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Article

Putting a Spin on Jatropha: How Conservationist Rhetoric Drove Bedford Biofuels out of Tana Delta-Kenya

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Abstract: When the Canadian company Bedford Biofuels (BB) started talks with local ranch owners in Tana Delta district (Kenya) about subleasing their land for a large jatropha plantation, they were not the first ones to come to the region for a large-scale agricultural project. Nor were they the first to explore the possibilities of starting a jatropha plantation in Kenya's coastal area. By the time BB arrived, nature conservation and humanitarian NGOs had firmly established themselves as protectors of the ecologically fragile Tana river delta (now Ramsar site) and its residents, who were argued to be (even more) marginalized by large-scale agricultural projects. During the decision-making process, therefore, BB encountered stiff resistance from local NGOs, which had acquired the experience and the mechanisms to oppose or discourage a large-scale plantation. Additionally, BB was faced with a central government which gradually moved from a pro-jatropha stance to a more critical view of large-scale jatropha cultivation. Nevertheless, most of the local residents as well as the local government administration and the county council supported BB's plans to establish a large jatropha plantation. Although the deal was struck and the anti-jatropha campaign had ostensibly not prevailed, BB closed its plantation within the year. In the article, we analyze how discursive generalizations about foreign large-scale land acquisitions and in particular about large foreign jatropha plantations gradually undermined the legitimacy of the BB jatropha plantation in Tana Delta. To explore this question, the discussion focuses on analyzing the resources that account for the success of the anti-BB rhetoric and the interests that were involved in its

production. These resources have been identified as local to global (I)NGO alliances; the use of e-media as a conduit for opposition rhetoric and the strategic use of rhetorical images and polemic. Each of the three phenomena will be explored for their conceptual dimensions and their rhetorical implications. We argue that the conservationist rhetoric compressed intermediality, the grid where ideologies and practices of different stakeholders intersect. Thus, it effectively narrowed the possibility for non-compatible stakeholders, such as Bedford Biofuels, to avoid conflict. This initiated a gradual erosion of the rationale of the BB jatropha project in Tana Delta, which eventually led to the closure of the jatropha project and the departure of Bedford Biofuels from the area.

Keywords: jatropha; large-scale land acquisition; rhetoric; Kenya; Tana Delta; Bedford Biofuels

1. Introduction

When in 2009 Canadian Bedford Biofuels (BB) started talks with local ranch owners in Tana Delta district (Kenya)—a government administrative unit at the time—with a view to subleasing their land for a large jatropha plantation, they were not the first ones to come to the region for a large-scale agricultural project. Nor were they the first to explore the possibilities of starting a jatropha plantation in Kenya's coastal area.

The upsurge of investor interest in large swathes of land in the area had not gone unnoticed by nature conservation and humanitarian NGOs in Kenya. Indeed, they rapidly developed mechanisms of resistance, campaigning against "outsider" threats on the river Tana delta and its people, tapping into influential (inter)national networks, filing lawsuits and proclaiming "small-scale development" as the sustainable alternative to industrial agricultural explorations of the Tana Delta area. BB met with formidable resistance from NGOs during the decision-making process between January 2009 and October 2011. Also, Kenya's Minister of Environment and Mineral Resources—due to NGO pressure or not—publicly started to question the rationale of a large-scale jatropha plantation in the Tana Delta [1].

Notwithstanding the vigorous local advocacy campaigns conducted by NGOs against large-scale jatropha farming in Tana Delta, most local residents as well as the local government administration (of the then Tana Delta district) and the Tana River County council supported BB's plans to establish a large jatropha plantation. BB was initially granted a license for a jatropha pilot project on 10,000 ha of semi-arid land. In October 2011, the first seedlings were planted on a 19 ha field. One year later, however, Bedford Biofuels decided to close down its operations. In June 2013, the company filed for bankruptcy. The local population, who had generally believed that the jatropha would "finally" bring economic benefits to Tana Delta district, was deeply disillusioned.

What had happened? How was it possible that the jatropha plantation collapsed? The test field showed healthy and thriving jatropha shrubs, the ranch owners were content, the county council and the local government administration as well as the majority of the local population were still supportive of the project. Even company employees had started to believe that the jatropha plantation was gaining traction.

The generally cited reason for the closure of the plantation were the local clashes that occurred in August and September 2012 (and January 2013) between two local ethnic groups—with a history of violent land disputes. Bedford Biofuels claimed it was impossible to operate under such volatile circumstances. Other developments that negatively affected the commercial viability of the plantation, BB argued, included the central government claiming a 35% participation in the plantation once the pilot project proved successful, and the decision by the Minister for Environment and Mineral Resources to reduce the initially granted pilot land of 10,000 ha to 2500 ha [2].

However, compelling these reasons may appear, the seeds for the hapless ending of the BB jatropha project had been sown much earlier. During and after the decision-making phase, the Canadian company had been fighting against a powerful negative image, created by opponents to the jatropha plantation. Indeed, this image was so powerful that it seriously affected investor interest in the project. BB's large Asian investors were getting "nervous", BB's general manager explained to the first author, and gradually withheld investments. This investment reticence directly impacted on BB's financial position during the pilot phase of the jatropha plantation. Yet, it need not have persisted, one could argue, if the investors had been given proof of the successful production of jatropha seeds on the BB plantation. However, the clashes prevented a change of perception.

Little scientific attention has been given so far to the role of rhetoric with regard to large-scale land acquisitions (LSLAs) in the south and their impact on practices on the ground, apart from some notable exceptions [3,4]. Indeed, Kaag and Zoomers [5] argue for the study of "(unheard) voices" as an important avenue into exploring the hidden mechanisms behind the "land-grabbing hype". As the BB case testifies, the "anti-voices" took the lead, while the voices of the majority of the local population, the county council or the district government administration went largely unheard. In view of the dramatic impact of the negative rhetoric of the BB jatropha plantation, it seems timely to highlight the role of rhetoric in large-scale scale land acquisitions.

The case study is based on ethnographic as well as textual data from all BB plantation stakeholders. In practice, the first author interviewed (representatives of) key stakeholders (see Table 1 for all local stakeholders) in Tana Delta between February and April 2012 and participated in public meetings as an observer. Additionally, for more than two years (May 2011–September 2013), texts featuring Bedford Biofuels and/or Tana Delta were collected from BB, NGO and INGO websites, digital (inter)national newspapers and international expert reports. These have been studied and analyzed in close connection with fieldwork data to explore how discursive generalizations about foreign large-scale land acquisitions and in particular how large foreign jatropha plantations gradually undermined the legitimacy of the BB jatropha plantation in Tana Delta.

To explore this question, the discussion focuses on analyzing the resources that account for the success of the anti-BB rhetoric and the interests that were involved in its production. These resources have been identified as: local to global NGO alliances; the use of e-media as a conduit for opposition rhetoric; the strategic use of rhetorical images and arguments. Each of the three phenomena will be explored for their conceptual dimensions and their rhetorical implications.

As argued above, the main actors in the anti-BB rhetoric have tapped into (inter)national debates on foreign LSLAs, and on foreign jatropha LSLAs, in particular. Therefore, pertinent arguments of these debates will be discussed first. Indeed, as Michael Carrithers [6] points out, rhetorical persuasiveness cannot be studied without embedding the themes addressed in their wider discursive contexts.

Local stakeholders
Ranch owners
Local communities
Bedford Biofuels Kenyan subsidiary
Local Government Administration
- District offices of Ministries of Development
Livestock and Fisheries, Agriculture
- District Development Committee
County council
Locally based NGOs
• Lower Tana Delta Trust (LTDCT)
• Nature Kenya, Tana Delta branch
• Arocha Kenya (coastal area)
Kenya Wildlife Service (KWS) Tana Delta offic

Table 1. Local Bedford Biofuels (BB) stakeholders.

2. Discourse Context

2.1. Global Discourse on Jatropha

During the early years of the 21st century, *Jatropha curcas* was globally embraced as a panacea for climate change and global poverty; Jatropha, as went the argument, could produce biofuel, contribute to carbon sequestration, grow on marginal and degraded lands and promote local socio-economic development. Moreover, the "wonder crop" was supposed to be commercially viable for large-scale as well as small-scale farming. As a result, jatropha attracted both investment companies interested in large-scale jatropha projects and (international) development NGOs focusing on small-scale poverty alleviation projects. In fact, the narrative of jatropha being "green gold" gained momentum when fossil fuel prices spiked in 2004 [7].

This extremely positive perception of jatropha as a biofuel feedstock crop was supported by investors, Western and non-Western policy makers, (I)NGOs and plant scientists alike. However, the "wonder crop" abruptly lost its good reputation during the financial and food crisis of 2007 and 2008. Investment companies with big stakes in large-scale jatropha production went bankrupt, leaving few traces of actual jatropha cultivation [8]. Additionally, large-scale jatropha plantations which had been implemented failed to live up to their inflated commercial expectations. The "wonder crop" was not as self-supportive as it had been argued to be. For local people, this short-lived jatropha "hype" often had dramatic consequences. They had not only lost access to (community) land; they had lost their traditional sources of livelihood as well as potential employment on the plantation [9].

The global food crisis of 2008 brought home the world's precarious food situation. Global institutions, INGOs and international academics blamed the rapid increase of large-scale biofuel feedstock projects for exacerbating the problem [10,11]. Even jatropha with its ascribed quality of a drought resistant shrub did not escape this negative evaluation, as jatropha plantations had in actual practice often shifted from arid and semi-arid land to more fertile ground [12].

While the adverse environmental effects of large-scale mono-cropping projects in the global south had already been highlighted, large-scale jatropha projects had hitherto largely escaped criticism. However, since 2008, a growing body of agro-ecological studies on *jatropha curcas* cultivation has argued that jatropha is not environmentally sustainable. For instance, Achten *et al.* [13] argue that there is a significant methodological gap in assessing the carbon emission profile of large-scale jatropha agriculture, with a negative impact on its status as an environmentally sustainable biofuel feedstock. Only recently some more positive evaluations relating to jatropha's environmental impact can be observed [14].

2.2. Jatropha Discourse in Kenya

After the Kyoto climate conference in 1997, biofuels became the new buzz word in the world's efforts to combat climate change. Global discourses of clean energy and energy security filtered down to national levels, where numerous governments started to endorse biofuels by establishing fuel-blending targets [15]. In Kenya, development NGOs, with the financial and expert support of international donors, emerged as major drivers in steering government policy-making towards a green economy. These same NGOs ran local advocacy campaigns for small-scale jatropha farming and coordinated the implementation process [16].

Gradually, the Kenvan government put in place a pro-biofuel legislative framework. In 2006, an Energy Act was passed which mandated the government to pursue and facilitate the production of biofuels [17]. This was followed by the Government of Kenya strategy paper on biodiesel in 2008, which specifically focuses on growing jatropha [18–20]. Thus, in the course of a few years, the Kenyan government had not only embraced the pro-biofuel discourse, it actively facilitated biofuel production by way of small-scale income generating projects as well as by large-scale investment projects. The eagerness with which the government promoted jatropha cultivation particularly can be explained by Kenya's long-term socio-economic aspirations. In Kenya Vision 2030 [21], which presents Kenya with a road map to becoming a middle-income country by the year 2030, the government prospects a large-scale biofuel feedstock plantation in the delta of the river Tana. At the time when Kenya Vision 2030 was published, Kenya was not known to have oil resources of its own. It was entirely dependent on imports for fossil fuel [22]. Therefore, the government probably considered the creation of a biofuel market within Kenya as an economically attractive option. For one, a home market would make Kenya less vulnerable to fluctuating oil prices. Furthermore, the biofuel industry would create jobs and thus contribute to the poverty reduction policy of the government. In sum, the pro-biofuel strategy served important national socio-economic interests [23].

The biofuel feedstock *jatropha curcas* had an additional value in Kenya's policy-making context. In the 2005 Government of Kenya strategy paper, Kenya's Arid and Semi-Arid Lands (ASALs) had been selected as specific targets for investment opportunities [24]. Since jatropha had been advocated as a drought resistant plant, jatropha plantations seemed to be the perfect investment strategy for ASALs. In the 2008 Government of Kenya strategy paper, *jatropha curcas* is actually stated as a top priority in the government's renewable energy strategy [19]. Yet already in 2008, jatropha started to lose its initial shine in Kenya. Under the influence of a growing global awareness of the negative aspects of biofuel feedstock cultivation described above, Kenya's Minister of the Environment and the Director

General of the National Environmental Authority started to reconsider the pro-biofuel feedstock cultivation policies of the government. Small-scale *jatropha curcas* farming experiences in Kenya gave additional impetus to a negative evaluation of the oil-seed plant [25,26].

Generally speaking, since 2008, criticism of biofuel production in Kenya and jatropha in particular has increased. Nonetheless, *Kenya Vision 2030* [21] leaves room for biofuel feedstock cultivation. Against this background of growing ambivalence towards *jatropha curcas* as the panacea for some of Kenya's most pressing issues (lack of oil, underutilized land, poverty), Bedford Biofuels started negotiations over a large-scale jatropha project in Tana Delta district as the area was then called (nowadays Tana River County).

3. Local to "Global" NGO Alliances

Fieldwork data from the first author show that many Tana Delta residents supported the BB jatropha project. Other studies confirm this picture [27–29]. Nonetheless, local pockets of resistance also emerged, particularly in communities (i.a. Dalu, Didaade) living on the land which BB had sub-leased. Several of them have arguably been represented by the Lower Tana Delta Conservation Trust (LTDCT), which is not a member of an international alliance and has not campaigned successfully outside Tana Delta. Another more marginal actor in the context of Bedford Biofuels is the East African Wildlife Society (EAWLS), with its headquarters in Nairobi. Similar to LTDCT, the NGO did not establish an international partnership.

Generally speaking, opposition discourse has primarily focused on environmental issues relating to the Tana River Delta and the adverse environmental impacts of large-scale agriculture on human livelihoods. The Delta covers a 300,000 ha wetland area, which stands out for its unique biodiversity. Its ecological fragility has been a matter of serious concern for conservationists for several years. Prior to BB's arrival in the area, Kenya Wildlife Service and the conservation NGO Nature Kenya had already led a vigorous campaign seeking to have the Tana River Delta designated as a Ramsar site. In September 2012 163,600 ha of the Tana River Delta was officially listed as a Ramsar site, the same month in which the BB plantation stopped operating as a result of ethnic violence in the area.

Conservation and humanitarian Kenyan NGOs that are members of "global" alliances have taken the lead in opposing Bedford Biofuels and other projected large-scale agricultural projects in the Tana Delta. Of the three alliances described here, the International Birdlife alliance has been the most vocal. Having a Nature Kenya office in Tana Delta, it is also the most locally entrenched network.

The following lines from the website of one of Nature Kenya's Birdlife partners, the British Royal Society for the Preservation of Birds (RSPB), illustrate the mutual importance attached to international partnership:

Here at the RSPB we are very proud of our role in the global alliance Birdlife International. Clearly our primary mission is here in the UK but we've always recognised the threats to birds, indeed all of nature, aren't limited by national boundaries. Conservation is an international issue.

(...)

The Tana River Delta is one of the world's great wildlife sites, and together with local people BirdLife partner, Nature Kenya, has been successfully campaigning to save the delta from a variety of threats [30].

Since 2010, RSPB and Nature Kenya have closely cooperated on different issues relating to Tana Delta. Their alliance is a typical example of a local to global alliance driven by a shared ideology (in this case nature conservation) and a common cause, as RSPB argues in the above quotation. The fact that "conservation is an international issue" seems to make RSPB's interest and activities in Tana Delta self-explanatory. Nature Kenya, on the other hand, also benefits from its partnership with RSPB as it gains clout internationally. Thus, for both partners, their alliance adds substantial international credibility to their voices (compare the lack of international voice of the non-allied LTDCT and EAWLS discussed in the above).

This Birdlife alliance campaign included more active partners. For instance, Nature Canada [31] took on the task of informing BB's home audience about the negative environmental impact of a Canadian jatropha plantation on Tana Delta. Also, Birdlife International prominently featured the negative perceptions of the BB plantation on their website. Lastly, BirdLife International Africa Secretariat wrote a protest letter to NEMA's DG on behalf of the alliance, when Kenya's National Environmental Management Authority (NEMA) issued a licence to BB for a jatropha test field of 10,000 ha. Clearly, it was due to the local to global alliance of Birdlife partners that a variety of resistance strategies could be tapped into in the context of the BB jatropha project.

Another alliance that featured—albeit less prominently—in the context of Tana Delta large-scale agricultural projects is the one between Arocha Kenya and Arocha International. Arocha International has facilitated the Tana Delta website tanariverdelta.org, which was launched in 2010. On it, news items, development updates and reports are presented concerning land investment projects in Tana Delta.

The alliance of ActionAid International Kenya and its umbrella organization ActionAid International has been less visible locally. For one, ActionAid Kenya does not have an office in Tana Delta or its vicinity. Moreover, its lobby against the biofuel industry has particularly targeted the EU and its policy makers, criticizing the EU biofuel mandate as the main driver behind the biofuel feedstock industry [10].

Some important common features can be distinguished in these three alliances, such as a shared ideology and a common cause. Also, the partner networks facilitate exchange of information and enhanced visibility of the individual (I)NGOs. Moreover, global partnership facilitates greater access to resources (e.g., financial, legal, expertise on conservation or humanitarian issues). As will be observed in the discussion, expert reports—written by one of the alliance partners or commissioned—are an additional benefit of these alliances.

However mutually empowering alliance partners may seem, their partnership is not equal according to human rights expert Makau Mutua [32]. Writing about alliances between East Africa's human rights NGOs and international partners, he qualifies the characteristic position of the local NGO as one of dependency, particularly financial. This dependency on the "global" partner comes with a price:

Often local NGOs are sucked into external agendas and fail to make their own priorities based on the needs of their constituents and the confluence of local conditions. (...) ... the unhealthy reliance on external, donor funding from the West is the biggest threat to NGOs

in East Africa. Experience indicates that excessive donor support distorts their vision, plays havoc with their loyalty, retards their creativity, confuses lines of accountability and encourages the development of a "fat cat" mentality among NGO executives [32] (pp. 30–31).

Although Mutua's critique is rather extreme and not representative of the Kenyan conservation and humanitarian NGOs under discussion, it cannot be denied that some similarities can be observed. One is that donor support has been an important factor in promoting the local and international visibility as well as the operational power of local NGOs in the case-study (e.g., extension of staff, launch of a website). The divergence between local interests and NGO interests in the context of the BB jatropha project points to another possible parallel, the compliance of local NGOs with internationally salient agendas that do not necessarily include local interests.

INGOs also stand to gain by connecting with local NGOs, as the RSPB quote above illustrates. Their alliance with "local people NGOs" enhances their authority in global issues. Kaag and Zoomers [5] argue that INGOs partly seek this authority in the context of large-scale land acquisitions in the global south to legitimize their own continued existence "in a context in which support for development organizations in the West is decreasing" (p. 6).

Local to global alliances have been conceptually analyzed by Anna Tsing [3] and David Lewis and David Mosse [33]. Describing a successful local to global environmental alliance in Indonesia, Tsing [3] attributes its success to "collaboration with friction at its heart" (p. 246). This phrase aptly captures two elementary dynamics in the local to global (I)NGO alliances in the context of the present case study. On the one hand, Tsing's [3] concept of "friction" highlights the creative qualities of difference that are characteristic for cross-cultural and long-distance connections, while "collaboration" implies that (I)NGOs with differences can nonetheless work together for a common cause. This "collaboration" with "friction", Tsing [3] notes, produces results all on its own:

[In the case study] collaboration was not consensus but rather an opening of productive confusion. Productive confusion is sometimes the most creative and successful form of the collaborative production of natural and social objects... (p. 247).

In contrast to the "productive confusion" of local to global environmental alliances observed by Tsing, Lewis and Mosse [33] highlight a tendency towards unified production and representation among local to "global" stakeholders in the context of development projects. The authors argue that the "translation" of diverse discourses into a single coherent discourse is essential for a development project to become a reality. From this, we may conclude that Lewis' and Mosse's *translation* serves shared stakeholder interests, as much as Tsing [3] argues that *productive confusion* does. Examples of both *translation* and *productive confusion* can be found in the analysis of anti-BB rhetoric.

4. E-Media as a Conduit for Opposition Rhetoric

All members of the three alliances as well as the above-mentioned umbrella organisations have their own websites. Data from these websites constitute a major resource for the present case study, as their hosts are the main actors in the context of anti-BB rhetoric.

Kenyan newspapers have regularly reported on rumoured or real developments in the Tana Delta area with respect to domestic and foreign large-scale agricultural projects. Although their reports cannot be characterized as unequivocally negative of Bedford Biofuels, developments that affected the BB plantation negatively have been a regular feature of articles and OpEds in the *Daily Nation*, *The Standard* and *The Star* [26,34–36]. Additionally, international news outlets, such as *The Guardian* and *Time*, picked up on the negative image of Bedford Biofuels, disseminating such views to a global public [25,37].

Bedford Biofuels also featured in expert reports [27,38,39]. Although these reports target a much smaller audience, they have been influential in creating a negative public image of BB. (I)NGOs, newspapers as well as the Kenyan Minister of Environment and Mineral Resources and NEMA's Director General referred to one or some of these reports to scientifically underscore their anti-jatropha plantation arguments.

Although (inter)national news outlets, expert reports and (I)NGO websites refer to distinct categories of communication, in the environment of the internet their boundaries tend to become more blurred. In practice, the internet user can freely surf from one category to the other, picking and choosing information from different sources. In order to grasp the specific communicative dynamics at play in the present case study, we take recourse to Tsing's concept of "scale-making" [3] and Evers' concept of "zone of intermediality" [40].

Tsing argues that stakeholders of geographical and cultural diversity conjure "the spatial dimensionality necessary for a particular kind of view" [3] (p. 58), in an effort to link up with contingent articulations of other scale-making projects. In the context of Tana Delta, for instance, arguments and images from (I)NGO websites can be seen to appear in national and international newspapers; national newspapers report government officials and (I)NGO officials citing from expert reports. The effect of this border crossing is the creation of a chain of interlocking anti-BB arguments and images.

On the other hand, difference is what characterizes these various stakeholders' scale-making projects targeting large-scale jatropha production and/or large-scale land investments as they intersect on the internet. Visualising this intersection as a "zone of intermediality", a grid where different stakeholder ideologies and practices collide, we can discern degrees of intercommunicative potential. In the context of conservationist anti-BB rhetoric, the space for intermediality turned out to be increasingly limited.

Another feature of the main actors' strategic use of e-media is *framing*. Scheufele [41] characterizes a media frame as "a central organizing idea or story line that provides meaning to an unfolding strip of events....The frame suggests what the controversy is about, the essence of the issue" (p. 306). This process of reducing issues to palatable or appealing dimensions has a major impact on the interpretative process. According to Scheufele [41], *framing* can be highly effective in promoting specific points of view and interests and limiting alternative interpretations of the issue. In practice, media scholars argue, newspapers tend to copy each other's *frames* when reporting on major news issues [42,43]. The result is one-dimensional images and arguments that lack nuancing context [43].

5. Salient Images and Arguments of Anti-BB Rhetoric

As the above sections have demonstrated, anti-BB rhetoric had a considerable potential for being powerful. It was produced by local to global alliances, it constituted a mosaic of voices from different communicative categories and it was expressed via e-media. The following discussion highlights the

most salient rhetorical strategies used. It presents and analyzes arguments and images from the three media categories introduced before, (I)NGO websites, newspapers and expert reports.

5.1. Images

A review of e-mediated newspaper articles, (I)NGO websites, petition sites, expert reports and letters between May 2011 until September 2013 reveals a significant consistency with respect to *framing* the BB jatropha project. Two images dominate this frame. One is the *location* image of the Tana Delta as an ecologically fragile area of great biodiversity, the home of hundreds of varieties of birds, many species of wildlife and the abode of 90,000 pastoralists, farmers and fishermen. The other image relates to *figures*, the high number of interested investors and the huge swathes of land they claim. It cannot be denied that together they provide a powerful anti-BB frame. The factual character of the frame (*location* and *figures*) undoubtedly adds to its forcefulness.

Internationally, reports on locations and land area figures of large land projects have played an essential role in bringing the phenomenon of LSLAs and their potential impacts to the global public's attention [44,45]. Indeed, figures and location references constitute the rationale of the global discourse on LSLAs. This is no different in the context of the Tana Delta "scramble". Moreover, the combination of location and figures conjures up a picture that effortlessly accommodates environmental and socio-economic arguments against the BB jatropha project. As will be seen below, this close connectedness between *frame* and arguments produces a remarkable feature of the anti-BB rhetoric—its ability to mask realities that expose the images as being flawed.

A vivid illustration of the image creating power of the combination of figures and location can be found on RSPB's Tana Delta case work page [46]:

So today *the Delta* is at the centre of "a new scramble for Africa". Although rainfall is unreliable and soils are sandy and prone to salt water intrusion, the Delta is viewed as fertile. More than half a dozen companies are already gathering to reap its potential riches. These include Kenyan based organisations wanting to establish huge sugar cane plantations on over 70,000 ha of land in the Delta, a company from Canada [and] UK wanting to grow oil seed crops on over 60,000 ha (italics added).

From this (dated) description it can be concluded that the BB jatropha plantation is planned in the fertile delta area of the river Tana and that BB is not the only one claiming land in the delta. In fact, the text suggests there are more than six companies interested in setting up large-scale farms in the delta and that the claimed land area is vast (130,000 ha). This leads RSPB on a different occasion to exclaim: "The total area of land sought by these investors is larger than the entire delta!" [47].

Although this last remark is counterfactual, it strengthens rather than weakens the rhetorical persuasiveness of the massive presence of large-scale agricultural projects in the delta of the river Tana. Probably, that is also why the comment appeared on the website. In fact, at the heart of this exclamation is what Tsing calls *productive confusion* (see discussion above). The exclamation suggests a spontaneous reaction from one of RSPB's case workers. Perhaps, it was uttered at an early stage of collaboration with Nature Kenya. However, the exclamation appeared on the website in 2012. By then, RSPB's alliance with Nature Kenya had existed for two years and RSPB surely knew better.

From this, it may be inferred that the exclamation is a case of reported *productive confusion*, intended for rhetorical gain.

RSPB is not alone in viewing BB as one of a group of investors with huge demands on fertile and ecologically fragile delta land. *The Guardian* [37] equally presented BB in the telling combination of other (potential) large-scale agricultural projects vying for land in the Tana River Delta.

Kenyan NGOs, on the other hand, have generally refrained from lumping the BB project together with other large-scale agricultural projects. However, they also picture the Canadian company in the delta of the river Tana, e.g., Nature Kenya in a letter to NEMA DG (December 2010) and LTDCT on their June 2011 petition website (no longer available). Arocha Kenya [48] presents the most striking picture, arguing that "64,000 ha of jatropha plantations [stretch]...from the western edge of the Tana River Delta right to the heart of the main delta and its biodiverse rich wetland". In sum, throughout the local-national to global chain of representation, the BB land investment is pictured as invasive for its size and its location. The following paragraphs demonstrate that these aspects are rhetorical constructs created with strategic gaps of factual information.

5.2. Strategic Information Gaps

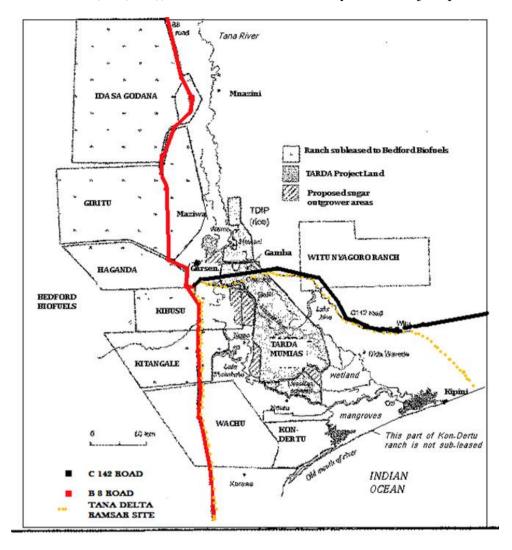
From 2009, the coastal district of Tana Delta temporarily became the hotspot of foreign and domestic investors' interests. Largely undeveloped and within the proximity of the prospected international port of Lamu, the delta seemed to be the ideal location to implement a variety of large-scale agricultural projects, such as horticulture (Qatar government), and biofuel production (Mumias Ltd. (Kenya); Mat International; G4 and BB). In early 2012, most of these projects had already been aborted during design phases. Only Bedford Biofuels had actually managed to sub-lease 162,000 hectares of land from six local ranching cooperatives, which included Tana River Delta land as well as semi-arid land outside the delta but within Tana Delta district. In this respect, BB—and G4—took a different position from the other land investors targeting public land. However, e-media campaigns failed to recognize this distinction.

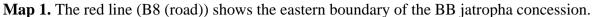
As a result of the EIA conducted by NEMA, Bedford Biofuels was restricted to growing jatropha on the semi-arid 62,000 ha outside the delta, the B8 motorway marking its eastern boundary (see Map 1). In May 2011, BB was issued an EIA license for a jatropha pilot on 10,000 ha. The pilot project was to be evaluated by NEMA before additional tracts of land were given to BB.

Clearly, this description shows a different image from that created by BB's opponents. It cannot be denied, however, that the opposition image includes some degree of truth. BB indeed subleased land in the Tana River Delta (but was prohibited by NEMA to grow jatropha there). Obviously, the anti-BB rhetoric was based on the lease agreement between BB and ranchers and did not include formal restrictions on the BB jatropha cultivation area that could affect the anti-BB rhetoric adversely.

The other strategic information gap is the reference to "Tana Delta". At the time, the phrase "Tana Delta" was used in popular parlance to refer to either the delta of the river Tana or to Tana Delta district (now part of Tana River County). Yet, they were two distinct geographical entities. Tana Delta district included the delta of the river Tana plus a large area of semi-arid land. The actual BB plantation area was therefore in Tana Delta district. The main opposition actors used the "productive

confusion" surrounding "Tana Delta" to their advantage in the environmental rhetoric against the BB jatropha project.





5.3. Environmental Arguments

As argued above, the arguments in the anti-BB rhetoric bear some of the hallmarks of global negative discourses on LSLAs and biofuel crop production, in particular jatropha. With respect to the environmental arguments, local to global (I)NGO alliances were most prominent. For instance, RSPB, Nature Kenya and ActionAid International commissioned a UK Energy consultancy [49] to write a carbon emission profile report on a jatropha plantation projected in nearby Dakatcha woodlands. Although they did not explicitly use the document in the anti-BB rhetoric, the report seems to have inspired all three (I)NGO alliances to claim that it is "a myth to assume that the BB jatropha plantation can contribute to carbon sequestration". As was pointed out in the description of the global discourse on jatropha, this argument has been supported by scientific studies [13]. Another argument expressed by the conservation (I)NGO alliances is that jatropha is an alien and invasive shrub. Although its alien status is confirmed by a GTZ (now GIZ) expert report [39], its invasiveness seems to lack international

salience. Not surprisingly, this argument can only be found in the national context. It was expressed by Nature Kenya's CEO in a Kenyan newspaper [35] and on the website of Arocha Kenya.

The dominant argument in the environmental rhetoric is that "jatropha destroys biodiversity". This leitmotif runs as an implicit strand through the rhetoric, the images and in the descriptions of the delta's unique biodiversity on websites and in newspaper articles. On the ground, this "jatropha destroys biodiversity" claim produced interesting dynamics, as the first author noticed. At a public meeting, the Nature Kenya representative argued that jatropha was particularly a threat to the great variety of resident and migratory birds. Within the rhetorical image that the INGO alliance had constructed of the BB plantation in the delta this remark made sense. However, the jatropha plantation was located outside the delta. Tapping into the *translation* which the (I)NGO alliance had rhetorically constructed, the Nature Kenya representative lost the connection with local reality. In fact, the audience showed no reaction; only the BB general manager, who was a speaker at the meeting, explicitly denied that the bird population would be affected by the jatropha plantation.

One argument that has not surfaced in (I)NGO rhetoric is the shortage of water that a jatropha farm could cause in the area. Yet, this so-called "water-grabbing" has been an important issue on the international agenda relating to LSLAs. Schade [27] and Duvail *et al.* [38] argue on the basis of scientific evidence that although *Jatropha curcas* can survive in a dry environment, it needs large quantities of water to thrive. On this score, both argue against the BB jatropha plantation.

A possible explanation for (I)NGOs' non-profiling of the water issue may be the way their rhetoric has been framed. Picturing the plantation in the delta with its annual floods, the frame hardly caters for a "dry" environment.

5.4. Socio-Economic Arguments

Within the socio-economic rhetoric by actors opposed to the jatropha plantation the insecurity of local communities' access to land takes an interesting position. The argument that local communities were threatened with eviction or dispossession of livelihoods because of the BB plantation was pursued only in one expert report [27] and in *The Guardian* [37]. Actually, it was the only argument in the anti-BB rhetoric that was shared by a few local communities (e.g., Dalu and Didaade). Albeit living on sub-leased land that was banned from cultivation by NEMA, they were afraid of eviction or dispossession from access to grazing land. It is hard to say what triggered their fears of eviction. It may have been the displacement of another community by the large-scale agricultural parastatal TARDA in Tana River Delta or their already insecure access to land as a result of recent or insecure settlement.

A recurrent argument on (I)NGO websites and in national newspapers (*The Standard*, *The Daily Nation*) is jatropha's lack of commercial viability according to "mounting scientific evidence" [36]. Indeed, international studies have highlighted failed large-scale jatropha plantations (see discussion above). The Kenyan actors seem to specifically refer to research commissioned by GTZ (now GIZ) in Kenya. The GTZ publication was often quoted and/or referred to in newspapers articles [26,50].

More than the other arguments, the "lack of commercial viability" argument is explicitly embedded in an international scientific context. In a letter from December 9, 2010, Nature Kenya urges the NEMA DG to refrain from issuing an EIA license to BB, using this contextualization as an essential persuasive force: Jatropha is untested and unproven in the drylands in general and Tana River Delta in particular. Although Bedford Biofuels say they will get the seeds from a high-quality source, all recent research reports suggest that under dry conditions Jatropha will not produce sufficient seeds or oil to make plantations economically viable. All recent research reports advise against Jatropha plantations, or even small-scale plantings except as fences/hedges.

This "non-viability" argument probably struck a sensitive chord in the then NEMA DG, Frances Ole Kaparo, as well as in the late Minister of Environment and Mineral Resources, John Michuki. Both started to express their reservations to the full-scale implementation of the BB jatropha project in national newspapers as well as in actions that obstructed the implementation of the jatropha project [36,51].

6. Discussion

The analysis has highlighted the resources that account for the success of the anti-BB rhetoric and the interests that were involved in its production. The following paragraphs consider these two themes in relation to two powerful voices in the opposition rhetoric, the (I)NGOs and international newspapers.

In the descriptions of characteristic features of (I)NGO alliances, e-media and rhetorical images and arguments the tendency of (I)NGOs to produce unified (representations of) realities stands out. One mechanism is the *translation* of individual (I)NGO opposition rhetoric into a unified alliance rhetorical framework. Another is the process of *scale-making*, the internet bringing together a range of stakeholders from different scale-making projects that seek connections. *Media framing* helped to present a restricted set of images and arguments that was circulated across different media categories and that discouraged alternative interpretations. Lastly, rhetorical images and arguments resonated with international environmental and humanitarian discourses on jatropha. The impact of these different layers of unification can hardly be underestimated. Indeed, the close interlocking of evocative images and internationally embedded arguments produced a picture that could mask inconvenient realities. This was the information that BB's investors in faraway Asia had access to via internet. Therefore it is not very surprising that Asian investors became "nervous" and withheld further investment.

Although "productive confusion" was discussed as a potential outcome of (I)NGO collaborative practices, the discussion demonstrated that it was not a characteristic feature of the (representation of the) main actors' opposition practices. The general tendency towards unified (re)presentations therefore can be assumed to best serve the main actors' interests. While a shared ideology and a common cause connect (I)NGOs, each (I)NGO strives for enhanced visibility and international clout. Alliances are effective ways of doing so, as the Birdlife International partners bring out. Involvement in a project that relates to the global issue of "land grabbing" further enhances international visibility and the NGO's legitimacy. It is hard to tell to what extent the Kenyan NGOs of the case study have benefited financially from their opposition practices against the BB jatropha plantation. Yet, financial interests cannot be discounted. One noteworthy result of Nature Kenya's partnership with RSPB is the extension of its local activities. Since September 2011, it has been involved in a DFID sponsored Land Use Planning project in Tana Delta.

The interests of international newspapers may be argued to converge to some extent. Considerations of authority and international clout, finances and compliance all influence reportage. Why international newspapers generally reported negatively on the BB jatropha project can best be explained by the concept of *framing*. Global discourses that view LSLAs and particularly biofuel feedstock plantations negatively have attracted a lot of media attention. International newspaper have a tendency to replicate this *framing*. In the context of Tana Delta, the first author noticed that *framing* was not only a matter of copying from other media outlets. Informed by (I)NGO websites on the "land-grab" situation in Tana Delta, Western journalists came to Tana Delta to see for themselves and were shown around by Nature Kenya staff. Thus, *framing* takes on additional persuasive power, as local informants can be cited to confirm salient international discursive arguments.

Interestingly, national newspapers, as was argued before, trace out a more nuanced portrait. Articles present news about the jatropha plantation, including citations from locals, Nature Kenya officials and (one of) BB's directors. However, they do little more than report on events that relate to the jatropha project. Only when the BB jatropha plantation stopped operating—it had not officially closed down yet—did a more in-depth article on BB's position in Tana Delta appear in *The Daily Nation* [52]. One explanation for the divergence between national newspapers from the international reportage of the BB jatropha plantation is that their perspective is more locally directed and that the local informants are more diverse.

This "local gaze" of national newspapers is distinct from the international orientation of other actors in the anti-BB rhetoric. Clearly, the international context was best suited for promoting the cause and interests of (I)NGOs, expert reports and international newspapers. However, in pursuit of these ends, the majority of Tana Delta locals, the Tana Delta district administration and the Tana River County Council were left unheard.

7. Conclusions

This case study illustrates the extent to which rhetoric proved effective in defeating a major jatropha investment in Kenya. From a public relations standpoint, occupying the high ground of mainstream economic discourse appears to have exposed a weak flank in the jatropha plantation project which was successfully exploited by conservationists. Notwithstanding the fact that the BB project initially enjoyed major local and government support and had substantial investment backing, the positions of local ranch owners and BB were marginalized by the direct use of powerful media campaigns and images. Both government and investors then wavered. Conceptualising the grid of interaction between these various stakeholders as a "zone of intermediality", we observe that the zone was reduced to insignificance by the combined Manichean simplicity of the conservationist rhetoric and the inability of BB to widen the area of discourse in order to engage and ultimately defeat conservationist claims which turned out to be based on questionable representations and limited scientific premises.

This clearly constitutes a case of failed intermediality, where a highly politicized discourse on sustainability succeeded in creating a climate of confrontation and uncertainty. The result is now a matter of history. Both BB and the conservationists have moved onto the next battlefield to define global land use, and local ranch owners are left with little prospect to improve their economy.

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Author Contributions

Froukje Krijtenburg has written the empirical part of the article. Her contribution consists of an analysis of various types of mediated resources and identifies stakeholders. Sandra Evers has provided the theoretical framework and theoretical commentary in the manuscript.

Conflicts of Interest

The authors declare no conflict of interest.

References and Notes

- 1. East African Wildlife Society. Director's Letter. Available online: http://www.eawildlife.org/ swara/swaraonlinearchive/pastswaraissuesandarticles (accessed on 2 December 2012).
- 2. Ruhu, J. Bedford Biofuels Tana Delta, Tana River County, Kenya. Personal communication, 2012.
- 3. Tsing, A.L. *Friction: An Ethnography of Global Connection*; Princeton University Press: Princeton, NJ, USA, 2005.
- Odoemene, A. Competing Rhetoric in the Context of Foreign Land Acquisitions: The Case of "New Nigeria". In Africa for Sale? Positioning the State, Land and Society in Foreign Large-Scale Land Acquisitions in Africa; Evers, S.J.T.M., Seagle, C.W., Krijtenburg, F., Eds.; Brill: Leiden, The Netherlands, 2013; pp. 259–274.
- 5. Kaag, M.; Zoomers, A. The Global Land Grab-Beyond the Hype; Zed Books: London, UK, 2014.
- 6. Carrithers, M. Introduction. In *Rhetoric, Culture and the Vicissitudes of Life*; Carrithers, M., Ed.; Berghahn: Oxford, UK, 2009; pp. 1–17.
- 7. Cushion, E.; Whiteman, A.; Dieterle, G. *Bioenergy Development: Issues and Impacts for Poverty and Natural Resource Management*; The World Bank: Washington, DC, USA, 2010.
- Vel, J.; Simandjuntak, D.; van Rooijen, L.; Widjaja, H.; Afiff, S.; van Klinken, G.; Tjeuw, J.; Slingerland, M.; Semedi, P.; Schulte Nordholt, H.; *et al.* Jatropha: From an Iconic Biofuel Crop to a Green Policy Parasite. Available online: http://www.iias.nl/sites/default/files/IIAS_NL66_FULL.pdf (accessed on 22 February 2014).
- 9. Carrington, D. UK firm's failed biofuel dream wrecks lives of Tanzania villagers. *The Observer*, 30 October 2011.
- Rice, T. Meals per Gallon: The Impact of Industrial Biofuels on People and Global Hunger. Available online: http://www.actionaid.org/eu/publications/meals-gallon-impact-industrial-biofuelspeople-and-global-hunger (accessed on 14 December 2013).

- 11. Oxfam. The Hunger Grains. Available online: http://www.oxfam.org/sites/www.oxfam.org/files/ bp161-the-hunger-grains-170912-en.pdf (accessed on 14 December 2013).
- Schoneveld, G.C.; German, L.A.; Nutakor, E. Land-based Investments for Rural Development? A Grounded Analysis of the Local Impacts of Biofuel Feedstock Plantations in Ghana. *Ecol. Soc.* 2011, *16*, 1–16.
- Achten, W.M.J.; Maes, W.H.; Aerts, R.; Verchot, L.; Trabucco, A.; Mathijs, E.; Singh, V.P.; Muys, B. Global Greenhouse Gas Implications of Land Conversion to Biofuel Crop Cultivation in Arid and Semi-Arid Lands—Lessons Learned from Jatropha. J. Arid Environ. 2013, 98, 135–145.
- Wani, S.P.; Chander, G.; Sahrawat, K.L.; Srinivasa Rao, Ch.; Raghvendra, G.; Susanna, P.; Pavani, M. Carbon Sequestration and Land Rehabilitation through *Jatropha Curcas*. (L.) Plantation in Degraded Lands. *Agri. Ecosyst. Environ.* 2012, *161*, 112–120.
- 15. Evers, S.J.T.M., Seagle, C.W., Krijtenburg, F., Eds. *Africa for Sale? Positioning the State, Land and Society in Foreign Large-Scale Land Acquisitions in Africa*; Brill Academic Publishers: Leiden, The Netherlands, 2013. Several chapters highlight the global developments of large-scale land acquisitions in which these discussions are framed.
- 16. Hunsberger, C. The politics of *Jatropha*-based biofuels in Kenya: Convergence and divergence among NGOs, donors, government officials and farmers. *J. Peasant Stud.* 2010, *37*, 939–962. See especially pp. 947ff. on the role of NGOs in establishing small-scale biofuel feedstock farming in Kenya.
- 17. Government of Kenya. Energy Act; Government of Kenya: Nairobi, Kenya, 2006.
- Muok, B.O.; Kirui, S.; Theuri, D.; Wakhungu, J.W. Policies and Regulations Affecting Biofuel Development in Kenya. Available online: http://www.acts.or.ke/dmdocuments/piscespolicybrief1.pdf (accessed on 14 December 2013).
- 19. Government of Kenya. *Strategy for the Development of the Bio-Fuel Industry in Kenya* 2008–2012; Ministry of Energy, Renewable Energy Department: Nairobi, Kenya, 2008.
- 20. Senelwa, K. New policy to boost Kenya's bid to go green. Daily Nation, 14 November 2009.
- 21. Government of Kenya. Kenya Vision 2030. Available online: http://www.vision2030.go.ke (accessed on 14 December 2013).
- 22. Since then, more than ten oil wells have been struck in Turkana district.
- 23. National newspapers became important platforms for debating the pros and cons of jatropha farming and biofuel production more generally. *Cf.*, Moll, P. Jatropha no good for local farms. *Daily Nation*, 14 June 2010; Senelwa, K. Going green in power search way out, says centre. *Daily Nation*, 21 August 2010.
- 24. Government of Kenya. National Policy for the Sustainable Development of Arid and Semi-Arid Lands of Kenya; Government of Kenya: Nairobi, Kenya, 2005.
- 25. Wadhams, N. How a Biofuel 'Miracle' Ruined Kenyan Farmers. *Time*, 4 October 2009. Available online: http://content.time.com/time/world/article/0,8599,1927538,00.html (accessed on 14 December 2013).
- 26. Moll, P. Jatropha no good for local farms. Daily Nation, 14 June 2010.
- 27. Schade, J. Human Rights, Climate Change, and Climate Policies in Kenya: How Climate Variability and Agrofuel Expansion Impact on the Enjoyment of Human Rights in the Tana Delta Research Mission Report of a Joint Effort by COMCAD (Bielefeld University), FIAN Germany,

KYF, and CEMIRIDE, 2011. Available online: http://www.unibielefeld.de/tdrc/ag_comcad/ downloads/final_study_ifa.pdf (accessed on 14 December 2013).

- 28. Smalley, R.; Corbera, E. Large-Scale Land Deals from the Inside Out: Findings from the inside out: Findings from Kenya's Tana Delta Kenya's Tana Delta. *J. Peasant Stud.* **2012**, *39*, 1039–1075.
- 29. Pickmeier, U. Land Acquisitions in Tana Delta, Kenya (Bio)fuelling Local Conflicts? A Youth Perspective. Master's Thesis, Radboud University Nijmegen, Nijmegen, The Netherlands, 2012.
- Royal Society for the Preservation of Birds. Help Save the Tana river delta. 2012. Available online: http://www.rspb.org.uk/supporting/campaigns/campaignwithus/current/tanadelta.aspx (accessed on 10 September 2012).
- Nature Canada. Bedford Biofuels threatens Kenya's Tana Delta. Available online: http://naturecanadablog.blogspot.nl/2011/09/bedford-biofuels-threatens-kenyas-tana.html (accessed on 14 December 2013).
- 32. Mutua, M., Ed. *Human Rights NGOs in East Africa: Political and Normative Tensions*; Fountain Publishers: Kampala, Uganda, 2009.
- 33. Lewis, D.; Mosse, D. *Development Brokers and Translators: The Ethnography of Aid and Agencies*; Kumarian Press: Bloomfield, CT, USA, 2006.
- 34. Ithula, M. Jatropha now runs out of steam as a viable green biofuel. The Standard, 7 April 2011.
- 35. Kagwe, W. Group says no to biofuel project. Daily Nation, 21 June 2010.
- 36. Muchangi, J. Study rubbishes jatropha fuel. The Star, 25 March 2011.
- 37. McVeigh, T. Biofuels Land grab in Kenya's Tana Delta fuels talk of war. *The Guardian*, 2 July 2011.
- 38. Duvail, S.; Médard, C.; Hamerlynck, O.; Nyingi, D.W. Land and Water grabbing in an East African Coastal Wetland: The Case of the Tana Delta. *Water Altern.* **2012**, *5*, 322–343.
- 39. Gesellschaft Technische Zusammenarbeit (GTZ). Jatropha Reality Check: An Independent Assessment of the Agronomic and Economic Viability of Jatropha and Other Oilseed Crops in Kenya. Report prepared by Endelevu Energy, World Agroforestry Centre and Kenya Forestry Research Institute, 2009. Available online: http://www.worldagroforestry.org/downloads/ publications/PDFs/B16599.PDF (accessed on 14 December 2013).
- 40. Evers, S.J.T.M. Ideology and the self—Fulfilling prophecy in conservation and social science research. *Madag. Conserv. Dev.* **2012**, *7*, 112–116.
- 41. Scheufele, D.A. Framing as a Theory of Media Effects. J. Commun. 1999, 49, 103–122.
- 42. Ruigrok, N.; Schaper, J.; Welbers, K.; Denekamp, M.; Jacobi, C.; Huiberts, E. Het Nederlandse Media Landschap Een Papegaaiencircuit? Available online: http://www.nieuwsmonitor.net (accessed on 2 February 2014).
- 43. Wijnberg, R. *De Nieuwsfabriek: Hoe Media ons Wereldbeeld Vervormen*; De Bezige Bij: Amsterdam, The Netherlands, 2013.
- 44. Nooteboom, G.; Bakker, L.G.H. Beyond the Gulf State Investment Hype: The Case of Indonesia and the Philippines. In *The Global Land Grab—Beyond the Hype*; Zed Books: London, UK, 2014; pp. 170–184.
- 45. Oxfam. Land and Power: The Scandals Surrounding the New Wave of Investments in Land. Available online: http://www.oxfam.org/en/grow/policy/land-and-power (accessed on 14 December 2013).

- 46. Royal Society for the Preservation of Birds. Case Work: Tana River Delta. Available online: http://www.rspb.org.uk/ourwork/casework/details.aspx?id=tcm:9-228564 (accessed on 14 December 2013).
- 47. Royal Society for the Preservation of Birds. Help Save the Tana River Delta. Available online: http://www.rspb.org.uk/supporting/campaigns/campaignwithus/current/tanadelta.aspx (accessed on 2 February 2012).
- 48. A Rocha Kenya. Public Hearing for Jatropha Biofuels in Tana River Delta. Available online: http://arochakenya.wildlifedirect.org/2011/02/07/public-hearing-for-jatropha-biofuels-in-tana-river-delta/ (accessed on 14 December 2013).
- 49. North Energy. Life Cycle Assessment of Refined Vegetable Oil and Biodiesel from Jatropha grown in Dakatcha. Woodlands of Kenya 2011. Available online: http://www.actionaid.org.uk/sites/default/files/doc_lib/kenyan_jatropha_final_report.pdf (accessed on 14 December 2013).
- 50. Gathura, G. Miracle tree may lack the magic touch it's fabled to have after all. *Daily Nation*, 27 May 2010.
- 51. Muchangi, J. NEMA directors suspended over illegal jatropha licences. The Star, 26 August 2011.
- 52. Gemson, S.C.; Mojtehedzadeh, S. Trouble Simmering in Tana over "Annexed Land". *Daily Nation*, 3 December 2012.

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