



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

Innovations in Climate Adaptation and Resilience (iCARE)

**Early Warning and Decision Support System for Energy
Infrastructure Resilience in the GBM Basin**

Project Name	Early Warning and Decision Support System for Energy Infrastructure Resilience in the GBM Basin
Lead Organization Name	Think Blue
Country of Implementation	Bhutan
Summary Description	<p>Bhutan currently has one of the highest Average Annual Losses as a % of GDP from disasters such as flood and drought among countries in South and South-west Asia. This project will develop an online Decision Support System (DSS) to provide stakeholders including national and local government, energy providers and infrastructure managers in Bhutan with timely and actionable climate information to safeguard critical assets. Key stakeholders across 12 Dzongkhags will access and analyze detailed local maps overlaid with historical, projected and real-time climate-related data, and publish selected results to the public.</p> <p>This information includes interactive maps, charts and reports of:</p> <ul style="list-style-type: none"> ● climate-related risk (e.g., floods and drought), ● impact (e.g., economic loss), and mitigation (e.g., prevention and disaster planning).
Expected Outcome	Key stakeholders will use the Decision Support System (DSS) for analysis of risk and planning for Energy Infrastructure Resilience (EIR) in Bhutan, and citizen stakeholders will use the DSS to access relevant analytical results. This will allow decision makers at the national and local government levels to analyze the intersection of climate risks and critical infrastructure to identify hotspots for use in disaster planning, prevention and mitigation strategies, and early warning activities.
Partner Government Agency(ies)	<ul style="list-style-type: none"> ● Weather and Climate Services Division (WCSD), National Center for Hydrology and Meteorology will analyze and provide local climate-related data and expertise ● Ministry of Energy and Natural Resources will provide expertise on energy-related risks, critical infrastructure and planning ● Department of Disaster Management, Ministry of Home & Cultural Affairs will provide expertise on disaster planning <p>➤ Districts (Dzongkhags) - Bumthang, Chukha, Mongar, Paro, Pemagatshel, Samdrup Jongkhar, Samtse, Trashigang, Thimphu, Tsirang, Zhemgang. These partners will provide localized expertise on risks, impacts, and actions:</p>
Project duration	15 Months

Implemented By



Supported By



Asian Disaster Preparedness Center

SM Tower, 24th Floor 979/66-70 Pahonyothin Road
Phayathai, Bangkok 10400 Thailand

Tel: +66 2 298 0681-92

Fax: +66 2 298 0012

E-mail: adpc@adpc.net

www.adpc.net



www.adpc.net



Asian Disaster Preparedness Center - ADPC



@ADPCnet



Asian Disaster Preparedness Center (ADPC)