Residential Training Program on
Wetland Eco-System Conservation for Disaster Risk Reduction
Organized by
Gujarat Institute of Disaster Management
Date: 22-23 June 2022

Concept Note:

Lakes, rivers, underground aquifers, swamps and marshes, wet grasslands, peat lands, oases, estuaries, deltas and tidal flats, mangroves and other coastal areas, coral reefs, and all human-made sites such as fish ponds, rice paddies, reservoirs and salt pans known as Wetlands.

"Wetlands are areas with water, natural or artificial; permanent or temporary; static or flowing; fresh, brackish or salty; including areas of marine water the depth of which at low tide does not exceed six meters; and includes all inland waters such as lakes, reservoir, tanks, backwaters, lagoon, creeks, estuaries and manmade wetland; and the zone of direct influence on wetland that is to say the drainage area or catchment region of the wetlands as determined by the authority but does not include main river channels, paddy fields and coastal wetlands".

They are highly productive ecosystems. They provide access to water for agricultural and domestic use. They make it possible for farmers to grow crops in rainy and dry seasons, thus increasing food availability. In addition, they are sources of materials for crafts and building. They provide grazing and watering for domestic and wild animals. They are a habitat for diverse flora and fauna, and serve as a lifeline for migratory birds. They purify and replenish water, and are important for hydrological and climate regulation.

It is estimated that over the last 100 years' World-wide wetlands have declined by 64-71 per cent, leaving millions of people deprived from the essential services.

In recent years the frequency of natural hazards has been increasing and the Intergovernmental Panel on Climate Change is predicting even more extreme events. This year's World Wetland Day (2nd Feb. 2020) aims to raise awareness and highlight the important role of wetlands in Biodiversity Conservation, "Wetland Biodiversity Matters" and in helping to build resilience.

Wetlands are nature's shock absorbers and as natural sponges. They absorb rainfall, reducing floods and droughts. They reduce the speed and height of storm surges, tsunamis, and mitigate

the impact of hurricanes. They are **natural buffers**, and if managed wisely reduce people's exposure to storm surges, floods, drought and cyclones.

India harbours a substantial area of the global wetlands. India has about 1,50,174 sq. km (6.9% of the total geographical area) of wetlands, with the highest share of Gujarat. About 1/4th of fascinating wetlands are in Gujarat where millions of colourful water-birds decorate the landscapes. Waterfowl concentration in Gujarat during the winter is one of the highest in the country as the area falls on the migratory route of birds. Migratory birds from eastern Europe and western Asia pass through the western part of the country on their way to the Indian plateau. Many stay in Gujarat for the entire winter season and some move to Deccan plateau. Again, during their reverse migration in March and April, birds stay at wetlands for some time before they depart to their breeding grounds. The two gulfs - Kachchh and Khambhat and the two Ranns - Great and Little, cover a vast area of coastal wetlands and mixed sea and freshwater wetlands, making this part of the land incomparable in the country.

In Gujarat, the coastal and inland wetlands cover 35.8 % and 6.0 % of the total wetland area respectively in India. The state recognised the value of important wetlands related to geo-morphology, ecology, flora and fauna and constituted nine Protected Areas - one national park, seven sanctuaries and one conservation reserve to preserve a total area of 13,052 sq. km. Additionally, eight wetlands of national conservation significance have been identified and notified by the Ministry of Environment & Forests, Government of India for their conservation in partnership with the local communities.

Important wetlands as Protected Areas: (i) Great Rann Wildlife Sanctuary (ii) Wild Ass Sanctuary in Little Rann (iii) Marine National Park (iv) Marine Sanctuary (v) Nalsarovar Bird Sanctuary (vi) Thol lake Bird Sanctuary (vii) Porbandar Bird Sanctuary (viii) Khijadia Bird Sanctuary (ix) Chharidhund Conservation Reserve

Wetlands of national conservation significance: Under the National Wetland programme, eight wetlands have been notified as wetlands of National Conservation Significance (i) Greater Rann of Kachchh (ii) Little Rann of Kachchh (iii) Khijadia lake in Jamnagar (iv) Pariej

lake in Anand (v) Vadhawan lake in Vadodara (vi) Thol lake in Mehsana (vii) Nalsarovar lake in Ahmedabad and Surendranagar (viii) Nani-Kakarad in Navsari

India's National Action Plan for Conservation of Migratory Birds and Their Habitats along Central Asian Flyway. The Central Asian Flyway is among nine world migratory birds flyways connecting major wetlands and habitat for migratory bird among them Gujarat's Nalsarovar and Khijadia are hotspots.(TOI, 3rd Feb., 2019).

Wetlands not only as a critical natural resource, but also as an essential component of human wellbeing, inclusive economic growth and climate mitigation and adaptation. Wetlands contribute to all of the 17 SDGs, either directly or indirectly and their conservation and wise use represent a cost effective investment for governments. Synergies can be achieved with many actions on wetlands clearly contributing to more than one SDG, In turn, wetlands protection, wise use and restoration provide governments with a path to reconciling numerous commitments under the environmental agreements, such as Ramsar, but also the United Nations Framework Convention on Climate Change (UNFCCC), the United Nations Convention to Combat Desertification (UNCCD) and the Convention on Biological Diversity (CBD) *ie.* contributing to the SDGs

Considering the tagline of World Wetland Day (2nd Feb., 2020) "Wetlands & Biodiversity" and the SFDRR, SDG (1,2,5,6,8,9,11,13,14 & 15) and COP-21 Goals.

GIDM has going to organise a training program on "Wetland Eco-System Conservation for Disaster Risk Reduction in Gujarat"

Keeping these views in mind training has been enlisted in GIDM calendar and scheduled to conduct the training on 29 - 30th April, 2021 with the following objectives

Objectives:

1. To understand Wetland Eco-System and linked concept to Eco-DRR
2. To understand the Components of Eco-DRR and its implications in Gujarat
3. To illustrate the Eco-DRR mainstreaming in developmental practices

The proposed training program is a capacity building program that is the state as well as union mandate. The objectives of the programs are aligned with the National Disaster Management Plan and among one of the four priorities of the Sendai framework of action

Target Participants:

Range Forest Officers & Asst. Conservator of Forest from Forest and Environment Department.

Methodology:

The training has been designed to be in an interactive mode of Lectures, Presentations, Assignments, and Self-learnings.

Expected outcome:

The training will enhance participant's practical knowledge about the Wetland Eco-DRR importance and traditional practices and how it can be mainstream in the Disaster Risk Reduction (DRR).