DRYING OUT AFRICAN LANDS

EXPANSION OF LARGE-SCALE AGRICULTURE THREATENS ACCESS TO WATER IN AFRICA
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Cover Photo: Clearing waste pushed by Golden Veroleum into streams over hundreds of meters, North of Panama town, Liberia, September 2017 © Milieudefensie

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EXECUTIVE SUMMARY

Since the 2007–2008 food crisis, the African continent has been the primary destination of private international investors seeking land for large-scale agriculture. African governments, under the sway and pressure of Western countries and so-called development agencies, have facilitated the lease of land for agricultural plantations. The claimed objective of attracting these investments is to ensure food security and development. However, over the last 14 years, this trend has created a wave of land grabs involving widespread human rights abuses and a devastating impact on the livelihoods of rural communities all over Africa.

Reviewing 15 large-scale agriculture projects in 11 African countries, this report details how, beyond the loss of land, the establishment of large-scale agricultural plantations has dramatically impacted local communities’ access to water—becoming a critical factor in the deterioration of their livelihoods and food security.

The vast majority of rural households in Sub-Saharan Africa are established next to a water source that provides them with water for drinking, bathing, and cooking. Water also constitutes an essential source of food and income as it is used for small irrigation, livestock, and fishing. With access to water already a major challenge for millions of Africans, the expansion of large-scale land deals has a direct impact on livelihoods across the continent.

Loss of Vital Access to Water Resources: The impact on water availability is systemic in all cases reviewed. Projects often lead to the loss of streams and swamps—diverted or destroyed to establish plantations. This directly affects livelihoods with the loss of water sources for basic needs as well as the loss of fish and other products. People living in arid and semi-arid lands are also severely affected by large-scale irrigation projects that dry out the land, reduce available pastures, prevent flood recession agriculture, and cut out traditional routes for people and livestock through fencing and canals.

Irrigation Infrastructure Benefits Investors Not Communities: The lack of irrigation in Africa has often been flagged as a major factor hampering agricultural production and food security. However, in all cases reviewed, when irrigation infrastructure is established, it benefits private firms for large-scale agriculture—often dedicated to export crops—instead of local farmers and communities. Rather than improving food security, irrigation infrastructure, such as dams and canals, routinely undermine people’s livelihoods and well-being.

Pollution of Water Sources: The intensive use of chemicals and pesticides in industrial agriculture resulted in significant pollution in all cases reviewed. Pollution comes from runoff of fertilizers and pesticides used in industrial plantations, from the residues of processing plants, as well as from the biological effluents from workers. The consequence of pollution by hazardous chemicals has multiple impacts—on food security through the loss of important livelihood sources such as fish, on crops and drinking water for livestock; on health of the locals with a rise of illnesses; as well as the loss of biodiversity and other negative environmental impacts.

Loss of Water Disproportionately Impacts Women: Women are forced to spend additional time trekking on more difficult paths when fetching water for their daily household tasks, often up to several hours per day. Women’s caregiving tasks and support networks are also disrupted and may result in young girls being tasked to fetch water instead of going to school.

Failed Promises of Improved Water Supply: Most projects are promoted by government officials and private firms with promises of development, infrastructure, and services. For local communities, and especially women, the promise of a good supply of drinking water is very appealing given they often spend several hours every day fetching water from the local streams and rivers. In all the projects reviewed, these promises were never fulfilled. Instead, they resulted in a deteriorated water access for local communities. In instances where wells were constructed by the company, these often don’t compensate the loss in terms of quantity or quality of the water supplied. In some cases, like Ethiopia, locals were also promised irrigated land in resettlement sites where they would be able to grow crops but the promise did not materialize.

Ineffective Environmental Regulations and Safeguards: Many projects move forward without any concern for their potential environmental impact. While most countries require Environmental Impact Assessments (EIA) before projects can be implemented, many actually move forward before any such assessment is conducted or made public. When performed, many assessments downplay the potential impacts of the projects on water resources and lack proper public participation. Furthermore, there is rarely any mechanism to ensure that mitigation measures are actually implemented once projects are established; whereas government agencies, in charge of safeguarding health and environmental standards, often fail to enforce standards because of the lack of capacity or political will.

Misguided by the World Bank, African Governments Give Away Land and Water: Across the continent, governments, with support and guidance from international institutions such as the World Bank and western aid agencies, are promoting large-scale agriculture schemes. Most African countries have set up Investment Promotion Agencies (IPAs)—one of the instruments established with the guidance and funding of the World Bank—to market available land and favorable water access, with the intent to attract foreign investors for large-scale agriculture projects. This report details how many IPAs are currently advertising tens of millions of hectares of irrigable land and “underutilized” water resources to investors.

Free or Low-Cost Water: In the lease agreements reviewed, companies are often granted unlimited access to water at low
or no cost. Only a couple specify water usage fees but leave unclear how water usage will be monitored and accounted for. Most agreements grant companies the right to use water, construct water catchment stations, dams, boreholes and canals, with no limit or specifications provided. A few do require projects to respect national regulations or the water supply of communities but fail to detail how these clauses will be enforced.

**Private Actors with No Government Oversight:** Companies are often given extensive freedom to develop and cultivate the land at their own discretion, thus allowing environmentally harmful agricultural practices. These case studies show that even when the companies are legally obligated to respect environmental regulations, these safeguards are ineffective because government agencies all too often lack the capacity or political will to enforce them. The fact that it is left to the communities and civil society organizations to document the impact of the projects on water resources demonstrates the failure of many governments to perform their duty to ensure the basic rights of the citizens. Impacted communities and NGOs are forced to mobilize and advocate but given the massive power imbalance, the result is often late and insufficient action to remedy damages done to the livelihoods and the environment.

Whereas granting access to land and water to private investors is justified by the governments as being necessary to promote development and food security, the case studies in the report reveal that the impact of these projects is just the opposite. Investors want reliable access to water sources for the plantations they seek to establish. Some even explicitly acknowledge that they are water investors just as much as they are land investors. Consequently, water rights that small farmers, fisherfolks, and pastoralists have informally held for centuries, are threatened.

Africa has a wealth of natural resources that should be the basis for human development and food security. The way these resources are being put to use, however, only contributes to more hunger and dispossession. That the so-described untapped potential for irrigation of agricultural crops is being put to use—by and for private interests—at the expense of the local communities, demonstrates the fallacy of the development paradigm adopted by governments and international institutions.

The climate crisis already threatens access to water for millions of people and it will continue to escalate. Yet, in the face of dire projections of water insecurity, corporations continue to receive preferential access to water to further their profits. Access to water is a basic human right that has to be respected, preserved and prioritized over granting resources to corporations for large-scale projects that have a long track record of social and environmental devastation.
INTRODUCTION

Since the 2007-2008 food crisis, the African continent has been the primary destination of international investors seeking land for large-scale agriculture. Encouraged by international institutions such as the World Bank and by a number of Western countries and international initiatives, many African governments have facilitated the lease of land to international investors for agricultural plantations. The claimed objective of attracting such investments is food security and development. Over the past 14 years, however, this trend has created a wave of land grabs, dramatically impacting livelihoods of rural communities all over Africa. These land grabs and widespread human rights abuses faced by communities resisting the takeover of their land has been well documented by the Oakland Institute and several other organizations.

A 2011 briefing paper, Land Grabs Leave Africa Thirsty, alerted that in the rush for cheap agricultural land in Africa, access to water was of the utmost importance to investors. The brief showed how the land grab taking place in Africa was accompanied by a major “water grab.” The brief was largely focused on land deals and projects that were in their early phase. Ten years or more into the implementation of a number of projects, this report reviews the impact of 15 large-scale agriculture projects on local communities’ access to water in 11 African countries. The report is organized in two sections—one presents the case studies and the second draws a number of important lessons from the cases to inform policy makers and other actors.
The Société Camerounaise de Palmeraies (SOCAPALM), controlled by Luxembourg-based SOCFIN—a subsidiary of the Bolloré Group—has almost 80,000 hectares of oil palm plantations in Western Cameroon. Its operations have triggered local resistance because of the loss of land as well as decades of surface and groundwater pollution, culminating in a groundbreaking civil lawsuit by NGOs against the company.

One of the key environmental issues is the run-off of fertilizers, chemicals, and oil palm residue into water sources used by local inhabitants for cleaning and drinking water. According to Synaparcam (Synergie Nationale des Paysans et riverains du Cameroun), a local NGO representing farmers and local residents, SOCAPALM annually dumps the untreated contents of septic tanks from the toilets used by plantation workers into the waterways. This pollution has led to an exponential increase in the number of people that fall victim to waterborne diseases. Locals also assert that the pollution has resulted in the disappearance of fish and shrimp from the river.

In communication with the NGO FERN, which exposed the company’s wrongdoing in a 2018 report, SOCAPALM denied claims that the water was polluted. According to the company, the effluents entering water bodies are merely organic matter and necessary precautionary measures have been taken, such as building lagoons, to counter the concentration of the organic matter. The company insisted that it fully complies and respects the principles set out by the ISO 14001 certification for a proper environmental management system. Yet, not providing treatment of the wastewater is a flagrant violation of the Cameroonian law, specifically the 2011 Decree No. 2001/165/PM, which stipulates methods for the protection...
of surface and groundwater from pollution, as well as the Framework Law on Environmental Management and the Law No. 98/005 of April 14, 1998.

In 2010, the French NGO Sherpa filed an official complaint against the Bolloré Group, SOCAPALM, and several SOCFIN subsidiaries before the OECD National Contact Point. The list of complaints included the restricted availability of natural resources as well as SOCAPALM’s failure to adequately treat water pollution and the lack of transparency about potential environmental risks linked to its operations. This was followed by several months of mediation, that resulted in Bolloré committing to an action plan. However, in 2014, the company unexpectedly announced that it will not implement the action plan and instead, delegated the responsibility to SOCFIN. In May 2019, Sherpa, along with other European and Cameroonian organizations initiated legal action, asking a French court to order the Bolloré Group to respect its commitments to residents and workers of the SOCAPALM plantations.

In November 2021, recognizing that the communities’ demands had still not been addressed, 145 villagers initiated additional legal action in a French court against the Bolloré Group. According to their lawyer, SOCAPALM “inflicts harm on a daily basis” to these villagers and the exploitation of palm groves condemns access to land and burial sites and pollutes the water.
The Plantations et Huileries du Congo (PHC), Democratic Republic of Congo

The Plantations et Huileries du Congo (PHC) exploits a concession of 100,000 hectares for oil palm plantations on land seized by Belgian colonial authorities in 1911 from the Lokutu, Yaligimba, and Boteka communities in the Democratic Republic of Congo (DRC). Previously owned by the Canadian firm Feronia until its bankruptcy in 2019, PHC is today controlled by an investment management firm, Kuramo Capital Management (KCM), which was backed by several European development banks. KCM’s investors include US universities, pension funds, as well as the Bill & Melinda Gates Foundation.18

In addition to widespread human rights abuses perpetrated by the local police and security guards of the company, Human Rights Watch, in a 2019 report, documented the significant environmental impact of the plantation. Untreated industrial waste, including the dangerous effluent substances from the palm oil mill and diesel fuel have contaminated drinking water. At the Yaligimba plantation, hazardous waste is thrown into the narrow channel beside the Mindonga workers’ settlement. From there, the stream of effluents flows five kilometers away to a natural pond that women and children use to bathe and wash clothes and cooking utensils. From the natural pond, the effluents continue to flow through a channel to the Loeka stream, which constitutes the only source of drinking water for several downstream villages, including Boloku. In November 2018, after locals observed oily waste in their waters and a change of water color, Boloku’s customary leader filed a formal complaint with PHC alleging the stream was polluted by the company’s waste discharges. The leader told Human Rights Watch: “We don’t want to drink it anymore.” Months after the letter was filed, the company had still not taken action. Even though the company has installed or rehabilitated 70 boreholes for their workers and the wider community, this number is very low for an area covering more than 100,000 hectares and 100,000 people.
The only mitigation strategy of the company is to rescue the content of palm oil in the discharge—a highly insufficient measure. Feronia’s former CEO, Xavier de Carnière, claimed that the effluents do not have a harmful environmental impact, and instead, can even have a positive impact, as they can be used as fertilizers for smallholder farms.31

Human Rights Watch’s analysis of the nine different pesticides used by PHC found that half of the ingredients used in these products are considered hazardous by the World Health Organization (WHO) and that three of the pesticides are considered cancer-causing by the WHO and other international organizations. Although the company does not measure the volume of effluents and released contaminants, workers reported that 200 gallons (about 800 liters) worth of pesticides is sprayed every day. Effluents and pesticides threaten biodiversity and local ecosystems, including fish, as well as peoples’ health.

The Congolese authorities have failed to hold PHC accountable and subject it to domestic environmental regulations to ensure a safe water source for locals. In 2016, an employee from the Congolese Agency for the Environment (ACE) inspected the Yaligimba plantation where he observed that the “effluents are poorly handled, their pipeline dumps them upstream from where the population draws water for their domestic activities.” Still, ACE did not sanction the company or take action to remediate water sources and approved PHC’s social environmental impact assessment reports in 2017. In the reports, the company assured that they would implement industrial waste treatment systems at their plantation mills. Yet, research by Human Rights Watch in 2019 showed that the untreated waste discharge situation had not improved.

The company reportedly pulls strings at higher Congolese governmental levels, preventing authorities from safeguarding the interests and livelihoods of the citizens. In March 2018, the provincial coordinator of the Lisala Environment Ministry planned to send three environmental inspectors to conduct an in-depth monitoring analysis. Hours before the inspection was to take place, the national environmental minister ordered the provincial coordinator to withdraw from the plantation immediately. According to the provincial coordinator “the company appealed to the environment minister to avoid the inspection.… We couldn’t get inside.”32

International development banks financing the project are complicit in the company’s wrongdoings. CDC, the UK’s development finance institution, merely appealed to Feronia to address the effluent treatment ‘as soon as practical’ and was very considerate of the corporation’s financial constraints that delayed any action against untreated discharge. To justify this lenient stance, the CDC further claimed that national Congolese law does not mention any limits on palm oil mill effluents and that the effluents “might be harmful if drunk,” but that they are “strongly diluted after discharge.”

“A leak in the Lokutu mill pipeline releases effluents into the Congo River
© 2019 Luciana Téllez / Human Rights Watch

“The water had oil, it was mixed with diesel. It was not a small quantity. It was everywhere in the water. We see that the factory water enters our creek. It wasn’t just one time… If they work hard, it’ll return. You can smell the fuel. When it’s there, you need to wait a week until you can use [the water] again. We use the water to cook, for drinking. We also put cassava in the water [to soften] … We have 103 houses here. Of them… we all use the water from Loeka. … We don’t have pumps here, there are no sources other than Loeka.”

—38-YEAR-OLD BOLOKU RESIDENT DESCRIBING THE POLLUTION OF THE LOEKA STREAM TO HUMAN RIGHTS WATCH, FEBRUARY 201930
The Bukanga Lonzo Agro-industrial Park, Democratic Republic of Congo

The Bukanga Lonzo agro-industrial park was established in 2014, about 260 kilometers southeast of the DRC’s capital Kinshasa, through a public-private partnership between the Congolese government and the South-African company Africom Commodities. With US$200 million of public funding, the agro-industrial park was expected to produce corn and other agricultural commodities on 80,000 hectares of land. The agreement granted the park the right to construct boreholes as well as water catchment stations along the Lonzo tributary to create a supply network for irrigation and drinking water. The operations ceased in 2017—three years after its launch—because of negligent management, embezzlement, and corruption.

Land acquisition for the park took place in the most deceitful fashion and did not follow legal requirements that should have led to proper assessments and consultations. Locals were misled into giving their land away by signing documents in return for a delivery of a truckload of basic goods and commodities. Once the project was established, and even after it stopped operating, numerous human rights abuses were committed by police forces on locals who “trespassed” on their own land.

The project is a prime example of false promises made to the local communities regarding the supply of drinking water, as well as the adverse consequences of environmental and water pollution due to agrochemicals used in industrial farming. The creation of the agro-industrial park involved the construction...
of extensive infrastructure, including irrigation systems. In the project run-up, Africom promised that this water infrastructure will be made accessible to benefit local communities. The promise of drinking water was used as a promotional narrative to emphasize company’s corporate social responsibility. On its website, the company said, “contractors have established an intricate and effective system to allow for irrigation on the uneven terrain and to supply the villages with electricity. This enables the irrigation system to pump water to the fields where it will be required for superb crop yields and also for household use.” Yet, the villages in the vicinity never got access to water—either for irrigation or for household use.

For locals, especially women, living in the villages surrounding the park, the promise of a good supply of drinking water was appealing given they often spend several hours every day fetching water from the local streams and rivers. Water has then to be carried back to the villages, which represents strenuous work mostly done by women. These promises were never fulfilled with water only supplied to the park itself. “We were fooled,” lamented Chief Mbuma Mpawa of Mwala Banku in an interview with the Oakland Institute researchers in 2018.

Along with the broken promises of provision of water and other services to adjacent villages, the plantation also posed threats to local ecosystems and water bodies through pollution and health hazards. The company’s financial records indicated a massive purchase of a multitude of chemical agricultural inputs, including close to 60,000 liters of glyphosate—a health hazard and environmentally harmful chemical. Due to the process of aerial spraying of chemicals as well as surface water run-off into local waterways, drift into neighboring farmland and streams was likely, with potential health hazards as well as crop and livestock damages. Also, the Lonzo and Kwango rivers that surround the industrial park, are a critical water source for fishing, drinking, bathing, gardening, and other household water uses. The unchecked pollution of these rivers constitutes a major health threat and undermines local livelihoods.

Though the project was stopped in 2017, land was not returned to the local communities by the government of DRC. Instead, it has desperately looked for foreign investors to take over the agro-industrial park.
Sugar and Cotton Plantations, Awash Valley, Afar, Ethiopia

Over the past five decades, over 400,000 hectares of land in the Afar Region have been seized by the government for large-scale sugar and cotton plantations and other purposes. In this relatively arid region in the North East of Ethiopia, the plantations relied on the establishment of irrigation schemes on the Awash River. Established on the lush banks of the river, these plantations had a massive detrimental impact on the livelihoods of pastoralist communities—resulting in loss of pasture, increased conflicts, and hunger. The establishment of plantations and of the Awash National Park reduced pastoral grazing areas by 60 percent while it failed to contribute to local or national food supply.

Prior to the plantations, local pastoralists coped with the variable geophysical and weather conditions of the region through their mobility, allowing them to adapt to the environment and maximize available resources. During the rainy season, they used the sparse grazing land further away from the valley, but during the dry season they depended on the more condensed grazing land near the banks of the Awash River. Locals used a mixture of permanent plots along the river and shifting land cultivation to ensure food security. However, in the 1970s, flexible floodplain grazing was halted by upstream dams and cotton and sugar plantations that controlled the river flow tightly. The increased vulnerability to drought was made evident during the 1972-1973 famine, when as many as 200,000 people (roughly 25-30 percent of the Afar population) died. As with recurrent food crises that have occurred every few years since, this disaster was only partly due to limited rainfall, as the lack of access to grazing land resulted in the inability of pastoralists to cope with drought. The rise in food insecurity and vulnerability among Afar pastoralists has created a growing need for relief aid to the region. In 2016—as many times previously—Afar was a major recipient of emergency relief for people (food aid) and animals (emergency forage, destocking, etc.).

In addition to the loss of pasture land, the irrigation schemes impacted human and animal health, due to water contamination by the sugar processing plants and plantations, and increased risks associated with malaria and schistosomiasis. The use of chemical pesticides, insecticides, and herbicides in cotton and sugar production, along with the accompanying industrial waste from the factories, significantly polluted and degraded the Awash River. With pastoralists and their livestock dependent on the river for drinking water, this pollution gravely endangered both people and animal health.

Furthermore, deprived of access to the Awash banks on which they depended for dry-season cattle grazing, the Afar pastoralists were forced to move long distances in search of pasture and water. This aggravated pre-existing conflicts between different ethnic groups in the region. Afar pastoralists have been forced to compete for resources and grazing land with neighboring pastoral groups such as the Issa-Somalis and Oromos [Karrayyu]. Such conflicts have cost many lives along with large numbers of animals lost through cattle raiding, while further shrinking the availability of pasture for security reasons. Studies have shown that shrinking land and water resources and the push for the sedentarization of pastoralists in Afar led to increased land degradation (resulting from cattle concentration in small grazing areas) and food insecurity. Today, recurring weather variations and food crisis continue to take a high toll on Afar pastoralists, who are deprived of their traditional strategies to cope with drought, such as access to dry season pasture, mobility and herd management. Despite large-scale investments in water infrastructure, economic returns have failed to come to the local communities—instead control and access of water resources has been moved from agro-pastoralists to agribusiness and the government.
Kuraz Sugar Development, Lower Omo Valley, Ethiopia

In the last decade, Indigenous groups—predominantly agro-pastoralists, hunter-gatherers, and flood-retreat cultivators—in the Lower Omo Valley have faced increased threats with the Ethiopian government pushing forward its plans to “transform” the region. In 2006, the government embarked on the construction of the Gibe III Dam to increase Ethiopia’s energy potential and enable the development of large-scale irrigated plantations. By 2011, the Kuraz Sugar Development Project (KSDP)—a massive sugarcane plantation project with five associated factories—was designed on over 245,000 hectares located downstream from the dam. The export potential of both energy and sugar was a major factor in the US$14 billion investment that Ethiopia made in building of the dam. Research by the Oakland Institute shows that the project seriously undermined the livelihoods of the Bodi, Mursi, and Northern Kwegu tribes.

Plans for the Gibe III Dam date back to the 1996 African Development Bank-commissioned Omo-Gibe Masterplan. With the completion of the dam wall and the filling of the reservoir in 2015, the annual flood of the Omo River, a key element of the Indigenous economies for thousands of years, came to an end. With the end of the Omo River’s annual flood, the scheme decimated local livelihoods for many of the more than 200,000 subsistence agro-pastoralists that depend on flood cultivation and grazing. Promises of the government and the dam builder, the Italian firm Salini, of an artificial flood of ten days per year never materialized.

“In the coming five years there will be a very big irrigation project and related agricultural development in this zone. I promise you that, even though this area is known as backward in terms of civilization, it will become an example of rapid development.”

—FORMER PRIME MINISTER OF ETHIOPIA MELES ZENAWI, 2011

Kara parent and child sitting along the bank of the Omo river, Ethiopia © Kelly Fogel
As a result, the Mursi have more permanently settled in the central plains of their land—increasingly dependent both on the fickle rains for bush cultivation and on the sale of their cattle to buy grain. The Mursi were also promised irrigated land in resettlement sites where they would be able to grow crops but the promise did not materialize, causing hunger for an already vulnerable population.

The Mursi recall the promises made by the government: “‘Now, we are going to give you water,’ they said. ‘We will put it in a pipe and you can pour it on your crops. We will bring water to the cattle, so they can drink...The grain will ripen even during the dry season...You will change and become rich people!’”

In other places, the Mursi were required to dig their own irrigation canals, with no help from the government. “We said that [the resettlement site] is difficult, the work is very hard. We are supposed to dig the canals and there is no shade to sit in. We work in the sun all day. Our hands are heavily blistered from digging irrigation channels all the time. We said leave it. We will cultivate in the bush. If there is rain the sorghum will grow. If the rainy season is dry, then we will be hungry and have to buy grain. We will sell cattle and buy grain.”

The Gibe III dam also impacts the adjacent Lake Turkana, which receives more than 80 percent of its inflow from the Omo River. A 2010 study showed that the river level will be lowered by 20 meters (half of its original volume) and double the lake’s salinity level. In 2018, the United Nations cultural agency (UNESCO) put the lake on its list of endangered World Heritage Sites because of the “disruptive effect” of the dam and irrigation schemes in Ethiopia.

“That’s how they tricked us. They took the Omo River waters and channeled them. They then divided out cultivation sites for the Mursi and poured water on the land. The corn ripened. ‘This is very good,’ we said. When we wanted to plant again they bulldozed the crops. ‘The land will be cultivated by its owner—the government,’ said the officials.”

—MURSI ELDER, MAY 2018
Saudi Star Rice Plantation, Gambella, Ethiopia

Saudi Star Agriculture Development PLC, a company owned by Saudi-Ethiopian billionaire Mohammed Al-Amoudi, was set up in 2009 with a 50-year lease on 10,000 hectares to operate a rice plantation near Abobo, along the Alwero River in Gambella. Though Ethiopia faces chronic food insecurity, the plantation was established primarily for exporting rice to Saudi Arabia.

The lease agreement granted Saudi Star the right to build “infrastructure such as dams, water boreholes, power houses, irrigation system,” following submission of the proper permits. An irrigation scheme taking water from the Alwero River (which is already dammed upstream of Saudi Star’s lease area) was then set up to irrigate the rice. 30 kilometers of cement-lined canals were built to move water from the river to the fields, with plans to build a new dam to increase the amount of water available to the plantation.

As documented by the Oakland Institute research, several villages, including Oriedhe and Oridge, within the Saudi Star lease area were relocated across the Alwero river to Pokedi. This was part of the villagization program carried out by the Ethiopian government to relocate some 1.5 million Indigenous people from various areas of the country. The Alwero river was key to the livelihoods of the local communities as it was used for fishing, transportation, as well as a water source for households needs. The village farms along the riverbank produced maize using shifting cultivation but these areas were cleared by the company. Prior to the relocation of the villages, no community consultation was carried out by Saudi Star or the government. Villagers only came to know that their land had been given to investors once the bulldozers began clearing the area. When they expressed concern to the government about the clearing of their ancestral lands, officials reportedly replied, “You don’t have any land, only government has land.” No social or environmental impact assessment was done, so the socio-ecological consequences of the project were unknown to the locals and downstream users. Although many villagers did not want to resettle, they felt compelled to move by the government and feared arrests if they resisted.

In April 2012, a site where the irrigation canal was being constructed was allegedly attacked by locals killing four Ethiopians and one Pakistani citizen while inflicting injuries on eight persons.

A scientific study published in September 2021 highlights a significant consequence of the Saudi Star rice plantation on the health of the local population. It found that “the risk of malaria transmission was remarkably higher in the irrigation sites compared to the non-irrigation sites” with a 10-fold higher presence of the anopheline mosquito population density observed in areas close to the irrigation sites compared to the faraway clusters.
OLAM Oil Palm Plantations, Gabon

The Singapore-based firm OLAM has cultivated oil palm on 202,000 hectares in various areas in Gabon since 2011. Villages like Mbadi, Sanga, Mboukou, Rembo, and Mounigou were especially hit hard by the large-scale buildout of OLAM’s industrial plantation. Despite local resistance, the company expanded its oil palm crops up to 200 meters from villagers’ farms—almost fencing in the villages. This creeping expansion is particularly worrisome in the face of the extensive application of dangerous, bioaccumulating hazardous pesticides used on the plantations that travel to the surrounding community land, thereby contaminating smallholder farms.

According to the World Rainforest Movement (WRM), the village of Sanga faces a very severe situation because its main water source, located about 50 meters from the houses, is now polluted with the encroachment of the plantations. To address the villagers’ complaints, OLAM constructed a well, located close to the polluted water source and fed by the same contaminated water table.

People use the water from swamps or “marigots” for various livelihood purposes, including drinking, fishing, and sanitation. The expansion of the plantation has resulted in water

“Rivers buried along with their fish stocks, nonexistent jobs, increasing insecurity, dispossessed lands, contaminated water, and villages whose young people have abandoned them: Such is the daily reality of people there.”

—WORLD RAINFOREST MOVEMENT, JULY 2017

“Here we are in this OLAM palm grove, on land that has been filled in, where there used to be a river with fish and all kinds of fish products that we could consume; but as you see, this river no longer exists. OLAM destroyed it.”

—ELDERLY LOCAL WOMAN INTERVIEWED BY WRM, FEBRUARY 2017

The main water source left in Sanga village after all other sources were either destroyed or contaminated by OLAM plantations in Gabon © Winnie Overbeek, WRM
“The water is not good quality anymore, the body itches and we do not eat [the fish] any longer; we prepare it by boiling it and when we fish, the fish [caught] has no flavor or a nice taste anymore, and this has been happening since OLAM’s activities started on our lands.”

—WOMAN FROM BOUNGOUGA VILLAGE DESCRIBES THE WATER SITUATION TO MUYISSI ENVIRONNEMENT AND WRM, 2019

Lastly, the pesticide-polluted water has led to the proliferation of algae, hindering the penetration of light and oxygenation of the water. When the algae eventually die, the matter is degraded into aerobic microorganisms that consume a high amount of oxygen. This leads to the scarcity of vital oxygen in the water ecosystem, making the maintenance of fish populations impossible. This has impacted diets of the local villagers, especially fish as their source of protein.

In September 2018, local communities sent a complaint letter to OLAM as well as local authorities and various governmental ministries. The letter highlighted the massive environmental destruction caused by the plantations and specifically lamented the disastrous impact on the local water bodies. The letter states, “The environment of the community is being destroyed in front of their eyes. And the previous environment that protected and nourished the communities has become hostile and will only be a vague memory for future generations.” It called for an urgent solution to the loss of water sources for the villages.

The company installed some water pumps but locals consider the response inadequate. The two pumps that were installed in the village of Moutambe Sane Foumou are not fully functional and the water coming out of them is not drinkable. Célestine Ndong, a local villager, dismissed the promised benefits, “In these supposedly win-win contracts, I would like to know what our communities are gaining. On the contrary, we are losing and even dying a slow death.”
Golden Veroleum Oil Palm Plantations, Liberia

Singapore-based Golden Veroleum signed an agreement with the Liberian government in 2010 to develop an oil palm plantation on about 220,000 hectares in the remote and densely forested Western region of the country. The memorandum of understanding allowed Golden Veroleum “to sink boreholes, dam streams, build reservoirs and take and use water found within the Concession Area free of charge,” provided their activities did not “materially deprive any tribes, villages, towns, houses or watering places for animals of a reasonable supply of water.”

However, NGOs and communities have opposed Golden Veroleum’s operations around deforestation and other practices, which have had various direct and indirect impact on water resources.

In 2012, members of the Indigenous Butaw Kru tribes and other local communities sent a formal letter of complaint to the Roundtable on Sustainable Palm Oil (RSPO) about the harmful practices of the corporation. The letter, prepared with support from the local law firm, Green Advocates, details a number of issues with the company: “Golden Veroleum’s land clearing and planting operations have led to the damming of our creeks and streams, filling in of our swamps, destruction of grave sites and burial grounds, destruction and pollution of our drinking water sources and the forceful displacement of our people without adequate compensation.”

The damming, diverting, or polluting of the wetlands and swamps has had severe socio-ecological consequences. These ecosystems provided many valuable food sources that have been lost, including fish, crabs, snails, clams, and crayfish with high protein, as well as palm wines, wild fruits, berries, and palm oil. Furthermore, the swamps also provided key resources for building and construction materials, such as straws and twigs for roofing. Several roots, barks, leaves, stems, and flowers also served as medicinal plants. The deterioration of water quality and decrease in water availability due to the damming of swamps impacted food production. According to the communities, “the ground is no longer fertile, so yield is much lower and cultivating for subsistence is much more difficult now.”

All of the benefits of the swamps and wetlands that the locals enjoyed for centuries were lost. “All of the swamps within our...”
communities have been filled in to make way for oil palm. We barely have fuel wood to cook our meal and some of our people now have to purchase charcoal for cooking our food.”

The resistance to the plantation has been met with forceful state oppression. The complaint to RSPO stated: “We are living under constant fear of threats, harassment, intimidation and arrest because we have refused permission for Golden Veroleum to take away our customary lands left to us by our ancestors.” Benedict Manawah, a community leader, was illegally arrested and detained by police forces in Butaw in August 2012 after raising concerns about the land and water grab. Manawah was also attacked on his way to a community meeting and sustained injuries. After he was released from the hospital, Golden Veroleum denied involvement in the incident. Since then, four other outspoken community leaders were also arrested by the police.

In February 2018, after an independent review to address the complaint, RSPO Complaints Panel found that the company had failed to comply with RSPO’s principle of Free, Prior and Informed Consent (FPIC) when establishing and expanding plantations. Following the publication of the panel’s findings, the company announced in July 2018 its withdrawal from RSPO and “a new sustainability action plan aimed at reviewing the company’s sustainability journey and addressing ongoing criticism of the company’s performance especially in relation to community engagement.” In February 2021, another investigation following a complaint by Friends of the Earth and the Liberian NGO, Sustainable Development Institute (SDI), confirmed the wrongdoings of Golden Veroleum. The investigation led by the High Carbon Stock Approach (HCSA), a mechanism set up to assess the compliance of palm oil companies with their “no deforestation” commitments, found that the company had cleared rainforests and ignored community rights as it expanded its plantation operations. The investigation found “ongoing, clear, and egregious breach” of its rules on Community Grievance Mechanisms and Remedy and that “little concrete progress” had been made in addressing the RSPO’s 2018 findings.

In August 2021, James Otto, Program Manager for Community Rights at SDI, said “GVL is treating Liberian communities like dirt and the worst thing is that they get away with it. [GVL] takes the land at very low cost, exploits workers and communities and continues to deforest. The Government of Liberia is not doing anything about it, so communities don’t know anymore where to go for justice and redress.”
Large-scale Agriculture in the Office du Niger, Mali

Since 2009, several large-scale land acquisitions have taken place in Mali in the large riverine Delta of the Office du Niger, an irrigation scheme established under the French colonial rule, which offers irrigated land to private firms at advantageous conditions. In a 2011 report, the Oakland Institute and the Coordination Nationale des Organisations Paysannes (CNOP)-Mali, alerted that by the end of 2010, over 500,000 hectares of fertile land had been leased or were under negotiations in Mali, whereas the government was hoping to expand this amount to over one million hectares.123

Farmer organizations and local communities have been very critical of the government policy to offer access to vast amounts of irrigation water from the Niger river along with large swaths of land to corporations while hundreds of thousands of farmers live in the area. Hundreds of farmers have been routinely evicted or arrested over the years when unable to pay the water fees collected by the Office du Niger, often unaffordable for resource-limited farmers.124

An example of the kind of deals the government of Mali has made with domestic and international investors is the 50-year lease signed in 2010 with Moulin Moderne du Mali (M3) for 20,000 hectares of land.125 The agreement granted M3 “a permit for the use of surface water as well as groundwater according to the needs of the project,” and the ability to construct infrastructure such as water pumping systems, canals, and water supply pipes.126 The fees for using water were based on the type of irrigation and area of land. M3 agreed to pay 2,470 F CFA (US$5) per hectare per year for spray irrigation and 67,000 F CFA (US$140) per hectare per year for gravity-fed irrigation.127

For the past ten years, local communities from 35 villages have been protesting the loss of their land to the firm. In addition to the loss of their farmland and the destruction of their livelihoods, the lives of the villagers from the villages of Sanamadougou and Saou have also been impacted by the 8.5 kilometers-long canal built by the company. The canal separates the two villages, undermines the ability of people
to move, and created hazards like the drowning of villagers, such as the death of 31-year-old Fousseyni Coulibaly from Sanamadougou. Protests by the locals against the loss of their land have been met with violent repression—beatings by police forces, dozens of arrests, with villagers kept in jail for four to six months in many cases.

Mali is a mostly arid country with a population of over 20 million people, who remain largely rural and faced with chronic food insecurity. Yet, several of the investments initiated in the Office du Niger region were for agrofuels instead of food. Moreover, Mali’s Investment Promotion Agency (API) ensured favorable conditions to investors and officially prioritized export crops. In 2011, the API advertised that agricultural land was available for lease to investors at a “symbolic price” and that “export-oriented firms (exporting at least 80 percent of their production) would benefit from 30 years of exemption rights and taxes.”
Wilmar Oil Palm Plantations, Nigeria

Wilmar International acquired 30,000 hectares of land for oil palm plantations in Southeastern Nigeria in 2010. Based in Singapore, Wilmar is owned by a number of prominent shareholders, including the Kuok Group, the American multinational food processing and commodities trading corporation Archer Daniels Midlands, as well as the investment management firms BlackRock, Vanguard, T. Rowe Price and Van Eck Associates. As documented by Friends of the Earth (FOE), this land was taken from local communities without their free, prior, and informed consent, bypassing community consultation, and without conducting proper environmental and social assessments. These issues led to several formal complaints to the RSPO in 2012 and 2013.

FOE’s research documented how Wilmar’s operations dramatically impacted both the water quality and quantity in the area with land clearing, deforestation, soil compacting, and the destruction of water sources, which prevents the infiltration of surface water into aquifers.

Representatives of multiple villages have reported lower water levels, both in aquifers and in surface water bodies, to the extent that rivers are starting to dry up and wells become non-functional. According to a local chief Ata Obo, the once plentiful river Ubot has almost dried up since Wilmar started operations in the area, whereas a borehole constructed by Wilmar was not functional. Villagers from Ibogo reported that their drinking water sources were no longer safe—leaching
of chemicals by the plantation’s activities has contaminated the water “so farmers cannot drink the water when they come out to the field and farm.” In response, villagers tried to dig alternative water sources, with limited success. A local youth leader lamented, “Hundreds of people use this source, so people have to get up at 4 AM to be able to be the first person to fetch the water.”

In 2011 and 2012, as the plantations were being established, Wilmar was named the world’s least sustainable company by Newsweek.

“Wilmar has destroyed the water. We do not have enough water now. Wilmar keeps on promising they will bring us water.”

—FIDELIS OKOR ELOPE, MBARAKOM VILLAGE
Senhuile-Senéthanol, Senegal

In 2010, the Italian agribusiness company Senhuile-Senéthanol signed a 50-year lease with the government for a 20,000-hectare plantation for various crops in the Saint-Louis region of Senegal. Initially planned in Fanaye, the project operation was moved to the forest and wetland preserve of Ndiall after violent protests against it led to two deaths and many wounded. The project took land away from 37 villages in the areas of Ngnith, Diama, and Ronkh, whose population depended on the natural resources of the Ndiall reserve for their pastoralist livelihoods.

The environmental impact study conducted in 2013 by the company noted the significant water needs of the local population and stated that as part of its social policy, the project planned to develop retention basins for domestic water use. In reality, however, the impact was disastrous on the adjacent community’s ability to access water. In addition to the loss of pasture and bush lands that were essential to the local communities, the project also obstructed their access to water. The pathways between the villages and water sources were blocked with barb wires and security guards. Locals were forced to spend dramatically more time and energy on gathering drinking water. According to the interviews conducted by the Oakland Institute researchers, some residents have to walk more than 10 kilometers every morning to reach the nearest water body. Amadou Sow, chief of Thiamène Beli Bambi village, reported that the plantation “asphyxiates and kills our activity and our villages... In 15 villages, the pastoralists have started to dust their suitcases to go to other zones.”

Senhuile’s project also required a massive amount of water for irrigation, which was to be drawn through a canal from the Lac de Guiers, the only water reservoir in the lower Senegal.
River basin. Located in an already geophysically restricted area of the semi-arid Sahelian zone, the basin supplies significant share of water to several cities, including 65 percent of the water consumed in Dakar. Apart from supplying urban centers, the basin is used extensively by adjacent rural communities in Ndial as a freshwater source through the nine to ten months of dry season. In the run-up to the project, there were warnings about various potential water problems, including chemical pollution, eutrophication (excessive growth of algae due to high concentration of phosphates and nitrates), and salinization. Nonetheless, the plantation was established without proper environmental impact analysis, with impact assessment conducted in 2013, after the commencement of the project.

Another tangible and immediate negative consequence of water irrigation infrastructure for local communities was occurrences of lethal incidents due to the open water canals built for the irrigation. In June 2013, three children drowned after accidentally falling into the canals. It is not known whether these incidents have been officially followed up with an inquiry of the responsible parties.

Over ten years after the establishment of the project, and multiple changes of owners and activities, 37 villages are still calling for the return of their land.
Since 2011, SOCFIN Agricultural Company Sierra Leone Ltd (SAC), a subsidiary of the French Bolloré Group, has operated an oil palm plantation on 12,000 hectares of land in the Sahn Malen Chiefdom, in the Southern Province of Sierra Leone. The 2011 memorandum of understanding between the Government of Sierra Leone and SAC states: “there will be no restriction on the volume of water extracted by [SAC] from rivers, other watercourses, wells and boreholes.” The agreement further stated that water will be paid at a mere 3 Leones [US$0.0007] per cubic meter, without any specification on how water use will be measured and charged.

The Sahn Malen Chiefdom has three major rivers: the Malen, the Sewa, and the Waanje as well as many small streams, lakes, and swamps. All these water sources were used by local communities for fishing, bathing, washing, and drinking.

The plantation’s extensive usage of chemicals and fertilizers has drastically worsened the water quality for local communities. In 2015, River Malen was named among the worst river bodies in Sierra Leone due to its proximity to oil palm plantations.

The swamps used in the plantation area are now unsuitable for subsistence cultivation. The contamination of water bodies through the use of nitrogen or phosphorus substances blightens the crops, directly threatening the livelihoods of local communities. Furthermore, locals point to poor water quality, with severe impacts on their food supply—particularly fishing, a primary protein source, which has become impossible. In 2013, impacted communities wrote a letter of complaint to the Environmental Protection Agency of Sierra Leone (EPA), alerting it about a large amount of dead fish in the waters. They also contended that River Malen was no longer an adequate drinking source. A subsequent EPA investigation into the matter confirmed chemical pollution of the Malen. Despite demands to make the report public or share it with the community, the EPA withheld the report details, which enabled SAC to claim that the recorded pollution was unrelated to their operations, and instead, caused by fishermen. The company was never held accountable but in response to the loss and pollution of rivers and water sources, built and/or repaired close to 100 wells in the area between 2011 and 2017.

An independent monitoring of the water quality and chemical analysis is crucial to hold the company accountable to national and international standards, including for the water provided through the wells. The EPA, however, lacks the capacity to perform its duties. A 2017 mission of the UN Special Rapporteur on hazardous substances and waste reported that “more robust data is required than what is currently provided under approval and monitoring procedures to appropriately assert the safety
situation of workers, communities and the environment. For example, while business enterprises need to disclose in their quarterly reports to the EPA what pesticides they use, the EPA informed the Special Rapporteur of challenges in analyzing or testing of pesticides. One of the EIA [Environmental Impact Assessment] licenses examined by the Special Rapporteur in relation to SOCFIN’s large-scale palm oil plantation failed to provide an accurate list of pesticides and other agro-chemicals envisaged to be in use in the plantation and remained non-exhaustive on several other key aspects that may be hazardous (...). This lack of detail fundamentally obstructs the ability of the EPA to perform its duties under human rights law, and fails to respect the rights of workers and local communities to information, participation and remedy. Despite these concerns, SOCFIN received an EIA license.”

The environmental risks connected to adjacent water sources were known prior to the establishment of the plantation. A 2011 EIA repeatedly highlighted the threats of SAC’s operations on water resources, including sedimentation in downstream rivers and lakes, leaching of fertilizers and subsequent eutrophication resulting from the use of nitrogen or phosphorus. Additionally, the assessment report mentioned health concerns around the possibility of fertilizer substances that penetrate local drinking water supply.

Dozens of land rights defenders, critical of the way SOCFIN’s subsidiary SAC has taken control over their land, have been subjected to judicial harassment and arrests for the past ten years. Six land rights defenders, members of Malen Affected Land Owners Association in the Pujehun District, were sentenced to six months of jail in 2016.
In the Kilombero Valley flood plain of the Morogoro region in Tanzania, the British company Kilombero Plantations Limited (KPL) operated a 5,800-hectare rice plantation from 2008 to 2019, when it went bankrupt after defaulting on loans from several financial institutions. Though KPL was a poster child of so-called sustainable investment in African agriculture for a number of institutions and governments, research by the Oakland Institute detailed KPL’s serious detrimental impacts on local farmers. In addition to the loss of farmland, local villagers suffered severe crop failures on their adjacent farms due to pollution of water bodies and drift off from agro-chemicals used on the plantation. KPL used aggressive pest and weed control chemicals, including aerial spraying of Monsanto’s non-selective herbicide glyphosate. These and other mixtures of chemicals surface run-off and drifting into waterways and the plantations’ surroundings led to negative effects for the locals, including severe crop losses and health problems related to contaminated water wells, used for drinking and other domestic purposes. In 2010, more than 600 farmers from the surrounding villages wrote a letter to KPL complaining of crop losses and illness following aerial spraying of agrochemicals. This pollution was confirmed by the Tropical Pesticide Research Institute (TPRI) commissioned by KPL to investigate the issue. TPRI found evidence that glyphosate drift had settled into adjacent rice, maize, and vegetable farms causing crop failures. By December 2011, 518 farmers were compensated for the damages made to their farms. Locals claimed that many other affected villagers did not get compensated and had to bear the loss. Despite the subsequent implementation of buffer zones to avoid drifting via aerial spraying of chemicals, residents still reported resulting crop damages. According to another investigation conducted by FIVAS—The Association for International Water Studies, aerial spraying of pesticides continued until 2013, with similar concerns of pollution.

In addition to the pollution, another major issue related to KPL’s plans to expand irrigation infrastructure to utilize water from the Mngeta River. This was especially worrisome as there was only limited reliable information on the water availability and the requirements to maintain the ecologically complex floodplain and the ecosystem downstream. Experts have asserted that the Mngeta River was already confronted with water problems connected to climate change. Still, KPL managed to acquire water permits from the Rufiji Basin Water Board with the permission to divert up to 50 percent of the river during the dry season, allowing for the irrigation of about 3,000 hectares of land. This expansion did not take place due to defaulted loans and the resulting bankruptcy of KPL.

In October 2021, the Tanzanian Treasury stepped in to buy the plantation from the liquidator of the farm and stated that the project “remains a potential large-scale commodity production giant.”

“...The chemicals from KPL drifted into my farm and destroyed my maize. That season I was not able to harvest anything because the whole farm was destroyed. So, I had to wait for the rain to remove all the chemicals and then start all over again. I had to carry all the costs for this myself, so our household economy was negatively affected and it also led to a shortage of food in the household that year.”

—MAIZE FARMER, NOVEMBER 2014
Sun Biofuels Jatropha Plantations, Tanzania

In 2009, the British company Sun Biofuels established an 8,000-hectare jatropha plantation for biofuels in the district of Kisarawe, Tanzania. People in the 11 villages, affected by the plantation, agreed to lease their land to the company after they were promised various benefits, including hospitals, roads, pharmacies, and employment. Apart from employment, which ended when the company went bankrupt in 2011, no other promises materialized. In an area where 80 percent of the people are engaged in agriculture, the impact of the project was dire, as locals lost their farmland as well as access to essential natural resources.

The land acquired by Sun Biofuels was collectively held forest and bush land that belonged to the villages and was used for various social and economic activities, including grazing, charcoal production, and harvesting of timber, poles, firewood, wild food, fodder, and medicine.

But the most serious concern stressed by all households interviewed during the course of the Oakland Institute’s research in 2011 was about access to water, which gravely deteriorated after the arrival of Sun Biofuels. Though the Environmental Impact Assessment undertaken by Sun Biofuels stated that given water scarcity in the area, the plantation should not cover any key water sources used by local communities, this recommendation was not followed. Villagers in Marumbo contended that the remaining water sources were as far away as 10 kilometers, significantly increasing the time they had to dedicate to fetching water. This even led to a situation of entrapment where locals were forced to buy water on the market at prices that they could barely afford, whereas water was freely accessible prior to Sun Biofuels involvement. One household reported that, at times, they have to choose between buying food or water, forced to substitute one for the other in purchases.

Denial of water access placed the largest burden on the poorest segments of the community, who lacked resources for transportation or for purchasing water. This was an unexpected impact on the villagers—during discussions with the company, they were promised a win-win situation with the construction of infrastructure, including water wells. None of the promised benefits materialized.

The plantation failed in 2011 when the company went bankrupt, leaving thousands of Tanzanians landless and hundreds jobless. But the land was not returned to the locals and it remains with the leaseholder for the full 99 years of the lease, until a new buyer is found.

“We used to fetch water, it was close. We used clay for handicrafts.”

—SALIMA NASORO, WOMAN FROM MUHAGA VILLAGE, KISARawe

“The water situation has become much worse. Before we used to find water nearby, very close to the house, but now this land has been cleared, and the source of water is totally destroyed by the investors.”

—VILLAGER, MARUMBO VILLAGE, KISARawe
Farm Block Development Program, Zambia

Over the past decade, Zambia has implemented a Farm Block Development Program, which aims to expand agricultural investments on over one million hectares of land. The program is based on the conversion of customary or state land into land to be leased to investors for large-scale commercial farming. In many instances, this had led to evictions and loss of land for the local communities.

To access water, since the adoption of the Water Act in 1996, investors in Zambia are required to apply for water permits. There is, however, a substantial gap between what is legally required and what actually transpires—as corporations rarely applied for water permits and still received water supply for their projects. As a result, the legislation is poorly enforced and investors’ water usage has not been adequately monitored while the impact on local communities has been disastrous in a number of cases.

A 2017 Human Rights Watch report documented the impact of the scheme in Serenje district, Central Province, where

HUMAN RIGHTS WATCH INTERVIEWS WITH
COMMUNITY MEMBERS, 2016-2017

“Sometimes water [river] looks brown from dirt, and sometimes white with fertilizer from [commercial] farms.”

—JIM K., HEADMAN LUOMBWA BRIDGE VILLAGE, KABUNDI

“We use the river water for cooking, washing, bathing. They want to use the Luombwa River to irrigate the center-pivot [on the commercial farm], and that’s why they want us to go. But what about us? Don’t we need water?”

—JEFFREY K., CHISHITU SECTION

“We are all worried about water. We have seen how the others who have moved are suffering because there is no water.”

—54-YEAR-OLD LYDIA C., NTENGE SECTION

“I used to live in a house with burned bricks. Now I live in a temporary shelter made of sticks. The wind blows the house. It’s very cold inside. There’s not enough water, so we can’t even make proper walls.”

—JANE M., CHISHITU SECTION

“Over there the soil was very fertile... This is sandy soil and doesn’t hold water. Over there the soil is muchanga (loamier). We could produce crops there without using inkande (fertilizer), and now we can’t grow crops without fertilizers, and they are expensive.”

—ESTHER M., CHISHITU SECTION
communities were evicted by the creation of the Luombwa and the Nasanga farm blocks. After the displacement, former residents were left to find other settlements, build new houses from the scratch, or were forced to resettle in areas under less favorable conditions, especially in terms of access to water. Reduced water access has resulted either when communities had to move away to areas far away from rivers and streams, or when their access to water was physically cut off by fences or other boundaries built by commercial farms. As a result, access to water for cultivation, drinking, and household purposes has been undermined. For example, residents displaced by the company Billis Farm have lost access to the Mulembo stream and River Luombwa, previously used for household activities and farming. One resident described how the insufficient access to water for basic cleaning and washing impacted people’s ability to maintain good hygiene: “We are dirty because we don’t have water, we need water to wash our clothes, even our dishes are dirty because we need to have enough water for us to clean ourselves.” For women and girls, the consequence of insufficient water resources has unique health implications and challenges in managing menstruation. In order to find alternative sources of water, communities were forced to dig wells but many of these efforts were not successful in finding water or in ensuring a reliable water supply during dry seasons. Often, multiple households were forced to share the same well, with competing users making over-extraction and quick depletion likely. Well water is also very susceptible to contamination and thus not necessarily a clean drinking water source. Families reported more frequent and severe health problems: “Over there we were getting water from the Kalengo stream, and here we get water from a shallow well—it’s stagnant water. I feel like we have all been getting diarrhea more often here and have to keep going to Kabundi (health center).” The loss of access to water resources had additional repercussions on food security. One community member explained: “Sometimes we sleep hungry and thirsty—we can’t cook without water.” Losing access to water bodies made it more difficult for communities to catch or buy fish and other products that were traditionally part of their diet as a significant protein source. As a result, communities had to shift their diets and find other healthy sources of protein. The loss of water for small irrigation led to reduced harvests and poorer quality of agricultural output. One resident complained: “Because we don’t have enough water, we can’t make our gardens. So, we don’t have any radish [vegetables] to eat with nshima [maize meal]. Nobody around here has a garden. Mostly we go to Kabundi [clinic and school area] to get vegetables and small fish—and we have to buy that. So, our costs [of] living here have gone up... When we lived on the farm, we could get by for more than a month without going to the market. Now we have to spend more than 100 kwachas [US$10] per month.” Resettled residents had to put more effort, time, and money into providing food for themselves. For farmers who sell their produce in markets, this meant less economic viability and return on their profits, harming their source of income significantly.
MULTIPLE IMPACTS OF WATER GRABS IN AFRICA

The case studies in this report show that while land is generally the main scope of the contracts, agreements, and leases for large-scale agriculture schemes, local communities’ access to water is systematically undermined. The establishment of plantations has a direct impact on the availability and quality of water for African rural communities, their livelihoods and wellbeing. The multiple facets of the water grab taking place on the continent are described below.

Loss of Vital Access to Water Resources

Expansion of large-scale plantations for oil palm and other crops is primarily taking place in African tropical farmland, bush, and forests. Even when such plantations are not irrigated, this expansion has a huge impact on water availability given it systematically leads to the loss of streams and swamps, destroyed or filled-in to establish plantations. This directly affects livelihoods because of the loss of water sources for drinking, cooking, and other uses as well as the loss of fish and other resources.

Though it may seem counterintuitive, arid lands on the continent, especially in the Sahel strip, are also targeted for water grabs in areas with irrigation potential. From Senegal to Ethiopia, pastoralists and agro-pastoralists have been severely affected by large-scale irrigation projects that dry out land, reduce available pastures, prevent flood recession agriculture, and cut out traditional routes for people and livestock through fencing and canals. With the growing climate crisis, recurring weather variations are taking a high toll on pastoralist communities when deprived of their traditional strategies to cope with drought, such as access to dry season pasture, mobility, and herd management. Several of the case studies document how taking away essential water sources from arid lands results in major threats on their livelihoods and sometimes even leads to famines, like in the case of Ethiopia. Though often seen as “backward” by central governments, mobile pastoralism is a sustainable and effective livelihood model in arid lands, which is undermined by large-scale irrigation projects.

The promise of drinking water along with development of other infrastructure and services is often used as a promotional narrative for new projects. It is an appealing promise for locals, especially women who often spend several hours every day fetching water from the local streams and rivers. Despite these promises, the loss of clean and abundant water supply is a systematic impact of plantations. Cases from Sierra Leone, Senegal, and DRC illustrate that even when companies have contractual promises to supply communities adjacent to their projects with clean water, it fails to materialize. Poor oversight and enforcement of these terms allowed many of the aforementioned investors to shirk their responsibilities and break promises without penalty. In the best-case scenarios, where companies have built or rehabilitated wells and boreholes to compensate the loss or pollution of water sources, communities still report their numbers to be too low or water supply to be inadequate, especially in dry season. Furthermore, the lack of proper testing and monitoring of the new wells does not ensure water quality, given they may rely on a water table that is polluted from the chemicals.
Irrigation Infrastructure Benefits Investors Not Communities

The lack of irrigation in Africa has often been flagged as a major factor hampering agricultural production and food security on the continent. The International Fund for Agricultural Development (IFAD) has stressed that “only around 5 per cent of cultivated land in Africa is irrigated, compared with 41 per cent in Asia. Irrigation alone could increase output by up to 50 per cent in Africa.” According to the United Nations Food and Agriculture Organization (FAO), irrigation systems typically have yields at least twice those of nearby rainfed crops and it is irrigation that has allowed the major boost in land productivity seen in recent decades in a number of Asian countries.

However, expansion of irrigation on the African continent raises critical questions. In the case studies reviewed, irrigation schemes have been largely established to benefit private firms for large-scale agriculture, often dedicated to export crops, instead of the interests of local farmers and communities. Rather than improving food security, irrigation infrastructures have routinely undermined people’s livelihoods and safety.

The most common impact of large-scale irrigation in several case studies is to dry out lands and water sources downstream. In Afar and Lower Omo in Ethiopia, dams and associated irrigation schemes had a severe toll on agro-pastoralists who lost critical land previously used for flood-recession agriculture and pastures, especially in dry season, when river banks provided critical havens for livestock and people. This diversion also impacts distant communities by worsening water levels of rivers and lakes that are already under dire stress, such as the Niger River or Lake Turkana.

Another consequence of irrigation schemes, in addition to the fences and security guards preventing locals’ access to land, are the canals built for irrigation—often several kilometers long—which physically cut out traditional routes and movements for people and livestock. In a number of instances, as in Senegal or Mali, canals are also a deadly hazard for the locals, especially children, with a number of reported fatalities from drowning.

Whereas the expansion of irrigation may be a way forward to increase land productivity in Africa, the report raises critical concerns about the way it is happening on the continent—favoring large-scale plantations run by private firms, rather than farmers and local communities. The Office du Niger in Mali is one of the few publicly managed schemes on the continent which provides irrigation to both farmers and private entities. Over the past decade, however, the trend has been for the government to seek more large-scale land deals whereas resource-limited farmers routinely struggle to pay the usage fees and lose their land when unable to pay.

Pollution of Water Sources

The pollution of water sources by industrial agriculture, due to its intense use of chemicals and pesticides, is systematic in all the cases reviewed. Pollution comes from the runoff of fertilizers and pesticides used in industrial plantations, from the residues of processing plants, as well as from the biological effluents from workers. The consequence of pollution by hazardous chemicals has multiple impacts—on food security through the loss of important livelihood sources such as fish, on crops and drinking water for livestock; directly on the health of the locals with an increase in illnesses; loss of biodiversity and other environmental impacts. Whereas outside the continent, especially in Western countries, water may be treated and is available at the tap, it is not the case in Africa where the pollution of water sources is particularly problematic given a large part of the population relies on open water sources for drinking, cooking, and bathing as well as fishing, small scale irrigation, and livestock.
Loss of Water Access Disproportionately Impacts Women

Loss of access to water disproportionately impacts women who have to deal with longer trekking times and possibly more difficult paths when fetching water for their daily household tasks, sometimes multiple times per day.224 The distance to water bodies can be as high as 15 kilometers a day and take as long as 4 hours.225 In the case of Zambia, one woman said: “(The Luimbwa River) is very far from here. I don’t even know how we will go there. Or maybe we will try the Ssasa stream. Even to get to the Ssasa stream it will take us more than two hours to go and get water.”226

As seen in Gabon or DRC, women were also particularly impacted by the loss of water access since fishing, an important source of nutritious food and livelihoods, is mostly practiced by them. Around the SAC oil palm plantation in Sierra Leone, the small-holder plots along the swamps are mostly operated by women,227 and constraints on cultivation have accentuated gender discrimination. Additionally, as noted in a 2015 academic study, “The impact of the fall of women’s income on households tends to be more immediate on the households than that of men.”228

Loss of access to water and longer fetching time disrupts women’s caregiving tasks and support networks.229 Girls are particularly impacted as they can be tasked to fetch water instead of going to school, with major long-term consequences for future prospects of young girls.230
Ineffective Environmental Regulations and Safeguards

Companies are often given extensive freedom to develop and cultivate the land at their own discretion, allowing for various environmentally harmful agricultural practices. The case studies show that even when companies are legally obligated to respect environmental regulations, these safeguards are not effective because government agencies all too often lack the capacity or political will to enforce them.

Despite the scale of some of these investments, many projects move forward without concern of their potential environmental impact. As seen in the cases of Saudi Star in Ethiopia or the Senhuile plantation in Senegal, no social or environmental impact assessment was conducted prior to the start of the project, so the socio-ecological consequences were unknown for locals and downstream users.

While many governments require EIAs before projects can be implemented, the process has failed to prevent numerous environmental disasters in many countries. When EIAs are carried out, the process should identify potential risks associated with proposed projects before they are implemented and propose ways to prevent, mitigate, and control potential negative environmental and social impacts. However, even when EIAs are implemented, they often insufficiently consider the impacts, alternatives, and lack proper public participation.

Without concrete language and clear obligations, the presence of clauses that vaguely require investors to respect the environment are more symbolic than substantial. Several of the cases demonstrate that the enforcement of environmental protections often takes a backseat in the agenda of investors. As illustrated in the case of the PHC oil palm plantation in DRC, even when environmental agencies found the company had been illegally dumping effluent waste into community drinking water, corporations sometimes leverage political connections to avoid any meaningful enforcement or face penalties. In Sierra Leone, even after the EPA investigation confirmed chemical pollution of the River Malen, the report was kept confidential which allowed SOCFIN to shirk accountability. The conclusions drawn by the UN Special Rapporteur on hazardous substances and waste in 2017—that the Sierra Leone EPA lacked the capacity to perform its duties—are unfortunately applicable to many environmental agencies across the continent.

When a project inflicts a negative impact on something as critical as drinking water, drawn out complaint mechanisms and processes offer communities insufficient avenues for redress. Even when companies respond to complaints, measures often fall short. This was evidenced in Gabon when after villagers sent a letter of complaint to the company demanding an urgent solution to the OLAM oil palm plantations contaminating local water sources, the company responded by installing water pumps that were not fully functional and did not produce potable water.

Other communities trying to protect their livelihoods and environment have been continually ignored or, even worse—as shown in the cases from Liberia, DRC, Sierra Leone, and Mali—met with arrests and repression. Governments across Africa continue to prioritize attracting and pleasing investors over protecting communities’ rights to clean water and a healthy environment. With poor government oversight and enforcement of environmental regulations, companies are largely left to police themselves, which often leads to disregard of community concerns around the impact projects have on their access to water.

With governments failing to perform their duty towards the citizens, local communities and civil society organizations must fend for themselves, documenting the impact of the projects and organizing, to pressure companies to take action. Given the massive power imbalance between rural communities and corporations, the result is often delayed and/or insufficient action taken by companies to remedy environmental damage.
Grabbing Water in Africa

The vast majority of rural households in Sub-Saharan Africa are established next to a water source that provides them with water for drinking, bathing, cooking, and agriculture. Water, used for small-scale irrigation, livestock, and fishing, constitutes an essential source of livelihoods for the majority of Africans. 85 percent of water consumption on the continent is for agriculture.254

While access to safe and affordable water is recognized as a basic need and a fundamental human right by the United Nations and is even manifested in the Sustainable Development Goals, it remains a prevalent issue across the continent.255 Approximately 400 million Africans lack access to drinking water supply and one in three people face water scarcity.256 Projections estimate that by the year 2025, 25 of the 48 countries experiencing water shortages will be African, impacting over 690 million people living in water scarce or water-stressed areas.257

Governments have justified their policy in favor of large-scale plantations relying on big irrigation projects by citing the need to increase agricultural production and to enable economic growth.258 However, the multiplication of large-scale land deals led by foreign investors presents serious challenges. For the plantations, investors typically want to ensure reliable access to water sources given erratic rainfall across Sub-Saharan Africa.259 Some companies explicitly acknowledge that they are land investors as much as they are water investors.260 Others recognize the need for abundant water supplies and discard land without water access as valueless.261

Considered a common good, for millennia, access to water for farmers, fisherfolk, and pastoralists has been managed through informal customary laws and practices. Beyond recognizing that access to safe drinking water is a basic human right, such customary water rights are not formalized by governments,262 which hold the legal authority to allocate land and water sought by investors.263 While not all land lease agreements signed with investors contain specific provisions on water access,264 many do formalize free, or very inexpensive, unlimited access to water for large-scale projects. Whereas private firms are granted legal guarantees to access water, those with informal rights, who are reliant on the same water sources, are invisible and unable to defend their rights.265

The influx of investors seeking land and water access for agribusiness and other projects threatens essential rights to water for hundreds of millions of people in Africa.


Across the continent, governments, with support and guidance from international institutions such as the World Bank and western aid agencies, are keen to promote and establish large-scale agriculture schemes. Leveraging financial support, international institutions have successfully driven governments to a “development” pathway focused on making large amounts of land and water available to foreign investors.

Most African countries now utilize Investment Promotion Agencies (IPA), which may have a different name from country to country but are generally set-up using the same blue print, established under the guidance and funding of the World Bank or Western donors such as the United States and United Kingdom. The IPAs act as prominent channels for governments to market available land and favorable water access to attract investors for large-scale agriculture projects. IPAs of African nations are currently advertising tens of millions of hectares of irrigable land and “underutilized” water resources to investors (see next page).
<table>
<thead>
<tr>
<th>Country</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burkina Faso</td>
<td>“Irrigable land: 233,500 hectares including 26,758 hectares developed” “10 billion m³ of surface water and 113 billion m³ of underground water resources available”</td>
</tr>
<tr>
<td>Democratic Republic of Congo</td>
<td>“4 million hectares of irrigable lands (only 10 percent currently exploited)” “Large reserves of fresh water”</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>“Ethiopia’s vast land, favorable climate, and water and land resources combine to make it an incredible hub for investment.”</td>
</tr>
<tr>
<td>Ghana</td>
<td>“Vast arable land” “Abundant water resources”</td>
</tr>
<tr>
<td>Guinea</td>
<td>“Potentially irrigable land: 364,000 hectares (only 30,200 hectares actually developed)”</td>
</tr>
<tr>
<td>Liberia</td>
<td>“Vast forests and an abundance of water provide a basis for increased agricultural development in our value chain products”</td>
</tr>
<tr>
<td>Madagascar</td>
<td>“The highest rainfall in Southern Africa” “Fees for water extraction are negligible”</td>
</tr>
<tr>
<td>Mali</td>
<td>“The groundwater resources, estimated at 2.7 billion m³, make Mali one of Africa’s water reservoirs” “Total irrigable land is estimated at 2.2 million hectares, of which only less than 400,000 hectares are irrigated”</td>
</tr>
<tr>
<td>Nigeria</td>
<td>“3.14 million hectares of irrigable land” Investment opportunities in “water resources development” and “development of private irrigation facilities”</td>
</tr>
<tr>
<td>Senegal</td>
<td>“Significant underutilized water potential in some areas of the country” “35 billion m³ of renewable surface water and 4 billion m³ of groundwater”</td>
</tr>
<tr>
<td>Sierra Leone</td>
<td>“The country’s topography, high rainfall levels and numerous ground water sources offer huge potentials for irrigation all around the country” “Up to 300,000 hectares of land have been identified as priority targets for irrigation in the next 5 years”</td>
</tr>
<tr>
<td>Tanzania</td>
<td>“With ample rainfall and generous rivers fed by the high hinterland plateaus, Tanzania has among the best irrigation potential in the sub-region” “29.4 million hectares of irrigable land”</td>
</tr>
<tr>
<td>Zambia</td>
<td>“Zambia is endowed with a large arable land resource base of 42 million hectares of which only 1.5 million hectares is cultivated every year” “Abundant water resources for irrigation”</td>
</tr>
</tbody>
</table>
The World Bank plays a key role in creating and running IPAs through the International Finance Corporation (IFC) and the Bank’s Foreign Investment Advisory Service (FIAS). The Bank works closely with government agencies and IPAs to reform laws and regulations to make countries more attractive to private investors. Working to change legislation and regulations, FIAS assists countries in streamlining the administrative processes that investors must go through, including for land acquisitions. These advisory services of the World Bank have worked together with the Bank’s Doing Business Report (DBR) that scored and ranked countries on the “ease of doing business” and promote regulatory changes and reforms that make them more attractive to private investors. As a result, countries across Africa have been encouraged to prioritize reforms that would improve their score instead of policies that would benefit people or the environment. For instance, Sierra Leone was rewarded and ranked as one of “the top 15 economies that improved their business regulatory environment the most,” the same year after the country implemented policy changes that fast-tracked land leases, attracting foreign investors eager to develop large-scale oil palm and sugar cane plantations that deprived local communities of the land essential for their livelihoods.

The World Bank’s Enabling the Business of Agriculture (EBA) program is another initiative promoting large-scale agriculture on the continent, with the goal to help create “policies that facilitate doing business in agriculture and increase the investment attractiveness and competitiveness of countries.” To achieve this, it measures the “legal barriers” for agribusinesses and scores countries on their performance in applying reforms to reduce these barriers. The scores act as conditions for the provision of international aid and influence the levels of foreign investment in these countries. In 2017, the EBA introduced a set of indicators on land that measured “laws and regulations that impact access to land markets for producers and agribusinesses.” The introduction of the land indicator represented an unprecedented push to privatize and facilitate private interests’ access to public land. Although the indicator was removed in 2019, following civil society backlash, the damage was already done given the Bank spent years and millions of dollars creating the enabling environment favorable to the privatization of land. As the case studies demonstrate, once investors access land for large-scale projects, favorable water access is often included in the deals at little or no cost.
CONCLUSION

All over the continent, local communities have been opposing the theft of their land and water to large-scale agricultural projects. Whereas governments justify granting access to land and water to private investors to ensure development and food security, the case studies examined in the report reveal that the impact of projects is just the opposite.

Africa has a wealth of natural resources that should be the basis for human development and food security. But the way these resources are put to use only exacerbates hunger and dispossession. The so-described untapped potential for irrigation of agricultural crops is being put to use mostly, if not only, for private interests at the expense of the local communities. This calls for an urgent change of course for governments and international institutions.

The climate crisis already threatens access to water for millions and will continue to escalate. Yet, in the face of dire projections, corporations continue to receive preferential access to water to further their profits. Access to water is a basic human right that has to be respected, preserved, and prioritized over granting resources to corporations for large-scale projects that have a long track record of failure.
ENDNOTES


2 See the Oakland Institute website at https://www.oaklandinstitute.org/publications.


4 Ibid.


7 Ibid.


10 Ibid.

11 Ibid.


15 Ibid.

16 Ibid.


20 Ibid.


24 Ibid. p. 44.

25 Ibid.


27 Ibid.


30 Ibid.

31 Ibid.

32 Ibid.


34 Ibid.

35 Ibid.


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de l'opérateur économique pour la restitution de leur terres/ (accessed November 2, 2021).


126 Ibid.

127 Ibid.


129 Ibid.


133 Ibid. p. 40.

134 Ibid.

135 Ibid.

136 Ibid. p. 37.

137 Ibid.

138 Ibid. p. 37.

139 Ibid.

140 Ibid.


144 Ibid.


146 Ibid.

147 Ibid.


149 Ibid. p. 5.

150 Ibid.


153 Ibid.

154 Ibid.

155 Ibid.

156 Ibid.

157 Ibid.


161 Ibid. p. 16.

162 Ibid.

163 Ibid.


166 Ibid.

167 Ibid.

168 Ibid.


170 Ibid.

171 Ibid.


174 Ibid.

175 Ibid.

176 Ibid.


179 Ibid.


181 Ibid.

182 Ibid.

183 Ibid.


186 Ibid.

187 Ibid.


192 Ibid.

193 Ibid.

194 Ibid.

195 Ibid.


198 Ibid.

199 Ibid.


201 Ibid.

202 Ibid.


205 Ibid.

206 Ibid.


208 Ibid.

209 Ibid.

210 Ibid. p. 70.

211 Ibid.

212 Ibid.

213 Ibid.

214 Ibid.


217 Ibid.

218 Ibid.

219 Ibid. p. 67.

220 Ibid. p. 64.


