CREWSnet: Reinventing Climate Change Adaptation

EMPOWERING COMMUNITIES TO BETTER PLAN FOR AND RESPOND TO CLIMATE CHANGE

BANGLADESH – A Nexus of Climate Risk

- Bangladesh is experiencing extreme heat waves, drought, rising seas, pervasive flooding and salinity intrusion, and increasingly intense storms
- Estimates suggest that by 2050, climate change will displace 1 in 7 people in Bangladesh
- The growing crisis requires a new, proactive approach to climate resilience
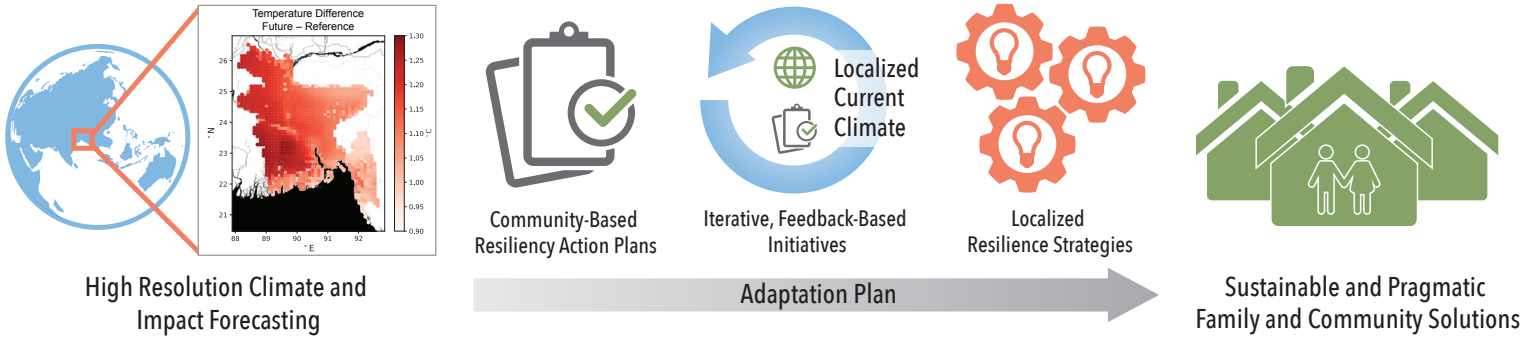
Our Solution is CREWSnet: The Climate Resilience Early Warning System Network

We will partner with BRAC, a leading global NGO with extensive experience and presence in Bangladesh, to develop early warning and decision support tools for saving lives and reducing suffering. CREWSnet combines state-of-the-art climate and socioeconomic forecasting techniques with resilience technologies and strategies to empower communities, diversify livelihoods, and save lives.

CREWSnet creates a comprehensive framework for predicting climate impact and creating scalable resilience strategies for communities worldwide:

- **Next-Generation Forecasting & Information Sharing:** Community-scale forecasting that enables a fundamental change in climate resilience, empowering families to interpret local climatic changes and plan for their futures

- **Enabling Proactive Adaptation:** Community-based resilience options that span agriculture, livelihoods, infrastructure, education, and financing

- **Driving Community Action:** Highly-localized forecasting that enables communities to tailor their own decisions about relocation

- **Scaling Worldwide:** Iterative refinement of CREWSnet forecasting, information sharing, and resilience technologies that creates a solution that is readily adaptable for global use

- **CREWSnet Potential Future Growth:** A global open-source capability, to be implemented with partners around the world

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CREWSnet: Predicting Impacts and Enabling Resilience

High Resolution Climate and Impact Forecasting

Community-Based Resiliency Action Plans

Iterative, Feedback-Based Initiatives

Localized Current Climate

Localized Resilience Strategies

Adaptation Plan

Sustainable and Pragmatic Family and Community Solutions

The CREWSnet system will significantly enhance forecasting resolution of local climate impacts, enabling community-based decisions in resiliency planning. This approach uses predictions from state-of-the-art modeling techniques to present options for proactive adaptation. By applying an iterative, feedback-based process that incorporates current local climate change conditions, community indicators, and resiliency actions, CREWSnet will enable these communities to adopt a pragmatic adaptation path that is tailored to their specific needs in the agriculture, economic, healthcare, education, and infrastructure sectors.

Partnering for Impact

CREWSnet is seeking forward-thinking and impact-driven partners motivated to apply next-generation technologies to climate change adaptation, urban development, and other community empowerment needs. With $18.5M over 5 years, we will initially focus on southwestern Bangladesh, one of the world's most climate and socially vulnerable regions. The MIT team will integrate its innovative, localized forecasting, information sharing, and resilience technologies into BRAC's holistic humanitarian, climate, and urban development programs. With local collaboration, the BRAC-MIT team will continuously monitor and refine resilience programs and innovations to build sustainable systems. The ultimate goal is to engage public, private, and non-profit partners in other high-risk geographies to scale these solutions across Bangladesh and the world.

For further discussions, please contact:
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