

# POLICY BRIEF

## ANALYSIS OF IMPACTS OF LARGE-SCALE INVESTMENTS IN AGRICULTURE ON WATER RESOURCES, ECOSYSTEMS AND LIVELIHOODS IN SUB-SAHARAN AFRICA

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### Key Fact:

*Water is the neglected resource in large-scale agricultural land investment contracts in Sub-Saharan Africa, resulting in lost opportunities for efficient, equitable and sustainable water management and use.*

## KEY MESSAGES

- 1) Governments need to monitor and ensure that water availability, use and management is factored into large-scale agricultural land investment (LSALI) contracts.
- 2) Water valuation is key to efficient and equitable water use and management. Governments have a key role to play in instituting frameworks and policies for implementation of practical and politically feasible water valuation systems.
- 3) Governments need to improve the coherence, complementarity and coordination of land, water and environmental policies.
- 4) Governments, through relevant national agencies, need to commission and conduct detailed assessment of the socio-hydrological implications of LSALI.
- 5) Investors need to adhere to the principles for responsible investment in agriculture and food systems, including adoption of inclusive business models.
- 6) Governments need to apply laws in the statute books to revoke land not utilized.
- 7) Governments and investors need to fully disclose information on LSALIs.

## Introduction

Large-scale investment in agricultural land in Sub-Saharan Africa (SSA) has been increasing since the food, oil and financial crises of 2008. Drivers of these investments are varied and influenced by the motives and interests of investors and recipient countries. Some investments, especially by foreign investors from water scarce regions of the Middle East and North Africa, are driven by the need to secure access to water and land to assure food security in their home countries. Other investments are driven by profit or speculative motives, or in some cases the opportunity to grow biofuel crops to gain from the policy directives in favour of bioenergy in Western countries. Most SSA countries have welcomed large-scale investments viewing them as a means of transforming their underperforming agricultural sector and boosting agricultural productivity and growth. This is partly in a bid to meet the Comprehensive Africa Agriculture Development Programme (CAADP) target of an average annual growth rate of 6% in agriculture by 2015 and partly to achieve other key national objectives pertaining to food security and employment creation.

Nonetheless, questions remain about the effects of these investments on national food security, local livelihoods, water quantity and quality and essential ecosystem services. To address these questions and in response to a request from the African Ministers' Council on Water (AMCOW) for research-based policy

options for managing land and water effectively and sustainably, a study was conducted in 2014 by the International Water Management Institute (IWMI) in partnership with UNEP, GRID-Arendal and FAO. It involved an investigation into how large-scale agricultural land investments (LSALIs) have affected the livelihoods of current land and water users, water resources and what repercussions there are on the ecosystem services they provide. The goal was to support informed policy decision-making by providing recommendations on leasing agricultural land that will ensure that: a) needed investments in agriculture are not discouraged; b) equitable benefit-sharing by all parties, i.e. investors, current land users and host governments, is promoted; and c) appropriate measures and safeguards are put in place to guarantee sustainable natural resource management and continued provision of essential ecosystem services supplied by land and water resources.

This brief provides key messages (options for policy action) that emerged from an analysis of 148 LSALIs in 22 SSA countries, supplemented by in-depth case studies in Ethiopia, Ghana, Mali, Mozambique, Tanzania and Zambia. These LSALIs cumulatively covered at least 3.4 million hectares, while the six case study countries accounted for 50% of the total land area under these large-scale investments.



## 7 Key Messages

### 1) Governments need to monitor and ensure that water availability, use and management is factored into LSALI contracts

Water is seldom mentioned or considered an essential input into agricultural production in many LSALIs reviewed. Where mentioned, the amount of water to be allocated is often unstated, even within irrigation schemes where dam capacity is known. Many of the crops earmarked for cultivation (e.g. rice and sugarcane) have high water demands and will be grown over large areas. In addition, chemical inputs (e.g. fertilizers and pesticides) will be required to ensure optimal production. There will be attendant consequences on hydrology and a vast array of ecosystem services which may result in potentially negative implications for local livelihoods. These consequences can best be taken into account when from the outset LSALI contracts take into consideration long-term water availability and use by investors, smallholder farmers and other local users.

### 2) Water valuation is key to efficient and equitable water use and management. Governments have a key role to play in instituting frameworks and policies for implementation of practical and politically feasible water valuation systems.

Water was not valued as an economic good in many of the LSALIs reviewed. In instances where water was priced, a flat rate per hectare pricing system was implemented. Tariffs were often low and not reviewed in the course of the year to account for changes in water availability or demand. In a few cases, the contracted water fees were not even routinely collected. Because the flat rate per hectare pricing does not take into account the volume of water used, it provides no incentive to conserve water and does not send the right signals to water users about the relative scarcity of the resource. This pricing system will not result in efficient water allocation and it can also be faulted on equity

basis. It is imperative that governments put in place research-based, practical and politically feasible water pricing systems to allow for efficient, equitable water use and management.

### 3) Governments need to improve the coherence, complementarity and coordination of land, water and environmental policies

Although land and water are interlinked resources, they are governed and managed under separate but parallel legal, policy and institutional frameworks. A review of environmental policies and legislation revealed that they are often detailed enough in terms of due diligence functions (monitoring, evaluation, compliance and conformity assessments), but poorly linked into the land acquisition process that takes place before LSALI contracts are signed. Due to poor funding and limited human capacity, due diligence functions are not effectively performed. Pilot testing different institutional arrangements for bringing about improved coordination of policies as well as financing public agencies charged with environmental monitoring and evaluation are needed.

### 4) Governments, through relevant national agencies, need to commission and conduct detailed assessment of the socio-hydrological implications of LSALI

Many current or proposed LSALIs are located in areas where current land uses are considered ineffective or inefficient. Results obtained from hydrological simulations carried out as part of this study demonstrated that when irrigation is practiced by numerous large scale investments within a single basin, unintended and potentially damaging long-term consequences can occur. These include increased streamflow variation, groundwater recharge reduction and increased flood risk during high rainfall events. These consequences may jeopardize livelihoods and the ecosystem services relied upon by other land and water users (e.g. fisherfolks, pastoralists, etc.) living around the LSALIs.

#### **5) Investors need to adhere to the principles for responsible investment in agriculture and food systems, including adoption of inclusive business models**

The ten principles for “Responsible Investment in Agriculture and Food Systems” endorsed by the Committee on World Food Security in October 2014 encapsulate principles that directly speak to investors. These include respect for tenure of land, fisheries and forests and access to water, sustainable management of natural resources to increase resilience and reduce disaster risks and inclusive economic development. Few of the LSALIs reviewed include ‘win-win’ business models that can lead to equitable benefits sharing and sustainable natural resources management. Further analysis of successful cases is needed to identify the preconditions, appropriate policies, institutional frameworks and economic incentives to promote scaling-up of successful investments.

#### **6) Governments need to apply laws in the statute books to revoke land not utilized**

Many LSALIs reviewed appeared to be using only a small fraction of the acquired land (around 5% of 3.4 million hectares). Reasons for land underutilization vary from underestimation of the capital and managerial outlay needed to

cultivate large land areas to land unsuitability for the intended crops. Despite this underutilization, many governments are reluctant to revoke land contracts possibly due to expected long-term benefits and to avoid lengthy legal litigation. Legislation allowing for revocation of land may be needed, or simply revised and clarified, to ensure that parts of acquired land can be withdrawn if not developed within a specified time period. This should serve as a disincentive to land speculation without impairing investors’ long-term development plans.

#### **7) Governments and investors need to fully disclose information on LSALIs**

LSALIs are often shrouded in a cloak of secrecy under the guise of maintaining confidentiality. This results in a paucity of reliable and comprehensive data on these investments. Available data are often incomplete and contradictory. Good quality data are needed to allow for rigorous analysis of the impacts of LSALIs on water resources, livelihoods and ecosystem services. It is only through such analysis that LSALIs can be responsibly and sustainably implemented and also put an end to often inaccurate and sensational media reports.

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