

***Project:*** Analysis of impacts of large-scale investments in agriculture on water resources, ecosystems and livelihoods; and development of policy options for decision makers

## Project Overview Brief



*Photographer: Nana Kofi Acquah*



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### Project background

Large-scale agricultural land investments in Africa are rapidly on the increase with potential positive and negative impacts. This project was initiated in response to an explicit request from the African Ministers' Council on Water (AMCOW) for research-based policy options for managing land and water effectively and sustainably in light of the rapid increase in large-scale agricultural land investments in sub-Saharan Africa (SSA). An analytical study is being conducted by the International Water Management Institute (IWMI) in partnership with the United Nations Environment Programme (UNEP), GRID-ARENDAL and the Food and Agriculture Organization of the United Nations (FAO).

The analysis is being conducted at three levels. Firstly, at a pan-continental level, the extent, characteristics, production activities and drivers of foreign direct investments (FDI) in agriculture across sub-Saharan Africa are reviewed. Secondly, a more detailed review of FDI in agricultural land in 6 countries: Ghana, Mali, Ethiopia, Tanzania, Mozambique and Zambia is being done to examine the adequacy of policy and institutional frameworks for guiding and managing FDI. Together these six countries account for 50% of the total area under FDI (based on the database developed for this project). Thirdly, at a sub-river basin level a simulation modeling exercise is undertaken to analyze and quantitatively estimate the impacts of FDI in agricultural land on water resources, ecosystems and livelihoods.

### Objectives

The objectives of this project are to:

- better understand the impacts of large-scale investments in agriculture on water resources, ecosystems and livelihoods
- develop policy options for decision-makers for leasing agricultural land that help to ensure equitable benefits to all parties, including current land users and affected communities, without compromising ecosystem services.

## Methodology

An eclectic approach comprising of the following steps is utilized:

- A review of the size and type of land leases in Africa, using as a starting point the Land Matrix database ([www.landmatrix.org](http://www.landmatrix.org)), including identification of the investors, target countries, location, total surface area, actual area under production versus total land acquisition, agricultural production activities including, crop types (to identify water demanding crops), and the type of agricultural lease.
- A systematic review, using an adaptation of the DPSIR (Driving forces, Pressures, States, Impacts, Responses) analytical framework, to identify the driving forces, opportunities, motives and pressures, relating to large scale agricultural land acquisitions in Africa, and the interconnection between these variables.
- A desktop review to identify, categorize and qualitatively assess the environmental and socio-economic impacts of FDI schemes, with a focus on water, ecosystems services and livelihoods.
- Analysis of policies, legislation and institutional frameworks to determine how they facilitate or hamper the inclusion of water and its various uses and users in FDI contracts. The aim is to identify gaps that may need to be addressed and lessons that can be shared to improve the administration and management of FDIs in agriculture in ways that will ensure judicious use and management of water resources and enhance livelihoods and ecosystems.
- A model to simulate the likely impacts of FDIs in agriculture on water resources, livelihoods and ecosystem services in the Jeldu watershed in the Eastern Blue Nile region of Ethiopia. The aim is to use this simulation exercise to provide a proof of concept on how impacts can be conceptualized and measured.

## Project outputs

Results derived from the various analyses will:

- provide a more accurate picture of the extent and distribution of FDI in agriculture across SSA;
- establish the qualitative and quantitative impacts of FDI investments in agriculture on water resources, ecosystems and livelihoods;
- provide information on the adequacy and/or gaps in existing policies, legislation and institutions governing FDI investments in agriculture and suggest policy options to fill the gaps to ensure that benefits are equitably shared.

## Project impact

Results and recommendations emanating from this project will provide policy options enabling informed choices to be made about the water dimensions of FDI in agriculture, and measures to be put in place to ensure that they lead to positive benefits for both investors and current land users, while cognizant of the need for environmental sustainability.

## Project partners



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