

Are land deals driving ‘water grabs’?

Investors in land often look for land with a high growing potential, which means land with lots of rainfall or land that can be irrigated. In multimillion dollar investments involving irrigation, investors typically want to secure water rights as part of the deal. Motivated by potential revenues from water fees and the prospect of improved agricultural productivity, many African governments are signing away water rights for decades to large investors. But they are doing so with little regard for how this will impact the millions of other users — from fishermen to pastoralists — whose livelihoods depend on customary access to water. Water managers must seriously consider the extent to which water rights should be linked to land in this way before setting a long-term precedent that could compromise sustainable and equitable supply to all users in the future.

Policy pointers

- **African governments are** allocating water rights to investors without considering the impacts on customary users or the consequences for future water management.
- **In some cases, the projected** cumulative water needs of growing large-scale land acquisitions are driving major dam projects to ensure reliable water supplies, with major implications for environments and societies both upstream and downstream.
- **Climate change requires** flexible approaches to allocating water that can ensure sustainable and equitable supply to all users during periods of water scarcity, and proper valuation of increasingly scarce and fluctuating water resources.
- **Water allocation and** large water infrastructure projects will have major, lasting implications for agriculture in host countries and beyond — decisions on these issues must be based on rigorous long-term analysis of fluctuating water availability and competing water demands.

Investors want secure water

Investment in African land is big business. According to the World Bank, about ten million hectares were acquired from governments or local authorities between 2004 and 2009 in five African countries alone.¹

The rise of large land acquisitions — which typically involve long-term leases on state-owned land — has had much attention from media and researchers. But less attention has been paid to water.² Yet water is just as important as land. Both are key resources in African economies, as they are all around the world. In combination, they form the bedrock of our agricultural productivity: all of our farmland crops

depend on a guaranteed supply of water, be it from rainfall or irrigation.

Water is often critical to land deals, especially if these are made in semi-arid regions or with the intention of growing thirsty crops. Countries that have land but little water — such as the Gulf States — are already investing in semi-arid Africa and, like many other investors, are seeking to secure water rights alongside land rights.

Several African countries have already started allocating water rights to foreign investors, albeit in a rather haphazard way, with little standardisation between contracts (see *Contrasting contracts in Mali*).

Contrasting contracts in Mali³

In Mali, investor contracts are regulating water rights in different ways, with different pricing structures and payment mechanisms.

One contract for 100,000 hectares of land signed by the country's Minister of Agriculture in 2008 grants the company unrestricted access to canal and ground water during the wet season, but says the investor must restrict dry season crops to those with low water requirements. Water payments are to be made at a fixed rate per hectare — which can be renegotiated — depending on the type of irrigation used.

Just a year earlier, in 2007, the Minister of Habitat, Land and Urbanism signed another land deal, this time with a sugar cane company. This agreement — part of a public-private partnership development project — includes irrigation of 14,000 hectares of sugar cane. The water for this will be supplied from existing canals at a flow rate of 20 cubic metres per second, which will be paid for through volumetric billing.⁴

Despite being signed by the same government, the two contracts provide for water in very different ways. It is also worth noting that it is the Ministry for Mining, Energy and Water Resources that manages water in Mali.

Many African governments are signing away water rights for decades to large investors

Even when a contract makes no specific reference to water, water may still form part of the deal through, for example, separate licences for water use and payments, or through parallel government investments

in infrastructure such as dams.

For example, Fomi Dam, currently being planned on the upper Niger River in Guinea, will provide water during the dry season for

up to 650,000 hectares of land in Mali's Office du Niger area, where a large number of investment agreements have been made or are being negotiated.

Why allocate water rights?

Motivations behind the increasing allocation of water rights to large investors vary (see Figure). In many cases, it's a question of money both as a revenue stream and as a common denominator of efficiency. Historically, irrigation schemes across Africa have been managed by governments, so the normal practice has been for one part of the state to allocate water for use by another, with little formality or payment.

The arrival of large investors has changed the dynamic. Water has suddenly been brought into sharper focus as a commercial asset. Questions are asked about guarantees, annual volumes and payments for use as part of a package of large investments in infrastructure.

In some cases, the politics are such that a near *carte blanche* is given. Some investors in both Mali and Sudan have been given unrestricted access to as much

water as they need. Belated recognition of the 20-year-old 'Dublin principles'⁵ that "water has an economic value in all its competing uses and should be recognised as an economic good" has, in many cases, pushed governments who want to sell or lease land to investors to rapidly devise water allocation guarantees without due consideration of the implications. Although in many cases, governments are willing to provide water free of charge.

Another significant factor driving the allocation of water rights is the sheer scale of the acquisitions. It is logistically much easier to allocate rights to a single investor for a hundred thousand hectares in a single block than it is to allocate water rights to a hundred thousand small-scale farmers each occupying one hectare.

A third reason for allocating water rights builds on the recognition that state-managed irrigation systems tend to be very inefficient. The World Bank Infrastructure Diagnostic notes that large-scale irrigated agricultural schemes in Africa rarely recoup their costs.⁶ Putting the irrigation challenge to private investors is one way of seeking innovative and cheaper engineering solutions and a more economic agriculture.

Studies of five dams in West Africa⁷ show that in all irrigation schemes, governments are attempting to allocate land to investors who have the capacity to pay water fees, cover agrochemicals and fertiliser costs and raise productivity to meet national targets for food security (from 3–5 tonnes of rice per hectare from smallholders to 8–10 tonnes per hectare from agribusiness).

Downstream impacts

As water is legally state-owned in Africa, governments have the legal authority to allocate water to irrigate land leased by local and international investors. But how does this impact other water users?

When land is assigned to private investors, the deal only impacts directly on existing users of that land. Allocating water to irrigated agriculture potentially affects a much broader range of users. Whether it is reduced surface flows downstream due to upstream water abstraction, or changing groundwater levels, the impacts will be widely felt. Water management potentially affects everyone along the river.⁸

By allocating water to land specifically for irrigation, decision makers have not sufficiently considered how, if at all, water rights can be given for other uses such as riverside market gardening or dry season grazing, which both support livelihoods, or for riverine fisheries, on which thousands of Africans depend.

In many cases, downstream citizens are left with less secure access to life-giving water. For example, the Gibe III dam being built on the Omo river in Ethiopia, is expected to enable 150,000 hectares of irrigation

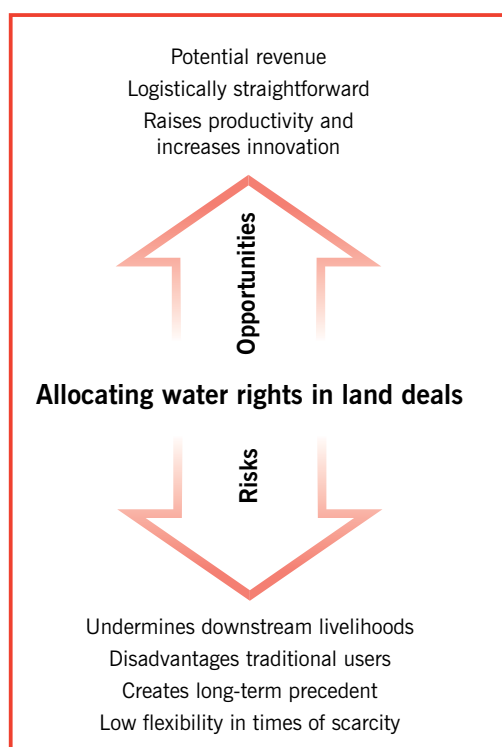


Figure. Opportunities and risks of allocating water rights in land deals.

downstream, on land allocated by government to national and foreign investors. Studies of the impacts of such water extraction on Lake Turkana, at the bottom of the river, on which 500,000 Kenyans depend, suggest that delivering the planned irrigation would lower the lake level by eight metres by 2024. If irrigation demand doubles, the lake level declines by 17 metres.⁹

Similarly, an impact assessment of the planned Fomi Dam in Guinea suggests that water storage in the dam will reduce the floodplain area of the Inner Niger delta in Mali — home to a million people — by 11 per cent (135,800 hectares). Wetlands International estimates the economic losses to local people in the delta at €15 million each year.

Old rights, new rights

As with land, water — and the natural resources it supports, such as rice, pasture, fisheries, flood recession crops and wildlife — has always been exploited and used in Africa. Land may be worthless to an agricultural investor if it comes with no water, but the same is true for traditional users.

Water use in Africa has largely been governed by customary, rather than formal, rights (see *Who owns water in Africa*). The interplay of these is linked to power inequalities between actors. Formal water rights are usually held by investors or government agencies that have the resources and skills to navigate the complex bureaucracy involved in obtaining them. Local people usually rely on local tradition to manage their access rights.

Where customary and formal rights collide, power imbalances clearly favour those holding formal rights that can be defended in court. So how can traditional water users, managed by customary law, group themselves into a recognised legal entity and claim a formal water right?

Protecting customary rights and managing them alongside investors' rights is not easy and raises several questions, particularly around who pays for water and how (see *Water pricing*). In some countries, such as Tanzania, there are laws that allow traditional water users to form collective water user associations and acquire water permits at similar rates to agricultural investors. But take-up is low — only ten per cent of permits in the Ruaha basin belong to such associations.

And elsewhere, even this basic legal provision is lacking. If fishermen on the Niger river or pastoralists in Mali's Inner Niger Delta were to form an association and request a water right, how could it be allocated, and under what legislation?

Next steps

Some proponents of integrated water resource management argue that allocating — and eventually

trading — water rights is critical for managing limited water supplies and maximising economic returns on a scarce resource. They generally agree that the state should initially play a key role in distributing this key national asset. But before deciding how to do that, water managers the world over need to consider three key questions.

First, to what extent should water rights be linked to land? African countries must seriously consider this quandary before they sign too many water rights away as part of land deals and create a long-term precedent that will be hard to go back on.

Second, what rights will other water users have? It is essential that local water rights and needs be fully considered in water allocation decisions.

Third, how will management of water rights (including

Who owns water in Africa?

Across Africa, water tends to be vested in, and managed by the state. In most places, local people have customary uses but do not hold formal rights. For example, fishermen do not hold a formal water right, nor do pastoralists who use floodplain pastures during the dry season. Even if local people have legally protected land use rights, they rarely have formal control over the water that they use, beyond recognition that supplying drinking water is a basic human requirement that cannot be refused.

In most cases, traditional users of water simply accept water rights as a secure tradition and either see no need to formalise them, or are unable to access the process for doing so. The same is not true of incoming investors, who tend to be anxious to codify their rights and formally ensure access to water resources.

Data on water rights are hard to quantify, although in one documented example — the Ruaha basin in Tanzania — some 40 per cent of rights were held by government bodies, 28 per cent by private land owners and only 10 per cent by local water user associations.¹⁰

Water pricing

How much should people pay to use water? Current systems are an awkward hybrid of customary law, payments per hectare farmed, and payments for a water right linked to volume consumed. Customary users generally have free, if insecure, access to water. In some cases, water use is also free for investors. For example, in Senegal one contract specifically states that water is free of charge, which would seem to conflict with national law.

In other cases, investors must pay to use water. Often, as is the case in Mali and Sudan, investors are charged according to how much land is irrigated rather than how much water is consumed.¹¹ This approach makes sense as a stop-gap measure, and it is easy to monitor — and so collect fees — through field visits. But whether it leads to sustainable water management in the long term is questionable. It does not reflect real water consumption and would be very difficult to apply to other uses such as drinking water, grazing and fisheries.

The biggest challenge for water pricing across the board is how to put all the available uses on a time-bound, flexible and equitable footing to effectively manage future scarcity. Other challenges include how to ensure that pricing leads to innovation (and is not simply rent seeking), and how to protect the poorest water users.

their possible withdrawal if resources decline) be made sustainable in the long term? Much has been made of the emerging 'water crisis' in Africa. Rainfall regimes in most countries on the continent are already highly variable and are predicted to become more so in the face of climate change. If most water resources are allocated to irrigated agriculture, how will countries manage competition and scarcity in a dry year? This issue requires a sustained discussion of the pros and cons of the different pricing and allocation approaches available to ensure that water is not wasted. If investors acquiring land have 'grandfather rights' derived from contracts signed today, they will be the first in line in times of scarcity.² At the very least, contracts should be flexible enough to allow for review and renegotiation at intervals that still provide investor security (for example, every ten or fifteen years) or in times of crisis.

In many cases, governments may have been bounced into allocating water rights during negotiations with

investors, when they were initially only ready to lease the land. It is now time for water managers to fully embrace this reality. This means structurally assessing what water management policy might look like in twenty years from now under various scenarios. Perhaps more importantly, it means asking what the implications will be for the traditional water user who doesn't have a long-term lease on thousands of hectares.

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Notes

■ ¹ Deininger, K. et al. 2011. *Global Interest in farmland. Can it yield sustainable and equitable benefit?* World Bank, Washington DC. ■ ² Smaller, C., Mann, H. 2009. *A Thirst for Distant Lands: Foreign Investment in Agricultural Land and Water.* IISD, Winnipeg. ■ ³ Cotula, L. 2011. *Land deals in Africa: what is in the contracts?* IIED, London. ■ ⁴ African Development Fund. 2010. Appraisal report for Markala Sugar Project. ■ ⁵ International Conference on Water and the Environment. 1992. Dublin statement on water and sustainable development. See www.wmo.int/pages/prog/hwrp/documents/english/icwedece.html ■ ⁶ World Bank. 2008. *Africa Infrastructure Country Diagnostic Overhauling the Engine of Growth: Infrastructure in Africa.* World Bank, Washington DC. ■ ⁷ For studies of dams in West Africa — Bagré, Moussodougou, Kompienga in Burkina; Kayanga/Niandouba in Senegal and Sélingué, Mali — see www.iucn.org/gwidams (in French). ■ ⁸ Woodhouse, P., Ganho, A. 2011. *Is Water the Hidden Agenda of Agricultural Land Acquisition in sub-Saharan Africa?* Paper presented at the International Conference on Global Land Grabbing, Sussex, IDS, 6–8 April 2011 ■ ⁹ Avery, S. 2010. *Assessment of hydrological impacts of Ethiopia's Omo basin on Kenya's Lake Turkana water levels.* African Development Bank, Tunis. ■ ¹⁰ See, for example, Van Koppen, et al. 2004. *Formal water rights in Tanzania: deepening the Dichotomy?* International Water Management Institute, Colombo, Sri Lanka. ■ ¹¹ Although there are indications that multilateral banks are seeking to change this in favour of volumetric billing. See, for example: African Development Fund. 2010. Appraisal report for Markala Sugar Project.

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