

Q Elaborate salient features of the Pakistan Wetland Programme and add your comments in this regard?

## 1- Introduction :

Wetlands are important components of Earth's ecosystem and provide myriad benefits. In addition to slowing down global heating and capturing carbon, they remove and filter pollutants from water. In Pakistan, the total wetland surface area is around 9.7% and total wetland sites are 225 as per GIS Database. The importance of wetlands in Pakistan was brought into the notice of international community in 1967. Pakistan became signatory to Ramsar Convention in 1976. However, wetlands are still in need of being protected.

## 2- Wetlands of Pakistan :

A Wetland is a place where land is covered by water, either salt or fresh or somewhere in between. In Pakistan, wetlands were noticed for the first time by international community in 1967. Ramsar Convention came into enforce in 1976 and total 9 wetlands were recognized of global importance. In 2001, this number raised to 16. In 2013, among 1888 Ramsar sites, 19 sites of Pakistan bear global importance.

## Classification of Wetlands in Pakistan

Inland water      Delta Marshes      Mangroves      Lakes and Reservoirs      Fish farms and ponds

Among 225 sites of wetlands, 112 are significant. There are 30 wetland sites in Sindh, 22 in Balochistan, 20 in KPK, 17 in Punjab, 10 in Azad Kashmir, 12 in Northern areas and 1 in Islamabad.

### 3- Features of Wetland Programme of Pakistan : (PWP)

The Pakistan's Wetland Programme (PWP) aims to promote the sustainable conservation of fresh water and marine wetland and their associated wetland biodiversity.

This PWP is being specifically implemented under the umbrella of long standing Ramsar Convention of 1976.

#### a- Strategy of PWP :

The programme strategy of PWP is based on two subsets of objectives :

i- The first will provide the required policy, institutional, technical and financial framework and generate positive support essential for mainstreaming of wetlands

Conservation.

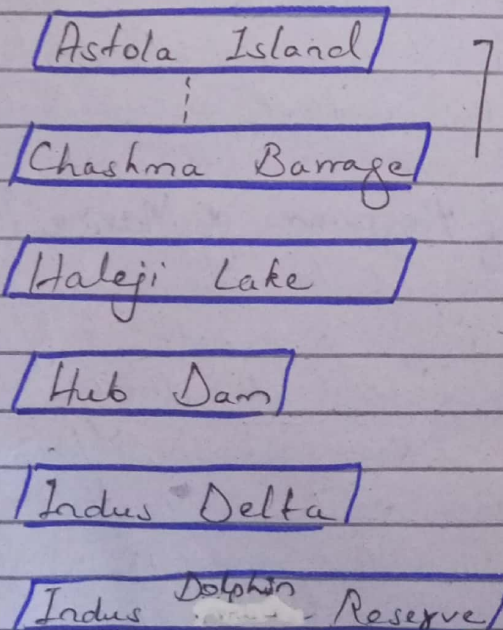
ii. The second involves the design and implementation of sustainable, participatory management plans for four independent Demonstration sites, each chosen to be representative of a broad eco-region in Pakistan.

Despite of arid nature of Pakistan's climate, the region estimated 780,000ha of wetlands that constitutes 9.7% of total surface area. In excess of 225 wetland sites are on record in prototype Pakistan Wetlands GIS Database developed during the PDP phase of this programme.

### b- Objectives :

To promote sustainable conservation of fresh water and marine wetlands and their associated globally important biodiversity.

### c- Key Achievements :



Kinjar Lake

Omara Turtles Beach

Taursa Barrage

### e- Salient Features:

As per report "Pakistan Wetland Project" published by UNEP, following are the salient features of Pakistan's Wetland Program:-

#### i- Features Related to Makran Coastal Wetlands Complex: (MCWC)

MCWC lies on the Balochistan coast where rugged conditions and poor communication hamper the efforts of Balochistan Forest and Wildlife Department. Pakistan's largest national park, Hingol National Park is in Makran, secondly two important Ramsar sites: Astola Island and Jiwan Coastal Wetlands are in Balochistan.

#### q- Tracking Programme of Marine Turtle:

Pakistan's efforts to conserve marine turtles and to actively participate in global turtle research have been intermittently supported by different donor agencies. However, the only limitation on the turtle tracking is financial. It was proposed that annually average of 5 turtle will be monitored.

## b- Re-establishment of program of Marsh Crocodiles:

The general density of Marsh Crocodiles in the coastal zone of Balochistan has been substantially reduced in the past decades due to illegal hunting. Under breeding program, the eggs from crocodile nests will be taken by concerned authority. They will be returned to parent community, once they have been matured.

## ii- Features Related to Central Indus Wetlands Complex: (CIWC)

CIWC consist of a continuum of wetland reserves along the main stem of Indus River between the town of Chashma in the north to Sukkur in the South.

### a- Translocation and management of trapped Indus River Dolphins:

According to comprehensive study of Indus River Dolphins population in 2007, the population density was low between Jinnah Barrage and Taunsa Barrage. This suggested that the inbreeding depression may be a potential problem. So, a partnership project between Sindh Wildlife Department and WWF - Punjab was proposed to rescue dolphins for translocation operations.

**b- Reintroduction of Gharial :**

Gharial historically occurred at low elevations in most of the rivers of Sindh and Punjab, but have been hunted into local extinction in the wild in ~~past~~ <sup>past</sup> fifty years. They have been successfully bred in captivity elsewhere in the sub-region. A wildlife program for Gharial breeding was proposed.

**c- Re-introduction of Hog Deer :**

Hog deer historically occurred in the riverine forests of lower Indus Basin. Encroachment of agriculture into its wetland has displaced the species and made it endangered. A proposal of Hog deer breeding program was suggested at two sites : Attock and Taunsa.

**iii- Features Related to Salt <sup>Range</sup> Wetland Complex (SRWC) :**

The Saltland Wetland Complex consist of 3 independent wetlands; Kalarkhar, Khabbaki, Uccahli, Jahlan and Marnal lakes. These wetlands support important bird species which were listed in IUCN Red Data book : Imperial Eagle, Sociable Plover etc.

**a. Setting-up vegetation covers :**

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was chronic conditions that existed for over generations. Therefore, to overcome the situation, proposal of vegetation setting was given.

### b- Breeding of Endangered Cranes:

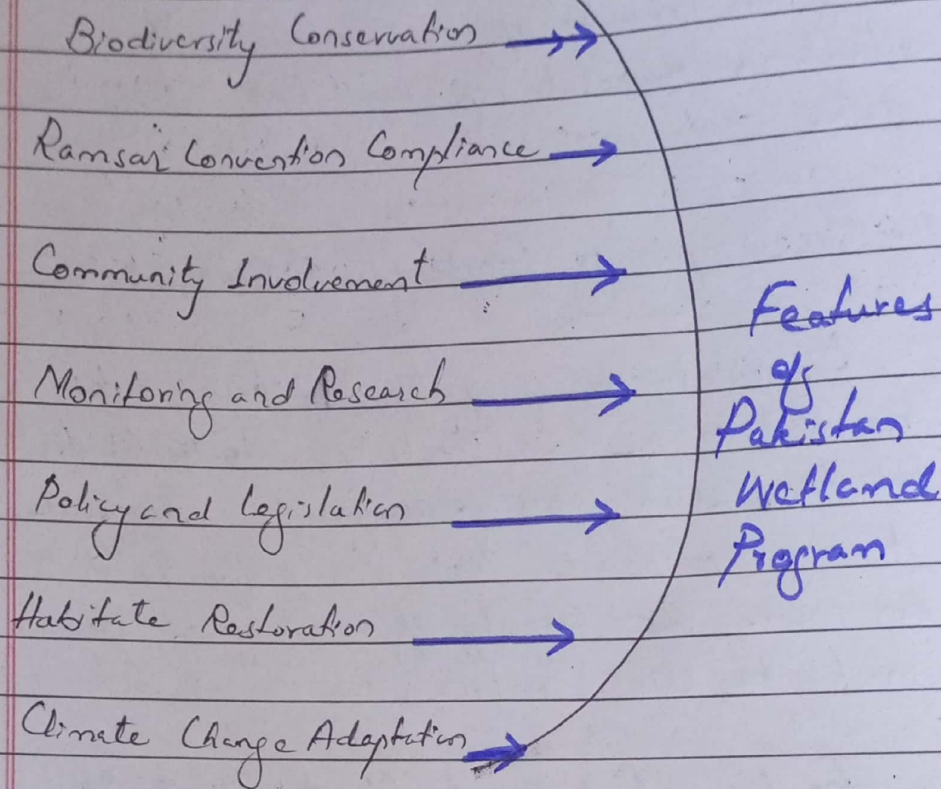
Different species of cranes have been recorded in the wetlands of South-Central Pakistan, which were endangered. Therefore it was proposed that a program which can ensure the security of endangered species must be carried out.

### iv. Features Related to North West Alpine Wetland Complex: (NAWC)

The North West Alpine Wetland Complex essentially consist of series of high altitude, lakes, glacial, kettle and valley bottom lakes. This part is rich in fauna and flora.

### a- Proposal of application for status of being a Ramsar site:

A preliminary analysis performed using the Pakistan Wetlands GIS Database revealed that none of significant Alpine wetlands, except Saucha Lake on Deora Plain, enjoys appropriated protected status. Therefore, to protect them, an application was proposed.



#### 4- Conclusion :

In a nutshell, Pakistan Wetland Program was designed to protect the wetlands and associated biodiversity. It consists of different measures and policies to manage the endangered species by following international policies and guidelines.

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