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Foreign, Commonwealth & Development Office

adpc Asian Disaster Preparedness Center

CLIMATE INNOVATION CHALLENGE

www.adpc.net/cic

iCARE – Innovation in Climate Adaptation and Resilience

1. Background

Climate change is a major driver of disaster losses and failed development. Climate related disasters, including the extreme weather events, have dominated the global disaster landscape in the 21st Century, which is shaping new approaches to science and practice in disaster risk reduction, resilience building and climate change adaptation.

Over the years, science has become more accessible, acknowledging that it also needed to deal with uncertainty. Policymakers are becoming more aware of scientific developments as more and more public policy issues call for science-based solutions. Therefore, interactions between policymakers and science are increasingly seen to be complex and nonlinear, as opposed to early conceptions.

In South Asia Region (SAR), the decision-making spaces are shared by science and policymakers with the local community. The shared decision space is characterized by co-learning and knowledge production. The Climate Adaptation and Resilience for South Asia Project (CARE) of the Asian Disaster Preparedness Center (ADPC) empowers decision-makers with tools, products, and services to act locally on climate-sensitive issues such as disaster related public policy and planning, agriculture, water, and transports.

Leveraging advanced technology and prioritizing a demand-driven approach to climate resilience, the CARE for South Asia is offering a new ground in using innovative approaches to help decision makers better respond to a changing climate. The Climate Innovation Challenge (CIC) and the TechEmerge Resilience Challenge opens a new window of opportunities to bring technology together for the benefit of all.

The Climate Innovation Challenge (CIC) financed by the Foreign, Commonwealth and Development challenges across SAR countries that is crowd sourcing innovative and disruptive technology solutions for resilience. The CIC aims to facilitate innovative solutions for their application and scale-up across different sectors, and tiers (national, sub-national and local/community) for greater impact.

2. Climate Innovation Challenge

Sixteen innovations from around the world have been selected for their disruptive and cutting-edge technologies – from the Internet of Things (IoT) and deep-learning model to automatize land-use and smart farming to digital systems for decision support. They are all aimed at meeting the needs of the target countries against the threats of climate change in South Asia through climate information and analytics, community-level early warning system, climate-smart agriculture, Integrated Water Resources Management (IWRM), resilient infrastructure, nature-based solutions (NbS) for adaptation, and risk financing solutions. The list of the selected pilot innovations is provided below and further details at www.adpc.net/cic.

1. Customized Irrigation And Climate Advisory Services Through Citizen Science (Pakistan)
2. Tidal River Water Custodian (Bangladesh)
3. Infrastructure Vulnerability to Slope Instabilities and Floods in Bhutan
4. SAT - Sustainable Agriculture Technology (Pakistan)
5. ADOPT Model for Technology Diffusion - Innovating Nonmonetary Interventions for Climate Smart Agriculture (Bangladesh)
6. Integrated Pest Management using Seamless Climate Information (Bangladesh)
7. Smart Vertical Farming: Achieving Food and Nutritional Security of Urban and Semi Urban Communities in Sri Lanka
8. Heylhi – An Online Application for Coastal Erosion and Flooding Information Collection in Maldives.
9. Technology Driven Microloan Fund for Climate Adaptation of Remote, Vulnerable Mountain Communities in Bhutan
10. Building Food Security through Agro-met Innovative Advisory Services (Nepal)
11. Smart Farm – A Complete Advisory Dissemination System (Nepal & Sri Lanka)
12. Household Level Risk Assessment Tool - A Digital System for Evidence- based Decision Support to Plan Effective Risk Financing Strategies (Nepal)
13. SLAMDAM - Water-filled Flood Barrier (Pakistan)
14. CRISTA - Climate Resilient Infrastructure for Social Transformation and Adaptation - (Bangladesh & Nepal)
15. Parametric Flood Insurance for Climate Vulnerable Communities in Nepal
16. MOBILISE 3.0: Digital Toolset for Building Resilient Communities (Sri Lanka)

3. *iCARE*: Innovation in Climate Adaptation and Resilience

ADPC will be hosting a series of online webinars highlighting innovations in advancing climate resilience initiatives in South Asia. This will showcase the progress made under the CIC pilot projects being implemented in Bangladesh, Bhutan, Maldives, Nepal, Pakistan, and Sri Lanka. This will help all the stakeholders learn lessons from each other and apply them in scaling the pilot innovations.

The online webinar will bring global experts and practitioners on climate adaptation and resilience sharing their perspective in terms of partnership, applicability and sustainability of innovations and share practical field experience from another region. The webinar topics are:

1. **Partnership in Innovations for Climate Adaptation and Resilience in South Asia (14 February 2022)**
2. **Scaling Innovations in Climate Smart Agriculture (21 March 2022)**
3. **Climate Sustainable Economy and the Need for Risk Information and Analytics (18 April 2022)**
4. **Climate-related Fiscal Risks and Financing Solutions (23 May 2022)**
5. **Adaptation, Resilience and Innovation in Built Infrastructure (27 June 2022)**
6. **Innovative Water Management Solution in Changing Climate (27 July 2022)**
7. **Measuring Innovations to Scale in Climate Adaptation and Resilience (12 August 2022)**