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**Southern and Eastern Africa: The threats people face
and their resistance struggles**



Our Viewpoint: Violence, appropriation and resistance: Eastern and southern Africa 3

Green Resources **Mozambique:** More False Promises!..... 6

Carbon Colonialism: Failure of Green Resources' Carbon Offset Project in **Uganda** 11

Southern African women organising against the violence of extractivism 15

Food, forests and the unfolding crisis in **Zambia**..... 19

Large Hydropower Dams Are Not the Answer: Time to Rethink **Africa's** Energy Infrastructure 24

Implications of Monoculture Tree Plantations in **Mozambique:** The Case of Portucel Mozambique..... 28

Food sovereignty in Zimbabwe: Mopane trees and local livelihoods..... 32

Industrial tree plantations in **eastern** and **southern Africa** 36

Action Alerts

No to ProSavana Campaign: Peoples' Declaration 41



Sengwer people cry for help in the Embobut Forest, **Kenya** 41

Recommended

Study Links Eucalyptus Monoculture to Water Scarcity in Minas, **Brazil** 42

Land conflict in Côte d'Ivoire: local communities continue to struggle against the state and Belgian company SIAT 42

African Biodiversity Network: "Matters of Principle: Guiding our way through challenging times" 42

"Industrial Tree Plantations Invading **Eastern** and **Southern Africa**" 43



Southern and Eastern Africa: The threats people face and their resistance struggles



This Bulletin is dedicated to the memory of our friend, colleague and comrade of struggle Wally Meene

Our Viewpoint

Violence, appropriation and resistance: Eastern and southern Africa



From time to time the WRM bulletin highlights stories, struggles and reflections from a specific part of the world. This issue is focused on the southern and eastern regions of Africa.

In order to better understand peoples' struggles across this vast region, reflecting on its history is crucial. This includes a prevalent economic system, based on a violent and racist *modus operandi*, which has its roots in many other forms of violence towards people's lives and livelihoods. This editorial highlights some parts of this history. And this, of course, is just the tip of the iceberg.

Colonial rule in southern and eastern Africa, going back to the 19th century, was not easily established. It needed punitive and oppressive expeditions as well as strategies and tactics aimed at destroying what was not useful to the colonizers. It also required territorial wars in order to establish a colonial "order". Agricultural systems were disrupted, with parallel impacts on forests and forest-dependant populations. Most colonial rulers adopted land-alienation policies that reserved much of the land, especially the most fertile, for concession companies, European settlers, and as 'Crown Land'. Indigenous peoples were largely forced onto less fertile lands. For example, The Land Ordinance of 1923



in Tanzania passed by the British declared all its land area –occupied or unoccupied- to be public lands and a title deed system with prominence over customary tenure. In eastern Zambia, some 900 thousand hectares of land were set aside for more than 150 thousand indigenous people. Meanwhile, about one million 700 thousand hectares were allotted to 80 European settlers. In Zimbabwe, large tracts of fertile land were grabbed from the local population and allocated to the British South Africa Company, which profited from large-scale mining activities in the region. (1)

These imposed and violent re-configurations of access and control over land and forests also imposed a change in local practices, economies and cultures because through colonial appropriation, land available to the indigenous population had been drastically reduced and communities relocated. Fallow periods were reduced, traditions and local organization were damaged, sacred places and medicinal plants were destroyed, patterns of trade were changed and the few hectares of land left for local livelihoods were mostly over-cultivated.

These violent appropriations of land also led to massive deforestation that directly affected indigenous populations. As a researcher from Washington State University states: “The large amount of deforestation in South and East Africa was a direct result of British companies logging forests to make room for gold and diamond mines.” (2)

The researcher further explains how the British South Africa Company (BSAC) invested heavily in gold mines, mainly located in Rhodesia (now Zimbabwe). The British mine supervisors would control from around 5 thousand hectares to well over 40 thousand hectares of land. They operated gold mines on heavy machinery, cheap labour, and wood: Mine tunnels needed to be confined with wood, machinery needed wood fuel, workers needed shelter built from wood, and wooden storage rooms had to be built. When the mines would run out of timber, they would have to order it from elsewhere and this could become “quite costly”. One order was a contract for 45 thousand square meters of timber to construct railways to allow the export of minerals. It is important to highlight, though, that while the company was freely stealing land, gold and diamonds from local populations, with all the social and environmental impacts that this entailed, buying wood was still consider “costly” for their business. Nonetheless, thousands of hectares of forests were cleared to support mining. The gold mines in Rhodesia were just the start of heavy logging and deforestation in this region.

One of the most damaging gold mines was that of the Witwatersrand Gold Mining Company in South Africa. The gold deposits were first discovered in July 1886, a time where the currencies in Europe and the United States were backed up with gold held by national banks. Seven thousand Europeans settled at the mine by the end of that same year. By 1899, 100 thousand African mineworkers toiled at the mine, mainly because they were forced to earn money to pay the taxes imposed by colonizers. They were being exploited as cheap and harsh labour. (3) It is estimated that, annually, an amount of about 2 million 300 thousand US dollars was spent on buying timber, just to keep the mine



functioning. They used over 16 thousand gallons of water a day, mainly from an underground aquifer. The water has become unusable for the local population, however, because of the pollution caused by the mine, in particular the poisonous acid mine drainage. (4)

Despite these violent seizures of land, livelihoods, economies and cultures, people have never ceased to resist, even in the face of severe repression. At times, their struggles were silenced, either by colonial or post-independence regimes and governments in the region, which continue at the service of an economic system that has not lost its colonial character.

This bulletin includes two articles on the severe impacts that result from monoculture tree plantations invading a region. In this case, the plantations are controlled by the Norwegian company Green Resources. One article looks at the impact of Green Resources plantations in Mozambique and the other at their operations in Uganda. Another article assesses the consequences of plantations established by the pulp and paper company Portucel in Mozambique. A contribution from Zambia outlines the many pressures on forests and peasant land from mining and agribusiness expansion to forest carbon (REDD+) projects. Another article highlights the differentiated and heavy impacts that women and girls suffer due to mineral extraction in Zimbabwe and Mozambique, as examples of the many cases from the region. An article from Zimbabwe explores the tight and crucial relationship between certain trees and animals and the livelihood of local populations. And finally, another contribution reflects on the push for building more mega-dams in the region under the discourse of generating “clean” energy; but who will benefit from this energy and who will be affected by this infrastructure?

(1) Campbell B. (1996) The Miombo in Transition: Woodlands and Welfare in Africa, page 83, http://www.cifor.org/publications/pdf_files/Books/Miombo.pdf

(2) <http://history.libraries.wsu.edu/history105-06-stratton-fall2017/2017/09/01/deforestation-in-south-africa/>

(3) Potenza, E. (1946) All that glitters, South African History Online – towards a people’s history, <http://www.sahistory.org.za/archive/all-glitters-glitter-gold-emilia-potenza>

(4) Idem 2



Green Resources Mozambique: More False Promises!



Green Resources Mozambique is a tree plantation company that is part of Green Resources S.A. With mostly Norwegian capital and over 80 shareholders, Green Resources S.A. was established in 1995, and is considered to be the largest tree plantation company in Africa, excluding South Africa. It operates in three African countries (Mozambique, Tanzania and Uganda) with ten plantations: Bukaleba and Kachung in Uganda; Lindi, Idete and Mnyera in Tanzania; and Niassa Green Resources, Chikweti, Lúrio Green Resources, Tectona and Ntacua in Mozambique.

According to Green Resources Mozambique, the objectives that guide its tree plantations are: i) to sustainably establish and manage commercial tree plantations in order to generate forest products for domestic use and export (energy production, particle board and pulp, sawed timber and transmission poles); ii) carbon sequestration; iii) conservation of natural forests and biodiversity; and iv) economic and social development of the communities and areas encompassed by the plantations. But the reality on the ground reveals the opposite: countless land conflicts; usurpation of community land that was mostly used to grow food; installation of plantations along rivers and water sources, and next to roads and houses in native forest areas; among many other issues.

Conflicts between communities and Green Resources occur not only in Mozambique. Several studies also show serious land conflicts between the company and communities in Uganda and Tanzania. For example, in 2012, the National Association of Professional Environmentalists (Friends of the Earth Uganda) carried out a study that exposed the general situation of conflicts between local communities and the company in Uganda. This study describes how Green Resources—through its subsidiary, Busoga Forestry Co Ltd,—destroyed between 8,000 and 10,000 hectares of native forest in Bukalega, Uganda, to convert them into pine and eucalyptus plantations. About 8,000 people from 13 villages in the region were driven off their lands, under the allegation that they had illegally occupied the region during the political turmoil of 1975-1985 (1).



Meanwhile, a 2011 report by the NGO, TimberWatch, highlighted the following impacts of Green Resources' plantations in Tanzania: "displaced communities that are losing their land, poor working conditions, destruction of the biodiversity upon which communities depend to obtain their food, fuel and medicines, reduced availability of water, as well as many other direct and indirect effects that negatively impact affected communities' way of life" (2).

Struggles Against Green Resources in Mozambique

In September 2016, the Mozambican civil society organizations, Justiça Ambiental, Livaningo and União Nacional de Camponeses (National Peasants Union) published the study, "The advance of tree plantations on farmers' territories in the Nacala Corridor: The Case of Green Resources Mozambique" (3). In the framework of this initiative, the three organizations also produced a short documentary that shows the situation of communities affected by territorial conflicts with Green Resources Mozambique (4). Additionally, we drew up a joint petition with the World Rainforest Movement, which garnered 12,332 signatures from individuals and national and foreign organizations. We presented this petition to Green Resources in Norway and Portucel/The Navigator Company in Portugal, as well as to governmental institutions in Mozambique—in particular the Ministry of Land, Environment and Rural Development and the Ministry of Agriculture and Food Security. The petition's main demand is that the companies, Green Resources and Portucel,—as well as all the other companies that seek to obtain large tracts of fertile land for tree plantations in East and Southern Africa—return the land to local communities, in order to resolve the current territorial conflicts and prevent new ones. In this petition we demand that the government of Mozambique ensure true compliance with the Land Law, and that it guarantee proper respect for communities' rights to land, water and food.

So far, we have not received a formal response to our petition. We recently learned that Green Resources responded to our petition on its website (5). As one can see, this response contains little or nothing new, although it does add an interesting fact. One of the arguments for establishing tree plantations has been that they use degraded or marginal lands, which we know does not correspond with reality. In their response, Green Resources confirmed that it needs fertile lands for its plantations....And we need to grow food, ladies and gentlemen!

Since the public launch of the study in 2016, the aforementioned organizations have had two meetings with Green Resources Mozambique. These meetings were mediated by the Norwegian Embassy, which did not help resolve the conflicts at all. The study was severely criticized in these meetings, not only by the company but also by Embassy representatives—from whom one expected an impartial position. Neither was able to explain or substantiate the criticisms presented, or the reasons for so much indignation. It should be noted that in both meetings, the company ensured its openness to discussing the issues presented in the study; however, this did not happen in either meeting. In carrying out the study, we contacted Green Resources Mozambique representatives, who merely refuted all information about conflicts or



misconduct on the part of the company, without substantiating this claim or presenting documentation that could clarify any misunderstanding. The consultants in charge of the study asked the company for a number of documents, such as the minutes from community consultations or the proceedings to acquire rights of Land Use and Exploitation (DUATs, by its Portuguese acronym). Although the company has argued countless times that it has done everything according to national law, and that it keeps a record of everything, we could not access the required documents, and we were advised to request them from the government.

Companies have used this strategy widely: to state that they are not responsible for providing information, and that interested parties should request it from the government, which does have the responsibility to ensure access to information. Meanwhile, despite countless requests and no official refusal, we still have not been able to access the documents.

Confronting Financiers in Norway and Sweden

Given that most of the land conflicts, complaints about the compensation process and affected communities' dissatisfaction have yet to be resolved, and given the difficult communication and access to information, the organizations decided to present and discuss these issues in Norway, the country where the company is based. We also presented the issues in Sweden, due to the relationship with the Chikweti tree plantation company—a company Green Resources acquired.

It was in this framework that a delegation went to Norway from September 26-29, 2017 and met with the Norwegian Investment Fund for Developing Countries (Norfund), the Norwegian Agency for Development Cooperation (Norad), Norwegian parliamentarians and various civil society organizations. The delegation was composed of representatives from Justiça Ambiental (JA!), Livaningo, the National Peasants Union (UNAC, by its Portuguese acronym), the Provincial Peasants Union of Niassa (UPC, by its Portuguese acronym), as well as representatives from the communities of Meparara, Namacuco and Lanxeque, Ribaué district, Nampula province. In these meetings the delegation presented the main results of the study, and discussed the conflicts with local communities, as well as the way in which these actors could intervene to resolve them, without neglecting these countries' economic interests in this type of investment.

In the meeting with Norfund—one of the financiers of Green Resources Mozambique—we learned that the FSC certification (Forest Stewardship Council) for the plantations in Nampula province had been suspended. Green Resources Mozambique's FSC certification, about which it boasts every time it is confronted about the numerous problems with communities, was actually suspended as of May 2016, due to the number of problems detected (6).

Norfund representatives appeared to be quite concerned about the results of the study, and especially about community representatives' testimonies—although this was not a new situation for them, as they already knew about



these issues. It is important to note that Norfund's concern is not necessarily related to conflicts with local communities, but rather to the amount invested in Green Resources and its need to return that investment. Their motivations appear to be exclusively economic, and there is a lot of interest in making sure the company recovers. Norfund seems to believe that tree plantations bring about the much advertised "development," and it also believes that by financing this kind of investment in poor countries, it is really supporting the development of those countries—as it believes to be the case with Mozambique. An interesting (and contradictory) fact is that they mentioned that they have already received countless reports of conflicts and problems with Green Resources, both from Mozambique and from plantations in Uganda and Tanzania.

Green Resources Mozambique's lack of transparency is unfortunate—seeing as it mentioned the FSC certification every time it was challenged, but never clarified that this certification had been suspended in 2016.

Companies use the FSC certification as a quality seal to assure consumers that the wood they buy comes from forests exploited in a socially just, economically viable and environmentally sound manner. However, the credibility of this process has long been questioned due to several cases, in which, despite having been informed of serious conflicts with local communities and serious environmental issues, companies managed to maintain their certification. Another factor that has significantly contributed to the loss in credibility of the FSC certification is the inclusion of tree plantations in the certification process—in spite of the huge opposition these kinds of projects have received, due to the negative impacts they cause.

The delegation also met with a Green Resources representative in Norway, who determined that the compensation and land acquisition process had been a success. We presented the most urgent issues, and it was clear that we were not of the same opinion about the way in which the processes were carried out in local communities; because according to this representative, everything had been done in keeping with the law, and all the compensations had been duly calculated, negotiated and paid. It is clear that we did not have the same information. We gave them copies of the compensation payment vouchers so that they could see the amounts that had been paid, as well as copies of the records with information on the areas of agricultural production and the number of trees. These documents leave no doubt that there are matters to discuss, and that several situations require an urgent solution. We were able to confirm with the Green Resources representative that Lúrio Green Resources's FSC certification has been suspended. It is important to note that on numerous occasions, Green Resources referred to the certification as proof that it had complied with all procedures, and that everything was working in the best possible way—without once mentioning that this certification had been suspended.

Another matter that has been the cause of countless disputes between local communities and the company are the promises that were made during community consultations—and which were, in fact, the main reason that many community members agreed to give up their land. So far, Green Resources has



ignored these promises, claiming that the communities misunderstood, and that social infrastructure is the government's responsibility, not the companies'. Interestingly, one of the problematic issues requiring the company's attention—which appeared in the Woodmark Forest Certification Public Report—is that "in consultations with communities, committees and leaders, it was repeatedly mentioned that LGR [Lúrio Green Resources] promised social infrastructure constructions, including schools, water wells and health posts. These promises have still not been met. Company management say that they will fulfill these commitments in stages and according to priorities. As proof, the company showed a contract with BJ Drilling Lda to drill seven water wells in the three districts where it operates. LGR must ensure it meets communities' expectations, and that it regularly communicates about progress and plans to fulfill social commitments."

Another fact which is new to us is related to the company's current financial situation. According to information confirmed during the meeting with the Green Resources representative in Norway, the company is going through serious financial difficulties. This is apparently the main reason for having not yet carried out the social projects, which include the myriad promises that have been constantly cited, and in a way denied by Green Resources Mozambique. The company alleges that these are expectations beyond its control and not promises, as the various communities consulted have always claimed.

How big is Green Resources Mozambique's financial crisis? What is the company's strategy to resolve its financial situation without further harming local communities? And how will it be able to fulfill its obligations toward the affected communities with this financial situation? We wonder if there is an exit strategy in the event of bankruptcy, and we sense that in that case, everything would go to the banks...There is no strategy!

In all the meetings that took place in Norway and Sweden, it was clear that even though we do not agree on everything, there is room to discuss the conflicts between the company and affected communities, and that these conflicts exist. They are the result of poorly managed processes and selective application of the law, and they are worsening as the years go by. This is due to the lack of sensitivity regarding the conflicts; arrogance in dealing with them; flagrant power imbalances between investors and local communities in negotiation processes; and the greed to accumulate more and more land—competing with food production. This is all in a country which, despite affirming that agriculture is the basis of development, is increasingly promoting investments that require large tracts of land and drive more and more peasants off their lands.

The fight continues!

Justiça Ambiental, <https://ja4change.wordpress.com/>

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(2) Timberwatch Coalition, CDM Carbon Sink Tree Plantations. A case study in Tanzania, 2011, <http://globaljusticeecology.org/files/CDM%20plantations%20report.pdf>



(3) Justiça Ambiental, Livangingo and the National Peasants Union, “O Avanço das Plantações Florestais sobre os Territórios dos Camponeses no Corredor de Nacala: o caso da Green Resources Moçambique”, 2016,

https://issuu.com/justicaambiental/docs/o_caso_da_green_resources_moc_ambi

(4) <https://www.youtube.com/watch?v=jPU9ydB4b2U>

(5) Response available at: <http://www.greenresources.no/News/ID/60/Green-Resources-GR-Responds-to-Open-Letter-Calling-for-an-end-to-the-expansion-of-forest-plantation-activities>

(6) Lurio Green Resources SA. License Code: FSC- C110223. See:

<https://info.fsc.org/details.php?id=a0240000008hYgcAAE&type=certificate#result>

Carbon Colonialism: Failure of Green Resources’ Carbon Offset Project in Uganda



Green Resources – a Norwegian tree plantation, carbon offset, wood products, and renewable energy company – champion themselves as a good corporate citizen. They claim to have planted more trees in Africa than any other private company in the last ten years, and to have invested over 125 million US dollars in tree planting, as well as providing an array of community development initiatives. (1) Despite such claims, the devastating impacts of Green Resources have been exposed over a number of years. In its 2014 report, for example, the Oakland Institute documented Green Resources’ misconduct at its two project sites in Uganda – Kachung and Bukaleba. (2) The social, cultural, and environmental damage caused by Green Resources was called out as *carbon violence*, given that the suffering and destruction reported was directly tied to the company establishing industrial monoculture tree plantations for entry into carbon markets. (3) The idea behind these markets is to measure the potential amount of carbon dioxide that a specific land area with trees can sequester and to place an economic value upon this “service.” This economic value is turned into carbon credits, which are mostly sold to governments and industry in order to “offset” their pollution.

Following the exposure of Green Resources’ poor conduct at its Kachung site, the state owned Swedish Energy Agency, Green Resources only carbon credit buyer, (4) stopped payments to the company in November 2015. (5) It outlined ten actions for the company to undertake for reinstatement of payments. In



explaining its decision to withdraw from the buying arrangement, the Swedish Energy Agency drew attention to human rights concerns. (6) The deep flaws in Green Resources' conduct have cost the company access to its carbon market.

How has Green Resources responded to the loss of its sole carbon buyer? In December 2017, The Oakland Institute released a follow-up report entitled "Carbon Colonialism: Failure of Green Resources' Carbon Offset Project in Uganda." (7) This report reviews the company's claims against those villagers on the ground at Kachung. These findings point to the on-going failure of Green Resources to take seriously complaints directed towards the company, or to respond responsibly in the face of the adverse social and environmental impacts arising as a direct consequence of its project.

Background

Northern Uganda comprises some of the most vulnerable communities in Uganda. (8) Rates of poverty are high and life expectancy is low. The region also faces limitations in access to vital services, including education, safe drinking water, sanitation and health. (9) It is here that Green Resources operates under the names Busoga Forestry Company (BFC) and Lango Forestry Company. Green Resources reports having between 80 and 105 private shareholders, including major players such as Diversified International Finance (20.1 per cent), New Africa/Asprem (9.6 per cent), and Sundt AS (8.7 per cent). (10) Green Resources has also received significant support – approximately 33 million US dollars (11) – from public Development Finance Institutions, including Norfund (Norway), FMO (The Netherlands) and Finnfund (Finland).

Green Resources obtained a license from the National Forestry Authority (NFA) to establish an industrial tree plantation in the Kachung Central Forest Reserve in 1999. Afforestation operations commenced in 2006, and planting is now complete, with the establishment and management of mostly monoculture plantations (with around 90 per cent of trees planted *Pinus caribea hondurensis*, and the remainder various Eucalyptus species) on approximately 2,050 hectares. The project is certified with the Forest Stewardship Council (FSC), recognized as a Clean Development Mechanism (CDM) project, and was validated under the Climate Community and Biodiversity Standard (CCBS) in 2011. Kachung's only carbon credits were purchased by the Swedish Energy Agency; a government agency that reports to the Ministry of the Environment and Energy. While the Swedish Energy Agency initially paid 150 thousand US dollars to Green Resources, the remaining payment is in doubt, with a decision to resume payment pending in 2018. (12)

There are 17 villages directly adjacent to Green Resources' license area within Kachung Central Forest Reserve and affected by the company. Their livelihoods are dependent upon small-scale subsistence farming, fishing, and livestock herding. (13) Given the very high reliance upon land for subsistence food production and grazing, the loss of land due to the plantation project presents acute challenges for local communities.



Carbon colonialism

The Oakland Institute's latest report lays bare the false solutions to climate change promoted by Western corporations and institutions in Africa. Extensive on-the ground research conducted between November 2016 and August 2017 in Uganda, reveals how Green Resources undermines food security and livelihoods by excluding people from their own land.

The report exposes that Green Resources over-inflates the employment opportunities it provides, as well as sidestepping responsibilities related to the health and safety conditions for its workers. Villagers also continue to struggle to secure access to firewood and water, challenges Green Resources has done little to address. Most profoundly, villagers continue to struggle to access land to grow food and graze animals, driving food insecurity in the region.

The industrial monoculture tree plantation and carbon offset project run by Green Resources at its Kachung site is, quite simply, incompatible with the presence and needs of local people who rely upon the same land for their livelihoods. The outcomes of this project directly undermine local livelihoods and threaten local villagers' very survival.

Carbon markets fail people and the planet

The failings of Green Resources' industrial tree plantation and carbon offset project exposes, more broadly, the limits of carbon markets. While local villagers carry the social, environmental and other costs of this project, the company is allowed to profit even more from its destructive plantations, framing them as "carbon sinks".

This system is carbon colonialism (14) at work, with the natural resources of an African country exploited by foreign interests under the guise of sustainable development, and at a high cost for the people and the environment.

Such circumstances should be a matter of serious concern to Green Resources' shareholders and financiers, who share responsibility with the company in supporting a project that has such a detrimental impact on local populations.

As the Swedish Energy Agency reassesses whether to resume payments to Green Resources in early 2018, the Oakland Institute's latest report is an irrefutable indictment on the failure of Green Resources to take responsibility for the harmful impacts on local communities that derive from its' project activities.

You can access Oakland Institute's latest report here:

<https://www.oaklandinstitute.org/carbon-colonialism-failure-green-resources-carbon-offset-project-uganda>

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- (11) Idem (6)
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- (13) Idem (9)
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Southern African women organising against the violence of extractivism



For many resource-rich nations in the global South, large-scale natural resource exploitation and extraction, and accompanying mega infrastructure projects, is the pathway governments take in order to receive foreign investment and access to financial aid. The Africa Mining Vision (1), adopted by African ministers responsible for mineral resources exploitation throughout the continent, along with its accompanying policy framework, Minerals and Africa's Development (2011) (2) both provide the most “comprehensive strategy for African industrialisation in the 21st century.”

However, beneath the veneer of this popular development paradigm, the lives and livelihoods of rural and peasant communities as well as the environment are under threat from the devastating impacts of mining and other extractives industries. Women and girls, in particular, carry the costs of these impacts. From women in the Tete Province, Mozambique, whose communities are burdened with water scarcity and pollution to Zimbabwe's Marange community, where militarised and often sexualised violence haunts women's daily lives.

“Women in search of water” – Tete, Mozambique

Tete Province lies to the very north of Mozambique, and is bordered by Malawi, Zambia and Zimbabwe. In the pre-colonial era, Tete town, the present capital of the Province, was a major trading place in Southern Africa. Currently, it is the centre of the Mozambican mining industry, with coal mining being predominant. To date, coal mining concessions and licenses covering 60 per cent of the Tete Province (3) have been awarded by the Mozambican government.



One mining site, Kassoca, is operated and owned by Jindal, a company that is part of Indian multinational conglomerate Jindal Steel and Power Limited. This site tells the story of a highly militarised community struggling for water. The government has done little to research the effects of mining on the community, according to local environmental justice NGO Justiça Ambiental (JA)'s project coordinator. Starting operations in 2013, the Kassoca mine has resulted in the relocation of over 500 families. To date, 289 families are still awaiting relocation.

The daily life of these 289 families is not easy. "Here, there is no water," says a local activist, while pointing to a dam. Although the mine claims that the water from the dam is unfit for consumption, women are forced to use that water because they have no other option. They must, however, do so in secret as the mine will "deal with us if they catch us." The community, along with Justiça Ambiental, faces heavy threats and intimidation for speaking out against the mining company. Nonetheless, they have made efforts contesting the violations of their right to water and against the pollution coming from the mines in the Mozambican courts.

In another part of Tete sits the Moatzi Coal Mine. Operational since 2011, this mine was formerly owned by Rio Tinto and now belongs to Brazilian company Vale. The affected community, which largely relies on subsistence agriculture for their livelihoods and survival, was relocated to the area of Mualadzi and is finding it difficult to grow food in the resource-depleted area.

One local activist, Dona Maria (not her real name), is working alongside Justiça Ambiental to raise awareness on the plight of her community. Similar to the Kassoca mine, the lack of access to clean water is a serious issue for people in Mualadzi: "The old people (Rio Tinto) dug up 10 boreholes, but only 6 are working." There are many women gathered around the water, as well as a range of animals. "See?" says one woman, "We use the water with the animals."

The community has developed small income-generating projects, choosing four families to sell basic items in a small market, with the aim to increase the projects so that other families can benefit.

Dona Maria shares that there has been an unusual number of spontaneous abortions and stillbirths since they moved to Mualadzi. "We are trying to investigate, we want to be sure." Many of the young women who collect water are of school-going age. The road between the community's secondary school and the residential area is long and unsafe, "Some girls have been attacked and raped. So they are afraid." The community has a graveyard area allocated, but Dona Maria says, "Our sick travel back to our land and die there. They do not want to be buried here."

A few kilometres away there are houses being built by mining company Vale, which are intended for placing more families that will be relocated. These are nothing but "painted empty shells." None of the homes have piped running water, and the tap installed for families to use is often cut off by the builders of the housing settlement, in retaliation for not being paid by the mining company.



In a province with average temperatures of over 40°C, women's daily lives are made that much more arduous without access to clean water.

Supported by Justiça Ambiental, these communities have lodged formal requests to the mining company Vale, and the Mozambican government, in order to address the issues they are facing. This, however, did not result in any action. A peaceful protest was thus held and the road and railway were blockaded. The community faced a violent backlash from the Mozambican government, resulting in six protestors being hospitalised and many others jailed. There is an increasing militarization of these communities, with police check points controlling people's movement in and out.

Communities continue to seek ways in which to raise awareness and mobilize. In 2016, they sent a delegation to the Permanent People's Tribunal (4), a platform and instrument that gives recognition, visibility and voice to people suffering violations of their fundamental rights.

“When the diamonds were discovered”— Chiadzwa, Zimbabwe

“They displaced us from our lands and stripped away our freedom of movement,” describes Zimbabwean activist, Gladys Mavhusa. “When our land became a restricted area [because of the diamond mining], it meant that there was a boom gate to enter our town. This is where public transport would stop and the ‘officials’ there would perform strip searches. Women would be searched in our mouths, our ears, everywhere including private parts. Sometimes these officers did not change their gloves, using the same one on many women to the point that some of us began to develop infections. Women started having problems with their reproductive systems, fibroids and other growths. For us to go and seek medical treatment, we could not because we were no longer farming and thus, we had no money.”

The Marange diamond fields were discovered to the east of the capital, Harare, in 2006. Since then, communities like Chiadzwa have suffered grave human rights violations, violence and repression, land grabbing and displacement. Presently, in the Chiadzwa area, the Zimbabwe Consolidated Diamond Company (ZCDC) holds the mining rights (5), a merger of government and corporate interests supported by military and security forces.

Gladys Mavhusa paints a powerful picture of life before and after the mineral rush arrived in Marange:

“I was born in Chiadzwa. When I was growing up, my life was very good, I lived a relatively free life. I was born in a family that was rich, I married into one, too, because we were farmers. We had cattle, goats, chickens, everything. The problem came when diamonds were discovered. The first thing we were told was that we were no longer free to move around. The land that we had lived on all our lives, the fields that we had cultivated and depended on – they were all taken away. The forests where we used to worship and pray to our gods for rain were taken. Our ancestral graves, the graves of our chiefs – sacred places that we all valued when I was growing up, were taken over by the mines.”



Women in Marange bear the heaviest burden of the impacts of mining activities, including the loss of livelihoods. Before the mining companies overran their lands, women made their living through activities such as farming and basket-weaving. This is no longer possible for the vast majority. Women also experience rape and other forms of sexual violence. (6) It is an onslaught from “all directions... If our husbands see that we have been raped, they blame us and they claim that we asked [for it]. If our children are raped or engage in sex work, the men blame us women again and say, ‘It’s your child.’ This situation has brought so much conflict into our families and our communities. Our husbands cannot understand that it is impossible for us to look after our families and deal with all of these problems at the same time; they say that we are lazy.”

The Chiadzwa Community Development Trust (CCDT) (7) was formed in 2005 in order to promote accountability and transparency in the extraction of diamonds. They began to work with women who wanted to mobilise to stop the violation of their bodies and rights, the grabbing of their lands and livelihoods. First, women began to organise to refuse relocation – they told their local member of parliament that they would not respect relocation, particularly to lands where they could not farm and support their families. At first, they faced early backlash – intimidation and threats from local ‘officials’. Fearing further retaliation, some members of the community chose to relocate – but in the end, they did not get their relocation homes.

CCDT continues to work with the women and families who stayed behind. Many of these women lost their husbands through murder or disappearance. In cases where it is possible, CCDT assists with litigation with the support of allies like the Zimbabwe Lawyers for Human Rights (ZLHR). In other situations, CCDT provides much-needed trauma and psychosocial support to widows and their families through organisations like the Counselling Services Unit (CSU).

To strengthen women’s organising and movement building, CCDT holds community trainings to enable women to know their economic, social and cultural rights. Through these awareness-raising activities, CCDT hopes that women will be able to collectively build an analysis and mobilise together.

“...I want a world where...”

The contexts may be different but the struggles are the same—from the fight for clean water to confronting threats of intimidation and repression at the hands of mining companies’ security forces or other powerful actors as well as the struggles to protect lives and livelihoods. The alliance “African Women Unite Against Destructive Resource Extraction” (WoMin) is working with women from these communities and many others across the region in order to support their movement building and resistance initiatives, while envisioning a world where, as Gladys Mavhusa says, “women and communities are empowered. And I believe that we must build that empowerment together so that every woman can stand up for herself and with others.”

Nicky Le Roux and Maggie Mapondera,



WoMin, <http://www.womin.org.za/>

WoMin is an alliance of organisations that spans the African continent, and works alongside national and regional movements and popular organisations of women, mining impacted communities and peasants, and their solidarity partners, to make visible the impacts of extractivism on peasant and working class women. Together with partners situated from the local to the international, WoMin works to counter the destructive impacts of extractivism such as land grabbing and displacement of communities, pollution and erosion, and violence against women, and, critically, to advance a women-centred and just development alternative.

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(2) Africa Mining Vision, Reports and Documents, <http://www.africaminingvision.org/reports.html>

(3) Justiça Ambiental, World Bank Development Policy Finance in Mozambique, January 2017, <https://issuu.com/justicaambiental/docs/mozambique-dpf-formatted-1.11.17-1>

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(5) New diamond merger commences work, posts profit, June 2016,

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Food, forests and the unfolding crisis in Zambia



In the past, Zambia infrequently made global news. A peaceful country at the heart of southern Africa, renowned primarily for its copper deposits. Some know Zambia for its long geographical boundary on the Zambezi river, its Livingstone's Victoria Falls – or the 'Mosi-oa-Tunya', 'The smoke which thunders' – or its expansive and biodiverse national parks occupying a land area greater than the United Kingdom.



Structural adjustment programmes in the 1990s saw the beginning of economic liberalization and the opening up of Zambia's resources for commercial and private exploitation. National mines were privatised, with significant tax incentives for foreign owners; agriculture marketing boards that supported peasant access to markets were disbanded and state owned companies progressively were sold out to private, and increasingly corporate, holders.

At the same time, the reality of people's lives and the consequences of land dispossession, dwindling and contaminated water sources, increasing malnutrition and rising costs of living, remain hidden from market driven development headlines. Food, education, transport, health care and energy are critically under-resourced and increasingly privatized and financialized. The relentless wave of exploitation places a heavy toll on soil, water, forests, air, minerals - and people.

In the last 5 years, national foreign debt has risen exponentially. Mining lingers as the primary "economic driver", despite the stubborn persistence of token tax returns put in place in the bygone structural adjustment era. A frenetic search for new alternative - and fast - sources of foreign direct investment has become a national priority.

At the time of writing, 16 new mines in national parks and major rivers have been recently approved or are in the application process. A large-scale oil and gas exploration license has been granted to British company Tullow Oil and Gas, in an extensive area that includes Zambia's lake systems and associated catchments and national parks. The country is also exploring a nuclear energy deal with Rosatom, the same Russian company that was taken to court in 2017 in South Africa over lack of transparency and alleged corruption.

The context of Zambia's peaceful history and strategic geographical location, combined with a desperate hunger for foreign direct investment, positions the country in the frontline of the global wave of resources grabbing, the crisis of global capital and the capitalisation of climate change.

Food, forests and climate change

Food and forests are two of the many cross-cutting and turnkey systems affected by the current course of events. The two systems are part of an unfolding crisis in Zambia that is largely going unnoticed. Forests cover more than half of Zambia's territory. Deforestation as well as hunger and malnutrition rates rank in the top 10 of the worst in the region and the world. (1)

Forests are central to the carbon offsetting debate within climate negotiations, as these are being labelled as "carbon stores" that could, in theory, offset the pollution of others. The main mechanism being pursued is REDD+ (Reducing Emissions from Deforestation and forest Degradation). The idea behind REDD+ is that countries mainly in the global North and international bodies, such as the World Bank, provide funding for measures that claim to halt forest loss in tropical countries. In return, the countries or companies providing the funds can



claim carbon credits for the emissions supposedly saved through REDD+ activities, and continue their business as usual. The private sector and local NGOs in Zambia are taking advantage of this carbon offsetting system.

While Zambia's government appears avid to open up further forested lands to mining, oil extraction and large agribusiness expansion, it is at the same time promoting REDD+ policies and projects.

BioCarbon Partners, a local Zambian NGO, in partnership with the US development agency (USAID), has become a REDD+ poster-child actor with its Lower Zambezi REDD+ Project. According to the project website, they claim to protect 39 thousand hectares of forests in the Lower Zambezi National Park. BioCarbon does not mention extractive industries or agribusiness as the main drivers of deforestation at large scale. On the contrary, they narrowly argue that "poor people" are the ones to blame for deforestation, without considering the systemic causes of poverty, deprivation and environmental exploitation.

BioCarbon recently teamed up with private tourist operators, allowing tourists to offset their luxury wilderness safaris by making financial contributions to BioCarbon's forest conservancy (REDD+) projects. While international tourists can enjoy the wilderness, a limited number of local residents are allowed constrained access to the project area for sustainable harvesting of trees for charcoal production. This, in turn, is marketed through BioCarbon Partners to middle class urban consumers and 'green' tourist operators.

The issue remains however that few efforts are prioritised in Zambia for equitable access to water, land and natural resources while respecting customary rights. In consequence, the industrial and extractive-based economy splutters along, inequality rises, and peoples' means for a livelihood and survival become increasingly commercialised and unfeasible. In response, poor households adopt multiple strategies to gain some income for their daily lives. The two most commonly available options for forest-dependant people are charcoal burning or logging, mostly for an illegal hard-wood trade, and for peasant communities, government supported mono-cropping or intensive commodity production. These activities have shown to have multiple negative feedback loops.

Nutrition and agribusiness

The international climate negotiations have separated nutrition in poor countries from the economy of agriculture. In turn, intensive industrial agriculture is exonerated from its contribution to soil degradation, (agro)biodiversity loss and the country's capacity to build human and ecosystem functioning resilience. This is made obvious by the high visibility of corporate agribusiness at UN climate negotiations and in swayed national contributions to mitigation and adaptation measures.

Zambia positions herself as the breadbasket country of the region, with accounts of expansive "unoccupied" land open for foreign bidders, abundant water resources and an export orientated agriculture development and



investment model. Slogans of Zambia's new agriculture policy are "private sector led" or "farming as a business". Parallel to this, the country is ranked among the top seven most hungry and malnourished countries in the 2017 Global Hunger Index.

The state has allocated roughly 1 million hectares of formally customary land for ten agriculture "farm blocks" throughout the country. Blocks are modelled for export-orientated production, with one single large corporate operation, a number of smaller commercial enterprises and some peasants functioning as out-growers. Yet, there has been slow uptake and "investment" from targeted foreign capital. A recent statement by Zambia's Agriculture Ministry pledged to increase public spending on the infrastructure development of the "farm blocks" in order to incentivise foreign public and private interest. On the ground, the picture is far from rosy. Stories arising from areas where ownership of land has already been transferred involve land dispossession, corruption of local leaderships and minimal or no compensation for affected populations.

The opening up of forested land for the designated "farm blocks" accounts for potentially 1 million hectares of new industrial agriculture fields, which entails a large increase of greenhouse gases pollution. In spite of this, Zambia has identified agriculture as a priority sector to achieve its National Determined Contribution (NDCs) for halting climate change under the UN climate Paris Agreement.

"Conservation agriculture", defined by the principles of minimum tillage, crop rotation and residue retention, has been selected as the means to achieve the NDCs in the agriculture sector. In Zambia, "conservation agriculture" is promoted in combination with agroforestry and use of "green revolution" technologies: hybrid seeds, mineral based fertilisers and agro-chemicals.

Despite years of significant funding for promoting "conservation agriculture" in Zambia, it is widely known that farmers have minimally adopted its principles. Both large and small-scale farmers, however, are increasingly using an extensive range of artificial agro-chemicals. Soil degradation, water contamination, insect loss and the inhibition of plants' capacity to take up essential dietary nutrients are well known consequences. Farmers are also shifting from smallholder diverse farming systems (for food, fodder and fibre production, both on their farms and communal forests/grasslands management) to large-scale monocrop commodity production, in order to maximize an effective application of targeted agro-chemicals.

A small elite minority benefits from the initial phases of industrialising agriculture, acquires more land and mechanises production systems. On the other hand, it is common for farming households to earn as little as 40 to 100 US dollars from their entire annual commodity crop. Previous years have seen cotton prices so low that contract peasants were left with a deficit after the costs of seeds, fertilisers and chemical inputs had been deducted.

In contrast, research is beginning to document the extensive knowledge that supports how cultivated indigenous crops as well as plant products from farms



or forests still contribute significantly to household diets in Zambia. De-valued through the colonial, and subsequent neo-colonial imposition of narrow research and western diets, this knowledge and practice has been side-lined and in some cases, deliberately destroyed. (2) Zambia is a nation crippled by rural malnutrition and hidden urban hunger. Serious attention and support needs to be given to the diversity of locally adaptive and climate resilient indigenous fauna and flora.

The effects of de-valuing local diversity as well as the commodification and then centralisation of the agro-food system have seen the same impacts as in other places. Decreased diversity, increased debt and the dispossession and dislocation from the land have resulted in mass urban migration and the burgeoning of a young unskilled urban class. This is accompanied by shifting consumption patterns. Food that is spatially and financially accessible is favoured and consumed. This contains highly processed and refined carbohydrates, with elevated fat, salt and sugar contents. (3) As a result, Zambia is now witnessing a surge in dietary and lifestyle inflicted diseases. In all of this, women and girls are affected the worst.

Connecting the dots in Zambia between a floundering capitalist economy, climate change and climate change policies, exponential natural resource depletion and the changing lives and livelihoods of ordinary citizens, raises serious questions about the lack of investment in public benefit goods and services, particularly by donors. There is instead a concerted and collaborative push for the industrialisation of local food systems, the commodification of production processes, the clearing and enclosure of forests and the expansion of mining and oil concessions. Land grabs are rapidly expanding. These are largely undocumented, unspoken and unchallenged, and critically threaten forest-dependant and peasant communities' livelihoods. There is an urgent need to rethink the model of development that disregards basic human rights and destroys biodiversity and indigenous knowledge. Zambia requires that everyone is able to participate in its own development and to claim his or her human and collective rights.

Zambia Agro-ecology Alliance

(1) Depending on source – Global Hunger Index: <http://www.ifpri.org/publication/2017-global-hunger-index-inequalities-hunger>. FAO, Republic of Zambia, Forest Department and NEP Facility, Forests and Climate Change, 2011, <http://www.fao.org/forestry/32680-0c227f4c90a3ef146c7f4e1728302c62b.pdf>

(2) This happens through the tightening of national and regional restrictions on the sale and exchange of seeds, the concentration of corporate control of seeds and the development of inequitable intellectual property regimes that favour corporate breeders' rights over farmer managed seed systems and farmer breeder rights. Further reading at www.acbio.org.za

(3) Contrary to the popular industry-driven argument that availability is the food security silver-bullet solution, there is an extensively documented over the production of nutrient poor "empty" calories. Global food wastage is estimated to be anything between 30-70 per cent from farm to fork. Global narratives of the crisis of food insecurity are about political and economic will, documented as early as the 1970s Ethiopian famine by Amartya Sen.



Large Hydropower Dams Are Not the Answer: Time to Rethink Africa's Energy Infrastructure



The electrification rates of Africa are appalling: the lowest in the world, with as little as 1 per cent access in some rural areas. The average electrification rates in sub-Saharan Africa range from 16 per cent in rural areas to about 59 per cent in urban areas. Out of a continental population of 1.25 billion, more than 600 million people have no access to modern energy. This is a major cause for concern.

Over the past half-century, successive African governments have been aware of the need to improve infrastructure and to extend access to electricity, and have made numerous efforts to address these deficiencies. In 2012, African heads of states adopted the Programme of Infrastructure Development for Africa (PIDA), an initiative to address infrastructure services gaps in energy, transport, water, and information and communication technology. After a priority action plan was developed to prioritise projects and speed up implementation, 52 projects were selected, among them 13 large hydro projects. The prioritised hydro projects would increase installed generation capacity by a combined 15,000MW, at a cost of USD 30 billion. The priority action plan intended to deliver the prioritised projects by 2020. Today, with three years left, it is unlikely that this goal will be met.

In light of the controversy and scepticism surrounding large hydro dams, NGO International Rivers carried out an analysis of eleven of the PIDA hydro projects, assessing how the projects are structured and their potential for alleviating the energy crisis in Africa at a reasonable economic and financial cost, while promoting social welfare and environmental sustainability. [1] This article shares some of the report's findings, and outlines important considerations about the role of large hydro dams in Africa's energy future.

Climate change and large hydropower dams



On the one hand, PIDA hydropower projects ignore the risks posed by climate change. The 2014–2016 drought spell in eastern and southern Africa resulted in a decline in the water volumes held in many large dams, leading to reduced power generation. Many hydropower plants failed to produce their firm capacities (a measure of their ability to contribute effectively to system reliability) and some in Tanzania had to be shut down because of lack of adequate water. The Zambezi basin was particularly affected. Usable water levels in the Kariba Dam, on the Zambezi between Zambia and Zimbabwe, dropped to 14 per cent. Both Zambia and Zimbabwe experienced low power generation, to the extent that industry outputs and jobs were lost in Zambia.

In 2012, International Rivers commissioned the noted hydrologist Richard Beilfuss to carry out a study on the climate change risks for both existing and planned hydropower projects in southern Africa. [2] Among other findings, Beilfuss warned that the dams on the Zambezi River would be unable to meet energy needs as the global temperatures increased and rainfall amounts dropped in the basin. While assessments of the potential impact of climate change on dams and water resources had been carried out before, the Beilfuss study was a worthwhile addition to a growing chorus and provided a robust analysis of the issue. He concluded that the Zambezi Basin was extremely vulnerable to climate fluctuations. Under these predictions, the proposed Batoka Gorge Dam in Zambia/Zimbabwe would lose as much as 32 per cent of firm power during years of drought. The current reliance on hydropower is thus unsustainable and attention needs to be redirected to alternative energy technologies.

Moreover, recent studies also provide evidence that tropical dams produce large amounts of methane, thereby contributing to greenhouse gas emissions. In a 2017 study, tropical ecologist Claire Salisbury shows that all dams worldwide do emit some greenhouse gases. [3] This work debunks previous justifications for including hydropower dams under climate funding initiatives. There is now irrefutable evidence that methane and other greenhouse gases are unintended by-products of large dams.

Large hydro dams service urban areas and industry

In order to reach the millions of Africans who do not have access to electricity, the geographical distribution of electricity needs to be increased to the rural areas where they reside. This is also where large hydropower projects fail, as they have limited ability to distribute power widely. Their access is restricted to grid-connected consumers, mainly those in urban centres and large industries – most of which are extractive industries. **In 2008, mining companies consumed more electricity than the whole population of sub-Saharan Africa.** In the case of the Inga 3 Dam project that is planned for construction on the Congo River in the Democratic Republic of Congo (DRC), 55 per cent of its generation capacity of 4800MW is destined for export to South Africa, a country whose economy is highly dominated by the mining industry, 30 percent for the copper mines in Katanga Province, and the rest for the capital of Kinshasa. Thus, this mega dam will not have any meaningful impact on increasing access



to electricity in DRC. By focusing on large dams and hydropower, the continent is missing the opportunity to develop other sources of energy that can improve access to other types of off-grid energy technologies. In its 2015 report “Speaking Truth to Power” [4], NGO Oxfam noted that two-thirds of energy investment in Africa is devoted to producing energy for export, and that tackling the continent’s energy poverty will have less to do with the ambitious expansion of electricity generation capacity and more to do with delivering ambitious energy services to the rural areas.

No one has cracked the resettlement and compensation issues

One of the most contentious concerns associated with the construction of large hydropower dams has been the displacement of communities that depend on rivers. This sore issue led to the establishment of the World Commission on Dams (WCD) in the late 1990s. Because riverine communities pay the price but don’t reap the benefits of these investments, the WCD found that dams “can effectively take a resource from one group and allocate it to another”.

As a result of this fundamental finding, lenders and development banks developed mitigation policies, guidelines and safeguards – but to date there is still no proven effective model of a fair and just resettlement and compensation process. In spite of the awareness and recommendations wrought by the WCD, the problems of human displacement and resettlement persist. Communities that were displaced by the Kariba dam (located in the Kariba Gorge of the Zambezi river basin between Zambia and Zimbabwe, built in 1955), and many other dams on the continent, continue to struggle for just compensation, decades after the projects were completed.

In addition to those physically displaced by dam construction and reservoirs, many more people living downstream are economically disadvantaged through reduced fishing and other water-based economic activities. A stark example of this is Kenya’s Lake Turkana, which gets 90 per cent of its water from the Omo River that flows down from Ethiopia. With Ethiopia’s construction of the Gibe III Dam and establishment of large irrigated sugarcane plantations, Omo flows into Lake Turkana have been drastically reduced. This has had a devastating effect on the livelihoods of hundreds of thousands of people who rely on it for fishing. In another example, the planned Mphanda Nkuwa Dam on the Zambezi River in Mozambique would further jeopardise the country’s thriving prawn industry in the Zambezi delta.

Economics of large dams: The numbers do not add up

An advisory report by the Dutch Sustainability Unit hosted by the Netherlands Commission for Environmental Assessment shows that social and environmental effects of large hydro projects are often underestimated, while the economic and financial benefits are overestimated. [5] Mega dams costs are known to spiral out of control, creating massive debt burdens for host countries. The report also confirms that governments and business have a bias towards large dams as a way to acquire access to finance. Businesses prefer these large infrastructure projects because the large amounts of capital and length of



the projects compel the states to carry the risks, while the private financiers take much less risk. This also makes large hydro projects a magnet for corruption. In the end, citizens are burdened with generational debts and yet they are not involved in the decision-making.

The establishment of the Clean Development Mechanism, carbon offset projects financed under the Kyoto Protocol, an international agreement linked to the United Nations Framework Convention on Climate Change, has further favoured large dam infrastructure at the expense of alternative energy sources. [6]

Another aspect of the economics of large hydropower is that the promise of cheap electricity tends to be an illusion. Once projects are completed, with cost and time overruns, tariffs generally rise above the initially predicted levels as investors seek to recoup their costs. In Uganda, the consumer cost of electricity increased significantly after the Bujugali hydro project came online, with the result that many people could not afford it. They resorted to using electricity only for lighting and continued to use firewood and charcoal for cooking. This is disheartening when so many public resources were expended on the project.

Energy Transformation

Infrastructure strategies can play a significant role in delivering energy to the continent of Africa. To address the energy crisis while promoting inclusive access to energy that takes into account climate change impacts and all the other concerns raised above, African states need to ask several questions. What kind of infrastructure do we need? And does it meet our own development goals? Decision-makers need to deliberately target infrastructure, which respects social and environmental concerns, for servicing the majority of people who need the energy and to define milestones to assess progress.

Worldwide, there is a growing recognition that grid-connected mega-infrastructure such as large hydro dams, while attractive for scaling-up national and regional generation, are slow to come online and far too expensive for most African nations. A 2016 report “Lights Power Action: Electrifying Africa” [7] by the Africa Progress Panel affirms what International Rivers’ study found: PIDA’s energy and infrastructure model fails to acknowledge the historically poor performance of large dams in Africa. This is certainly the time to rethink the future of Africa’s energy infrastructure.

Rudo A. Sanyanga, International Rivers

<https://www.internationalrivers.org/blogs/266/large-hydropower-dams-are-not-the-answer-time-to-rethink-africa%E2%80%99s-energy-infrastructure>

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Implications of Monoculture Tree Plantations in Mozambique: The Case of Portucel Mozambique



In the last ten years, Mozambique has been the target of several investments from various sectors that are acquiring lands, both cultivable and non-cultivable, to develop numerous activities—including agribusiness, tree plantations, mining, etc. The discovery of mineral resources, the ease with which foreign investors acquire lands, the abundance of fertile lands with access to water, the illicit enrichment of a few elites, the lack of policies protecting the most vulnerable social classes, the ingenuousness and low education levels of rural communities, and bad application of the Land Law—among other things—are some of the many reasons that attract private investment to Mozambique. This leads to land grabbing and expropriation.

In this environment, industrial tree plantations are gaining more and more ground in processes of land acquisition and dispute. This has led to serious



conflicts with communities, who reach the point of organizing to burn plantations in order to express their dissatisfaction (1).

Portucel Mozambique is a company belonging to what was once the Portuguese group, Portucel Soporcel, now called The Navigator Company. It owns large areas of tree plantations, and focuses on producing and selling paper and other wood derivatives. The first phase of Portucel's project in Mozambique involves setting up 60,000 hectares of new eucalyptus plantations in the central provinces of Zambezia and Manica (2). The Portuguese company has a "reforestation" plan that aims to cover 356 thousand hectares by 2026. The investment in eucalyptus plantations and paper and energy production in Mozambique—financed by the World Bank's International Financial Corporation (IFC)—amounts to 1.7 billion euros, equivalent to 2.3 billion dollars.

The company was incorporated in April 2009 and obtained the Land Use and Exploitation Rights (DUATs, by its Portuguese acronym) for some 356 thousand hectares. Around 183,000 hectares are located in Manica province—encompassing Barue, Manica, Mossurize, Gondola and Sussunenga districts—and some 173 thousand hectares are in Zambezia province—encompassing the districts of Ile, Mulevala (at that time an "administrative post" or district subdivision) and Namarroi. In the areas for which the company has obtained DUATs, there are approximately 24 thousand families—13 thousand in Zambezia province and 11 thousand in Manica province (3).

In the areas where Portucel operates, agriculture is the main subsistence and income-generating activity for the local population, and it involves almost all members of the nuclear family. People practice agriculture manually on small family plots, using a crop association system and local varieties. Agricultural production occurs mainly in drought conditions, which is not always successful given the high risk of loss, due to the soil's low capacity to store moisture during the growing season (4). In this context, the main production system is crop association: such as cassava, corn and nhemba or boere beans; or mapira (a species of sorghum), corn and nhemba beans; or both associations together; and, to a lesser extent, almond growing.

The company's land occupation model (called mosaic) and acquisition of the DUATs (Land Use and Exploitation Rights), as well as the impacts it has already begun to cause in the areas where it operates, have not gone unnoticed (5); and they have warranted several analyses and studies by various academic entities, research institutes and civil society organizations. Interestingly, the results and conclusions of these analyses indicate that Portucel has breached the law through its actions, and that it has harmed several families by encroaching on fertile lands that were suitable for agriculture (6).

For example, the civil society organization, Justiça Ambiental—in its 2016 study on the land access process, and the rights of local communities in the areas occupied by Portucel in Socone, Ile district, Zambezia province—concluded that: (i) community consultations intended to acquire DUATs evince legal breaches, due to having been poorly conducted; community members did not understand that by giving up their land parcels, they would only receive



payment for the work of cleaning up these plots; (ii) community members' dissatisfaction is clear, given the high expectations generated by the countless promises made during community consultations; this is exacerbated by communities' vulnerable situation of poverty, which makes them easy to persuade; (iii) the communities visited feel that Portucel's arrival has limited their access to land, and placed them in a situation of greater vulnerability and food insecurity; (iv) it is not clear what kind of employment would be offered, which in most cases forces community members into short-term, precarious jobs with unstable wages (7).

Meanwhile, a 2017 study carried out by the research institution, Rural Environment Observatory (OMR, by its Portuguese acronym), in Namroi, Zambezia province, entitled "Plantações florestais e a instrumentalização do Estado em Moçambique" (Tree Plantations and the Instrumentalization of the State in Mozambique), confirmed that Portucel's actions have caused: (i) a decrease in the productive area of nuclear families; (ii) a decrease in the amount produced and in the productive structure, indicating potential risks of food insecurity; (iii) decreased security of land possession for nuclear families and future generations; (iv) imbalance in the labor market, underemployment and unemployment, and wage dependency; (v) social class differentiation at the community level, promoted by the non-inclusive development characteristic of this kind of activity. Moreover, another legal analysis, by Justiça Ambiental, suggests that the company obtained the DUAT prior to the community consultation (8).

Furthermore, the "mosaic model"—which the company supposedly implements in the process of land occupation—is believed to be problematic. In addition to increasing the distance that villagers must travel to collect firewood and other timber resources, as well as surrounding people's food plots with eucalyptus, this model leads to a reduction in families' productive area, and thus, a decrease in agricultural production (9).

Against this backdrop, it is the government's responsibility to intervene immediately to safeguard local communities' rights, and to ensure it attracts foreign investments to the country in a responsible and rational way—without jeopardizing local families' livelihoods, or the sustainability of natural resources and the environment in general. Thus, in August 2017, Justiça Ambiental officially requested the intervention of Mozambique's Ombudsman—in order to establish legality, justice and the rights of communities affected by Portucel Mozambique's operations.

Justiça Ambiental, <https://ja4change.wordpress.com/>

(1) Calengo, A.; Machava, F.; Vendo, J.; Simalawonga, R.; Kabura, R. and Mananze, S. (2016). O Avanço das Plantações Florestais sobre os Territórios dos Camponeses no Corredor de Nacala: o caso da Green Resources Moçambique (The advance of tree plantations on farmers' territories in the Nacala Corridor: The Case of Green Resources Mozambique). Maputo: Livangingo, Justiça Ambiental and the National Peasants Union, https://issuu.com/justicaambiental/docs/o_caso_da_green_resources_moc_ambi

(2) Banco Mundial financia com 1,7 MME projeto da Portucel em Moçambique (World Bank provides 1.7 billion euros in financing to Portucel's project in Mozambique), October 2013,



http://noticias.sapo.pt/internacional/artigo/banco-mundial-financia-com-1-7-mme-projeto-da-portucel-em-mocambique_16824131.html

(3) A Portucel Moçambique (Portucel Mozambique),

<http://www.portucelmocambique.com/Publicacoes-e-Documentos>

(4) MAE – Ministry of State Administration (2005). Profile of Ile district, Zambezia province, Republic of Mozambique.

(5) A model that Portucel adopted, which entails—in theory—gradual access to land, after communities provide their consent. This is the result of a negotiation process between the company and the population living in the areas encompassed by the DUAT. The plantations are subsequently installed in the areas ceded, voluntarily, based on the mosaic model (Portucel, 2016 cited by Bruna, 2016).

(6) Bruna, N. (2017): Plantações florestais e a instrumentalização do estado em Moçambique (Tree Plantations and the Instrumentalization of the State in Mozambique). Maputo: Rural Environment Observatory, <http://omrmz.org/omrweb/publicacoes/or-53-plantacoes-florestais-e-a-instrumentalizacao-do-estado-em-mocambique/>; Machoco, R.; Cabanelas, V. E.; Overbeek, W. (2016). Portucel – O processo de acesso à terra e os direitos das comunidades locais (Portucel: the process of acquiring access to land and the rights of local communities in Mozambique). Maputo: Justiça Ambiental, <http://wrm.org.uy/articles-from-the-wrm-bulletin/recommended/portucel-the-process-of-acquiring-access-to-land-and-the-rights-of-local-communities-in-mozambique/>; ADECRU, Plantações florestais da Portucel ameaçam a segurança alimentar nas comunidades do distrito de Namaroi, na Zambézia (Portucel's Tree Plantations Threaten the Food Security of Communities in Namaroi district, Zambezia), <https://adecru.wordpress.com/2016/07/01/plantacoes-florestais-da-portucel-ameacam-a-seguranca-alimentar-nas-comunidades-do-distrito-de-namaroi-na-zambezia/>; Jornal Verdade, Camponeses de Chiuala-Honde revoltados com a Portucel (Chiuala-Honde Peasants Angry at Portucel), 2013, <http://www.verdade.co.mz/economia/38305-camponeses-de-chiuala-honde-revoltados-com-a-portucel> and Jornal Verdade, Portucel - mais um caso de conflitos de terra (Portucel – Another Case of Land Conflicts), 2013, <http://www.verdade.co.mz/ambiente/42243-portucel-mais-um-caso-de-conflitos-de-terra>

(7) Machoco, R.; Cabanelas, V. E.; Overbeek, W. (2016). Portucel – O processo de acesso à terra e os direitos das comunidades locais (Portucel: the process of acquiring access to land and the rights of local communities in Mozambique). Maputo: Justiça Ambiental, <http://wrm.org.uy/articles-from-the-wrm-bulletin/recommended/portucel-the-process-of-acquiring-access-to-land-and-the-rights-of-local-communities-in-mozambique/>.

(8) Bruna, N. (2017): Plantações florestais e a instrumentalização do estado em Moçambique. Maputo: Rural Environment Observatory, <http://omrmz.org/omrweb/publicacoes/or-53-plantacoes-florestais-e-a-instrumentalizacao-do-estado-em-mocambique/>

(9) Idem (8) y Machoco, R.; Cabanelas, V. E.; Overbeek, W. (2016). Portucel: the process of acquiring access to land and the rights of local communities in Mozambique. Maputo: Justiça Ambiental, <http://wrm.org.uy/articles-from-the-wrm-bulletin/recommended/portucel-the-process-of-acquiring-access-to-land-and-the-rights-of-local-communities-in-mozambique/>



Food sovereignty in Zimbabwe: Mopane trees and local livelihoods



Sinikiwe Ncube (46) lives with her three children in Mazwi village under chief Malaba, in Matabeleland south. Her family has been surviving on harvesting mopane worms for many years. However, over the past few years, the mopane worm population has been diminishing, threatening her family's livelihood and food sovereignty.

The mopane worm feeds mainly on the leaves of the mopane tree. The mopane tree, scientifically known as the *Colophospermum mopane*, is commonly found in the hot, dry, low-lying areas of Zimbabwe, such as Mazwi village in Matabeleland south. The tree is locally known as *Iphane* in isiNdebele or *Mupani* in Shona. The locals call mopane worms, *amacimbi* in isiNdebele or *madora* in Shona.

Mazwi village is one of the driest parts of Zimbabwe. The rocky infertile soil, coupled with erratic rainfall patterns and excruciatingly high temperatures are hostile to crop farming. Villagers who insist on growing crops have had to painfully watch the crops wilt under the merciless heat. Aid agencies have had to move in to assist villagers from persistent food shortages. It is survival of the fittest, even for any other living organism, including vegetation. Few trees have survived the scorching environment and one such tree, the mopane tree, is found in the isolated patches of dense forests.

It is in these forests that local community members are deriving their livelihood through harvesting mopane worms. Local community members also use the mopane tree for various other uses such as timber for craftwork, small household items, fence posts, hut poles and firewood. Some companies use the mopane tree in the manufacturing of mine props, railway sleepers, and sometimes parquet floors. During the winter season the mopane trees turn



leafless, presenting a picture of misery in the village. However, the scenario changes drastically in summer. The beauty of the mopane leaves is not only attractive to the human eye. The mopane worms hatch from the eggs that are laid underneath the mopane leaves. Soon after hatching, mopane worms start to feed from the leaves of the mopane tree. The worms have played a crucial role in the lives of Mazwi villagers.

Mopane worms usually appear a few weeks after the rains during the early summer season. They are voracious eaters and can defoliate a tree in their continuous feeding habit. After defoliating one tree, they move on to the next tree. The process is repeated until the caterpillars have reached the next stage of their life cycle at which they will undergo metamorphosis underground.

Soon after the appearance of the mopane worm, the forests become alive with scores of villagers scouting from tree to tree, picking the worms in what has become an annual ritual in Mazwi village. Hundreds of people, both from Matabeleland south province and others from all over Zimbabwe converge in the forests.

“When the time for harvesting mopane worms comes, all activities in the village grind to a halt as villagers scramble to collect the worms. The harvesting is not regulated and each family will be collecting as much as they can. At times I have to stop my children from going to school so that they help me to collect mopane worms,” says Ncube. She adds that the harvesting of mopane worms is not a trifling affair, as one can get back home empty handed.

“Some mopane trees are very tall and this requires a lot of dexterity for one to climb the trees and unpluck the worms that fall off after a violent shaking of the branches. The worms are very prickly and one has to handle them with care. They also ruin the skin and clothes with some brownish substance they excrete when you touch them,” says Ncube.

After collecting the mopane worms, Ncube says the next step is to squeeze out the entrails and this she says is not a task for the faint hearted.

“The entrails are gory looking and they splutter all over the place. After a day of squeezing out the entrails, one’s hands will be very sore and disgusting to look at,” says Ncube. The final step, she says, is to wash them in running water and then boil them. They are then dried in the sun and packaged. They can last for many months if they are properly processed.

The benefits of mopane worms to the community

Mopane worms play an important role in the economic and social welfare of Mazwi villagers. To reaffirm the economic role of the mopane worm, the community has constructed a state of the art Processing Centre for packaging, storing and selling the mopane worms. The Matobo Processing and Value Addition Centre is a project with a membership of 57 community members (49 women and 8 men) who came together to initiate strategies to add value to local natural resources. The project buys mopane worms from the community



members and packages them for sale to urban markets where the prices are higher.

“This project is a huge investment. We had to look for additional funding from development agencies to ensure that it is up and running. We are, however, worried about the future of this project because the mopane worms are no longer found in abundance,” says Ncube.

Ncube says she used to harvest as much as 18 (20-litre) buckets of *amacimbi* per season, but in the past three years she has only managed to harvest an average of four. She says the depleted harvest has left her family and the community at large in a precarious economic position.

“*Amacimbi* are an important component of my family’s welfare and diet. I have been managing to pay fees and buy school uniforms from selling *amacimbi*,” says Ncube.

The income from selling mopane worms has been a lifeline for people who own shops at the nearby Tshelanyemba business centre. Villagers bring brisk business at the centre after they have sold their mopane worm harvests. The decline in the mopane worm population is triggering anxiety among villagers and businesses. The Matobo Processing and Value Addition Centre is one of the businesses seriously affected.

The impacts of loosing the mopane worm population

Community members say that the decline in mopane worm population is due to the charcoal vendors, mainly from outside the Matabeleland region. They say that the charcoal vendors have brisk business in cities, where there is poor supply of electricity resulting in the use of charcoal for cooking.

“Some people go to the forests and cut down big mopane trees to process them into charcoal. They do not consult local people and they do that without authorization from anyone. They are mainly bands of young unemployed youth who do this job because it is labour intensive. After processing the charcoal they hire trucks to transport the charcoal to urban centres during the night to evade police checkpoints because they know it is illegal,” says Ncube.

Ncube adds that if this destruction by people from outside her community is allowed to go unchecked, all the community investments and livelihood would be destroyed. Environmental activists concur with Ncube that the fast depletion of mopane trees calls for immediate action.

Ms Gertrude Pswarayi, the Country Coordinator for the Participatory Ecological Land Use Management (PELUM) Zimbabwe, says that the decimation of the mopane trees in Matabeleland South is associated with the general decline in forests around the world, mainly to meet the rapidly growing demands for food, fresh water, timber, fibre and fuel.



“Forests are disappearing all over Zimbabwe and the sad fact is that it is the poor rural communities, such as the villagers in Mazwi, who have to bear the negative effects of the decline in ecosystems,” says Ms Pswarayi. She added that the harmful effects of the degradation of forests and other ecosystems are contributing to growing inequities and disparities across groups of people. And this, sometimes, she says, is “the main cause of social conflict”.

Ms Pswarayi also highlighted that women face increased vulnerability compared to men. She says that for many families in Matabeleland south, men leave their villages to go to other parts of the country or across the border to look for better paying jobs. The women are then left to depend on the depleted environment in order to survive. “The reliance of the rural women on forests is rarely measured and thus typically overlooked in national statistics and poverty assessments, resulting in inappropriate strategies that do not take into account the role of the environment in poverty reduction,” says Ms. Pswarayi.

Another critical issue that emanates from the decline in ecosystems is the socio-cultural change. Ms. Pswarayi says human cultures, knowledge systems, religions, and social interactions are strongly influenced by forests and other ecosystems. “The mopane tree and the mopane worm have fostered a distinct way of life for the people in Matabeleland south. Diverse cultural expressions in the form of ceremonies have emerged and these cultural expressions are tied to a deeper understanding of the environment that the villagers depend on,” says Ms Pswarayi.

Current efforts to stop the decimation of forests have in some cases worsened the plight of rural villagers. Many initiatives involve the privatization of land and all the resources in the acquired land. Some mining companies have been allocated large tracts of land and sealed them off from villagers, thereby depriving them of their livelihood. The mining companies have total control of their concessions and villagers find themselves being treated as trespassers. Ms Pswarayi added that villagers as well as wildlife and domestic animals that are integral in the local ecosystem have often lost rights due to the privatisation of land.

With the decline in mopane worms, Sinikiwe Ncube and other villagers in Mazwi continue to see their food sovereignty threatened. They want action as soon as possible so that their lives return back to the glorious days when they could fill many buckets of *amacimbi* while living in harmony with nature.

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Industrial tree plantations in eastern and southern Africa



From the late 19th to the mid-20th century, while under the political rule of Britain – the main colonial power in the region at the time - many African governments were pressured to establish timber plantations as a response to the perceived depletion of forests in their countries. In 1876, South Africa was among the first countries to establish eucalyptus plantations to provide fuel for railways, and pine plantations for timber used in construction. Plantations were set up soon after in Swaziland, Uganda and Kenya. From 1945, after the end of World War II, timber plantations were expanded to increase production of wood-based products and materials that had become scarce in industrialised countries.

As countries declared independence from Britain during the 1960s onwards, they received further funding from various development institutions for setting up ‘forestry’ departments as well as for establishing industrial plantations. One of these was the British Colonial (later Commonwealth) Development Corporation (CDC), which financed extensive plantations as well as pulp and paper mills in several countries of eastern and southern Africa, including Tanzania, South Africa and Swaziland. Another international institution supporting this process was the World Bank, which has financed industrial plantations in Kenya, Malawi, Tanzania and Swaziland, as well as in Zambia, together with the CDC. More recently, so called development agencies, like the Norwegian NORAD agency, have financed tree plantations in Uganda and Tanzania, while the Finnish government has promoted tree plantation expansion in Mozambique and Kenya.

International Monetary Fund (IMF) policies based on the neoliberal economic model imposed “structural adjustment programmes” on countries in the global South during the 1980s and 90s. In order to access money from the IMF to pay off debts to Northern governments and banks, states were obliged to promote privatisation, liberalise trade, and offer export incentives and subsidies to – mostly foreign and transnational – companies, including for industrial tree



plantations. Over the last 10 years, further privatisation and financialization of land (1) has allowed corporations to access cheaper state-owned and community land, and make low-cost investments in new and existing tree plantations across Africa.

As in other regions in the global South, a key player for introducing and promoting the Northern 'forestry' tree plantation model throughout Africa has been the UN Food and Agriculture Organisation (FAO). This industrial model with European roots is based on a distorted definition in which a forest is seen only as a 'bunch' of trees with the primary purpose of producing timber. The misleading 'forest' definition of the FAO includes industrial, large-scale, even-aged monocultures, usually in plantations of millions of non-native, potentially invasive trees, including genetically engineered eucalyptus and poplar varieties. These are misleadingly described by FAO as 'planted forests'. This biased definition fails to recognise other essential functions, benefits and values of real forests. It equally ignores the important role of human communities which sustainably live with, protect, and depend on forests, for their livelihoods and their cultural identities.

Who is behind the new wave of 'land grabbing' for plantations?

In most African countries land officially belongs to the State. In practice, land belongs to local communities whose inhabitants have lived there for generations. The way land is used and organized is still determined through customary law in many places. In many countries, local communities and indigenous peoples, together with support groups, are engaged in struggles for the State to recognize their customary, collective use of land.

The new wave of tree plantation projects across Africa is consequently directly impacting local lives and livelihoods. Over the past 10 years, as part of the broader land grabbing process taking place in the global South, finance capital has been exploring long-term speculation in land, including for development as tree plantations, as a new investment option. Many of these investors include The African Development Bank (AfDB), The European Investment Bank (EIB), the World Bank together with its subsidiary lending to the private sector, the International Finance Corporation (IFC), as well as private entities such as commercial banks, pension funds, and so-called 'green investment' funds, which use private and public money.

To facilitate land grabbing, countries in the global North have created new financial instruments designed to make investments in foreign land and infrastructure easier. For example, in 2004, the US government set up the Millennium Challenge Corporation (MCC), which plays a key role in commodifying farmland across Africa and opening it to US-based agribusiness corporations. MCC has projects, for example, in Madagascar and Mozambique.

In Mozambique for example, several million hectares of land have passed into the hands of companies and investors in recent years, including for growing tree plantations. Additionally, the land targeted by tree plantation and agribusiness companies is that with the best agricultural potential. When governments



facilitate access to fertile land by giving investors land leases or concessions, they exempt them from the need to invest in buying land, and this encourages them to occupy even more land from which they can increase their profits even further.

Another expansion threat comes with the UN Paris Agreement on climate change, which classifies tree plantations as 'forests' with the potential to (temporarily) store carbon. This provides an incentive to create more 'forest cover' with tree plantations, also erroneously called 'planted forests' in the jargon of the FAO.

The most ambitious 'reforestation' plan announced in Paris was the African Forest Landscape Restoration Initiative (AFR100). It claims that 100 million hectares of 'deforested' and 'degraded' lands across Africa can be restored by 2030. This scheme aims to complement (1) the Bonn Challenge, a commitment to restore 150 million hectares around the world by 2020; (2) the New York Declaration on Forests, which builds on and extends the Bonn Challenge to 350 million hectares by 2030; and (3) the African Resilient Landscapes Initiative (ARLI), to promote integrated landscape management with the goal of adapting to and mitigating climate change. The World Bank announced that it will provide AFR100 with 1 billion US dollars in institutional investments in 14 countries by 2030. This will be complemented by Germany's federal Ministry for Economic Cooperation and Development (BMZ) which will provide financial and administrative support for the AFR100 initiative. FAO is also one of the key partners in the project, as well as the World Resources Institute (WRI). The private funders are mainly capital investment companies. To date, commitments from African governments include pledges from Kenya, Madagascar, Mozambique Malawi and Uganda. (1)

Another key group of actors that promote and have a direct financial interest in tree plantation expansion globally, are international 'forestry' consultancies, mainly from countries in the global North with established wood-based industries such as Finland, Sweden and the US. Indufor and Pöyry from Finland, for example, help identify 'new markets' and 'assist' national governments in drawing up their national 'forest plans' that often have a strong emphasis on new tree plantations. For example, in 2011, Pöyry produced a "Review on industrial forest plantations in Africa", which reveals which countries "have good potential for expanding plantation development". Eastern and southern African countries are profiled as countries with potential for tree plantation development.

Why are tree plantations promoted?

Investors in eastern and southern African tree plantation projects often mention more than one purpose or product to promote their plantations, thereby hoping to expand the options to increase profits. These are some of the options:

- Plantations for timber (saw logs) or energy (fuelwood/charcoal)

Several investors affirm that their plantations will supply saw logs for furniture or timber for firewood, for both domestic and export markets. These companies



often claim that their activities reduce pressure on native forests. However, the opposite is more often true. In Mozambique for example, after almost 10 years of investment in and expansion of eucalyptus and pine tree plantations, native forests continue to be destroyed for the extraction and export of high value timber from species other than eucalyptus or pine. In turn, tree plantation expansion has also been denounced as a direct and indirect cause of deforestation. For example, according to affected local communities, tree plantation expansion in the Niassa province of Mozambique has destroyed large areas of forest.

- Plantations for pulp and paper production

Wood is the main raw material used in paper production. In eastern and southern Africa, the escalating trend of new and expanding pulp plantations and mills in the global South has only materialized in South Africa, with 10 pulp mills mainly owned by multinational companies Sappi and Mondi. One reason for this situation is that new pulp mills need 50 to 100 thousand hectares of tree plantations near the mill to ensure a continuous supply of 'fresh logs'. Construction of new pulp mills also requires an increasingly bigger investment of several billion dollars. This also requires that a company obtains government subsidies, either financial or through the state providing infrastructure, before deciding to go ahead with such a large investment. Few countries in Africa can offer such support. One country that pulp and paper companies are looking at is Mozambique. The Portuguese company Portucel is now expanding its timber plantations in the country, with the aim of establishing a pulp mill in the future.

- Plantations as carbon sinks

The idea of creating 'carbon sinks' has been driving tree plantation expansion in eastern and southern Africa for more than two decades. These plantations spread in response to the hope to make easy money by generating and selling so-called 'carbon credits', which would then offset the pollution of other industry or government elsewhere. In 1994, one of the first carbon-offset tree plantation projects was set up in Uganda by the Dutch FACE foundation (now called Face the Future). Covering 25 thousand hectares at the edge of the Mount Elgon National Park, this project resulted in severe human rights violations. Local people were expelled from the area and lost their livelihoods; and the project was denounced as a form of neo-colonialism. Similar carbon plantation projects continued to be set up in Uganda, Tanzania and other African countries over the following years.

- Plantations for energy production from woody biomass

Most of the alternative 'green' energy currently produced in the EU is comes from burning woody biomass. The EU is now importing increasing amounts of woody biomass, mostly from the southern US. However, African countries could still be a potential exporter of woody biomass to the EU if demand increases.

Community struggles against tree monoculture plantations

The drivers of tree plantation expansion in southern and eastern Africa and the different purposes for which the plantations might be used may be many. Yet, the impacts on communities are often very similar, as most companies use the



same model of large-scale, most often eucalyptus plantations, and also often apply identical strategies and tactics to promote their projects.

One of the main challenges for communities in the region is to secure and to maintain control over the land on which they depend, and which they use according to customary practices. This is especially true in eastern Africa where about 75 per cent of the population lives in rural areas. Most often, their livelihoods are dependent on the food they are able to produce. In cases where companies did not physically expel families from their homes, they often restrict access to customary agricultural land and forests yet, in many cases, deny that this happens.

Water scarcity is another challenge for communities who successfully resisted displacement, and remain in their homes after their land is invaded by tree plantations. Water becomes scarce usually after a few years, as the plantations grow bigger and consume relatively more water, especially during the dry season. The ongoing drought in the southern African region has further aggravated the impact of tree plantations on surface and groundwater sources. A tactic used by companies to appease affected communities is, for example, to promise to provide boreholes, as part of corporate social 'responsibility' programmes.

Another serious impact results from companies applying toxic agricultural chemicals. This includes herbicides and insecticides, used to prevent competing plant growth, or insecticides to kill ants and other insects or fungi that might harm plantation trees. Such poisons pose a serious health threat to workers who apply them. They can also harm wild animals and livestock that drink contaminated water from streams and around the plantations areas, as well as local people, who also use contaminated water from wells and boreholes for washing, drinking and cooking.

The already severe impacts are even more severe for women. It is women who perform tasks such as collecting water and producing food. In many African countries women provide 70 per cent of field labour, supply 90 per cent of domestic water, and are responsible for producing 60 – 80 per cent of the food consumed and/or sold by the family. They carry out 100 per cent of food processing, 80 per cent of food storage and transportation, and 90 per cent of the labour for preparing the soil before planting. In spite of this, their land rights are far less secure than those of men.

The present trend of expanding tree plantations in eastern and southern Africa shows, once again, the urgent need for a different process for the “restoration of land”. Not driven by corporate profit or corruption, but led by local communities and implemented in ways that they believe are needed in order to improve their livelihoods and well-being, whilst protecting their environments and ensuring their access to and control over resources and land. Community land that has been invaded by tree plantations should be given back to communities. There are examples from Brazil, Thailand and Indonesia, where tree plantations have been re-converted to a land use defined by the interests and priorities of, and controlled by the local community.



This article is based on the 2016 briefing published by the Timberwatch Coalition and WRM, “Industrial tree plantations invading eastern and southern Africa”. You can access the full briefing with all relevant references at: <http://wrm.org.uy/wp-content/uploads/2016/10/2016-10-Plantations-in-ES-Africa-TW-WRM-med-screen.pdf>

(1) See more information in an article from Bulletin 228, January 2017, <http://wrm.org.uy/articles-from-the-wrm-bulletin/section1/main-initiatives-to-expand-tree-plantations-in-latin-america-africa-and-asia/>

Action Alerts

No to ProSavana Campaign: Peoples' Declaration

The Third Triangular Conference of the Peoples—organized by the No to ProSavana Campaign—brought together people and organizations from Brazil, Mozambique and Japan, in October 2017 in Maputo, Mozambique. The Conference took place in a context in which the government of Mozambique is prioritizing public-private partnerships, whose main objective is to allow big investments in agribusiness, mining and hydrocarbons to enter the country. The Peoples' Declaration from the Conference calls for a broad mobilization and organization of a common front against this development model. Read the Declaration here:

<https://www.farmlandgrab.org/post/view/27603-no-to-prosavana-campaign-peoples-declaration>

Sengwer people cry for help in the Embobut Forest, Kenya

The Sengwer are indigenous people who live in the Embobut forest in the Cherangani Hills in Kenya. Since British colonial rule, the Sengwer have been evicted from their homes. Now, these violent evictions are taking place in the name of conservation, to protect the forests, and to address climate change. The European Union is funding a new six-year project: the Water Towers Protection and Climate Change Mitigation and Adaptation Programme. In 2016, the Sengwer appealed to the EU to respect their rights to live in the forest. See two videos (in English) from the NGO Forest Peoples Programme featuring the Sengwer speaking about the evictions and their lives in the forest, and where they are now forced to live: <http://www.conservation-watch.org/2017/12/01/even-if-they-want-to-kill-us-let-them-kill-us-here-we-must-continue-to-stay-sengwer-women-cry-for-help-in-the-embobut-forest-kenya/>



Recommended

Study Links Eucalyptus Monoculture to Water Scarcity in Minas, Brazil

Almost five decades after their planting began, eucalyptus plantations have become the main cause of the deterioration of water resources in the semi-arid region of Minas, says technician Walter Viana, head of Environmental Monitoring at the Northern Minas Environment and Sustainable Development Commission, and author of a thesis on desertification in the region. As a measure to combat the water shortage that the growth of eucalyptus causes, environmentalists defend the prohibition on new plantings in the region. Read the article (in Portuguese) here:

https://www.em.com.br/app/noticia/gerais/2017/11/27/interna_gerais,919749/estudo-liga-monocultura-de-eucalipto-a-falta-d-agua-no-semiarido-em-mg.shtml

See also WRM's report, "The Impacts of Industrial Tree Plantations on Water" in Portuguese and Spanish.

PO: <http://wrm.org.uy/pt/files/2016/10/Impactos-en-el-agua-de-las-plantaciones-industriales-de-%C3%A1rboles-PORTUGUES.pdf>

SP: <http://wrm.org.uy/wp-content/uploads/2016/10/Impactos-en-el-agua-de-las-plantaciones-industriales-de-%C3%A1rboles-1.pdf>

Land conflict in Côte d'Ivoire: local communities continue to struggle against the state and Belgian company SIAT

Three villages in Côte d'Ivoire were informed in 2015 that the government had granted a concession covering a total of 11 thousand hectares to Compagnie hétéicole de Prikro (CHP), the Ivorian subsidiary of the Belgian corporation Société d'investissement pour l'agriculture tropicale (SIAT), for establishing an industrial rubber tree plantation. A recent report from the NGO GRAIN recounts the communities' on-going struggle for recuperating their land.

EN: <https://www.grain.org/article/entries/5855-land-conflict-in-cote-d-ivoire-local-communities-defend-their-rights-against-siat-and-the-state>

ES: <https://www.grain.org/article/entries/5856-conflictos-de-tierras-en-costa-de-marfil-las-comunidades-se-defienden-ante-siat-y-el-estado>

FR: <https://www.grain.org/article/entries/5854-conflict-foncier-en-cote-d-ivoire-les-communautes-se-defendent-face-a-siat-et-l-etat>

African Biodiversity Network: "Matters of Principle: Guiding our way through challenging times"

The latest issue of the African biodiversity Network (ABN) Newsletter highlights the processes that participants of the 2017 Biennial Partner meeting in Nanyuki, Kenya followed to analyse and reflect upon the actions of the network over the previous two years. The newsletter also includes a reflection on Kenya's new ban on manufacture, use, importation and sale of plastic bags as well as an



article on a primary eco-school in Benin which places endogenous knowledge at the front of education. Access the newsletter (in English) here: <http://africanbiodiversity.org/abn-news-07/>

“Industrial Tree Plantations Invading Eastern and Southern Africa”

This briefing, compiled by the World Rainforest Movement (WRM) and the Timberwatch Coalition (TW), is now also available in Swahili. It focuses on various internal and external factors determining changes in the extent of land under industrial tree plantations in 11 eastern and southern African countries: Malawi, Mozambique, Zambia and Zimbabwe; Kenya, Tanzania and Uganda; South Africa, Swaziland and Lesotho; and Madagascar.

Access the briefing in Swahili:

<http://wrm.org.uy/books-and-briefings/mashamba-makubwa-ya-miti-kwa-ajili-ya-viwanda-yanavyovamia-mashariki-na-kusini-mwa-afrika/>

And in English:

<http://wrm.org.uy/books-and-briefings/industrial-tree-plantations-invading-eastern-and-southern-africa/>

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