Climate Change Adaptation Actions in India
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Sustainable Lifestyle = Positive Climate Action
www.indiaatcop22.org
Climate Change – Causes

✓ Climate is the aggregated pattern of weather.

✓ Climate change means altered patterns.

✓ Small temperature changes → big changes in the patterns.
Climate Change – Major global Impacts

- Decrease in snow cover
- Change in Precipitation Pattern
- Increased evaporation rate
- More droughts & heat waves
- Forest fire
- Bleaching of coral reefs
- Increase in Ocean temperature
- Rise in Temperature
- Melting of Ice
- Sea Level Rise
Climate Change – Effects in India

- Large size of Population particularly living in rural areas
- Poverty and Unemployment
- High Dependence on agriculture
- Longest Coastal line
- Majority of Livelihoods are based on natural resources
- 2/3rd rainfed areas
- Extreme Climatic events like drought, cyclones, temperature variation, etc.
Impact of Climate Change in India

- Reduction in Milk Productivity
- Siltation and Reduced Water Carrying Capacity
- Problem of Surface Runoff And Soil Erosion
Impact of Climate Change - contd.

- Water Scarcity in Hilly Areas
- Problem of Shifting Cultivation
- Sea Level Rise and Coastline Inundation
Impact of climate Change-Contd.

Health

Agriculture & Food Security

Availability of Ground Water
Adaptation refers to adjustments in ecological, social or economic systems in response to actual or expected climatic stimuli and their effects or impacts.

It refers to changes in processes, practices, and structures to moderate potential damages or to benefit from opportunities associated with climate change.
Major Milestones for Adaptation

- Least Developed Countries Programme (COP7 - 2001)
- Nairobi Work Programme COP-12 (2006)
- Cancun Adaptation Framework (COP16 – 2010)
Adaptation Strategies in India

- National Action Plan (NAPCC)
- National Water Mission
- NM on Sustainable Agriculture
- NM on Himalayan ecosystem
- Capacity Building & Knowledge Management
- State/UTs Action Plan

Preparation of State Action Plans
NABARD’s Climate Finance & Role of NIE

Participatory Grant Models

Climate Resilient Livelihoods

Infra. Finance

Participatory Loan Models

Financial Models for Banks

Adaptation Fund (July 12)

National Adaptation Fund (July 15)

Green Climate Fund (July 15)
National Adaptation Fund – Major Initiative

Setup of NAFCC

- National Adaptation Fund for Climate Change (NAFCC) set up in 2015-16 with budgetary support

Objective

- Aim is to support concrete adaptation activities that are State driven

Priorities

- Needs and priorities identified under the SAPCCs are supported

Amount Sanctioned

- Sanctioned Projects: 18 so far (USD 56.2 million)

NIE and EE

- NABARD is designated as NIE
- State Govt. Deptt. are the Executing Entities
Adaptation Fund Status

6 projects Sanctioned of US$ 9.85 Million against country cap of US$ 10 Million

Six States covered (MP, AP, UK, RAJ, TN, WB)

Projects sectors: Dryland farming resilience (WB), Inland fisheries (MP), Mangroves Fish farming (AP), Forestry (MP), Sustainable Agriculture (UK), Watershed Management (TN & RAJ)
Adaptation Fund – Major Initiative

Climate Proofing of Watersheds in TN and Rajasthan
- A: USD 1.344 M
- PB: 27,696 (Cumulative)

Building Adaptive Capacities of Communities in Kanha-Pench Corridor
- A: USD 2.55 M
- PB: 21,220

Climate Smart Agriculture for Sustainable Livelihoods
- A: USD 0.969 M
- PB: 800

Coastal Resource Conservation for Climate Adaptation
- A: USD 0.69 M
- PB: 3,905

Climate Proofing of Watersheds in TN and Rajasthan
- A: USD 1.344 M
- PB: 27,696 (Cumulative)

Enhancing Adaptive Capacity of S&M Farmers
- A: USD 2.51 M
- PB: 22,596

Number of Projects: 6
- Amount Sanctioned: USD 9.85 million
- Project Beneficiaries: 77,225

Legend:
- States where AF Projects are Sanctioned
- States where AF Projects are yet to be Sanctioned
- A: Amount in USD Million
- PB: Project Beneficiaries

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Adaptation Actions supported

Scientific and Climate Compatible Crop Cultivation

Improvement in Water Security

Water Budgeting

SNSCE/CIVIL/KEERTHI KUMAR B/GE8071 - DM - Unit 3
Adaptation Actions supported

Crop Advisory Message For the Local Community

Springshed Rejuvenation

Tank Rehabilitation
Adaptation Actions Supported

Promotion of Climate resilient Indigenous breed of Cattle

Development of Climate Resilient Cattle Sheds

Fodder Management
Adaptation Actions Supported

Automatic Weather Stations

Mangrove Conservation
Challenges in Adaptation Projects

- Identification of location specific sustainable interventions
- Mainstreaming of interventions in planning process
- Availability of financial resources
- Stakeholder Engagements
- Technical Support & Capacity Building support
- Scaling up of adaptation projects towards Programmatic approach
Way Forward

➢ Mainstreaming of Climate Change Resilience building initiatives/policies in the national development planning process.
➢ Convergence with existing project & programmes
➢ Development of project and programmes to cover diverse agro-ecological systems.
➢ Institutional capacity building and stakeholder engagement through training programmes.
➢ Development of knowledge management platform to share experiences and learnings across the projects and programmes.
Expectation from the Event

- Facilitation of sharing of national and international perspectives on Adaptation Actions
- Development of synergy of national and international funding mechanism for adaptation actions in India
- Evolving strategy for mainstreaming of adaptation action in development planning