



**Climate Adaptation and Resilience  
(CARE) for South Asia Project**

**Innovations in Climate Adaptation and Resilience (iCARE)**

**Digital Innovation in Early Warning Systems: Building  
Climate Resilience in Bangladesh**

<b>Project Name</b>	Digital Innovation in Early Warning Systems: Building Climate Resilience in Bangladesh
<b>Lead Organization Name</b>	Practical Action
<b>Country of Implementation</b>	Bangladesh
<b>Summary Description</b>	<p>Practical Action aims to enhance location-specific, impact-based early warning dissemination in Bangladesh, centering on people and utilizing digital innovations in line with the country's digital transformation. The Government of Bangladesh's 'Perspective Plan 2010-2021' and the 'Smart Bangladesh Vision 2041' reflects the digital shift, with significant ICT investments and a notable increase in mobile phone usage, predicting 62% smartphone usage by 2025. Against this backdrop, Practical Action's initiative leverages this trend by introducing a mobile-based application called the 'Disaster Alert for BD', developed along with the Ministry of Disaster Management and Relief (MoDMR) to augment disaster preparedness, response, and recovery. The app, integral to the disaster risk management (DRM) cycle, offers multi-hazard knowledge, regular weather updates, risk prevention tips, and MoDMR guidelines. It alerts users to impending hazards and assists in locating shelters, medical services, and facilitates emergency communication, including rescue requests to local volunteers and authorities. To enhance community engagement, we've developed a network of Local Resilience Agents (LRAs) who disseminate early warnings and assist in post-disaster activities, reinforcing local capacities. The app's smart features, like manual location settings and offline solutions, address diverse needs, including those in connectivity-limited situations. Inclusivity is a cornerstone of our approach. Recognizing gender disparities in mobile phone access, we've installed digital weather boards at Union Centres, bridging the technology gap. This effort aligns with our participation in the global Early Warnings for All Initiative (EW4A) led by the WMO, focusing on efficient, cost-effective climate adaptation methods.</p> <p>'Disaster Alert for BD' is a smartphone-based application designed to alert communities before an impending disaster, provides up-to-date, authentic, and real-time information/data of weather conditions with dos and don'ts knowledge and available nearby services in Bangladesh. It provides users with real-time alerts about natural hazards such as cyclones, floods, heatwave, etc.</p>

<b>Expected Outcome</b>	<p><b>Outcome 1:</b> Improved Early Warnings and Early Action for climate induced hazards reaches the last mile to minimize losses and damages of livelihoods and assets.</p> <p><b>Outcome 2:</b> Improved access to information and advisory services</p> <p><b>Outcome 3:</b> Strengthened Institutional capacity at the local level for EW dissemination.</p>
<b>Partner Government Agency(ies)</b>	<p>Bangladesh Meteorological Department (BMD)  Department of Disaster Management (DDM)  Flood Forecasting and Warning Centre (FFWC), Bangladesh Water Development Board (BWDB)  Bangladesh Agro-Meteorological Information Services (BAMIS), under the Department of Agricultural Extension (DAE)  Ministry of Disaster Management and Relief (MoDMR)  Cyclone Preparedness Programme (CPP)  Bangladesh Red Crescent Society (BDRCS)  District: Faridpur, Upazila (subdistrict): Char Vodrashon  Union: Char Bhadrasan, Gazirtek  District: Khulna, Upazila: Koyra, Union: Koyra, Uttar Bedkashi  District: Satkhira, Upazila: Ashashuni, Union: Pratap Nagar, Sreeula</p>
<b>Project duration</b>	15 Months

Implemented By



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