

Managed groundwater development for water-supply security in Sub-Saharan Africa: Investment priorities

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Abstract

In numerous countries of Sub-Saharan Africa the strategic agenda of the water-sector is undergoing substantial change because of demographic pressure, climate change and economic transformation. Two new policy questions are arising from the need to make better use of available groundwater storage to improve water-supply security:

- What is the scope for promoting much increased groundwater use for irrigated agriculture, and how might the investment risks be reduced and sustainable outcomes ensured?
- How can the demand to expand urban groundwater use, for both further supplementing municipal water-supply systems and for direct *in situ* water supply, be best channelled to maximise the benefits whilst minimising the risks?

This 'new agenda' poses very different challenges from the long-standing requirement to provide rural water supplies of adequate coverage, reliability and quality (which, while still not yet fully addressed, is outside the scope of this paper).

Balanced answers to these new questions are needed to provide a sound basis for appropriate investment policies on managed groundwater development and adequate institutional provisions for their implementation. They are discussed here from the standpoint of the GW-MATE experience in some World Bank-supported projects in eastern Africa during 2001-2010, together with a review of some developments in western Africa and insights from parts of Asia and Latin America.

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