by Loktak Development Authority and Wetlands International - South Asia to develop and implement participatory management processes involving local communities and NGOs. Wise use of the resources of the East Calcutta wetlands is being practiced by the local community. Similar approaches are being considered for other wetlands including Chilika, Keoladeo National Park and Harike Wetland. An effective role has been played by several NGOs in the country to save the wetlands and help in the conservation of the threatened species. A reference may be made in this case about conservation of Sukhna Lake in Chandigarh. The Environmental Society of Chandigarh, the local people and school children have been participating in the conservation of this lake through an environmental movement called "Shramdan".

2.13 No action has been taken so far regarding involvement of private sector in conservation and wise use of wetlands.

### **Ramsar Strategic Plan - General Objective 3**

#### **To raise awareness of wetland values and functions throughout the world and at all levels**

3.1 - 3.2 One of the important components, which could work as a catalyst is building awareness about values and functions of wetlands. Under management action plans prepared for identified wetlands, financial assistance has been provided to the State Governments by the Ministry of Environment and Forests. Several activities have been undertaken by the State Governments of Punjab, Orissa, Jammu & Kashmir, Madhya Pradesh, Himanchal Pradesh, Manipur and Kerala to

build awareness among various target groups including school children, youth and major stakeholder groups through audiovisuals, posters, nature camps, films etc.

The Ministry of Environment and Forests conducts National Environmental Awareness Campaign every year to create awareness which includes awareness generation of wetlands and environmental conservation. This campaign makes use of the communication skills, both conventional and non-conventional, to get across the desired message. For these campaigns, NGOs, schools, colleges, universities, professional bodies, women and youth organisations are involved in organizing seminars, workshops, padyatras, folk dances, street theaters, etc. to create environmental awareness. Centres of excellence have been set up to develop resource material and generate awareness about environment including wetlands. WWF-India and Centre for Environmental Education, Ahmedabad have established Interpretation Centre at Keoladeo National Park, Bharatpur and several other such centres are being planned for other wetlands including Chilika, Harike and Renuka. The environmental awareness programmes concerned with wetlands emphasize conservation and wise use of wetlands.

#### **Ramsar Strategic Plan - General Objective 4**

**To reinforce the capacity of institutions in each Contracting Party to achieve conservation and wise use of wetlands.**

- 4.1 Realizing the importance of wetlands and developing an inter-sectoral framework for conservation of wetlands, a National Committee on Wetlands has been constituted. Similarly, a National Committee on Mangroves and Coral Reefs has been constituted to address the specific issues of these wetland ecosystems. These committees advise the Government on policy guidelines, identification of priority wetlands for intensive conservation, monitoring, implementation of management action plans, research and preparation of an inventory of wetlands. At the State Government level, Steering Committees have been constituted consisting of members drawn from State Government Departments concerned with wetlands and experts in the subject matter. The Chief Secretary of the concerned State Government is usually the Chairman of Steering committees. Some State Governments have constituted authorities for wetland and lake development, which includes Chilika Development Authority, Loktak Development Authority, Jammu and Kashmir Lakes and Waterways Development Authority. These committees are responsible for formulation, implementation and monitoring of the progress of the management action plans prepared for each individual wetland ecosystem. At the district level, Coordination Committees have been constituted to coordinate implementation of wetland activities. (The Ministry of Environment and Forest provides financial assistance to the State Governments for carrying out activities for conservation and management of wetlands, mangroves and coral reefs. Similar mechanism exists for the committees constituted for conservation of mangroves and coral reefs.)

A Research Sub-committee has been constituted to advise on research aspects and implementation of projects on conservation of wetlands including mangroves and coral reefs. Several research projects have been undertaken on conservation of wetlands including mangroves and coral reefs by the research institutions, university departments, NGOs and other concerned agencies with the financial support of the Ministry of Environment and Forests. These projects are expected to provide

scientific and technical inputs for conservation and management of wetlands on a sound ecological basis.

- 4.2 Several training courses have been held in collaboration with State Government agencies to impart training to wetland managers concerned with conservation and management of wetlands. Two training courses concerned with overall conservation and management of wetlands and wise use of wetlands were held at Calcutta in collaboration with British Council. Two training courses were held at Imphal by Loktak Development Authority in collaboration with Wetlands International - South Asia in 1998 to impart training to wetland functionaries in Manipur on water management and analysis of wetland ecosystem and management. Similarly, other State Governments have been also organizing training courses on the issues relating to conservation and wise use of wetlands. Wildlife Institute of India has been organising training courses on wildlife conservation including wetlands.

**Ramsar Strategic Plan - General Objective 5**

**To ensure the conservation of all sites included in the List of Wetlands of International Importance (Ramsar List).**

- 5.1 India has designated six Ramsar Sites viz. Keoladeo National Park, Chilika Lake, Loktak Lake, Wular Lake, Sambhar Lake and Harike Lake. These wetlands broadly represent Himalayan freshwater wetlands, coastal lagoons, floodplain systems and arid zone wetlands. Management action plans have been formulated for all wetlands excluding Sambhar Lake, which is under preparation. The management action plans broadly include protection, catchment area treatment, pollution control, weed control, wildlife conservation, sustainable fisheries development, generating awareness and people's participation. The status of the implementation of current status of six Ramsar sites is briefly given below. The Ministry of Environment and Forests provides technical and financial support for implementation of activities under these management action plans.

**(i) Keoladeo National Park**

Keoladeo National Park is an important habitat for waterfowl. It harbors over 350 species of birds including some endangered species. A large number are migratory, coming as far as from Siberia. Keoladeo National Park is the only wintering site in India for the central and western Asian population of highly endangered species, Siberian Cranes in the Park that visit the Park between middle of October to middle of November and leave for Siberia between February and middle of March. The population of Siberian Cranes has decreased in the last two decades from 200 in 1964-65 to 2 in 1998-99. During 1993-94 and 1994-95 no Siberian Crane was sighted in the park, which is a matter of concern. However, during 1995-96 to 1997-98 5 -7 Siberian Cranes visited the Park. Concerned at the plummeting numbers of wintering Siberian Cranes in India, the Government of India in collaboration with the experts from the International Crane Foundation, USA, Russia and Japan conducted an experiment to know the reasons for the dwindling population of the Siberian cranes, using radio telemetry and satellite transmitters. They have been able to trace the migratory path of the common cranes. Introduction of reared Siberian crane chicks in the wintering grounds of Keoladeo National Park by bringing these from USA and Siberia is still going on. A Memorandum of Understanding concerning conservation measures for Siberian Cranes was signed in 1993 by five range states including India, Iran, Kazakhstan, Pakistan and Russian Federation under the

Convention on Conservation of Migratory Species of Wildlife Animal (CMS). The agreement aims at coordinating efforts to save the central and western Asian population of this highly endangered species.

The Government of Rajasthan through Wildlife Department has taken several measures for effective habitat management of the Park. The measures undertaken include water management, control of water hyacinth, re-establishment of Siberian Cranes, management of aquatic vegetation, ecotourism and eco-development. The prolific growth of some grass species has been controlled by bulldozing some areas of the park during the draw down period, in addition to manual cutting and control burning. A definite sequence of flooding of the various blocks in the park is followed to ensure water level for different species of waterfowl. Broad guidelines have been formulated for the tourists visiting the park. To ensure the participation of the local communities in the management of the park, Keoladeo National Park Development Society has been formed under the chairmanship of the district collector. The primary objective of this society is to delineate the ecological boundaries of the park and to draw up an eco-friendly integrated land use strategy for the over all development of the area. The society will raise funds by increasing the existing park entrance fee and diverting a part of revenue to be used for undertaking eco-development activities.

**(ii) Chilika Lake**

A management action plan for Chilika Lake has been drawn up and is being implemented by Chilika Development Authority. The Government of Orissa engaged the services of National Institute of Oceanography of Goa, Central Water Resources and Power Station (CWRPS, Pune) and Indian Institute of Technology, Madras to study the flow of marine water and its mixing pattern in the lake with the objective of restoration of appropriate salinity regimes. Based on the recommendations of these studies, de-siltation near the mouth of the Lake communicating with the Bay of Bengal has been undertaken for restoration of salinity regimes. To supplement these activities a comprehensive catchment area treatment programme is being implemented to control silt load in the lake. Government of Orissa has initiated several other activities for the conservation of the lake which include habitat improvement of Nalabana Bird Sanctuary, setting up of visitors interpretation centre, building database and ecotourism development. Guidelines have been formulated for ecotourism development for ecotourism development of Chilika Lake. Efforts are also being made to remove encroachments and other manmade barricade interfering with water current and migration of faunal species.

**(iii) Loktak Lake**

Ministry of Environment and Forests has constituted a Technical Advisory Committee to look into the issues of Loktak Lake and prepare a comprehensive management action plan. A draft action plan has been prepared by the Loktak Development Authority in consultation with the Ministry of Environment and Forests.

The measures undertaken for the conservation of Loktak Lake so far include afforestation of indigenous species including fruit trees, control of silt by limited engineering measures, catchment area treatment, removal of floating lands called locally *phumdis* in some pockets of the Lake and generating

awareness about the values and functions of the wetland. Loktak Development Authority has adopted several measures to control the prolific growth of *phumdis* and water hyacinth. *Phumdis* which have occupied more than 70% of the lake area are removed mechanically. However, under the ICEF project a comprehensive action plan has been developed for control of *phumdis* and their utilization. Loktak Development Authority in collaboration with Horticulture Institute, Bangalore, introduced weevils for biological control of water hyacinth. The biological control has been very effective in controlling water hyacinth.

Loktak Development Authority in collaboration with Wetlands International -South Asia is implementing a project on Sustainable Development and Water Resources Management of Loktak Lake which addresses the issues relating to water management, sustainable fisheries development, community participation and development, catchment area treatment and conservation of wildlife. This project is supported under India-Canada Environment Facility and is expected to provide scientific basis for sustainable development and water resources management of the Lake.

(iv) **Harike Lake**

The State Government of Punjab has prepared a comprehensive management action plan for conservation of the wetland. Survey and mapping of the lake has been carried out using remote sensing techniques and convention methods. Based on a survey, demarcation of the wetland has been attempted and fencing has been carried out of some ponds, which sustain a high concentration of waterfowl. Afforestation of catchment area has been carried in some critical areas to control siltation. One of the major problems of the wetland is the prolific growth of water hyacinth. Punjab State Council for Science and Technology in collaboration with Irrigation Power Research Institute has conducted studies on biological control using weevils. The studies are still going on, and at present, success is very limited. Four monitoring stations have been installed at four sites to assess water quality change in the wetland. The State Government of Punjab has set up a centre for environmental education at Kanjli for the non-formal education of people of all age groups to sensitize them about the values and functions of this Ramsar site. A film on Destination Harike both in English and Punjabi has been produced

(v) **Wular Lake**

Wular Lake plays an important role in hydrological regimes of the Kashmir valley and acts as an absorption basin for floodwater. Wular Lake along with its associated marshes is an important waterfowl habitat. The wetland, however, is subjected to heavy siltation due to loss of vegetal cover of the area. The Department of Environment and Remote Sensing has prepared a comprehensive management action plan with a focus on catchment area treatment. Ministry of Environment and Forests has provided substantial support for afforestation of native species and limited engineering measures. Local communities have been involved in the afforestation of Erin Watersheds, which is a major source of silt load in the lake. For protection of wildlife and generating awareness funds have been also provided by the Government of India. The University of Kashmir has completed a project on Wular Lake which gives the information on flora, fauna, water quality and ecological characteristics of the lake.

(vi) **Sambhar Lake**

The Sambhar Lake located in the arid zone of Rajasthan is one of the largest inland saline depressions in India. The wetland constitutes the most important wintering area for flamingoes apart from the Rann of Cachchh. Over 500 thousand flamingoes visit the wetland in addition to a large number of Pelicans. A few salt tolerance species like *Spirulina* and *Dunaliella*, *Salina* are found in this wetland. Salt extraction is one of the major activities of the wetland.

Sambhar Lake has not been studied in detail excepting a few reports on waterfowl and planktonic forms. A management action plan of the lake is under preparation by the State Government of Rajasthan.

- 5.2 The State Steering Committees constituted for the individual wetlands are responsible for developing monitoring programme for the implementation of the activities.
- 5.3 There has not been any change in ecological character at the designated Ramsar sites.
- 5.4 Three wetlands viz. Keoladeo National Park, Chilika Lake and Loktak Lake have been included in the Montreux Record. The Ministry of Environment and Forests is in contact with Ramsar Convention Bureau to remove Keoladeo National Park and Chilika Lake from Montreux Record and the concerned State Governments have been advised to provide the information, as desired by the Bureau. The information is awaited from the State Government. It is planned that removal of Loktak Lake from the Montreux Record will be considered after detailed report is received from the State Government which is implementing a major project funded by India - Canada Environment Facility.
- 5.5 Not applicable

**Ramsar Strategic Plan - General Objective 6**

**To designate for the Ramsar List those wetlands which meet the Convention's criteria, especially wetland types still under-represented in the List and trans-frontier wetlands.**

- 6.1 Ministry of Environment and Forests has prepared a directory on Wetlands of India in 1990 based on questionnaire survey, which includes information on location, geographical coordinates, area and ecological category of wetlands over 100 ha in different states and union territories. The directory does not include information on mangroves. Forest Survey of India monitors the forest cover of the country bi-annually which also includes information on mangrove forest ecosystems.

A nation-wide project on wetlands has also been undertaken by the Ministry of Environment and Forest, in 1993 to carry out survey and mapping of wetlands in the country involving remote sensing technology. The final report of the project is under preparation.

- 6.2 Information on 93 well known wetlands of the country has been given in the Asian Wetland Directory which represents important wetland sites of national and international importance sites. Subsequently WWF - India in collaboration with Asian Wetland Bureau (now Wetlands International - Asia Pacific) has revised the

section dealing with India's wetlands in the Asian Wetland Directory. Information on 40 new sites has been added, while that on most other sites has been updated.

- 6.3 As per the Directory of Wetlands in India, there are 2,167 natural wetlands and 65,253 manmade wetlands occupying an area of 4.1 million hectares. According to the latest survey carried out in 1995 the total mangrove area in the country is 4,533 sq km. About 80% of mangrove forests occur in Sundarbans and Andaman and Nicobar Islands. The rest being distributed in the coastal States of Orissa, Andhra Pradesh, Tamil Nadu, Karnataka, Maharashtra, Gujarat and Goa.

A preliminary analysis of the project report on Wetlands of India indicates the total area of wetlands in the country as 7.6 million ha, out of which 3.6 million ha are inland and the rest coastal. Several projects have been sanctioned by the Ministry for inventorisation of wetland resources at the state and district levels.

Definition of Ramsar Convention Bureau has been followed for inventorisation of wetlands in India.

- 6.4 The criteria for identification of Wetlands of International Importance have been mainly based on the criteria of biodiversity and socioeconomic importance.
- 6.5 Several wetlands are being investigated to assess their feasibility in designating as Ramsar Sites based on the resolutions and recommendations of COP6.
- 6.6. No Ramsar site designated by India falls under transfrontier wetland.
- 6.7 At present, there are no plans for designating transfrontier wetland sites under the Convention.

#### **Ramsar Strategic Plan - General Objective 7**

**To mobilize International cooperation and financial assistance for wetland conservation and wise use in collaboration with other conventions and agencies, both governmental and non-governmental.**

- 7.1 The sites designated by India under Ramsar Convention do not include trans-boundary frontier as such, no action is required to be taken.
- 7.2 No Ramsar sites are twinned with other countries
- 7.3 India is a signatory to the Convention on Biological Diversity, Convention on Climate Change, Convention on Migratory Species and World Heritage Convention. Ministry of Environment and Forests is the nodal Ministry for implementation of these Conventions in the country. The inter-linkages among these Conventions are frequently discussed at the ministerial and inter-ministerial level to develop comprehensive plans and actions for their implementation.
- 7.4 A Memorandum of Understanding has been signed by India with Iran, Kazakhstan, Pakistan and Russian Federation for conservation of Siberian Cranes under CMS. Action has been initiated for conservation of marine turtles with the range countries
- 7.5 The Government of Japan under OEC is supporting a project on Upper and Lower Lake of Bhopal. The objective of the project is to improve the water quality and

overall conservation of the lake. No multilateral or bilateral donors are supporting projects, which are contributing to Ramsar Convention in India.

- 7.6 The budgetary allocations for the schemes on Wetlands and Mangroves is annually Rs. 30 million to support the conservation and wise use of wetlands.
- 7.7 No funds have been provided by India for conservation of wetlands in other countries.
- 7.8 No mechanism exists in the country for consultation between Ramsar Administrative Authority and the development assistance programme.

### **Ramsar Strategic Plan - General Objective 8**

**To provide the Convention with the required institutional mechanisms and resources.**

- 8.1 No voluntary contributions have been made towards Small Grants Fund or other such activities.
- 8.2 India has been promptly paying the annual contributions to the Ramsar Convention.

### **Optional section - Participation of non-government organisations in the implementation of the Convention.**

- 9.1 There are several NGOs working on wetlands in the country. However, a break-up of the major NGOs working on wetlands are:

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|--------------------------------|--|
| <b>International/ Regional</b> | - Wetlands International - South Asia              |
| <b>National</b>                | - World Wide Fund for Nature - India               |
|                                | - Bombay Natural History Society                   |
|                                | - Salim Ali Centre for Ornithology                 |
|                                | - M.S. Swaminathan Research Foundation             |
| <b>Provincial</b>              | - Ecological Society - Pune                        |
|                                | - Institute for Restoration of Natural Environment |

- 9.2 NGOs are represented in the National Committee on Wetlands and National Committee on Mangroves. In addition, there are several other committees in the Ministry of Environment and Forests having linkages with wetlands where NGOs are represented. Several projects have been funded to NGOs to carry out studies on wetlands. WWF-India has a NGO - Ramsar Committee which has contributed substantially to promote conservation and wise use of wetlands of Ramsar Convention in India. Reports have been published on six Ramsar sites by WWF-India in 1994.
- 9.3 WWF-India has attended COP meetings at Montreux, Kushiro and Brisbane so far. WWF-India was an official delegate in the Montreux Conference.
- 9.4 Centre for Environmental Education, Ahmedabad and WWF-India have several programmes to generate awareness about the wetlands through conventional and non-conventional methods.

- 9.5 NGOs are represented in the Steering Committees constituted at the State Government level to advise on implementation and monitoring of programmes related to the conservation and wise use of Ramsar sites.
- 9.6 NGOs are active in the following themes of the Convention
- a) Generating awareness about values and functions of wetlands and role of Ramsar Convention
  - b) Inventorisation of wetland resources
  - c) Identification of new Ramsar sites
  - d) Wise use of wetlands
  - e) Waterfowl census
  - f) Conservation of migratory species

**Final comments**

10.1 - 10.3 No comments