climate call

Communities are embracing
measures to adapt to extreme
weather events. As the world
commemorates the International
Day of Climate Action on
October 24, we highlight some
important practices for each
important practices for each
in India

Desert region

Potential adaptation practices

- >> Enhance preparedness for drought and deploy early warning and drought monitoring systems
- Enhance soil and water conservation measures—rainwater harvesting and creation of micro-water harvesting structures
- >> Create state-wide drinking water grids
- >> Promote drought-resistant and heat-tolerant crops and re-deploy existing crop varieties that can cope with varying climatic conditions
- >> Introduce crop insurance policies so that farmers are secure in the event of a natural calamity

Coast and islands

Potential adaptation measures

- > Introduce measures to integrate drainage and irrigation systems that will mitigate floods and help in groundwater recharge
- Strengthen rivers' banks and seacoasts with groynes and dykes
- >> Develop bio-shields in coastal villages by growing mangroves that would protect coastal communities from cyclones and provide nutrients for marine species
- >> Control the volume of groundwater abstraction by enforcing groundwater regulation acts to prevent seawater intrusion

Indian Himalayan region

Potential adaptation practices

- » Introduce programmes for mid-Himalaya watershed development, grassland management and fodder production
- > Introduce weather-based crop insurance, weather forecasting stations and real-time crop monitoring

- Conserve indigenous floral species in the wetlands and alpine meadows and moraines and promote mixed species planting
- >> Soil and water conservation measures and soil testing and issuance of Soil Health Cards
- >> Promote horticulture, agro-horticulture and organic farming

India's Jammu and Kashmir 13 Uttar Pradesh uninvited September August-September September visitor 2014 2014 2014 To the state of th Extreme weather events are becoming more 2 Uttarakhand (Bihar frequent and widespread July-September June-September August 2013 2013 2014 3 Haryana June-August 2014 16 Assam To the second July September 2013 2014 4 Rajasthan June 2013 1 Tripura **(D)** Meghalaya Madhya Pradesh February-March April 30 April 30 September 2013 2014 2014 2014 **6** Gujarat May-June March 2013 2014 6 Maharashtra **1** Andhra Pradesh **B** West Bengal February-March June-September August 2013 2013 2013 October 12 May 8 October August January 2013 2013 2013 2013 Karnataka November 21 October 10 May 2013 2014 1 Odisha October 12 July-August October 12 2014 2013 2014 8 Kerala **9** Tamil Nadu January-February April-June July 2013 2014 2013

Indo-Gangetic plain

Potential adaptation practices

>> Revive ponds, lakes, traditional water storage bodies and wetlands

International day of climate action

- >> Use early warning systems and weather advisories, especially those related to timing of seed sowing, harvesting and pest control
- Diversify into value-addition activities to avoid wastage of agricultural produce. Increase storage capacity of foodgrains to ensure farmer's income in a changing climate scenario
- >> Ensure management of new and emerging pests, diseases and weeds. Promote organic ways for combating weeds, insects and pests
- >> Introduce new cultivars of various crops, and encourage indigenous cultivars

Central and peninsular India

Potential adaptation practices

- >> Develop and plant climate-hardy indigenous cultivars tolerant to drought and thermal extremes
- >> Establish a seed storage network for climatehardy cultivars, and for conservation and promotion of traditional knowledge in plant breeding
- >> Expand Automatic Weather Station (AWS) networks to the panchayat level and link them to existing insurance mechanisms
- >> Develop insurance products for poor, lower middle-class households to protect their assets
- >> Promote agro-forestry; explore convergence of ongoing agro-forestry projects with MGNREGA

Prepared by DTE/CSE Data Centre

Flood Prought Hailstorm

Cyclone

Monsoon rain

Infographics: Ritika Bohra and Raj Kumar Singh Analysis: Rajit Sengupta

Data source: Rising to the Call: Good practices of climate change adaptation in India, Centre for Science and Environment, New Delhi, 2014 For more such infographics visit: www.downtoearth.org.in