

AREMS

Agentic Risk & Environmental Management System

Vision:

To transform complex risk data into **simple, life-saving conversations**, enabling anyone, anywhere to take proactive measures.

A future where anticipatory action is co-created by fusing **global data with local wisdom**, giving every community a voice in their own resilience.

The Humanitarian Challenge:



Humanitarian responses are often undermined when critical local knowledge is overlooked, leading to delayed, one-size-fits-all interventions. This gap is intensified because traditional risk analysis struggles to synthesize vast geospatial data with crucial community insights.

Without structured community engagement and capacity building, risk assessments miss key context, treating **affected populations as passive recipients** of aid rather than empowering them as active partners in their own resilience. These combined failures result in **insufficient assessments and uncoordinated responses**, ultimately crippling efforts to implement effective anticipatory action.

Our Solution



AREMS transforms vulnerable populations into actors of their own resilience. Our agentic Al platform **fuses complex data with on-the-ground community insights**, turning this combined intelligence into actionable alerts, adaptive training, and life-saving guidance delivered through simple conversation. This fosters a truly collaborative ecosystem where **technology and community work together to build resilience**.

Selected for the Generative AI Accelerator 2025

3iS was proudly selected as a recipient of the Google.org Generative Al Accelerator, **recognizing our innovative approach** to building Al-driven solutions for resilient communities.

with support from Google.org

More details at:

Google.org Accelerator: Generative AI open call

The Google.org Accelerator welcomes 5 new organizations having impact in SSA



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Designed around community engagement to:



Co-Create Knowledge: Community members share observations, hazard reports, historical events and traditional coping strategies via accessible channels like WhatsApp, Telegram, and simple mobile forms. Al agents validate, contextualize, and integrate these inputs with geospatial data, climate metrics, and humanitarian reports. This information is then structured into a knowledge graphs, building a rich, locally grounded risk picture and enabling the identification of complex relationships and trends through queries in natural language.



Empower Local Actors through Sustained Capacity Building: Tailored training modules, delivered through WhatsApp and Telegram with an adaptive learning approach, are designed to engage communities in disaster preparedness and resilience building, and introduce top-tier technologies, like AI Agents and satellite remote sensing. With AREMS users are not just recipients of information but active, skilled participants in the risk management process, capable of leveraging sophisticated tools for local benefit.



Catalyze Collective Action: Through participatory mapping and natural language queries, communities and humanitarian teams jointly identify triggers, prioritize interventions, and monitor impact. The system produces clear, automated dynamic reports, actionable recommendations, and tailored assessments that inform stakeholders, ensuring solutions are context appropriate and community-owned, fostering the adoption of anticipatory actions.

Key Features:

To achieve our vision, AREMS is built on six core features that work together to monitor risks, build knowledge, and enable collaborative action.



Alert & Notification System



Semi-adaptive Learning



Questions and answers system



Community Risk Mapping



Analysis & Reporting Tools



Coordinated Data Collection

Projected Impact:

600+

Humanitarian NGOs, CSOs, and local authorities.

300k

People within the first 18 months

+65%

Improvement in knowledge and skills

