LARGE-SCALE LAND ACQUISITIONS IN KENYA: ENVIRONMENTAL AND SOCIAL IMPACTS

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EXECUTIVE SUMMARY

Over the last decade, and particularly the last five years, the world has witnessed a surge in interest in large-scale land acquisitions for agricultural purposes. Some of the land deals have been publicized widely, such as the failed South Korean proposal to acquire 1.3 million hectares of land in Madagascar, while others have been negotiated quietly behind closed doors. Interest in and acquisition of land has occurred across the globe, from Latin America to South-East Asia, but the majority of land deals have been in sub-Saharan Africa.

Today, land has become a commodity. However, that was not always the case. For many people, historically, land was not a thing to be bought and sold. It was one's livelihood, one's home, one's history. Land represented security. Even today, in many communities in Africa the idea of selling one's land is treated as an alien concept, and talk of it raises suspicions. But that is changing. Three factors in particular are driving this renewed interest in large-scale agriculture: a global economy, food insecurities, and climate change.

In 2007-2008, the world witnessed an unprecedented spike in food prices. For many decades, the food commodity market was relatively stable. However, since the initial spike six years ago, the market has been volatile. This has led to a renewed interest in the agricultural market for public and private investors alike. States with the financial resources to engage in food production but who lack land, such as Qatar, have started buying or leasing land for agricultural purposes in foreign countries in an attempt to satiate their own domestic food demands. Securing a dedicated food production scheme on foreign land helps land-deficient countries insure against future fluctuations in food prices.

In addition, demand for biofuels has been growing at a rapid pace over the last several years, due primarily to subsidy schemes offered by developed countries that are looking for ways to lower gas emissions from fossil fuels. Many blame the European Unions' Renewable Energy Directive (RED), which aims to source 20% of the EU's total energy needs and 10% of its transportation-fuel needs from renewable sources by 2020. Critics argue that these policies have

created perverse incentives to produce biofuels in place of food crops. ¹ "Estimates vary: international non-profit GRAIN puts the total volume of land acquisitions for biofuels in Africa at over 7.5 million hectares over a 10-year period, while the International Land Coalition estimates that 18.8 million hectares were purchased, representing 66 percent of all such transactions in Africa." (Woodhouse, 2012)²

As land has become increasingly scarce in many developed countries, agribusinesses have been seeking out large swaths of land – often in developing countries – that may be acquired at a fraction of the price of land in more well-off countries. Of course, the sad irony of this is that some countries with the highest rates of food insecurity are now exporting food to other countries in the world.

This renewed interest in land for agricultural purposes has occurred in conjunction with a move to formalize land tenure systems in developing countries with an eye towards creating land markets, in areas where heretofore none had existed. In many places where land speculations are taking place, local people have claims to the land based on informal or customary law. Even though many countries have adopted laws recognizing customary land tenure, in practice this area of law remains very unclear. This state of ambiguity creates opportunities for exploitation. When no legal title exists, land is labeled "vacant" or "unused" and residents are described as "squatters." Persuaded that they have little to no legal claim to the land and/or desperate for economic development, some communities eagerly welcome the projects. Others are kept in the dark or sold down the river by elected officials who claim to be acting in the interest of the community.

Through a literature review and phone interviews with relevant stakeholders, the author sought to document the environmental and social impacts of four proposed large-scale land acquisitions in Kenya. In addition to confirming what many others have already found regarding the detrimental social and economic impacts of these types of land deals, this report contributes to the growing body of research on this topic in four important ways.

First, the primary focus of this report is on the potential environmental impacts of largescale land acquisitions. To date, not as much has been written about the environmental implications of large-scale land acquisitions, presumably for several reasons. First, this latest land rush is relatively new. Many of the recent land acquisition proposals are still at the earliest stages of implementation, and, therefore, there is not yet significant detailed information about actual environmental outcomes. Second, government-enforced environmental monitoring and compliance systems are weak, at best, or non-existent. As will be discussed further below, governments lack the technical capacity and resources to carry out effective environmental audits. And, as one would expect, private investors make it difficult for non-governmental groups to carry out environmental inspections. As such, obtaining data on the environmental impacts of ongoing projects is very difficult. Lastly, as the case studies highlight, many projects never materialize, have been stalled, or were begun but then abandoned, forestalling the most egregious environmental outcomes. Despite the dearth of concrete evidence on measureable environmental impacts, it is important to underscore the environmental threats posed by these projects; just because there is not a thorough body of research documenting the environmental impacts does not mean they do not exist.

Second, this report underscores the connection between "land grabbing" and "water grabbing." Water resources are at a premium in Kenya. By their nature, many of the projects considered herein entail not only acquisitions of land rights, but also water rights. While the focus of many studies has been on the land component of agricultural projects, these case studies highlight the importance of considering water as a finite resource, as well.³

Third, this report urges a shift in focus of attention from land *acquisitions* to land *speculations*. As noted above, it is true that an untold number of proposed large-scale land acquisitions have never come to pass, and to the extent that the worst environmental harms have been avoided, this is a good thing. Nonetheless, it is critical to understand that large-scale land *speculations* can have a detrimental impact on communities, as well. Many proposed land

projects have left their mark on the environmental and social landscape, often in the form of cleared land, uprooted communities, and inter-group conflicts attributed to increased competition over remaining community resources.

Finally, the case studies here highlight the inadequacies of the present environmental regulatory system in Kenya. Although three of the four large-scale land acquisitions discussed here are not presently operational (two have been abandoned and one is still on hold), the case studies illustrate that it was factors outside of the environmental regulatory process that prevented the projects from moving forward. In all but one case the projects received environmental approval from the government, despite widespread opposition from environmental groups and a plethora of evidence that the projects posed significant harm to the environment. The projects were abandoned due to pressure from civil society and/or investors – not because of effective environmental safeguards.

The large-scale land speculations and acquisitions discussed here have had a tremendously destabilizing and detrimental effect on local communities. On the environmental front, the land deals have threatened to consume already scarce water resources, diminish vital natural resources such as forests and wetlands, pollute water sources, and destroy the natural habitat of important and endangered species. Again, the full environmental impacts of the proposed land deals are not yet known, as interference with fragile ecosystems may have a ripple effect on downstream environments, setting in motion unimagined consequences.

On an economic scale, the land deals have destabilized local communities who depend on the land for their very survival. In Kenya, agriculture provides the main source of livelihood for 85% of the population.⁴ By their nature, large-scale land acquisitions almost always cause the dislocation of communities. Even if communities are compensated and relocated (which is not always even the case), the new land is usually not as desirable. As the case studies will detail, the new land may be more prone to drought or floods, the soil is not as good, and/or the land is at a further distance to a water source, which makes growing crops and raising cattle an even more

challenging endeavor. Moreover, local communities may lose access to some of the natural resources, such as reeds or trees that they previously relied upon for producing other goods for sell and/or consumption.

Finally, there can be no doubt about the devastating social impacts caused by mounting interest in large-scale land acquisitions. Land speculation has unleashed political and sometimes outright deadly turmoil in local communities. Even prior to the land rush, relationships between local communities were fraught with tension as groups competed with each other over access to the already-scarce and limited set of resources. These tensions have ignited as land deals pit communities against one another. Moreover, the increasing interest in land has spurred local elites to acquire land in anticipation of future deals. As more powerful and moneyed interests eye land, weak and already impoverished communities are left fighting over the scraps.

Introduction

Over the last decade, and particularly the last five years, the world has witnessed a surge in interest in large-scale land acquisitions for agricultural purposes. Interest in and acquisition of land has occurred across the globe, from Latin America to South-East Asia, but the thrust of proposed large-scale land acquisitions have occurred in Africa. Estimates suggest that sub-Saharan Africa has 60% of the uncultivated, arable land in the world; that, coupled with a newly emerging market in land, makes sub-Saharan Africa a prime target for these large-scale land acquisitions.⁵ There is a rapidly growing body of literature documenting the impact of these land deals across the globe. This report adds to that discussion by examining large-scale land acquisitions and speculations in Kenya, with a particular focus on the attendant environmental impacts.

While there are many common threads in case studies of LSLAs around the globe, it is important to understand the unique historical, cultural, and environmental context in which this particular set of case studies take place. The Republic of Kenya, situated along the east coast of Africa, is comprised mostly of arid and semi-arid land (ASAL). Rainfall in this area is highly variable, and irrigation on a large-scale is nearly non-existent, which makes agriculture a very risky venture. Although the ASAL comprises 80% of Kenya's total land mass, only 35% of the population lives in these regions. Many of the people who live in the ASAL regions of the country practice pastoralism. The mobile and communal nature of pastoralism is often considered antithetical to the Western model of property rights, and the practice is treated as antiquated and counter to economic development. One theme that emerges from these case studies is that pastoralists typically have a more difficult time staking a claim to land than more sedentary groups, such as small-scale farmers, who exercise individual-control over plots of land, even in the absence of a formal title.

Sixty-five percent of Kenya's population occupies the remaining 20% of arable land. ⁶ While the amount of arable land remains consistent, Kenya's population continues to grow at one of the most rapid rates in the world. Moreover, unlike the ASAL regions of Kenya, the arable land is highly productive; in fact, the Kenyan Highlands are considered one of the most productive agricultural regions in all of East Africa. All of this contributes to fierce competition over a scarce, but highly valuable resource.

Land use in Kenya garners significant international attention due also in part to the abundance of wildlife and natural resources in the country. From the beaches on the Indian Ocean to the top of Mt. Kenya and back down to the shores of Lake Victoria, Kenya's natural environment is comprised of vital wetlands, forests, and savannahs. Kenya hosts all of Africa's "Big Five," and it is also considered one of the top five places in the world for bird watching. Kenya is also home to a number of threatened or endangered mammals, birds, reptiles, fishes, and plants.

Despite its many natural endowments and resources, the vast majority of Kenyan's remain impoverished. Approximately one-third of the Kenyan population is undernourished⁷, and it is estimated that nearly one in four people suffer from chronic food insecurity at any given time.

Kenya has consistently been rated as "one of the 20 most food-insecure countries on Earth." Poverty rates throughout the country hover around 56%, but reach as high as 80% in some regions.

This report proceeds in four parts. First, it begins with a brief discussion of the current national, regional, and international legal and regulatory frameworks at play. Next, it provides four case studies of large-scale land acquisition proposals in Kenya. The following section provides a brief comparison to LSLA's in Ethiopia and Uganda. The final section sets out the findings and recommendations.

KENYAN LEGAL AND REGULATORY FRAMEWORK

BRIEF HISTORY AND PRESENT STATUS OF LAND TENURE IN KENYA

Kenya's present day land system is similar to many other African countries in that it was shaped by colonial rule, which impacted both the current land distribution patterns as well as the current legal framework. The Crown Lands Ordinance of 1915 established a dual system of land administration and governance. Large amounts of the meager 20% of land suitable for agriculture was set aside for European settlers and came to be known as the "white highlands." Land for Africans was divided into "native reserves" and allocated according to colonial interpretations of ethnic or ancestral lineage. The Ordinance provided that the Africans were tenants at the will of the Crown. 10 "Native reserves" were managed by local land boards, which were in turn accountable to the colonial government. The quality of the land among the reserves varied widely. Protests spawned by unfair land distribution policies — both in terms of quality and quantity — contributed to the call for independence.

Following independence in 1963, this same pattern of unequal land distribution benefitting the wealthy and powerful was replicated. A report commissioned by the national government in 2004 detailed how elites used the political process to first privatize and then buy

up vast tracts of the most valuable public land in the country at a fraction of its market value. This brief history demonstrates that land grabbing in Kenya is not a new phenomenon nor has it been perpetrated solely by foreign interests. In fact, there is a well-documented history of Kenyan elites dispossessing other Kenyans of their land.¹¹

Over the last decade, Kenya has been in the process of reforming a number of land-related institutions and legal instruments. In December 2009, Parliament adopted a new National Land Policy, and the country as a whole adopted a new national Constitution by referendum in 2010.

Prior to adopting the new Constitution, land was categorized as either private land, government land, or trust land. Under the new land tenure system, private land remains essentially the same with one major caveat: only Kenyan nationals may own land in Kenya, and foreign investors may only lease land up to 99 years. "Government land," on the other hand, was renamed "public land." Prior to 2010, the President had the authority to allocate "government" land. In response to the Ndung'u Report pointing a finger at government officials straight up to and including former presidents, the new Constitution stripped the President of this power and symbolically renamed government land "public land." The Constitution further provided that a National Land Commission should be formed to manage and oversee all public land. Lastly, "trust land" was renamed "community land." Previously, land that belonged to a community was called trust land because it was to be "held in trust" by local county councils. Local county councils, comprised of elected and appointed councilors, were supposed to seek the consent of the communities prior to any land transactions. Instead, as will be highlighted in the case studies, it was often the practice that communities were merely informed after trust land had already been leased or sold.¹²

KENYAN LEGAL AND REGULATORY ENVIRONMENTAL FRAMEWORK

In order to comply with the Environmental Management and Coordination Act no. 8 of 1999 ("EMCA") and pursuant to Legal Notice No. 101 of 2003, proponents of large-scale

agricultural projects must submit an Environmental Impact Assessment (EIA) and gain approval before acquiring a license from the National Environment Management Authority (NEMA). Section 16 provides:

An environmental impact assessment study prepared under these Regulations shall take into account environmental, social, cultural, economic, and legal considerations, and shall –

- (a) identify the anticipated environmental impacts of the project and the scale of the impacts;
- (b) identify and analyze alternatives to the proposed project;
- (c) propose mitigation measures to be taken during and after the implementation of the project; and
- (d) develop an environmental management plan with mechanisms for monitoring and evaluating the compliance and environmental performance which shall include the cost of mitigation measures and the time frame of implementing the measures.

Many areas within Kenya are considered biodiversity hot spots. As such, the Government of Kenya is a signatory to several global conventions of conservation of wetlands and biodiversity. These include:

- 1) The Convention on Conservation of Wetlands, or the Ramsar Convention (1971),
- 2) The Convention on Conservation of Biological Diversity (Nairbobi, 1992),
- 3) The Convention on the Conservation of Migratory Species and Wildlife (Bonn 1979),
- 4) The Conservation of Important Bird Areas (IBAs)

CASE STUDIES: FOUR PROPOSALS FOR LARGE-SCALE LAND ACQUISITIONS IN KENYA

CASE STUDY #1: DOMINION FARMS

A SNAPSHOT

In 2003, U.S.-based Dominion Farms embarked on a large-scale agriculture venture in the Yala Swamp Wetlands. Initially, Dominion planned to develop a rice plantation on 3200 hectares of reclaimed swampland, but over the last ten years the project has grown in both size and scope. In the beginning, local communities welcomed Dominion Farms; local residents were hopeful that the venture would bring economic development, including desperately needed jobs, infrastructure, and health and human services to the area. However, Dominion Farms met resistance almost immediately, and local support quickly morphed into anger and resentment. Dominion Farms is the first-in-time of the four case studies considered here, and the only project that is currently operational. As such, this case study most clearly documents the social and environmental impacts of an existing large-scale land acquisition.

THE PROPONENT AND PROPOSAL

Calvin Burgess, a wealthy businessman and president of the US-based Dominion Venture Group LLC, first visited the Yala Swamp area in 1999. Guided by a belief that God had blessed him with "financial freedom and spiritual guidance 'to grow rice and save souls," Burgess embarked on a mission to develop a large-scale agricultural project in the region. ¹³ In 2003, Burgess incorporated Dominion Farms in Kenya as a subsidiary of Dominion Venture Group LLC. Dominion subsequently entered into an agreement with the Lake Basin Development Authority ("LBDA") to develop and manage a large-scale rice farm in the Yala Swamp area.¹⁴ According to the initial project proposal, the goals of the initiative were to:

1. Develop a profitable business and model for the region;

- 2. Reduction of poverty in the region through provision of employment;
- 3. Increase crop production for domestic consumption and for export;
- 4. Provide sustainable livelihoods for rural households; and
- 5. Improve socio-economic infrastructure in the region.¹⁵

However, according to a report by the Kenya Wetlands Forum, Dominion engaged in multiple other activities including construction of irrigation dykes and weirs, water-drilling, construction of an airstrip, and road construction. These activities – allegedly – were not part of the first Environmental Impact Assessment ("EIA") approval. According to Dominion's second EIA in 2005, Dominion's plans had expanded and included cultivating other crops such as maize, cotton, soybeans, and sunflower. The 2005 project expansion also included plans to construct fishponds for aquaculture, a fish processing plant, rice mill, feed mill, ginnery, fuel storage and dispensing station, and a turbine for electricity production. In addition, while the original proposal was for 2300 hectares, the second EIA envisioned 9000 acres for rice and 5000 acres for other crops. Page 9200 hectares would be reclaimed from swampland.

While Dominion's proposal conceded that the land was already being cultivated by small-scale farmers, it asserted that the project was justified because it would ensure better agricultural outputs and maximize land productivity. The proposal noted that adequate funding and an irrigation infrastructure would help ensure greater agricultural yields, but current users and interested stakeholders had never been able to provide the necessary capital investments. Dominion stood ready to bring its own private investments to bridge the resource gap.²⁰

Because of the vast natural resources in the region, the Yala Swamp region had long been eyed, by both foreign and domestic interests, for its development potential.²¹ Early plans called for reclaiming part of the wetlands to establish smallholder settlement schemes in the hopes of increasing food security and cash crop production.²² Other proposals entailed reclaiming the wetlands and converting the land into large-scale agricultural projects. Conversely, conservationists argued that reclaiming the swamp for agricultural purposes would negatively impact the biodiversity of the area, and suggested alternative ways to conserve and protect the

wetlands. ²³ Neither the pro-agricultural-development nor pro-wetland-conservation vision totally prevailed. Instead, proposals were floated, projects were even funded and initiated, but ultimately the Government of Kenya lacked the resources to sustain the management and maintenance of any single development project. ²⁴

For example, UNDP and FAO funded a project to reclaim 2300 hectares of swampland for agricultural purposes during the late 1960s through mid-1970s, and transferred authority over the reclaimed land to the Lake Basin Development Authority ("LBDA"). ²⁵ The LBDA was created by Parliament in 1978 to "sustainably exploit and develop the immense natural resources in the region in collaboration with other development agencies and investors to create wealth and employment and alleviate poverty." ²⁶ LBDA was given full authority over development activities within the 17,500 hectares comprising the Yala Swamp region. ²⁷ LBDA had been using the 2300 hectares of reclaimed swampland for research and agricultural purposes, and in 1998 it initiated a multi-million shillings rice project in an attempt to boost regional food production by 50 percent. However, after spending Sh150 million, the project was abandoned and a weir that was part of the plan was never completed. Reportedly LBDA had poorly managed the project and the accompanying finances. When Burgess arrived on the scene, the swamp was slowly taking back the land that had been reclaimed. LBDA found in Calvin Burgess the capital and commitment to execute what it thus far had been unable to accomplish.

In May 2003, LBDA and Dominion entered into a Memorandum of Understanding ("MoU"), which laid out the agreement between the two parties. The MOU provided that LBDA staff would be utilized and that LBDA would be allowed to conduct adaptive research, extension activities, and demonstration projects for the local communities on an area that was commensurate with the activities, but no larger than 20 hectares.²⁸ The MoU further provided that LBDA would assign and transfer to Dominion all of its water permits. In return, Dominion agreed to pay 3 million Ksh to LBDA every year for the first ten years, with the amount increasing up to 7 million a year at the end of the 25 year agreement.²⁹ Additionally, Dominion agreed to pay

approximately 11 million shillings on behalf of LBDA to the government for all outstanding dues owed.

That same month, Dominion entered into a Memorandum of Understanding with the Siaya County Council and the Bondo County Council to lease 6,900 hectares of land for a large-scale rice farm.³⁰ 3700 hectares of the land had already been set apart in accordance with the Trust Lands Act and was being held in trust by the Siaya and Bondo County Councils on behalf of the communities. The parties agreed that Dominion would lease the land for a 25-year period with an option to renew at a rate of 1,254,782 Ksh for the first three years and increasing amounts (up to 1,673,043) for the last 19 years of the lease.³¹ This money was to be paid directly to the county councils. ³² The Councils further agreed to seek immediate approval from the Commissioner of Lands to have the other 3200 has "set apart," so that it too could be leased to Dominion. Initially it was anticipated that the first phase of rehabilitation and reclamation of the Yala Swamp would take ten years.

PRIOR LAND USES AND INTERESTED PARTIES

Prior to Dominion's arrival, most individuals in the surrounding communities were wholly dependent on the land and the resources extracted from the wetlands for their livelihoods. Locals engaged primarily in smallholder subsistence rain-fed farming; fishing and hunting provided additional income, and other natural resources were extracted from the wetlands for domestic use and commercial purposes.³³ Since most of the land in the region was categorized as community land, the rivers, lakes, and surrounding wetlands were considered a communal resource shared by all. Residents in the area had long depended on these water sources for domestic purposes, as well as for grazing their livestock. Over 700,000 people live in the districts impacted by Dominion's arrival.³⁴

Box 1: THE YALA SWAMP WETLANDS: AT A GLANCE

The Yala Swamp is located on the north-eastern shore of Lake Victoria. It is considered one of the largest and most valuable wetland areas in all of Kenya. The Swamp forms the mouth of the Nzoia and Yala Rivers and was created by the backflow of water from Lake Victoria and the Nzoia and Yala rivers' floodwaters. Lake Kanyaboli and two other freshwater lakes are contained within the wetland. The region has garnered a great deal of national and international attention, in large part because of its rich biodiversity. Lake Kanyaboli is considered a 'genetic reservoir' for certain species of fish that have migrated from Lake Victoria and can no longer be found there. More than 65 species of birds, including the endangered Sitatunga, are known to populate the area, as well as many invertebrates, such as the aquatic nymph of mayflies, dragonflies, and stoneflies. Mammals found in the Swamp include the water-buck, vervet monkey, hippo, warthogs, leopards, and hyenas. Papyrus, reeds, and perennial grasses also grow in and around the Yala Swamp. (Abila & Othina, n.d.)

Despite vast natural resources (See Box 1), communities inhabiting the Yala Swamp area live in severe poverty and food insecurity plagues the region. In 2002, 58% of the people in the region lived below the poverty line. More specifically, Siaya and Bondo Districts ranked in the top 10 poorest districts in all of Kenya.³⁵

PROMISES AND PREDICTED IMPACTS

At the outset, Dominion Farms

and parties with a stake in the venture (i.e., LBDA and the county councils) made big promises to local communities about what the project would deliver. The initial proposal projected that Dominion Farms would "provide employment to hundreds of local residents both directly and indirectly" and that former land users would be offered employment opportunities on a preferential basis.³⁶ Dominion Farms maintained, "Outside experts in healthcare, farming, equipment maintenance and the like will be brought in from time to time to provide technical support, training and any other services not currently available in the country. Eventually, local staff will be trained to take over the consultancy and management of the farm." Dominion also promised to "include the employment and training of skilled and semi skilled farm labour, equipment operators and managers" and that employees would be paid a reasonable wage.³⁷ Moreover, Dominion committed to "assist in community development activities (providing financial assistance and training to organized groups carrying out income generating activities); assist in the construction and equipment of schools, churches, and a community center; improve health care, provide water and sanitation,

etc."³⁸ In its MoU with the County Councils, Dominion specifically agreed to set aside at least 150 acres of cleared land for each Council for local community use and to rehabilitate at least two public primary school and two public health facility for each of the Councils within the first thirteen years of the lease.³⁹

As for environmental risks that the project might pose, Dominion's 2005 EIA did raise some of the potential harms related to the aquaculture project, including degradation of wetlands. Wetlands, the report noted, "are amongst the most productive ecosystems sustaining the ecological integrity and productivity of adjacent large water bodies, and are important breeding and nursery grounds for many aquatic species. Clearance and conversion of these areas to fish ponds may endanger the large ecosystem and reduce their biodiversity." Additionally, it noted other adverse impacts from aquaculture including chemical pollution, biological effects, and nutrient and organic enrichment of semi-closed water bodies.

The EIA added that designs for a fish processing plant, a waste treatment plant, and a water disposal plant – all part of the proposal - were not available for review, but that they should "be given careful consideration during implementation" in order to "avoid pollution of the swamp and contamination of the flora and fauna." ⁴¹ The estimated water needs for the fish processing plant alone were 1000 cubic meters per month, which the EIA envisioned would be extracted from boreholes and canals. However, the EIA made it clear that overall water needs, including cropwater requirements, would be determined *in the future* – after the wetland reclamation process. The EIA also conceded that increased malaria infection was likely once irrigation began. ⁴²

Furthermore, although the EIA set out both the positive and negative impacts of the project, and often included measures to mitigate the harms, it did not include a framework to determine or any real analysis on whether the projected benefits actually outweighed the projected harms. For example, in its discussion of the positive and negative socio-economic impacts of the aquaculture and fish processing project, the EIA noted that benefits included:

i. Production of Tilapia for export to the EU markets

- ii. Increased local income levels through the creation of employment
- iii. Improvement of standards of living in the project area
- iv. Increase in foreign exchange earnings through export.⁴³

Conversely, the EIA noted that if the project was not well-managed it could lead to:

- i. Decline in the quality and quantity of food fish to the local inhabitants
- ii. Increased resource-use conflicts
- iii. Social disruption within the rural environment following:
- iv. Displacement of traditional community-based activities
- v. Underemployment due to shifts toward unskilled labour
- vi. Marginalization of resident resource-users and non-resource users due to increasing income distribution changes.⁴⁴

Astonishingly, the EIA listed no measures to mitigate the harms or discussion of what would constitute a "well-managed" project. Also, it is worth noting to whom the benefits and harms for this particular activity would accrue. As for the benefits, the EIA projected that the beneficiaries would include EU markets, local communities, and the national economy. It would be reasonable to assume that, if profitable, Dominion Farms would also be among the stakeholders who would benefit from the aquaculture and fish processing project. On the flip side, it is clear that the project posed numerous threats to local communities, who clearly would be the target of the enumerated harms. The EIA later noted that women working for Dominion currently earned 150 Kenyan shillings for a 10 hour day of work pulling weeds (the equivalent of approximately .17 cents/hour in USD in 2005 exchanges rates), leaving some to wonder whether Dominion was creating any positive impacts for the community at all.

Finally, in a nod towards the importance of ongoing environmental monitoring, the authors of the EIA urged

The Yala project is expected to utilize a large quantity of chemicals in its operational stages. Such chemicals are highly toxic and if allowed to flow directly into Lake Victoria would pose a disaster of great magnitude to the Lake fisheries. It is therefore, necessary and important that stringent measures are established and maintained to ensure that such toxic substances are used sparingly if and only where necessary...⁴⁵

Nonetheless, there is no mention in the final recommendations and conclusions of the potential environmental harms and need for ongoing monitoring, nor is any money allocated for ongoing monitoring, relocating displaced households, or resolving conflicts over natural resources.

DIFFERING PERSPECTIVES ON IMPACTS

A number of outside experts have weighed in on the Dominion debate. 46 Despite claims from Dominion that reclamation of the wetlands would not impose any significant environmental harm, reports from 1998 and 2002 found that previous reclamation efforts, as conservationists predicted, resulted in lower water quality in Lake Kanyaboli, less biodiversity, and increased demand over the remaining wetland resources by local communities. 47 The reports concluded that the earlier reclamation project had resulted in overall net losses for the local communities. Based on this previous work, Abila et al (2005) predicted that Dominion's swamp reclamation and conversion efforts would have a detrimental effect on the environment. They argued that reclamation efforts will lead to habitat loss and the "cascading environmental effects" associated with that. In addition, removal of swamp vegetation will damage the wetlands ability to perform as a buffer for certain nutrients and biocides that will otherwise adversely impact the water quality and ecosystems of some of the freshwater lakes. As certain resources within the wetlands are negatively impacted by the reclamation efforts, environmental scientists have argued that local communities that depend on the resources for their livelihoods will be negatively impacted as well.48

In addition, the Kenya Wetlands Forum convened a group of experts to conduct an assessment following DF's 2005 EIA proposal.⁴⁹ The report noted a number of concerns. First, it documented that a number of crops were already under cultivation that went beyond the license issued pursuant to Dominion's first EIA. Second, the team documented that Dominion was at "an advanced stage" in its fish farming project.⁵⁰ Without prior approval, Dominion had already constructed several fish ponds, was carrying out breeding, and had rehabilitated a retention dyke.

Additionally, the report found several water-related concerns. The report noted that a comprehensive feasibility study had not been completed with regards to the water extraction and diversion projects, and that no EIA had been completed to address the environmental and social economic impacts related to the irrigation scheme.⁵¹

Aside from concerns that DF had moved forward with activities without the proper permits or studies completed, the Report also noted that the land clearing would adversely impact the balance of the ecosystem and result in the loss of both important flora and fauna. Moreover, the Report noted that pollution caused by the project had not been adequately addressed and that the downstream effects of the damming and diversion of the river Yala were already apparent.

PUBLIC RESPONSE

According to the Council MOU, the project received initial approval from the Office of the President, the District Commissioner and District Development Committee for both Bondo District and Siaya District.⁵² However, a review of media reports covering the history of Dominion Farms demonstrates how divided the community has been over the project. The project began amidst a swirl of controversy when in late 2003, three cabinet ministers (from the Water, Environment, and Regional Development ministries) accused Dominion of not following government procedures, ordered Dominion to shut down its operations, and directed NEMA not to issue a license. (Nation, Nov. 29, 2003) Initial reports, however, suggested strong local support for the project, (East African Standard, Dev. 4, 2003) although it is difficult to ascertain whether the support was always authentic, or merely bought. A number of reports contain statements from local residents about how they were given transport and paid to speak out in support of the project.⁵³

THE REGULATORY PROCESS AND PRESENT STATUS

Although Burgess has publicly stated many times that he would not pay bribes or engage in corrupt politics, Dominion's activities, and the political and regulatory processes related to the project, have been opaque at best. Both of Dominion's EIAs were approved by NEMA; however, the author was unable to obtain any documentation regarding NEMA's approval process or whether there were any conditions attached to NEMA's approval.

Over time, local support has diminished, and from news accounts it appears that the majority of the community has turned against the project. This can be attributed to a number of factors. First, in the beginning, over 1500 people were employed to clear the land, but that number has dwindled down to less than 200 full-time employees, 40 security officers, and approximately 400 part-time unskilled positions on a seasonal basis.⁵⁴ Locals complain that the few jobs that do exist are primarily for unskilled labor, and that Dominion has failed to take proper measures to protect its workers against occupational health and safety hazards. Second, critics point out that Dominion's presence has drastically interfered with the ability of local communities to support themselves, due to their loss of land for farming and grazing, and the depletion and degradation of many of the resources they previously depended on from the wetlands. Dominion has blocked roads and paths that the community previously used, as well as fenced off access points to water. Third, as the project has expanded, an untold number of residents have been displaced or had their property flooded as a result of the Dominion project. Some residents have been compensated and willingly moved, while others have refused.⁵⁵ Third, locals argue that Dominion has taken over sites of cultural and spiritual significance for the Yala Swamp communities. Finally, local communities have spoken out against Dominion as emerging public health issues associated with rice production and water reservoirs, such as malaria, bilharzia, dysentery, and typhoid, are on the rise.

As for ongoing environmental monitoring, it is very unclear what, if anything, is being done. The LBDA MOU provided that "LBDA will regularly monitor the environmental impact of

the project by carrying out short term 'with Project' assessments in accordance with the Environmental Management and Co-ordination Act. Dominion will avail such records and data as may be necessary for such assessments. Dominion will also put in place remedial measures recommended by the assessments with a view to protecting the environment as may be required from time to time." However, the LBDA MOU also directed Dominion to provide all approved copies and design reports and drawings with LBDA *unless* the documents were of a confidential nature, would harm the reputation of Dominion, or hinder its operation in any way. Because LBDA makes a profit each year off of Dominion, it is hard to imagine how it could also legitimately be responsible for monitoring and enforcing environmental standards. At this time, NEMA does not publish any ongoing environmental audits, making it very difficult for others to serve as watchdogs.

CASE STUDY #2: TANA INTEGRATED SUGAR PROJECT

The Tana Integrated Sugar Project ("TISP") and the last two case studies are located in and around the Tana River Delta region. (See Box 2 for background on the Tana River Delta.)

Box 2: The Tana River Delta At a Glance

The Tana River Delta is considered the second most important estuarine and deltaic ecosystem in Eastern Africa. (The Annotated Ramsar List: Kenya.) The Tana River originates just north of Nairobi and spills into the Indian Oean in southeastern Kenya. The Tana River Delta is comprised of freshwater, floodplain, estuarine and coastal habitats. The region is widely recognized for its biodiversity. The Delta provides an invaluable habitat for hundreds of plant species, many of them endemic to the area. The Delta is also home to numerous species of endemic and/or threatened wildlife. In 2012, the Tana River Delta was designated as a Wetland of International Importance under the international Ramsar Convention. It has also been designated as an Important Bird Area.

A little less than 100,000 people reside in the Tana Delta Region. Poverty rates exceed 70%, making the area one of the poorest regions in all of Kenya. (TISP EIA) The region is made up of mostly arid and semi-arid land. However, rains in the upper delta cause flooding in the lower wetland twice a year. Much of the surrounding habitats – both human and natural – in the lower delta depend on this semi-annual flooding. Flooding in the delta supports a range of activities including forest regeneration, recession agriculture, and groundwater replenishment. (Duvail, Medard, Hamerlynck, & Nyingi, 2012)

Although some of the land in the lower delta area was set aside to form group ranches, it has been reported that the ranches were poorly managed and often resulted in open access zones. Most of the remaining land in the area is characterized as public (previously known as government) land, although again, it has been accessed, utilized, and even settled by local communities for generations. The conflicting land tenure schemes and de facto settlement realities make it very challenging to untangle who is rightfully entitled to exercise authority over land in the delta. This ambiguity has led many outsiders, as demonstrated by the case studies, to assert that land in the region is underutilized, vacant, or illegally claimed by squatters.

The situation is complicated by the fact that several ethnic groups inhabit the delta, depending on the season. The communities are generally organized in terms of their economic activities, which often in turn defines the communities' relationships to the land. For example, the Pokomo have traditionally been farmers and formed settlements along the Tana River. Conversely, the Orma have historically been pastoralists who were drawn to the Delta to graze their cattle during the dry season. (Duvail, Medard, Hamerlynck, & Nyingi, 2012) Increasingly, however, even the Orma have formed more permanent settlements in the area. These differing land use patterns and practices have resulted in a strained relationship between the Pokomo and Orma over the years. Nevertheless, the two communities have successfully negotiated access rights to the land and other natural resources, often in the absence of any formally recognized legal claim to the land. However, maintaining this peaceful coexistence is a delicate balance. Any shift in the quality or quantity of land and resources can cause tensions to erupt into violence. In 2001, 180 people died during clashes following a revision of farming and livestock-rearing land allocations. (Duvail, Medard, Hamerlynck, & Nyingi, 2012) More recently, in the fall of 2012, in the midst of a drought and following a spate of land speculations and resident relocations, 200 people died.

The fact that three of the four case studies proposed large-scale agricultural initiatives in the delta underscores the growing interest to develop and exploit resources in the region. The Tana and Athi Rivers Development Authority (TARDA) was formed in 1974 to "undertake integrated planning, development coordination and management of the resources within the Tana and Athi River basins." (TARDA Act Cap 443, Laws of Kenya) TARDA, however, much like the LBDA, has suffered from severe mismanagement. The inability of the government to successfully resource and manage development schemes has once again opened the door for foreign investors with the financial and human capital to step in.

A SNAPSHOT

The Tana Integrated Sugar Project is a joint venture proposed in 2006 by Mumias Sugar Company Ltd. and the Tana and Athi River Development Authority. The venture sought to establish a large-scale sugar cane plantation on 20,000 hectares in the lower Tana River Delta. However, the question of who had a superior claim to the targeted land was fiercely contested. Support for the project was closely drawn along ethnic lines, which further complicated matters. Despite a long list of anticipated environmental and social harms raised by authors of the EIA, as well as environmental advocacy groups, the project received approval from NEMA. Since 2008 when the project was approved, TARDA and Mumias have been embroiled in contracted court battles with local residents. As a result, although TISP has a license to move forward, the project has been stalled by this and other obstacles. It remains to be seen whether TARDA and Mumias can maintain a working relationship well enough to operationalize the proposal.

THE PROPONENT AND PROPOSAL

In 2006, TARDA entered into a planned private venture with Kenya's largest sugar-producing company, Mumias Sugar Company Ltd. ("Mumias").⁵⁸ The venture, known to as the Tana Integrated Sugar Project ("TISP"), would be located in the lower Tana Delta and entail "irrigated sugarcane production through estate (16,000ha) and out grower (4,000ha) systems, water supply to the project, a sugar factory, and co-generation facility of up to 34 MW power capacity, an ethanol production plant, and livestock supporting activities including fisheries."⁵⁹ The EIA asserts that the goals of the project are three-fold: 1) reduce poverty through direct and indirect employment opportunities, 2) increase Kenya's competitive edge in the sugar market and

meet domestic sugar supply demands, and 3) address energy needs by converting cheaply produced plantation cane into biofuels.⁶⁰

PRIOR LAND USES AND INTERESTED PARTIES

Although TARDA and Mumias had entered into a partnership memorialized by a Memorandum of Understanding regarding the TISP, it is clear from the EIA that a number of issues with respect to the project remained unresolved. Foremost among these was the issue of land ownership. The EIA states that the TISP would encompass 33,000 hectares of land, yet in the section on "existing tenure and allocation agreements" it becomes abundantly clear that the TISP had not yet entered into any formal land agreements, and that ownership of most, if not all, of the project land was contested. TARDA claimed individual ownership to a large tract of land, approximately 28,680 hectares, through a letter of allotment from the government in 1995. However, apparently TARDA had never complied with the conditions set forth in the letter, which included developing the land, and therefore no title had ever been granted. Nonetheless, in 2007, two years after the land grant purportedly expired, TARDA sold the lease to Mumias and retained a 15% stake. On this issue, the EIA notes, "This land is also home to indigenous and minority communities who derive their livelihood therefrom. To these communities, the lands they occupy

"This land is also home to indigenous and minority communities who derive their livelihood therefrom. To these communities, the lands they occupy together with the land based resources are rightfully theirs even though they do not have legal title thereto...TARDA is therefore in a precarious condition in as far as legal ownership of the land is concerned.

Indeed its claim to the land can be challenged in a court of law."

- Tana Irrigated Sugar Project, EIA, p. 95

resources are rightfully theirs even though they do not have legal title thereto." ⁶³ The EIA continues on, "The communities' claim to land is governed by the customary tenure and is based on the principles of equity."

Nonetheless, the EIA notes, "TARDA appears to have remained complacent upon the receipt of the Letter of Offer and contentedly states that the land belongs to the corporation. TARDA is therefore in a precarious condition in as far as legal ownership of the land is concerned. Indeed its claim to the land can be challenged in a court of law. It is therefore imperative that the title to the property be obtained without further delay."

The EIA goes on to lodge what seems like a warning to TARDA:

In Block G of the TARDA land however, there is a group of squatters who are said to have moved on to the land in December 2006. TARDA regards this latter group as illegal squatters. The fact is all squatters are illegal. TARDA may have to deal with these new squatters in the same manner as it dealt with the previous squatters. The issue of squatter is always sensitive as they pose a problem to legal land owners. The issue of these squatters must therefore be taken care of to avoid subsequent claims of ownership by adverse possession.⁶⁵

Finally, the EIA reveals that even the land targeted for the sugar factory is contested: "The factory site is outside the concession area. This fact creates a dilemma in that plans are being made and proposed over a piece of land whose ownership is not determined. The size of the land earmarked for the factory is also yet to be determined. Ownership of the said piece of land is key to any proposals made in respect thereof." The EIA posits that that this land should be allocated to TARDA so that the project proponent could avoid entering into an agreement with a separate party. At the time of the EIA, the land targeted for the factor site was occupied by approximately 85-140 people. Nonetheless, the EIA posits that the land should be allocated to TARDA so that the project proponents would not have to enter into separate agreements with other parties. "These people will have to be compensated and re-settled elsewhere."

In addition to the contested land comprising the nucleus estate, the EIA acknowledges that the additional 4,000 hectares of smallholder sugar cane blocks for out growers envisioned by the TISP is also contested. While the EIA asserts that the land is government land, it also recognizes that the land has never been adjudicated and "there are communities that occupy and derive their livelihood from the same. The pastoralists graze all over while the agriculturalists

have farming portions given by clans. The communities in the entire project area have been agitating for the issuance of titles for the land they occupy."⁶⁷ Noting that land adjudication is a government function, the EIA urges the government to take action on the issue as soon as possible.

PROMISES AND PROJECTED IMPACTS

The TISP proposal predicts that the project will have a positive impact on local communities, as well as the national economy. In addition to the standard promises of increased revenue and the provision of amenities to the local community, the EIA states that the proponents anticipate that the initiative will directly or indirectly create over 20,000 employment opportunities.

The EIA also enumerates a multitude of negative social and environmental impacts that it anticipates will be generated during the construction and operation phase of the project. A summary of the negative impacts, as set out in the EIA, can be found in Box 3 and 4.

Box 3: CONSTRUCTION PHASE NEGATIVE IMPACTS

"...loss of vegetation cover and biodiversity, alteration or destruction of wildlife and wildlife habitat, dislocation of populations and communities, stress on infrastructure as a result of increased population, loss of graves and the cultural value attached to them, loss of businesses, soil erosion, surface and ground water hydrology changes and water quality degradation, ecological imbalances, solid waste generation, noise pollution, dust emissions, generation of exhaust emissions, increased water demand, increased energy consumption, increased use of building materials and energy, accidents; creation of informal settlement, physical and economic displacement, diseases, conflicts between locals and newcomers." (HVA International/MA Consulting, 2007, pp. xxv-xxvi)

Box 4: OPERATION PHASE NEGATIVE IMPACTS

"...increased water use and reduced downstream flow, generation of industrial effluents, reduced water quality, waterlogging and salinization, sedimentation of canals, risk of flooding due to structural failure of the dykes, ground water pollution, noise, increased incidence of water borne diseases, increased soil erosion, contamination of soils with herbicides and other agro-chemicals, water logging and salinization of soils, algal blooms, weed proliferation and eutrophication, terrestrial and aquatic ecological changes, increased run-off from new impervious areas, solid waste generation, air pollution and occupational health and safety risks, increase in diseases, alcoholism, changes in lifestyles, increased road accidents, conflicts over resources." (HVA International/MA Consulting, 2007, p. xxvi)

The EIA elaborates on the anticipated harms in great length. In addition, it includes a 32-page chart detailing measures that will need to be taken to mitigate the harms. These include, "efficient water use in the fields, factories and domestic areas, release of water from the dams upstream of the project area during dry periods, use of cleaner production tools to reduce waste generation at source, use of non- or less hazardous input materials, protection of river banks and canals, awareness creation and education of the project communities regarding HIV/AIDS and other diseases, safe routing of storm water, and enterprise development e.g. development of ecotourism to assist the local communities."⁶⁸

To its credit, the TISP EIA is thorough. The EIA was prepared by two agribusiness-oriented companies. The 415-page report sets forth a detailed Environmental and Social Management Plan ("ESMP"), and recommends that the developer establish an Environmental Control Department to oversee implementation and monitoring of the ESMP.

DIFFERING PERSPECTIVES ON IMPACTS

While the TISP EIA asserts that the anticipated environmental harms could be adequately mitigated, others sharply disagreed. A team of international researchers led by Dr. Stephanie Duvail, an expert in the field of wetland management, independently reviewed the EIA and conducted extensive fieldwork in the Tana River Delta to determine the adequacy of the EIA particularly in terms of the hydrological impacts of the project.⁶⁹ Duvail's team found the TISP EIA inadequate on multiple fronts.⁷⁰

Duvail posits that the "success or failure of the project and its environmental impacts are to a very large extent tied to water availability and flows in the delta but this aspect does not receive an appropriate treatment in the EIA document."⁷¹ She notes that while the EIA asserts that the projected abstraction of 28 cubic m/s of water will not exceed 1/3 or more of the discharge water from the Tana River, her team's own calculations demonstrate that the project's water needs

would account for more than 1/3 of the mean monthly water flow for 2-5 months a year, depending on what point of the river is used to calculate the mean monthly flow.⁷²

Additionally, Duvail (2012) maintains that the EIA fails to address the high concentrations of pesticides and fertilizers that would drain into the Bilisa Boka lake, home to hippos, crocodiles, and piscivorous waterbirds, as a result of the project. The EIA, she notes, simply states "sugar cane is cultivated with relatively few pesticide inputs" but fails to support this assertion with any evidence. Duvail, on the other hand, considers typical sugar cane farming practices and concludes that while the most common pesticides are fairly immobile, contamination is quite possible during flood events, which occur with regularity in the Delta. This could lead to significant fish loss. Duvail notes that monitoring of soils and water sources should be mandatory for all pesticides used but that the EIA makes no mention of it.⁷³

Duvail's research further asserts that the environmental impacts of the project would extend far outside the spatial boundaries of the sugar cane farm itself. Because of the amount of water to be used by the project, the team argues that communities downstream would experience decreases in water flow, and some areas would completely lose out on the benefits of periodic flooding. The "flood pulse" in the Delta supports coastal fisheries and is connected to the overall health of the mangrove systems. Duvail's team insists that "while the nursery functions of the mangrove and the estuary probably present one of the greatest economic values of the Tana delta, values that will undoubtedly be seriously affected by any substantial reduction of flow and/or damage to the mangrove stands," the EIA fails to address this important issue.⁷⁴ Finally, in terms of environmental harms, the team notes that the EIA fails to mention all of the vulnerable and threatened species that will be impacted by the project.

In terms of social impacts posed by the TISP, Duvail finds that the mitigation efforts proposed by the EIA inadequately addresses the magnitude of the harm that would be inflicted on local communities if the TISP moves forward. Specifically, the team stresses,

Pasture will be lost: not only the grazing land set to be converted by the project, but also all the areas that will be excluded from flooding by the embankment and by the reduction of flooding frequency linked to the abstraction of a substantial proportion of the flow. Furthermore, other activities such as fisheries and recession agriculture will also suffer from the change of water regime in the delta. Some areas will be directly impacted since they have been included in the project areas, others indirectly through loss of pasture, fishing zones and farming opportunities.⁷⁵

Finally, to further assess the economic impact of the proposal, Nature Kenya and the Royal Society for the International Protection of Birds ("RSPB") commissioned a cost-benefit analysis of the TISP.⁷⁶ The report concludes that the EIA underestimates the total cost of the project by ignoring costs related to water extraction, relocation of displaced communities, pollution mitigation, and loss of tourism and wildlife. Moreover, the report projects that economic activity related to existing uses in the Delta is approximately 30 million (lbs.), while TISP projects annual economic gains of only 1.25 million.⁷⁷

PUBLIC RESPONSE

Farmers in the Delta reportedly were very supportive of the project. Pastoralists, on the other hand, were less enthusiastic. Environmental groups staunchly opposed the TISP. Nature Kenya, the Kenya Wetlands Forum, and the Royal Society for the International Protection of Birds ("RSPB")/BirdLife International all submitted comments through the EIA process opposing the TISP.

THE PROCESS AND PRESENT STATUS

NEMA held a number of public hearings on the TISP EIA in May 2008. Reportedly, the meetings were quite contentious and at times even violent.⁷⁸ Opponents of the project accused the proponents of hiring hecklers to disrupt the meeting.⁷⁹ Despite wide-spread opposition from community-based groups and conservation organizations, on June 11, 2008, NEMA granted Mumias a license to move forward with the project.⁸⁰ Following NEMA's decision to authorize the

project, local residents began holding protests against the project. St. Community leaders and some local elected officials spoke out against NEMA's decision to grant the license despite a plethora of concerns raised in public forums about the project. Meanwhile, a coalition of organizations launched a campaign to stop the TISP from moving forward, and members of the Kenya Wetlands Forum filed a lawsuit on behalf of local residents seeking to enjoin TARDA and Mumias from moving forward with the TISP. The court initially ordered a stay against the project, but eventually dismissed the case due to technicalities. The case was refiled in 2010. While the case was pending, several hundred households from the pastoralist community were forcibly evicted by TARDA and relocated to a remote area. Mounting tensions between the Pokomo and Orma erupted into violent clashes predicted in the fall of 2012. Many observers placed the blame squarely on the shoulders of investors like TISP, whose proposals interfered with an already fierce competition over scarce resources. The Daily Nation reported that the conflict between locals claimed over 200 lives and displaced over 35,000 people. Meanwhile, a coalition of organizations of specific placed over 35,000 people.

In February 2013, after several court postponements and further evictions, the High Court of Kenya reached a landmark decision in favor of the community. In its decision, the Court took note of two competing interests: "the interests of the petitioners to a clean environment and in safeguarding their livelihoods, and the larger public interest in having the considerable resources of the Tana Delta utilized so as to foster not only the development of the area but also to meet certain national needs such as the need for adequate supply of sugar and food security." The Court found that even though the projects were launched prior to the new Constitution coming into force, the prior Constitution also protected the right to life, livelihood, and a clean environment. Although the Court stopped short of revoking TARDA and Mumias' license, it directed TARDA to "reevaluate its short-term, medium term and long range plans for the Tana Delta in consultation and with the participation, the communities in the area and all state and private entities involved in the projects in the Tana Delta," and to "facilitate periodic monitoring of the projects that have already commenced to assess their impact on the Tana Delta wetlands

and the interests of the communities which derive a living from the Tana Delta." ⁸⁸ The case was a huge victory for the community and the wetlands. TARDA and stakeholders have begun the process of developing a Strategic Environmental Assessment, as well as a Land Use Plan. For now, the TISP is on hold.

CASE STUDY#3: KENYA JATROPHA ENERGY

A SNAPSHOT

In October 2009, NIIsri, an Italian company, submitted a proposal to develop a 50,000 hectare jatropha plantation in the Dakatcha Woodlands. Although the EIA conceded that 70% of the land was currently occupied, the company had engaged in lease negotiations with the county council, who it maintained had legal authority over the land. Prior to receiving a licence, the company reportedly began clearing the forest to make way for the plantation. Under pressure from environmentalists, NEMA initially denied the license, but encouraged the company to scale-down its proposal. NIIsri did, but as the evidence against the viability of the jatropha crop mounted, the project fell apart.

THE PROPONENT AND PROPOSAL

The project proponent in this case was Kenya Jatropha Energy Limited, a company wholly owned by Nuove Iniziative Indutrialis sri ("NIIsri) of Italy. NIIsri specializes in the production of electric power from renewable sources. In addition to building and managing several power plants in Italy, NIIsri manages plants for over 100 public and private clients. At the time of this proposal, NIIsri managed vegetable oil power stations in Italy powered by palm oil imported from the Ivory Coast and Malaysia. NIIsri's business plan entailed developing 30 more vegetable oil power plants in the near future, in a bid to meet the rising demand for non-renewable energy.

Thus, securing a reliable stream of vegetable oil was essential to the scheme. To this end, in October 2009, NIIsri submitted a proposal to develop a 50,000 hectare jatropha plantation in the Dakatcha Woodlands. NIIsri's stated intention was to use the oil produced by the jatropha crop to meet energy needs in Kenya and Italy.⁸⁹

PRIOR LAND USES AND INTERESTED PARTIES

The Dakatcha Woodlands are home to more than 20,000 people from the Watha and tribes. The woodlands are Giriama **Jatropha Curcas** is a non-edible, sacred to these oil-producing shrub. The seeds of the plant are used to make diesel oil. Up until recently, Jatropha was touted as a biofuel miracle **plant.** Early reports were that the plant was relatively drought resistance and easy to grow. **The** primary concern was that it required vast swaths of land. Hence, the interest in Africa. communities, who have resided in the for area hundreds of years. Prior land use in the primarily involved subsistence farming target area of pineapples, maize, and cassava. Locals also depend on the woodlands for basic resources such as drinking water and firewood. Poverty rates in the region exceed 50%.90

The EIA indicated that the Ministry of Local Government, through the County Council of Malindi, had agreed to lease NIIsri 50,000 hectares of land contingent on NIIsri's ability to procure a license from NEMA. The lease was to be for an initial period of 33 years and the EIA

noted that the local council would be paid Kshs 10,000,000 from ground rent on an annual basis. 91 The EIA acknowledged that 70% of the targeted land was currently inhabited; 92 nonetheless it asserted that because the proposed land was trust land (now called "community land") under the authority of the County Council of Malindi, "local communities live as squatters on this land." 93 This is a clear contradiction of the law even in 2009, which provided that community land shall be held in trust by the local council on behalf of the local communities living on the land. It is clear from the EIA itself that many local residents were opposed to the project and did not wish to relocate.94 In addition, the EIA revealed the strong perception amongst community members that they were entitled to the land and should reap at least some of the benefits of any development project. In late spring 2010, it was reported that the County Council of Malindi, in collaboration with the District Environment Committee, was proposing to set aside 32,000 hectares of land that could then be turned over to NIIsri.95 Setting aside the land would effectively privatize the land, and dispossess local communities of any claim that might have had if it were community land. It is unclear whether a lease was actually ever executed, and what became of the attempt to set aside the land. Like many land acquisitions, specific details regarding political maneuverings around the land negotiation process are difficult to confirm. Nonetheless, this illustrates again how common it is for contested land to be targeted for large-scale land acquisitions.

The Dakatcha region is comprised of natural forest and scrubland on the southeastern coast of Kenya. Dakatcha has also been named a "Key Biodiversity Area" and "Global Biodiversity Hotspot," due to the rich diversity of plants and animals that inhabit the forest. (Jatropha Biofuels in Dakatcha, Kenya – The Climate Consequences, p. 2.) A number of globally threatened birds reside in Dakatcha, most notably the Clarke's weaver, which is found only there and a forest to the south.

PROMISES AND PROJECTED IMPACTS

The EIA asserts that the project would provide employment opportunities for over 50,000 people and "improve the living standards of the community and promote access to quality education and health care." In addition, the project promised infrastructure benefits such as new schools, health centers, housing for workers, and improved access to water and energy supply. Finally, the EIA opines that the project will have an overall positive impact on the environment, despite the many environmental risks and harms it raises, because the project would reduce overall dependence on fossil fuels and the jatropha plantations would help prevent soil erosion.

The EIA acknowledges that while the jatropha plant is believed to be a drought-resistant crop and, therefore, to have a positive environmental impact, "no quantitative studies are available to confirm this." 97 Furthermore, it concedes that since the impact of the jatropha cultivation had yet to be assessed anywhere, it was "not clear what land use change and occupation Jatropha will cause to the soils and local biodiversity within the proposed project site."98 In a chart summarizing the environmental impacts of jatropha cultivation, the EIA notes areas of concerns including "an impact on biodiversity," "air pollution," "noise pollution," "solid wastes," "effluent generation," "water use for irrigation," and "energy resource use." The EIA predicts that these harms would all "definitely occur" during the lifecycle of the project. Without mitigation, most of these harms were predicted to be of a moderately severe nature. With mitigation, the EIA maintains that the impact will be only "slight"; however, the cost and plans for mitigation on a number of these factors was not yet known, making it next to impossible for NEMA to evaluate the efficacy of the proponent's plan to mitigate the harms. 100 For example, while the EIA recognizes that the commercial-viability of the jatropha plantation may depend on irrigation, and that the environmental impact of this water usage is likely to be moderately severe, the budget for this essential issue is "to be determined." 101

DIFFERING PERSPECTIVES ON IMPACTS

Several conservation groups submitted comments in opposition to the project based on the anticipated adverse environmental impacts the project would generate. Specifically, they argued that destroying the woodlands to make way for the plantation would actually create more greenhouse emissions than it would save; it would likely cause soil erosion and a disruption in the water balance of the region; and it would destroy one of the few remaining habitats for some endangered bird species.¹⁰²

In an attempt to block the proposal, several reports were commissioned to examine the social, environmental, and economic impacts of the project. Nature Kenya, RSPB, ActionAid, and BirdLife International commissioned a study by North Energy, a UK-based energy and sustainability consulting firm, to assess the life-cycle greenhouse emissions for the Dakatcha Woodlands jatropha plantation proposal.¹⁰³ The study found that emissions from the plantation under the EIA proposal would likely be 2.5 to 6 times higher than fossil fuel equivalents, thus falling far short of the European Union's 50% emission saving standard, which takes effect in 2017. The report asserts that this is due in large part to the clearing of the woodland and scrubland that would be necessary to make way for the jatropha plantation. The report concludes that only if jatropha is cultivated on existing or abandoned agricultural land will the project be able to hit the targeted emissions saving standard.¹⁰⁴ While the Dakatcha Woodlands do have pockets of abandoned agricultural land, a follow-up report noted, "In practice this is a highly impractical and, thus, unlikely scenario as small parcels of jatropha separated by other land uses would not deliver the economies of scale that developers targeting the European market are looking for."¹⁰⁵

COMMUNITY RESPONSE

There were conflicting reports about whether local communities supported the project. Nature Kenya reported that when several earth movers were brought to the site to begin clearing the land in March 2010, months before NEMA had even issued a decision on the EIA, the local community chased the workers from the site. However, The Standard ran a story in July 2010 with the headline, Residents Differ with NGO, Endorse Bio-Fuel Project. An elder from one of the surrounding communities was quoted as saying We want all the pending issues holding up this project resolved so that it

can start. It will give us an alternative source of income instead of the wanton destruction of the woodland for charcoal."¹⁰⁸ The article further noted that a local councilor asserted that the project would provide over 300 jobs (a conservative estimate compared to the EIA's promise that the project would create 50,000 jobs). In an ongoing public debate about the project, Michael Gachanja, deputy director of the East African Wild Life Society, asserted that The Standard had overstated the degree of local support and maintained that once residents had learned the true nature of the project, their enthusiasm had shifted to opposition.¹⁰⁹

Sustainable Development?

ClientEarth, an environmental law organization, published a report examining the legal dimensions of NIIsri's EIA jatropha plantation. ClientEarth concluded that the proposal violated several sustainability criteria contained within the European Union's Renewable Energy Directive:

"First, once the direct land-use change consequences of the plantation are included, the biofuels do not achieve required GHG savings thresholds. It therefore violates Article 17(2).

Second, the relevant competent authorities have designated the Dakatcha woodland an area for nature protection purposes. It therefore qualifies as highly biodiverse lands whose conversion violates Article 17(3)(b)(i).

Third, the Dakatcha land is a continuously forested area. It therefore qualifies as land with a high carbon stock whose conversion would **violate Article 17(4)(b).**

The Union legislature designed the sustainability criteria to protect natural areas precisely like the Dakatcha woodland. Any biofuels originating from the plantation as proposed may not count toward national targets or renewable energy obligations and are ineligible for financial assistance." (ClientEarth, 2011, p. 12)

It seems fairly clear that local politicians, including the Malindi County Council, stridently supported the project, at least initially. The EIA maintains, "Through its letter to the Permanent Secretary and copied to the proponent, the County Council's position is stated as follows. 'That the project is beneficial to both the community and the council since it will create employment and open up the area to development." ¹¹⁰ Nature Kenya reported that a local member of parliament was quoted as saying "Objecting to Jatropha Project Dakatcha is like nurturing poverty in the area." ¹¹¹

Without question, the proposal was divisive and stirred up a great deal of animosity. In early July 2010, it was widely reported that a group comprised of journalists, staff from Nature Kenya and Kenya Wildlife Services, and locals were attacked when they attempted to visit the proposed project site. A press release stated that 30-50 armed men and women attacked the visitors with machetes, sticks, and other weapons.¹¹²

THE PROCESS

Opponents of the project were dismayed when in early March 2010, the proponent began clearing parts of the Dakatcha Woodlands without a license from NEMA. On March 10, 2010, Nature Kenya wrote a letter to Hon. John Michuki, Minister for Environment and Mineral Resources, urging him to investigate and stop the illegal clearing of the forestland. At that point, even though the EIA was dated October 22, 2009, it had still not been made available for public review. Conservation groups were irate that the proponent was moving forward without the necessary licenses, and seemingly without suffering any consequences for its illegal actions. The clearing of the forest continued through March. Finally, on March 26, 2010, the EIA was made available. On March 29, 2010, Nature Kenya wrote to Michuki again requesting that the Ministry put a stop to the illegal destruction of the woodlands. The letter states, "Sir, starting the destruction of the forests of Dakatcha Woodland before the EIA is gazetted, before the public

notice is over and before a license is issued is not only an abuse of public rights but a gross violation of the Law."¹¹³

On July 9, 2010, just days after media reports of local attacks on a group of conservationists and journalists, NEMA issued a decision denying a license. The stated reasons for denying the project were that the proposal "poses a threat to the Dakatcha Woodland Forest in the proposed project area." In addition NEMA asserted that the project might cause "a possible loss of habitat and breeding grounds for birds and other wildlife within the Dakatcha Woodland Forest in the proposed project area." NEMA warned, "There is insufficient data on the viability of Jatropha plant in the proposed project area and as such, may not be environmentally sustainable on 50,0000 hectares."114 Nevertheless, NEMA advised the proponent to "redesign and scale down the project to pilot level" to prove the "sustainability" of the project; only then, NEMA stated, would an EIA license be issued for the entire 50,000 hectares. Although the initial proposal had been denied, the battle was far from over. Just days after NEMA denied the license, Malindi District Environment Officer Samuel Ng'ang'a spoke out in support of the project stating that the project "will not destroy the environment as alleged..." In fact, on July 29, 2010, the Standard published an article entitled, "NEMA Allays Fears Plant Will Harm the Environment" and inaccurately reported that that NEMA had "endorsed the investment with a few conditions."116

One month later NIIsri submitted a revised proposal for a 10,000 ha pilot project. Local groups mounted a campaign and filed a court case seeking to stop the project. As the proposed project gained national and international media attention, several members of the environmental governmental agencies, including the Minister of Environment and Mineral Resources and the Director General for NEMA, visited the site to hold a meeting with stakeholders. The Minister advised the proponent that scientific evidence was needed to demonstrate that no harmful environmental or social effects would result from the project before NEMA would consider issuing a license. After a sustained public relations battle, which included educating the public and

elected officials about the growing evidence that jatropha plantations were neither good for the environment nor economically sustainable, NEMA finally rejected the proposal. However, although the decision was made in August 2011, NEMA did not announce its decision, which carried enormous weight for local communities, until February 2012.¹¹⁷ One of the reasons NEMA gave for denying the license was that there "was insufficient data on the viability of Jatropha cultivation in the country."¹¹⁸ It is rather curious that the license was denied on these grounds, particularly in light of the fact that in May 2011, just three months prior to the NEMA's August 2011 decision denying NIIsri's license, NEMA approved Bedford Biofuel's proposal for a jatropha plantation in the very same region of the country.

Although the Kenya Jatropha Energy Limited project never launched, it left a mark, arguably, on both the environment and people who inhabit the Dakatcha Woodlands. An untold number of hectares of forest were cleared for the plantation, and the entire process drove a wedge between residents and local and national elected officials. Seeds of anger and resentment were planted; the full impact of the process remains to be seen.

A SNAPSHOT

On the heels of the prior two case studies, Bedford Biofuels entered the Tana Delta development debate. Bedford negotiated lease agreements with members of six group ranches in the region and proposed to cultivate a jatropha plantation on the 64,000 hectares of land. Over the objections of local communities, who asserted that they had not been consulted with regard to the lease agreements, and conservation organizations, who raised serious concerns about the environmental impact of the project, NEMA issued Bedford a license to proceed with the project. Bedford began clearing land and even planted jatropha seedlings. However, within months, Bedford folded and the project was abandoned

THE PROPONENT AND PROPOSAL

The project proponent in this final case study was Bedford Biofuels Tana Delta 1 Ltd. ("Bedford"), a private company incorporated in Kenya. Its parent company was the Canadian firm, Bedford Biofuels Inc. In September 2010, amidst the controversy surrounding the Kenya Jatropha Energy proposal in Dakatcha, Bedford submitted an EIA to NEMA proposing to lease 600 square miles or 64,000 hectares along the Tana River to grow jatropha. Bedford proposed to use only 40% of the targeted land for the jatropha plantations and to reserve the remaining 60% for protection of native vegetation and wildlife habitat, crop cultivation, livestock grazing, and settlements. ¹²⁰

The proponents maintained that a jatropha plantation was ideal in this semi-arid region because very few food crops could flourish without irrigation, and the jatropha plant did not require irrigation. According to a press release from Bedford Biofuels, the project was funded by private investment offerings designed to reach "beyond the scope of simple monetary gains and into the realm of environmental and humanitarian contributions."¹²¹

The EIA states that the proposed jatropha plantations would be sited on six ranches in the lower Tana Delta region. According to the EIA, the leases had been negotiated with the support of the Tana Delta District Development Committee and each of the six individual ranches. ¹²² According to the EIA, Bedford had negotiated sub-leases with five of the six individual ranches, and was in the process of finalizing the sixth. As part of the lease, Bedford agreed to pay all accrued rates owed by the ranches, as well as rents and a consent fee. ¹²³ In turn, the Tana Delta District Development Committee and the Commissioner of Lands had agreed "in principle" to extend the ranch leases for an additional 45 years. ¹²⁴ Although the lease document was not available for review, it was reported in the media that Bedford agreed to pay a mere \$1.25 USD per acre per year. ¹²⁵ Despite the fact that Bedford managed to secure subleases with the ranches, critics argued it had not been a true participatory process. These critics maintained that the land was controlled by a few local elites, who never consulted with the community-at-large. ¹²⁶

Prior Land Uses and Interested Parties

As discussed elsewhere, although land in the lower delta area was set aside to form group ranches, over time the ranches were poorly managed and therefore open access zones were more the norm. Prior to Bedford's arrival, land in the region was used primarily for agriculture and pastoralism by the Pokomo and Orma, respectively. As noted above, these differing land use patterns and practices have resulted in a strained relationship between the Pokomo and Orma over the years. Nevertheless, the two communities have successfully negotiated access rights to the land and other natural resources, often in the absence of any formally recognized legal claim to the land. The Pokomo hold the head leases for three of the ranches, while the Orma hold the leases to the three other ranches.

Promises and Projected Impacts

Initial promises were huge – both to the investors in the project and to the communities in Kenya. In 2010, John Mitchell, general manager of Bedford Biofuels, explained that planting the jatropha was like planting oil wells. So long as the jatropha is planted in a climate where it can grow, "you get a 100% chance of getting oil." ¹²⁷ Bedford specifically targeted small private investors for the project, and enticed local residents of Alberta, Canada, headquarters to its parent company, that they could buy into the "diesel tree" scheme for as little as \$8000. ¹²⁸ Addressing investor concerns that the biofuel plantation might edge out food crops, Mitchell asserted that the land had not "been used for 500 years for anything" and that Bedford Biofuels would "grow food on our land and feed the people." ¹²⁹ The statement that the land had not been used for 500 years is curious particularly in light of the fact that the EIA contains a three-page discussion of Bedford's "relocation/resettlement" plan. ¹³⁰ Although the EIA insists that "at no time will squatters be forcefully evicted from the ranches," the discussion is a tacit admission that the land was in fact being used, and that Bedford's attempt to exercise control over the land might meet resistance.

As for the community, Bedford vowed to allocate 4% of its budget to humanitarian work, which would include building homes, dental and medical clinics, schools, and food processing plants.¹³¹ The EIA promised that for every 10,000 hectare plantation, the proponent and Bedford Biofuel Inc. Canada would donate \$3.6 million USD to EMPOWER, a humanitarian development NGO established in connection with Bedford Biofuel, and HALOW – Helping African Landowners Win, an out-growers scheme. Through these two projects, Bedford envisioned supporting livestock production, beekeeping, constructing a primary school and health clinic, fish farming enterprises, eco-tourism, and other cottage industries such as mango processing, soap making, and candle making.¹³²

The EIA sets out a detailed discussion of the nature and significance of predicted social and environmental impacts, with and without mitigation measures. These impacts include: alteration and disruption of wildlife and wildlife habitats, loss of biodiversity, ecological imbalances, increases in water demand and energy consumption, increase use of natural

resources, risks of accidents and health hazards, increased incidence of HIV/AIDS and other diseases, reduced downstream flow, generation of waste water, increased soil erosion, increase in solid waste generation, increase in air pollution, interruption in animal movements, possible jatropha invasion, increase in use of wood and degradation of woodlands, the "hinterland effect," potential conflicts arising from pastoralists' loss of pasture and water, and the creation of informal settlements. The authors of the EIA asserted that out of this list the only impacts generated by the proposal that might pose a major negative harm would be the loss of biodiversity, an increase of woodland degradation, and the creation of informal settlements. However, the authors insisted that through the adoption of proper mitigation measures, the negative impacts be minor. 133 Ultimately, The EIA concluded that if the project implemented mitigation plans in accordance with the EIA, the benefits of the project would outweigh any potential drawbacks.

DIFFERING PERSPECTIVES ON IMPACTS

The same team of international researchers that studied the TISP proposal also examined the Bedford project. Duvail's team found the Bedford EIA also inadequate in many respect: "no proper water balance for the project was presented, impacts on the environment and especially on the biodiversity are not detailed and virtually no data to support the expected economical outcomes were supplied." Specifically, they stressed that the EIA lacked concrete details on the expected water consumption required to successfully grow jatropha curcas and how that would balance out against average rates of rainfall in the area. They included detailed findings from other studies that looked at the how much water the jatropha plant needs to thrive and what the recommended minimum rainfall amounts. Based on those figures, the research asserted that substantial irrigation would be required three out of every four years to ensure a viable jatropha plantation. Despite solid scientific evidence to the contrary, the EIA maintained that it was unlikely that the project would need to rely on water from the Tana River. Duvail reasonably questions why, if in fact the project managers believe this to be a drought-resistant crop, the

plantation must be situated so close to a river bed.¹³⁶ Duvail also questions the EIA's assertion that there would only be "limited use" or "safe use" of pesticides and fertilizers, since there is substantial research to the contrary. Finally, Duvail states, "[n]o proper biodiversity assessment was made. The lists of species are erroneous and not based on surveys while the solutions suggested to mitigate the impacts on the biodiversity seem unrealistic."¹³⁷ The project proposed creating corridors for wildlife to migrate; however, the corridors were also to be used by livestock to access the river – a scenario in which Duvail predicts "wildlife is likely to lose out."¹³⁸

COMMUNITY RESPONSE

The fact that Bedford was able to negotiate leases with the local ranches gave off the perception, at least initially, that local residents were in support of the project. Leaders from the Pokomo ranches embraced the project early on and willingly negotiated leases with Bedford. This is not surprising since the jatropha plantation and the out-grower proposal offered employment opportunities more akin to the Pokomo's practice of farming. Conversely, leaders of the Orma ranches were more reluctant. Conversely, the Orma, who practice pastoralism, were more reluctant in part due to concerns about how the project would impact pastoralism. ¹³⁹ Nevertheless, two of the three Orma ranches eventually signed leases with Bedford. This may be explained by the fact that the ranches had never been successful commercial enterprises, and as a result, the ranch members who negotiated the deals believed that sub-leasing the land to Bedford was the only way to retain tenure security over – and profit from – the ranches. ¹⁴⁰

However, not all stakeholders were in support of the proposal. Over time it emerged that some ranch members felt that they had not been adequately consulted.¹⁴¹ In addition, some nonranch members, who had formed settlements on the ranches and believed they had a superior claim to the land, filed lawsuits contesting the leases.¹⁴² National and international conservation groups, on the other hand, opposed the proposal on environmental grounds, and launched an allout campaign to halt the project.¹⁴³

PROCESS

On May 6, 2011 NEMA issued a decision approving the proposed project subject to certain conditions. The approval was for cultivation of 10,000 hectares, rather than the proposed 64,000 hectares and the license was valid for only 24 months from the date of issue. NEMA also required Bedford to "implement and maintain an environmental management system, organizational structure and allocate resources that are sufficient to achieve compliance with the requirements and conditions of this license." In addition, Bedford was required to:

- submit an Environmental Audit Report in the first year of "occupation/operation/commissioning"
- file a separate EIA report on the proposed borehole after obtaining authorization from the Water Resources Management Authority and a separate EIA Study on the processing plant prior to construction
- include certain barriers to act as a trap for effluents and other agricultural pollutants
- work with the National Museums of Kenya to identify, map, and conserve rare or threatened species of biodiversity in the areas prior to excavation
- establish wildlife corridors in collaboration with the Kenya Wildlife Service
- preserve riverline habitats.¹⁴⁶

The rest of the NEMA notification basically says: Comply with the law. As for decommissioning conditions, the approval simply states that the proponent shall ensure that indigenous tree species are replanted to "restore the biodiversity of the area." Finally, the letter concludes with a reminder that the proponent must make a payment of 500,000 Kshs to NEMA for the EIA monitoring fee prior to commencing the project.

In response, Nature Kenya and East African Wildlife Society submitted a letter to NEMA to record "our deeply held conviction that the granting of this licence is a betrayal of NEMA's custodianship of the environment." They objected on two grounds. First, they asserted that the Minister of Environment and Natural Resources had assured the communities that a license would not be granted until there was more scientific evidence proving that jatropha was a viable crop in the Tana Delta region. "In light of that request, we would anticipate that NEMA has used a scientific approach to considering this licence. We would therefore appreciate receiving this

scientific information, particularly as our opposition is partly based on the scientific and economic evidence, which we have shared with you, which is loud and clear in showing that jatropha is not viable as a commercial plantation under coastal conditions."¹⁴⁹ Second, they maintained that the Minister had requested that a land use plan be undertaken before the proposal would be evaluated. This too, they argued, had not yet happened, and granting the license prior to such a study would make it difficult to enforce additional conditions once the license had been granted. RSPB also submitted a letter echoing the same concerns.

In late July 2011, Bedford began clearing ground to make way for a tree nursery. 150 But the following month, the Star reported that two directors at NEMA had been suspended because they "illegally licensed" the Bedford proposal. ¹⁵¹ NEMA chairman Francis Ole Kaparo claimed that the two were suspended because they had issued license despite mounting evidence that "there is nothing to prove jatropha is viable. In fact all evidence shows it has failed." 152 Kaparo also announced that NEMA had asked the Ministry of Environment to revoke the license. 153 Soon after, the Tana River County Council withdrew its support from the project. In justifying the Council's change in positions, the Chairman of the Council explained, "The proprietors only told us their side of the story without telling us the technical report from Nema and it is noble for us, as leaders, to support the environmental agency." 154 Despite these accusations and threats to revoke Bedford's license, nothing happened. Bedford continued to move forward with its plans and planted a pilot crop in March 2012. In October, the Minister of the Environment, Chirau Mwakwere, told parliament, "We discovered that there was no place in the world where [a] Jatropha project has been done successfully to complement the supply of diesel to a nation's needs. We feel that this is an experiment in futility and giving up so much land in our food deficient country is not wise at all."155 Throughout the fall of 2012, ethnic tensions between the Pokomo and Orma tribes exploded into widespread violence in the area. 200 people died during the conflict. Some community members claimed that Bedford's use of already scarce resources, especially water, heightened tribal tensions in the area. (First Peoples Worldwide, "Did

Companies Invest in Peace During Kenyan Election?" Nick Pelosi, http://firstpeoples.org/wp/tag/bedford-biofuels/ March 19, 2013)

PRESENT STATUS

Sometime in late 2012 or early 2013, Bedford decided to abandon the project. Subsequently, the project was abandoned. Bedford blamed ethnic violence in the area, but later reports revealed that the Alberta Securities Commission had issued a cease-trade order against Bedford Biofuels in May 2012 because information provided to investors did not comply with Canadian securities law. Sometime in 2013, Bedford filed for bankruptcy, making it highly unlikely that it would ever comply with NEMA's mandate that it replant indigenous trees during the project decommissioning stage. Like NIIsri, Bedford picked up and went home, leaving the local community to pick up the pieces.

Some locals have spoken out and are disappointed that the project has failed. They were hoping that the project would bring employment opportunities and infrastructure development to the region. In addition, there is confusion now about who owns the land that was previously leased by Bedford. Former Bedford vice-president David Kombe maintains that the title deeds have been returned to the ranches, but ranch members still have not received the compensation they were promised for leasing their land.¹⁵⁷

FINDINGS FROM THE CASE STUDIES

1. LAND SPECULATIONS TARGET CONTESTED LAND

The proposed projects in each of the case studies involved several thousands hectares of land. The smallest proposal, Dominion Farms, comprised over 14,000 hectares; Bedford Biofuels aimed to lease over 64,000 hectares. As a point of comparison, the average farm in the United States today measures 178 hectares. 158

In order to efficiently amass large, contiguous tracts of land, the case studies suggest that proponents target either community or public land. Negotiating leases with multiple individuals carries high transaction costs; investors run a greater risk of encountering hold-outs when engaging in multiple transactions. Although there may be numerous and overlapping informal claims to community land based on customary practice, community land has rarely been formally registered. By exercising authority over community land, local county councils or parastatal agencies like TARDA exploit the lack of formal titling, and add a layer to the process that makes it appear as though there is really only one party with whom investors must negotiate. In the absence of a designated authority, proponents may push for land to be set apart or allocated to one single entity, precisely for this purpose. The EIA for the Tana Integrated Sugar Project demonstrates this exact point:

Ownership of the said piece of land is key to any proposals made in respect thereof. It is therefore necessary that first and foremost this land be allocated to a given entity. Allocation to a party other than TARDA would involve having a separate agreement between the project proponent and the said party. Ownership by TARDA may therefore be the most rational way to go so that . . . the activities proposed thereon may be managed under one agreement. 159

The end result is that investors in each of the case studies were able to negotiate leases to enormous tracts of land through entities rather than the actual occupants of the land.

Despite the fact that the Constitution and the Land Act of 2009 clearly recognizes community land and the legitimacy of customary law with regard to land, the case studies

demonstrate that in practice these communal land rights are ignored by project proponents and elected officials alike. In the case studies, local community residents – some whose families have resided on the land for generations – were often treated by project proponents as "squatters" who have no legal claim to the land and, therefore, can and should be evicted.

The lease negotiations in the case studies did, however, all occur prior to 2010, when the new Constitution was adopted. Previously, the power of the local county council to make decisions regarding community land was vast and virtually unchecked. Article 63 of the 2010 Constitution¹⁶⁰ presumably seeks to reign in the power of the local county councils through its mandate that unregistered community land "shall be held in trust by county governments on behalf of the communities for which it is held" and "shall not be disposed of otherwise or used except in terms of legislation specifying the nature and extent of the rights of the members of each community individually and collectively."161 The Constitution further provides that Parliament must enact enabling legislation on community land within 5 years, but no community land law has been adopted to date. Some have speculated that the rush on land deals prior to the adoption of the new Constitution in 2010 is evidence of local elites taking advantage of their last opportunity to reap private benefits prior to the enactment of more stringent laws protecting community land rights. 162 The findings from these case studies bolster that theory and suggest that pending legislation may accelerate additional transactions over contested land as investors try to secure agreements free from the encumberances of any new community land laws.

Moreover, it is unclear what, if any, legal recourse communities have when community land has been leased to a third party without the prior and informed consent of the residents. All four case studies involved contested land transactions, yet only the communities opposing the TISP lodged a successful legal challenge. And even in that case, the Court's holding leaves open the question of what the appropriate standard of review should be when a court reviews a land transaction made by the local county council or another parastatel agency on behalf of the local

community. For now, there seems to be little to no legal guidance on the proper role of entities who act as trustees, how benefits should be shared with communities, and how the decision-making process should occur as to the community land. As has been noted, "Thus, the inefficiencies and abuses of Kenya's land system have created an environment in which it is possible, and even accepted, for developments to involve improper acquisition of land or to infringe on people's customary rights."¹⁶³

2. THE PROCESS FOR ACQUIRING AND LICENSING LSLAS LACKS TRANSPARENCY

The case studies demonstrate that the process for acquiring land is unclear, quite possibly for all parties involved, but particularly for the people who occupy the targeted land. Occupants of the targeted land often complained that they were not consulted about or fully informed of the details regarding the land transaction. Proponents asserted that the communities had been consulted, but because the projects involved community land and leases were negotiated by a centralized body rather than the land occupants themselves, it is very likely that only some community members (at best) were ever consulted. Land tenure in Kenya operates within such a conflicting set of social, political, and legal signals, that even assuming the best intentions on the part of the proponent, it is easy to understand how the process would be confusing. This confusion is compounded by the fact that many land transactions are not made publicly available, so it is difficult for the public to assess who benefits and how.

In addition, NEMA's process of licensing large-scale land acquistions lacks transparency. Regulations promulgated with regard to Environmental Impact Assessments and Audits explicitly spell out the steps that a proponent must take in order to notify affected parties and seek their input in the course of conducting the EIA report. (Legal Notice 101, EIA and Audits 2003, Section 17.) Following submission of the EIA, the regulations provide that NEMA shall, at the expense of the proponent, publish for two weeks a notice inviting the public to submit oral or written

comments regarding the proposed project. The regulations state that the notice must provide details regarding the project including "the anticipated impacts of the project and the proposed mitigation measures to respond to the impacts." (Section 21.) However, until this year, the notice published in the National Gazette provided few details other than one or two sentences describing the project and its location. Every notice then read, "The project anticipates the impacts and mitigation measures set out in the gazette." Finally, the notice advised the public of the various government agencies where they could review a hardcopy of the EIA in person, despite the fact that the regulations require that the proponent make electronic copies available to NEMA.

Obviously it would be difficult for members of the public to comment on any proposal unless they had access to the pertinent documents. However, EIAs submitted prior to 2011 could only be reviewed in person at either the Ministry of Environment and Mineral Resources in Nairobi, NEMA's main headquarters in Nairobi or at the provincial or district-level environmental offices. Even still, it was difficult for the most diligent members of the public to access these documents. One NGO reported that the process of obtaining EIAs was arduous and fraught with difficulties. At times, the document of interest was simply not available; and, if it was, the person had to review the document onsite, and was not allowed to make copies. For this report, the author contacted staff at NEMA to inquire about accessing copies of EIAs submitted prior to 2011 and was told that they could only be made available in person. Since 2011, NEMA began posting all EIAs to its website. This is clearly a step in the right direction. Although the vast majority of the public may still not be able to access the documents, NGOs and other interested parties can now access the materials for free via the internet.

Finally, it seems that none of the environmental audits or monitoring reports companies must undertake are made available to the public. Without access to this kind of information, it is nearly impossible for the public to monitor and evaluate the impact the project is having on the surrounding environment.

This lack of transparency is not good for investors or the community. Transparency is a key attribute of good governance. Investors who understand the land tenure and environmental regulatory process will have more confidence in investing in Kenya. Transparency helps ensure that all the parties involved have clear and reasonable expectations.

3. Conflicts of interest abound

Both the land acquisition and the environmental licensing process are riddled by conflicts of interest from start to finish. For example, in each case study, a small group of private individuals negotiated or intended to negotiate agreements with the proponent on behalf of the wider community. The individuals were required by law to act in the best of interest of the community, but payments in the form of rents and other fees to the private individuals who were purportedly acting on behalf of the community raise, at the very least, the appearance of impropriety. Given the secrecy surrounding many of the land deals, it is difficult to know exactly what benefits the private individuals who negotiated the land deals obtained. However, the MoU between Dominion Farms and the Lake Basin Development Authority exemplifies how individuals who should have been acting on behalf of the community were negotiating agreements in their own interest. In that case, the MoU contained a provision directing LBDA to "nominate, by name and not by position, one of its members and Dominion shall appoint such member to its main board of directors."164 Aside from the possible private enrichment that might flow from a position on the board, it is difficult to imagine how that individual could objectively serve the interests of the Yala Swamp community, while also serving on the board of directors for Dominion Farms. As will be discussed further below, the implications of this cross-over are even more complicated considering that LBDA was tasked with monitoring the environmental impacts of Dominion Farms' activities.

The environmental licensing process is also full of potential conflicts of interest. First off, the project proponents select and pay the consultant who conducts the environmental impact assessment. Putting aside the question of whether the consultants are adequately qualified, the fact that they are hired and paid by the entity they will be evaluating raises questions about how impartial their assessment will be. In each of the case studies, the EIA consultant recommended that the project be approved, despite strong evidence that the balance of impacts tipped toward negative environmental and social outcomes. The authors own review of dozens of EIAs submitted since 2011 (and available now on NEMA's website) did not turn up a single EIA where the EIA consultant advised against the project. Furthermore, because NEMA's decision-making process is not particularly transparent, it is difficult to know what, if any, independent assessment they do on the project. It is, therefore, reasonable to assume that a great deal of weight is given by NEMA to the EIA.

Moreover, until just a few months ago, NEMA's policy on licenseing fees actually incentivized NEMA to approve project. Previously, the policy was that fifty percent of the fee was due upon submittal of the EIA, and the balance was due *only if* NEMA approved the project. If NEMA did not approve the license, NEMA would forfeit the remaining fifty percent of the fee. Pursuant to a notice dated September 17, 2013, that policy seems to have changed. According to Gazette Notice No. 13211, NEMA doubled the licensing fee, removed an upper cap on the fee, and it appears that the fee is now due upfront upon submittal of the EIA. Dr. Ayub Macharis, NEMA director of Environmental Education, Information and Public Participation, even acknowledged, "The cap (maximum) has often limited our ability to receive adequate funds to better manage our operations." Not only does removing the cap help ensure adequate funding for NEMA, but requiring full payment of the fee, regardless of the outcome of the licensing process, should help ensure that NEMA remains objective in its review and assessment of projects.

Finally, the fact that the regulatory process requires proponents to conduct monitoring and reporting *on themselves* is perhaps the most egregious example of a conflict of interest. Although the regulations suggest that NEMA will conduct some initial environmental audits, it seems that most ongoing monitoring is conducted by the proponent. This is simply counterintuitive. External, independent monitoring is critical to maintaining the integrity of an environmental oversight.

4. THE NATIONAL ENVIRONMENTAL MANAGEMENT AGENCY IS UNDER-RESOURCED

The case studies, interviews, media reports, and statements by NEMA staff all strongly suggest that NEMA is under-resourced in a number of ways. The delays in reviewing EIAs, the lack of an independent assessment, and the lack of compliance monitoring all indicate that NEMA lacks the technical capacity and/or necessary resources to adequately monitor and enforce environmental regulations. Many of the more complex EIAs are lengthy technical documents, which would require a great deal of time and expertise to review. As one group of independent researchers noted with regard to the TISP and Bedford Biofuels EIAs:

Both EIAs were approved by NEMA even though they did not address critical issues. They did not analyse the environmental, social, economic and cultural impacts of a proposed development activity; they did not develop plans to mitigate those impacts, including a monitoring plan that would suggest required adaptations while the activity is ongoing; and they did not perform a cost/benefit analysis of alternatives for the proposed activity, three elements considered as standard in an Environmental Impacts Assessment.¹⁶⁶

It seems clear that NEMA has not been allocated the resources to carry out these essential regulatory functions.

5. ECOSYSTEMS ARE UNDERVALUED

The EIAs in the case studies presented here often fail to acknowledge the value contained within the ecosystems they wish to operate by not accounting for the full value of targeted and downstream resources to present and future populations. The EIAs seem to assume that

exploitation of the natural environment is the only way that development and poverty alleviation can occur. The EIAs paint a picture whereby project proponents are the only ones who can properly extract resources, and that the "do nothing" alternative promises only human suffering and misery. This perception must be reversed.

Kenya has endorsed a number of legal provisions that recognize the importance of safeguarding the environment as a twin goal of sustainable economic development. Yet, the fact that actors at every level of government – from local council officials to regional development agencies to nationally elected politicians – endorse projects that pose serious threats to the environment belies this commitment. It is particularly alarming when NEMA, the national agency responsible for protecting the environment, gives approval to projects that will clearly be detrimental to the environment.

RECOMMENDATIONS

1. RECOGNIZE AND PROTECT COMMUNITY LAND

The new Constitution provides that "Land in Kenya shall be held, used and managed in a manner that is equitable, efficient, productive and sustainable." (Art. 60 (1)) It further states that land shall be held in accordance with the policy of "sound conservation and protection of ecologically sensitive areas." It remains to be seen whether Kenya can turn these aspirational statements into practice, and this may hinge in large part on the extent to which community land is afforded protections.

As demonstrated by the case studies, community land is most often the target of large-scale land acquisitions and detrimental environmental practices. Without laws in place that recognize community land rights, communities are unable to exercise control and authority over the land that they rightfully occupy. Article 63 of the Constitution indicates an intention to strengthen the laws protecting citizens access and use of community land, and directs Parliament

to enact enabling legislation regarding community land within 5 years of the Constitution's adoption.

Dean and Professor of Law Patricia Kameri-Mbote asserts that while the Constitution provides for equality of community rights with private and public land rights, historically the practice in Kenya has been to dismiss claims to community land, particularly when valuable natural resources are discovered on the land. 167 She argues that the trend of devaluing community land "needs to be reversed through documentation of norms, land use practices and instances of sustainable management of land by community" in an effort to debunk the myth that individual property rights is the only form of efficient and sustainable land tenure. 168 Looking forward, she advocates for strengthening community land laws through transparency and accountability measures to ensure that community members share in the benefits reaped by land deals. Recognizing that many communities have already been dispossessed of community land, she maintains that the government should investigate past illegal and irregular land deals involving community land and develop appropriate legal mechanisms to redress the losses that have already occurred.

The Ministry of Lands, in consultation with the SECURE Project, has developed and endorsed a Community Land Rights Recognition (CLRR) Model. ¹⁶⁹ The CLRR is a "tenure assessment tool designed to capture all the layers of community and local practices of land rights and land relations and record them in a participatory process." ¹⁷⁰ The process entails six stages:

1) demand for community land rights recognition, 2) community engagement, 3) recording of community land claims and governance rules, 4) demarcation, 5) validation and finalization, and 6) issuance of title. ¹⁷¹ The CLRR Model represents an important step in the right direction. Unfortunately, Parliament has yet to adopt it or any other community land bill. The latest draft of the community land bill was not supported by the Ministry of Lands, and died in Parliament.

Parliament should act swiftly to adopt a community land bill that recognizes community land rights and provides a mechanism for communities to record and exercise authority over their

lands. There should also be some legal recourse available to communities who have been wrongfully dispossessed of land in the past. But, time is of the essence. The longer it takes to enact a community land bill, the more likely it is that additional communities will lose access to and control over their ancestral lands.

2. REQUIRE GREATER TRANSPARENCY AND COMMUNITY INVOLVEMENT

Transparency is a key aspect of good governance in general and is particularly critical to the process of environmental governance. A wide variety of constituencies are likely to be impacted by LSLAs, and therefore have a vested interest in the outcome. Permanent residents and groups who regularly migrate to an area during certain seasons (such as pastoralists) have expectations – some conferred by formal law, others legitimated through custom – about their right to access and use the land and natural resources. When government land is involved, Kenyan nationals have a collective interest in seeing that the public land is used to benefit the public. Private investors – both foreign and domestic – have investment-backed expectations about how the process will unfold. All parties with a vested interest should be involved to the greatest extent possible in the decision-making process. Because there may be multiple and conflicting interests and expections, transparency helps ensure that all parties have access to the same information and are treated equitably, and that the decision-making process is clear and open.

Negotiations over community land should be driven by the community as much as possible. Details regarding the terms of any lease agreement should be made available to the public. The community land bill should set standards on how to establish the full and informed consent of a community. In addition, the law should establish what standard should be applied when court's review whether a transfer of community land is, in fact, in the "best interest" of the community.

As for the environmental review process, NEMA must continue to find ways to make EIAs more readily available to impacted communities. Publishing the EIAs on the NEMA website is a giant leap forward, but additional efforts should be made to ensure that Kenyans who lack access to the internet may also easily access the EIAs. This would make it easier for the average citizen to weigh in on the discussion.

Likewise, NEMA should be required to make findings of fact with regard to its licensing decisions. At this point in time, it is unclear who sits on the panel to review EIA proposals or how the ultimate decision is reached. Communities who stand to lose a property interest as a result of NEMA's licensing process should have a right to to this information. Moreover, if NEMA approves a license contingent on the proponent satisfying certain conditions, those conditions, as well as the environmental management plan, should be set forth in a publicly-circulated document. Finally, NEMA should disseminate the results of all environmental audits immediately. Local communities and the public-at-large have a right to know how projects are impacting the environment. By their nature, most environmental harms are not contained in space or time. Surrounding communities may be affected by pollutants or the destruction of a nearby ecosystem. All of the projects discussed here intended to lease the land. Theoretically, the land will eventually revert back to the local communities. The present generation, therefore, has a duty to future generations to act as stewards of the land.

3. MINIMIZE CONFLICTS OF INTEREST

Protections must be put in place to prevent well-positioned and powerful local actors from reaping personal gain at the expense of impoverished and disenfranchised communities. As scholar Liz Alden Wily adeptly notes, local actors are key partners in land acquisition schemes: "The active participation of local investors is crucial to the survivability of the trend, and helps increase the threat to majority community interests through lateralization of class interests across countries and continents, giving grist to the meaning of 'global capitalism'." ¹⁷² She further asserts:

Famously neo-patrimonial aspects of African governance enhance this, in that local elites in host African states frequently constitute a class of citizens who combine traditional, political, economic and even juridical and military power holding. This makes it difficult for policy decisions to be genuinely distinct from the personal economic interests of this class or to be readily subject to the level of self-regulation [which is] a key marker of a truly modern democracy.¹⁷³

Laws should be adopted and stringently enforced to prevent those acting as trustees (such as local county council members) from gaining private enrichment on land deals at the expense of local communities. Basic principles of the trustee-beneficiary relationship should apply, and officials who violate their trustee duties should be prosecuted.

In addition, to ensure that EIAs are conducted objectively, NEMA should review its policy on how the EIA consultant is selected and paid. NEMA should explore other models used for selecting an impartial and independent evaluator. For example, the project proponent could be given the opportunity to propose two or three EIA consultants. A committee comprised of representatives from conservation groups could also be given the opportunity to propose two or three EIA consultants. Each side (the project proponent and the conservation committee) could then have the opportunity to select one consultant offered by the opposing side. NEMA or some other impartial judge could then choose between the two consultants. The project proponent would be responsible for paying a set fee to NEMA, who in turn would pay the consultant. This is just one example of how it could be done. Obviously, with any system impartiality and/or corruption remain possible. But NEMA should try to find ways to curtail it as much as possible.

Likewise, NEMA or some other independent third-party should be responsible for ongoing environmental monitoring of the project. NEMA's costs should be covered by the proponent, so that NEMA has the resources to carry out effective monitoring. But outside monitoring is critical to ensuring the validity and reliability of environmental audits.

4. STRENGTHEN CAPACITY OF ENVIRONMENTAL REGULATORY SYSTEM

Finally, if Kenya is serious about adopting an environmentally sustainable approach to development, it must allocate more resources to the environmental regulatory system, and adopt laws, policies, and *practices* that reflect a genuine appreciation of the value of the environment.

To this end, NEMA must be given sufficient resources to carry out its job. There needs to be a comprehensive development plan created, which engages all stakeholders in the process. This should systematically be done for each of the environmental "hot spots" in the country. This pre-development planning process seems essential so that development is not done on an ad hoc basis, or simply in response to a given proposal. Rather, planning should be done upfront to ensure adequate involvement by all stakeholders. Although such comprehensive planning projects require the expenditure of valuable time and resources, hopefully resources can be saved by avoiding the waste of resources on projects that do not fit within the comprehensive plan, but would only be discovered to be so after many resources have been expended by the government, NGOs, and private citizens. The government should also continue to participate in regional efforts to strengthen regional collaborations on environmental policy and enforcement.

The government should also recognize the immense value of the non-governmental organizations who work on conservation issues. The efforts made by these community-based and civil society organizations should be recognized and their work should be supported. In the absence of a strong regulatory state, these organizations such as Nature Kenya and the Kenya Wetlands Forum have worked tirelessly to protect the environmental interests of the country. International organizations and foundations should also lend financial support to these local organizations.

In conclusion, Kenya must adopt and enforce policies that unify economic development and environmental sustainability goals. The Constitution and other legal documents (such as the National Land Policy and international treaties and conventions that Kenya is a signatory to) acknowledge how intertwined the two goals are. Policymakers and other stakeholders must be

persuaded that, "[i]n a country where environmental health, economic progress and development are inextricably interwoven, a decline in one sphere almost inevitably brings about declines in other spheres. Conservation of Kenya's biodiversity and maintenance of ecosystem health is therefore not a development option but a fundamental prerequisite for development."¹⁷⁴

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¹ (Flood, 2013)

² (Flood, 2013)

³ (Woodhouse, 2012)

^{4 (}Irregular and illegal land deals, p. 9.)

⁵ (Flood, 2013)

⁶ (Ng'ethe)

^{7 (}FAO)

^{8 (}Hickey, 2012, p. 333)

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9 (Kanyinga, 2009, p. 327)
10 (Ndung'u Report)
11 (Ndung'u Report) and Irregular Land
12 (Smalley & Corbera, 2012)
<sup>13</sup> (Heukelom, 2013, p. 170) Dominion Venture Group, LLC owns and operates private prisons in the
United States.
14 (MoU, 2003)
<sup>15</sup> (The Dominion Group of Companies, Lake Basin Development Authority, 2002, p. 1)
<sup>16</sup> This author was never able to obtain a copy of the Dominion's first EIA submitted in 2003. While the
second EIA was readily available, the first remained elusive, even to others who went to great lengths to
track down such documents. (Heukelom, 2013)
17 (Asunah, 2005)
<sup>18</sup> The EIA reports the land area in both hectares and acres, making it difficult to know the precise amount
of land being discussed. See (Asunah, 2005, p. 8)
19 (The Kenya Wetlands Forum, 2006)
<sup>20</sup> (The Dominion Group of Companies, Lake Basin Development Authority, 2002)
<sup>21</sup> (Heukelom, 2013)
<sup>22</sup> (Abila & Othina, n.d.)
<sup>23</sup> (Heukelom, 2013)
<sup>24</sup> (Heukelom, 2013)
<sup>25</sup> Abila 2006
26 (MoU, 2003)
27 (MoU, 2003)
28 (MoU, 2003)
29 (MoU, 2003)
30 (The County Council of Siaya; The County Council of Bondo; Dominion Farms Limited, 2003)
31 (The County Council of Siava; The County Council of Bondo; Dominion Farms Limited, 2004)
32 Initially Dominion paid LBDA $120,000 USD reportedly under the mistaken belief that the LBDA
would in turn pay the county councils, who would then be responsible for disbursing the rental payments
to local residents. However, the money that was paid to LBDA was never recouped, leading some to
suggest that it was a bribe. (Heukelom, 2013)
33 Abila, 2005 (Flood, 2013)
<sup>34</sup> (Asunah, 2005) Relative to the comparative case studies, the Yala Swamp area is quite densely
populated. In 2005, Dominion Farms was located in the Siava and Bondo District, which had populations
of approximately 316 and 242 people per square kilometer, respectively. (Asunah, 2005) By comparison,
the Tana River District where the other case studies are located has less than 5 people per square
kilometer. (Africa Business Foundation, 2010)
35 (The Dominion Group of Companies, Lake Basin Development Authority, 2002)
<sup>36</sup> (The Dominion Group of Companies, Lake Basin Development Authority, 2002, p. 12)
37 (The Dominion Group of Companies, Lake Basin Development Authority, 2002, p. 12)
38 (The Dominion Group of Companies, Lake Basin Development Authority, 2002, p. 5)
<sup>39</sup> (The County Council of Siaya; The County Council of Bondo; Dominion Farms Limited, 2003) Due to
the tension between the company and the community over the years, Dominion made a concession and
now provides 900 acres of land for community use. (Heukelom, 2013)
40 (Asunah, 2005, p. 15)
41 (Asunah, 2005, p. 21)
42 (Asunah, 2005)
43 (Asunah, 2005, p. 90)
44 (Asunah, 2005, p. 90)
45 Asunah, p. 52
46 (Abila & Othina, n.d.) (Mwakubo, Ikiara, & Abila, 2007) (The Kenya Wetlands Forum, 2006)
47 (Abila & Othina, n.d.)
48 (Abila & Othina, n.d.)
49 (The Kenya Wetlands Forum, 2006)
50 (The Kenya Wetlands Forum, 2006, p. 11)
<sup>51</sup> (The Kenya Wetlands Forum, 2006)
<sup>52</sup> (The County Council of Siaya; The County Council of Bondo; Dominion Farms Limited, 2003)
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53 (Adoga, 2011) (Gwengi, 2011)
54 (Heukelom, 2013)
55 (Oongo, 2011)
<sup>56</sup> (The County Council of Siava; The County Council of Bondo; Dominion Farms Limited, 2003)
<sup>57</sup> (The County Council of Siaya; The County Council of Bondo; Dominion Farms Limited, 2003)
<sup>58</sup> (HVA International/MA Consulting, 2007) Mumias was formed in 1967 by the Government of Kenya.
In 2001, it was converted from a private to a public company, but the Government of Kenya retains a
majority of shares in the publically-traded company.
59 (HVA International/MA Consulting, 2007, p. xx)
60 (HVA International/MA Consulting, 2007)
61 (HVA International/MA Consulting, 2007, p. 95)
62 (Duvail, Medard, Hamerlynck, & Nyingi, 2012)
63 (HVA International/MA Consulting, 2007, p. 95)
64 (HVA International/MA Consulting, 2007, p. 95)
65 (HVA International/MA Consulting, 2007, p. 96)
66 (HVA International/MA Consulting, 2007, p. 96)
67 (HVA International/MA Consulting, 2007, p. 96)
68 (HVA International/MA Consulting, 2007, p. xxvi)
69 (Duvail, Medard, Hamerlynck, & Nyingi, 2012)
70 (Duvail, Medard, Hamerlynck, & Nyingi, 2012)
71 (Duvail, Medard, Hamerlynck, & Nyingi, 2012, p. 328)
72 (Duvail, Medard, Hamerlynck, & Nyingi, 2012)
73 (Duvail, Medard, Hamerlynck, & Nyingi, 2012)
74 (Duvail, Medard, Hamerlynck, & Nyingi, 2012, p. 330)
75 (Duvail, Medard, Hamerlynck, & Nyingi, 2012, p. 331)
76 (Mireri, Onjala, & Oguge, 2008)
77 (Mireri, Onjala, & Oguge, 2008)
78 (The East African Wildlife Society, 2009)
79 (The East African Wildlife Society, 2009)
80 (RSPB, n.d.)
81 (Kwevu, 2008)
82 (Kweyu, 2008)
83 (RSPB, n.d.)
84 (RSPB, n.d.)
85 (Leaders Link Multinationals Eyeing Land in the Region to Bloodletting, 2013)
86 (Leaders Link Multinationals Eyeing Land in the Region to Bloodletting, 2013)
87 (Judgment, Abdalla Rhova Hiribae et al v. A.G. et al)
88 (Judgment, Abdalla Rhova Hiribae et al v. A.G. et al)
89 (Envasse Environmental Consultants, 2009)
90 (Envasse Environmental Consultants, 2009, p. 80)
91 (Envasse Environmental Consultants, 2009, p. 67)
92 (Envasse Environmental Consultants, 2009, p. 95)
93 (Envasse Environmental Consultants, 2009, p. 95)
94 (Envasse Environmental Consultants, 2009, p. 96)
95 (The East African Wildlife Society, 2010)
96 (Envasse Environmental Consultants, 2009, p. 80)
97 (Envasse Environmental Consultants, 2009, p. v)
98 (Envasse Environmental Consultants, 2009, p. 82)
99 (Envasse Environmental Consultants, 2009, pp. 88-90)
100 (Envasse Environmental Consultants, 2009, pp. 88-90)
<sup>101</sup> (Envasse Environmental Consultants, 2009, p. 108)
102 (Royal Society for the Protection of Birds, 2010)
103 (North Energy, 2011)
104 (North Energy, 2011)
<sup>105</sup> (ActionAid; BirdLife International; Nature Kenya; RSPB, n.d., p. 5)
106 (Nature Kenya, 2010)
107 (Residents Differ with NGO, Endorse Bio-Fuel Project, 2010)
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108 (Residents Differ with NGO, Endorse Bio-Fuel Project, 2010)
109 (Jatropha Project Just Isn't Viable, 2010)
<sup>110</sup> (Envasse Environmental Consultants, 2009)
<sup>111</sup> (Nature Kenya, 2010)
112 (Nature Kenya, 2010)
113 (Nature Kenya, 2010)
114 (NEMA, 2010)
115 (NEMA Allays Fears Plant Will Harm the Environment, 2010)
116 (NEMA Allays Fears Plant Will Harm the Environment, 2010)
117 (NEMA, 2012)
118 (NEMA, 2012)
119 (Dixon, 2013)
120 (Africa Business Foundation, 2010)
<sup>121</sup> (Bedford Biofuels Marks First Successful Jatropha Crop in Kenya, 2012)
122 (Africa Business Foundation, 2010)
123 (Africa Business Foundation, 2010)
124 (Africa Business Foundation, 2010, p. 59)
125 (Dixon, 2013)
126 (Dixon, 2013)
<sup>127</sup> (Christian, 2010)
<sup>128</sup> (Christian, 2010)
<sup>129</sup> (Christian, 2010)
130 (Africa Business Foundation, 2010)
131 (Christian, 2010)
132 (Africa Business Foundation, 2010)
133 (Africa Business Foundation, 2010, pp. 110-112)
134 (Duvail, Medard, Hamerlynck, & Nyingi, 2012)
135 (Duvail, Medard, Hamerlynck, & Nyingi, 2012, p. 332)
136 (Duvail, Medard, Hamerlynck, & Nyingi, 2012)
137 (Duvail, Medard, Hamerlynck, & Nyingi, 2012, p. 333)
138 (Duvail, Medard, Hamerlynck, & Nyingi, 2012, p. 333)
139 (Smalley & Corbera, 2012)
140 (Smalley & Corbera, 2012)
141 (Smalley & Corbera, 2012)
142 (Smalley & Corbera, 2012)
143 (RSPB, n.d.)
144 (NEMA, 2011)
145 (NEMA, 2011)
146 (NEMA, 2011)
147 (NEMA, 2011)
<sup>148</sup> (The East African Wildlife Society and Nature Kenya, 2011)
<sup>149</sup> (The East African Wildlife Society and Nature Kenya, 2011)
150 (RSPB, n.d.)
<sup>151</sup> (Muchangi, 2011)
152 (Muchangi, 2011)
153 (Muchangi, 2011)
154 (Bocha, 2011)
155 Bitter Taste
156 (Dixon, 2013)
157 (Dixon, 2013)
<sup>158</sup> (Agricultural Council of America, 2013)
<sup>159</sup> (Envasse Environmental Consultants, 2009, p. 96)
     Community land consists of-
(a) land lawfully registered in the name of group representatives under the provisions of any law;
(b) land lawfully transferred to a specific community by any process of law;
(c) any other land declared to be community land by an Act of Parliament; and
(d) land that is-
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- (i) lawfully held, managed or used by specific communities as community forests, grazing areas or shrines;
 - (ii) ancestral lands and lands traditionally occupied byhunter-gatherer communities; or
 - (iii) lawfully held as trust land by the county governments, but not including any public land held in trust by the county government under Article 62 (2).
- (3) Any unregistered community land shall be held in trust by county governments on behalf of the communities for which it is held.
- (4) Community land shall not be disposed of or otherwise used except in terms of legislation specifying the nature and extent of the rights of members of each community individually and collectively. Kenyan Constitution, 2010, Article 63.
- ¹⁶¹ See also, The Trust Land Act of 2009 provided: 8. (1) Where land is set apart under section 7 of this Act, full compensation shall be promptly paid by the Government to any resident of the area of land set apart who—
- (a) under African customary law for the time being in force and applicable to the land has any right to occupy any part thereof; or
- (b) is, otherwise than in common with all other residents of the land, in some other way prejudicially affected by the setting apart.

It goes on to state in terms of a county council setting apart land and compensation thereof: (4) Subject to this section, sections 7 (3) and (4), 8 (1), 9, 10 and 11 of this Act shall apply in respect of land set apart under this section, mutatis mutandis, and subject to the modification that the compensation shall be paid by the council (without prejudice to the council obtaining reimbursement thereof from any other person). Moreover: (5) Compensation, assessed in accordance with section 9 of this Act, shall be payable in respect of anything done under this section for loss or disturbance and for the fair value of buildings and crops destroyed or damaged, and, in any case where the usefulness of any land for agricultural purposes is impaired by anything so done, compensation in respect thereof shall be payable.

69. In respect of the occupation, use, control, inheritance, succession and disposal of any Trust land, every tribe, group, family and individual shall have all the rights which they enjoy or may enjoy by virtue of existing African customary law or any subsequent modifications thereof, in so far as such rights are not repugnant to any of the provisions of this Act, or to any rules made thereunder, or to the provisions of any other law for the time being in force.

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162 (Wilv, 2011)
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¹⁶³ (Smalley & Corbera, 2012, p. 1051)

^{164 (}MoU, 2003)

^{165 (}NEMA, 2013)

^{166 (}Duvail, Medard, Hamerlynck, & Nyingi, 2012, p. 337)

^{167 (}Kameri-Mbote, 2013)

¹⁶⁸ (Kameri-Mbote, 2013)

^{169 (}Ministry of Lands, 2013)

¹⁷⁰ (Ministry of Lands, 2013, p. 5)

¹⁷¹ (Ministry of Lands, 2013, p. 6)

^{172 (}Wily, 2011, p. 738)

¹⁷³ (Wily, 2011, pp. 738-739)

^{174 (}Raini, 2009)