Groundwater Resources Investigation for Drought Mitigation in Africa Programme (GRIDMAP)



What is **GRIDMAP**?

Established in 2012 by UNESCO, GRIDMAP is a regional scientific initiative that aims to combat climate change in water-scarce areas of Africa by identifying emergency and sustainable water supplies and delivering measures to mitigate against long-term drought and famine. The initiative is a consortium of international, regional, national and local actors, and funded by multiple donors. In its first phase (2012-2013), GRIDMAP will focus on the Horn of Africa region where drought and famine have been acute in recent years.

The Challenge

Most countries in the Horn of Africa region have arid and semi-arid climates. In 2011, the region experienced the worst drought in 60 years in the Horn of Africa. As a result, many pastoral zones have dried up, and millions of Somalis, Kenyans and Ethiopians have faced severe shortages of drinking water and food, requiring an urgent response. Those living in refugee camps have been particularly vulnerable. What's more, measures to mitigate against future drought and to prevent water-related conflict are greatly needed.

Water scarcity is exacerbated by the lack of understanding of groundwater in the Horn of Africa. Most data are incomplete, fragmented or outdated, and scientists in the area lack the tools to assess groundwater to rapidly improve water supplies. Furthermore, actors in the region lack the policies and skills necessary to manage groundwater that would help build long-term preparedness to drought and a more lasting peace.

Coordinated by:



GRIDMAP provides an opportunity to mobilize existing partnerships to improve access to clean water for drinking and agriculture in drought-stricken areas. Ultimately, **the challenge is to respond to the crisis and make a lasting difference to peoples' lives.**



The Opportunity

There is a need to develop groundwater as a means to meet emergency and long-term needs, and in a way that promotes sustainability. New advanced technologies now exist, such as the WATEX SystemTM developed by Radar Technologies International (RTI), which can provide rapid solutions to regional and local challenges. GRIDMAP also provides an opportunity to mobilize existing partnerships to deliver a rapid, sustainable impact. Ultimately, the challenge is to respond to the crisis and make a lasting difference to peoples' lives.

What does GRIDMAP do?

GRIDMAP assesses the availability of groundwater resources of target areas and determines which resources can be utilized safely for emergency and long-term development situations. The initiative also strengthens the drought preparedness of local, national and regional actors by building the capacity to sustainably manage groundwater resources. Ultimately, GRIDMAP aims to build the resilience of populations vulnerable to drought and famine.

Priority Areas

1. Identifying and mapping regional groundwater resources for emergency situations and long-term development

2. Developing Groundwater Management Tools to Combat Drought

3. Building skills and capacities for managing groundwater for drought and conflict mitigation

Expected outcomes (2012-2013)

Increased access to water for thousands of vulnerable





Government of Japan

Flemish Government

United States Geological Survey

populations

Precise understanding of where safe groundwater resources exist and how much can be used for emergency and long-term development needs.

Sustainable skills in groundwater assessment and management built.









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