

# Unlocking the Potential of Groundwater for the Poor (UPGro) - Overview

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# Background



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- 7 year international research programme with a total budget of £12m
  - Focus on improving the evidence base around groundwater availability and management in Sub-Saharan Africa (SSA) to enable groundwater to be used in a sustainable way, benefitting the poor
  - This will be achieved through interdisciplinary projects linking the social and natural sciences
  - A key measure of success will be the uptake of the outcomes of the research by users

# Funders



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- **Department for International Development (DFID)** – DFID leads the UK’s effort to end extreme poverty. To enable this DFID commissions world-class research that directly improves people’s lives and makes this research freely available to those who can use it around the world.
  - **Natural Environment Research Council (NERC)** – the UK's largest funder of independent research, training and innovation in environmental science. Invests in world-leading science to help us sustain and benefit from our natural resources, predict and respond to natural hazards and understand environmental change.
  - **Economic and Social Sciences Research Council (ESRC)** - the UK's largest organisation for funding research on economic and social issues. Supports independent, high quality research which has an impact on business, the public sector and the third sector.

# UPGro Components



- **Catalyst Grants** – small projects to enable the establishment of interdisciplinary partnerships, pilot studies, and the development of new methodologies
- **Knowledge Broker** – SKAT appointed to help facilitate the uptake of the research by policymakers and other stakeholders
- **Baseline studies**
  - A Groundwater Atlas of Africa (underway)
  - Literature review of social & economic conditions (to be commissioned)
- **Consortium Grants**
  - large interdisciplinary projects that will deliver the bulk of the UPGro research
  - 83 Outline Proposals received and 14 Full Proposals invited

# UPGro Aims and Objectives



- Aim to provide the evidence base around groundwater availability and management in Sub-Saharan Africa (SSA) to enable groundwater to be used in a sustainable way in order to benefit the poor.
- Programme guided by the following principles:
  - Research excellence
  - Development impact
  - Addressing end-user requirements
  - Creation of meaningful partnerships with African researchers and research institutions
  - Addressing gender, equality and related issues
  - Value for money

# Understanding the Resource



- Research under Theme 1 should respond to the demand for improved understanding of groundwater availability in SSA, could include
  - Recharge Processes: flow and storage mechanisms at local and catchment scale; impact of changes in climate and land use; impact of storms
  - Groundwater/Surface Water interactions: improved understanding of interactions that affect quality & quantity; improved integration in land surface models
  - Groundwater Quality: risks to groundwater quality; sources, sinks and transport of contaminants

# Governance, Institutions & Access

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- Research under Theme 2 is expected to generate and enhance understanding of the social, economic and political dynamics surrounding groundwater use in SSA and might include
  - Governance and political economy: impact of local, regional, national and international structures
  - Ownership models: role of industry, implications of accumulation of water rights by fewer groups
  - Approaches to governance/institutions: what approaches might improve access and management
  - Impact of non-water related policies
  - Behavioural change: understanding how decisions are made, influences, how to bring about positive change
  - Tools for decision makers

# Impacts of Future Trends



- Research under Theme 3 will contribute to identifying key drivers and stressors that may affect the availability of groundwater
  - Focus on trends on a decadal timescale (i.e. over the next 10-20 years and up to 50 years into the future)
  - Need to consider the interactions between different stressors as may give rise to unforeseen consequences
  - Examples of drivers and stressors include:
    - Changes in land use and ownership
    - Population growth and demographics
    - Changing rainfall patterns
    - New water management approaches and technologies

# Consortium Grants



- Each project should cut across at least 2 of the 3 UPGro research themes and:
  - Include novel, innovative natural science and novel, innovative social and economic science
  - Deliver research that will benefit poor people in low income countries in SSA
  - Include pathways for ensuring the uptake of the research by users
  - Include meaningful partnerships with researchers in African institutions
- We are looking to support 3-5 projects that will deliver excellent science and provide a balanced portfolio of research that will enable the delivery of the UPGro Aims and Objectives