

Virtual Classroom based Training Program
on
Nature-based Solutions for Climate-Resilient Agriculture
Through Zoom Platform
23rd October, 2026 (Time: 15:00 to 17:00 Hrs.)

Concept Note:

Agriculture in Gujarat is on the front line of a changing climate. With the longest coastline in the country, the State is exposed to sea-level rise, cyclones and storm surge, while shifting rainfall patterns, unseasonal and intense rain, prolonged dry spells and heat stress are increasingly affecting crops, soils and water availability. Groundwater depletion, coastal salinity ingress and land degradation add to the pressure, particularly in Kutch, Saurashtra and the coastal belt. These changes reduce farm productivity and income, and repeated crop-loss events deepen the vulnerability of farming communities and the disaster risk they face.

Engineering-led responses alone – embankments, deeper bore-wells, higher input use – are costly and may not address root causes such as soil degradation, groundwater depletion and the loss of natural buffers. Nature-based Solutions (NbS) offer a complementary path: they protect, sustainably manage and restore natural and modified ecosystems so that they address societal challenges such as climate change, disaster risk and food security, while delivering benefits for people and biodiversity. In agriculture, NbS include soil-health based and natural farming, agroforestry and tree cover on farms, watershed and water-body rejuvenation, mangroves and other coastal bio-shields, grassland and wetland restoration, and agro-biodiversity conservation. NbS are closely linked to Eco-System based Disaster Risk Reduction.

Gujarat already has strong entry points for scaling NbS. The State has long-standing experience in water conservation and rejuvenation of traditional water bodies through public participation, a growing movement towards natural and chemical-free farming supported by national and State missions, and notable success in mangrove restoration along its coast, with communities playing a central role. Learning from these experiences, and understanding how they can be planned, combined and sustained at village and landscape level, is essential for building climate-resilient agro-ecosystems. Restoration works best when protection, community stewardship and long-term care go together, rather than planting or construction alone.

Keeping these views in mind, the Virtual Class Room Training Program is scheduled on 21st October, 2026 with the following objectives:

Objectives:

1. To introduce the concept of Nature-based Solutions (NbS) and its link with Eco-DRR and climate adaptation in agriculture
2. To illustrate climate risks to Gujarat's agro-ecosystems – erratic and unseasonal rainfall, floods and cyclones, groundwater stress and coastal salinity
3. To present NbS practices with Gujarat experience – natural farming and soil health, water-body and watershed rejuvenation, mangroves and coastal bio-shields, agroforestry
4. To discuss convergence with ongoing State and Central programmes and simple ways of planning and monitoring NbS at village level

Target Audience for Proposed Online Training

S. No.	Department	Designation
1.	Agriculture, Farmers Welfare & Co-operation Dept.	Agri. Ext. Officer, Agri. & Horti. Supervisor, Assistant, Block Technology Manager, Assistant Technology Manager (ATMA) and Farmers Friends
2.	Forest and Environment Department	Forester, Beat Guard and all field workers (agroforestry, mangrove, coastal and grassland ecosystems)
3.	Narmada Water Resource Water Supply and Kalpsar	Engineers, Asst. Engineers

Expected outcome:

This will increase the capabilities of field functionaries to identify, plan and promote nature-based solutions for agriculture ecosystems in their daily duty execution, in convergence with ongoing State and Central schemes that will be helpful to serve the disaster risk reduction strategy.