Unlocking the Potential of Interdisciplinary Research on Groundwater

Abstract n° 1865

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KEYWORDS: interdisciplinary, research methods, stakeholder engagement

‘Unlocking the Potential of Groundwater for the Poor’ (UPGro), is a seven-year international research programme (2013-2020) jointly funded by UK’s Department for International Development (DFID), Natural Environment Research Council (NERC) and the Economic and Social Research Council (ESRC). It focuses on improving the evidence base around groundwater availability and management in Sub-Saharan Africa. In 2015, UPGro awarded large grants to five international research consortia to conduct interdisciplinary research combining cutting-edge natural and social science with innovative stakeholder engagement processes to address this challenge. UPGro contends that the programme’s success will be measured by the way that its research fills important evidence gaps and generates new knowledge which can be used to benefit poor people in a sustainable manner. This paper presents the results of a comparative analysis of how interdisciplinary research efforts are unfolding in the initial phase of the five consortium projects. Drawing on insights from development studies and science and technology studies on multi-, inter- and transdisciplinary research, and informed by an extensive review of key project documents and a series of qualitative interviews with the social and physical scientists involved, we examine the efforts of the consortium projects to operationalise integrated and policy relevant research in diverse, risk-prone, groundwater environments in Africa across a range of scales. The research was initiated to fulfill a perceived need for in-depth empirically grounded research on the philosophy and practicalities of knowledge-making in interdisciplinary groundwater projects. Our study seeks to provide insights to the groundwater research community by highlighting novel methodological innovations, thorny epistemological challenges, and details of how the projects have sought to meet the challenge of generating academically rigorous analysis while producing usable results to address complex, real-world problems.