

Climate & Disaster Resilience

Securing Lives Today, Sustaining Futures Tomorrow

1. Overview : A Journey of Resilience Since 2005

Headline: Protecting Lives, Livelihoods, and Dignity in a Changing Climate

Introduction:

The south western coastal belt of Bangladesh particularly Satkhira is among the most climate-vulnerable regions in the world. Cyclones, tidal surges, salinity intrusion, and water scarcity are not occasional crises here they are part of everyday life.

Since 2005, *Action for Rural Advancement (ARA)* has stood alongside these communities not only responding to disasters but driving long-term, sustainable change.

From the devastation of Cyclones Sidr and Aila to the escalating threats of sea-level rise and climate extremes, ARA has evolved into a trusted leader in climate adaptation and community resilience.

Our Strategic Pillars:

- ♦ Risk Reduction: Strengthening community preparedness to minimize disaster impacts
- ♦ Resilient Infrastructure: Building durable homes and systems that withstand extreme conditions
- ♦ Environmental Stewardship: Restoring ecosystems as natural protective barriers
- ♦ Innovation: Blending local knowledge with modern, scalable solutions

2. Climate-Resilient Housing (Signature Initiative)

Headline: A Home is More Than Shelter It is Protection

The Challenge:

In coastal Bangladesh, a house is a family's first line of defense. Yet traditional homes—made of mud and thatch are highly vulnerable to cyclones and flooding, leaving families repeatedly displaced.

Our Solution:

ARA has developed an innovative Climate-Resilient Housing Model tailored to coastal realities:

- **Elevated, Reinforced Foundations:** Built with salinity-resistant materials to prevent flood damage and corrosion
- **Cyclone-Resistant Roofing:** Aerodynamically designed to withstand high-velocity winds
- **Integrated Water Systems:** Each home includes a Rainwater Harvesting System (RWHS) for year-round safe drinking water
- **Modular Design:** Durable, repair-friendly construction using local materials and skills

Current Initiative :

Under the *ARA Renew Project*, we are piloting a cluster of 100 resilient homes creating a scalable blueprint for future coastal housing.

3. Water Security & Salinity Adaptation

Headline: Ensuring Safe Water in a Saline Landscape**The Crisis:**

Rising sea levels are pushing saltwater into freshwater sources, creating a severe water crisis. Women and girls often walk long distances daily to collect safe water—making this not only an environmental issue but also a health and gender challenge.

Our Solutions:

- Rainwater Harvesting Systems (RWHS): Household and community-level water storage solutions
- Pond Sand Filters (PSF): Low-cost purification systems managed by communities
- Climate-Smart Agriculture: Training farmers on salt-tolerant crops and adaptive farming practices
- Coastal Afforestation: Planting mangroves and local species to reduce erosion and act as natural windbreakers

These interventions go beyond water access they improve health, empower women, and strengthen livelihoods.

4. Disaster Risk Reduction (DRR) & Emergency Response

Headline: Prepared Communities Save Lives**Our Approach:**

While disasters cannot be stopped, their impacts can be significantly reduced. ARA empowers communities to act as their own first responders.

Key Interventions:

- Community Volunteer Corps: Training youth in search & rescue, first aid, and evacuation
- Early Warning Systems: Ensuring last-mile delivery of critical weather alerts
- School-Based Awareness: Turning schools into hubs of safety and resilience
- Rapid Emergency Response: Immediate distribution of food, water, and hygiene kits
- Recovery & Rehabilitation: Supporting long-term livelihood restoration after disasters

Our Commitment:**“Resilient Coasts, Protected Communities.”**

ARA remains committed to building a future where vulnerable communities are not just surviving climate change—but thriving despite it.