Geophysical Research Abstracts
Vol. 21, EGU2019-16459, 2019
EGU General Assembly 2019

Reflections on linking science to policy from an ongoing research project in Colombia

Micha Werner (1,5), Tibor Stigter (1), Leonardo Alfonso Segura (1), Nora van Cauwenbergh (), Teresita Betancur Vargas (2), Alberto Galvis (3), Humberto Avila (4), Marta Faneca Sànchez (5), and Liliana Otálvaro Hoyos (6)

(1) IHE Delft Institute for Water Education, Water Engineering, Delft, Netherlands (m.werner@un-ihe.org), (2) Universidad de Antioquia, Medellín, Colombia, (3) Instituto Cinara, Universidad del Valle, Cali, Colombia, (4) Instituto de Estudios Hidráulicos y Ambientales, Universidad del Norte, Barranquilla, Colombia, (5) Deltares, Delft, Netherlands, (6) Ministerio de Ambiente y Desarrollo Sostenible Bogotá, Colombia

In recent decades there has been a concerted effort in several countries to develop and implement modern integrated water resources policies. While such policies have indeed been adopted in many, an impediment to their effective implementation is often found in a lack of data and scientific knowledge to underpin key policy decisions. This is particularly so in developing and transitional countries, where poor availability of data and scientific knowledge may be exacerbated by lack of human and institutional capacity. Applied research projects often purport to address these gaps, intending to develop science solutions, engage with end users to link advances to policy needs, and provide recommendations through for example policy briefs and outreach activities on policy uptake. This process is in reality rarely as linear as this would suggest, and in many cases intended impacts of the research are achieved to only a limited extent. Poor uptake is habitually attributed to the disinterest or disconnect of policy and decision makers, but it may also be a consequence of the very design of the research project itself. Co-design of such applied research projects using the intended impacts as the starting point to establish the science questions to be addressed may prove more effective.

In an ongoing applied research project in Colombia the scientific research has from the outset been designed to align with policy implementation as well as the building of human and institutional capacity. The project has been constructed to address key science questions in the implementation of recently adopted policies on managing groundwater resources and the implementation of groundwater management plans in the country. These management plans are developed by regional water management agencies, and require research to the physical dimension of groundwater availability and sustainable use, as well as the socio-economic dimension of access and use of groundwater by stakeholders and communities. Here we explore how the design of the research project, and the constitution of the team undertaking the research, has fostered collaboration between universities and regional agencies involved, as well as with knowledge institutions providing scientific leadership at national level, and the environment ministry, the main policy setting institute in this context. This collaboration is now leading to selected science results from the project being integrated in national guidelines on policy implementation, contributing to improving the science evidence base on which the management plans are developed across the country. While project design has been instrumental, our experience also shows that good personal and inter-institutional relationships are fundamental to a successful linking of science to policy.