

# UP-SCALING COMMUNITY RESILIENCE THROUGH ECOSYSTEM-BASED DISASTER RISK REDUCTION

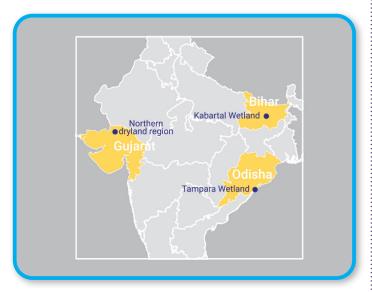


Fig.1:Map of the Project Sites

# **Project overview**

Project location: India

- · Tampara Wetland, State of Odisha
- Kabartal Wetland, State of Bihar
- Northern dryland region, State of Gujarat

**Key risks being addressed:** Wetland degradation reduces community resilience against water-related hazards such as floods, droughts, and storm surges

Project period: May 2019- September 2022

# **Project objectives:**

- Overall objective: Enhanced resilience of 12,000 households to water-induced disaster risks
- Specific objective: Upscaling and mainstreaming Eco-DRR approaches into practice and policymaking for building community resilience to water-induced disaster risk covering 12,000 households (appr. 60,000 people).

Project budget: 603,480 USD

 Over 10 years the present value of net benefits is 14,2 Million USD, including reduced property damage, income losses, carbon capture and pollution reduction (UMass-Amherst, 2022).

## **Project Results**



#### **Capacity Building**

- 32 Community-based Organisations (CBOs) trained in support of ecosystem restoration with risk reduction activities.
- 224 Women (members of Self Help Groups) trained on sustainable livelihoods and wetland wise use.
- 11 Task Force groups comprising over 150 wetland champions are established and actively engaged in wetland conservation/Eco-DRR.
- 1,500 fishermen sensitized on wetland management and sustainable fishing.



## **Policy and Practice support**

- Supporting State Governments in enhancing management regimes of the two wetlands to achieve conservation and wise use-goals.
  - Development of Integrated Management Plans for Kabartal (newly designated Ramsar site) and Tampara wetlands (a proposed Ramsar site, expected to be designated in remaining project period)
  - Implementation of community-based wetland management actions in Tampara basin to enhance community resilience
- Kanwar Nature Club and Fish Co-operative are strongly advocating for protection of wetland biodiversity and its values.
- 5 Panchayats (local government institution) have incorporated a myriad of Eco-DRR measures in their annual developmental plan (GPDP).
- Organised a regional consultation workshop with Ramsar focal points and site managers to develop guidelines on Eco-DRR for Ramsar site managers.
- Partnered with National Institute for Urban Affairs and World Resources Institute for constitution of the India Forum for Nature-based Solutions.



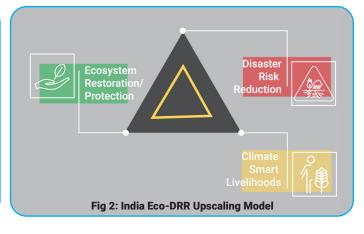
## Field implementation for resilience-building

- 29,216 beneficiaries reached of which 36 percent are women.
- 3,312 hectares (ha) of wetlands and community common pool resources (ponds, drainages) are protected and restored.
- Local farmer and fisher communities are adopting sustainable livelihood practices to reduce direct dependence on the wetlands through measures like organic farming, discontinuing use of zero-size fish nets and ecosystem management.

Each Eco-DRR project has developed a replicable model for upscaling community resilience through three core components of Eco-DRR:

- Ecosystem Restoration/Protection
- · Disaster Risk Reduction
- Climate Smart Livelihoods

In India, there is a greater emphasis on Ecosystem Restoration and Protection through a focus on waterrelated, risk sensitive wetlands restoration and capacitybuilding activities (Figure 2).



Eco-DRR upscaling model: Integrate Eco-DRR measures on improved water management into local development plans and schemes (such as disaster, wetlands and rural employment) through capacity-strengthening and participation of communities and (local) governments.



#### **Ecosystem Restoration/Protection**

- Empower CBOs such as Fish Cooperatives, Women Self Help Groups and others to identify, restore, and protect ecosystems with wetlands management plans;
- Restore natural water regimes of wetlands, natural vegetation, rainwater harvesting, efficient use of water, and blending wetland ecosystem functioning with built infrastructure.



# **Climate Smart Livelihoods**

- Local communities are empowered to engage with the local government for the resourcing and implementation of various social
  upliftment schemes such as Mahatma Gandhi National Rural Employment Guarantee Scheme and Jal Jeevan Hariyali Mission;
- · Local community networks form the core of community centric wetland stewardship programme, for livelihoods enhancement.



#### **Disaster Risk Reduction**

- Landscape scale risk assessment include ecosystem services and are embedded within community-based disaster risk reduction planning;
- · Regeneration of natural water sources (village ponds) around wetland basins to improve water security during dry season.

**Key Implementing partners:** Wetlands International South Asia; International Federation of Red Cross and Red Crescent Societies (IFRC/Indian Red Cross), Sustainable Environment and Ecological Development Society (SEEDS), Pallishree and Panchayat Raj Institutions.





Fig 3: Bamboo island in Tampara basin Odisha

Fig 4: Risk profiling with Women Self Help Group













