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

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Background

- 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

- **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

• 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