

Persistent Connections and Exclusions in Mozambique: From Colonial Anxieties to Contemporary Discourses about the Environment

Raquel Rodrigues Machaqueiro

1 Introduction: Climate Change and Forests in the Global South

Climate change has been considered the most important threat to humankind and the planet. Although decision-makers from more than 150 countries have been discussing possible solutions to this problem since at least 1992, no comprehensive agreement on effective measures to reduce the concentration of greenhouse gases in the atmosphere has been reached. Perhaps because of the difficult changes that such measures would entail – such as phasing out fossil fuels, and radically changing Western patterns of production and consumption – ruling groups in the industrialized world have increasingly focused their attention on the potential of forestry and land sectors in countries of the Global South. Given that, according to some estimates, deforestation is responsible for around 20 percent of global emissions (Parker et al 2009), the idea that avoiding deforestation in these countries can offset carbon emissions from industrialized countries became very popular – not just amongst these decision-makers, but also amongst environmentalists and development practitioners.

The assumption that carbon emissions¹ could be significantly reduced by certain interventions in forests of the Global South has, however, been criticized by many scholars who have denounced such interventions as constituting a new form of colonialism (McAfee 2017), for creating regimes of ‘carbonised exclusion’ precluding communities’ access to forest resources

1 Although carbon dioxide is just one of several greenhouse gases, carbon stands for all of them. The process of equating all greenhouse gases to carbon was part of the creation of emissions-trading mechanisms, but it is not exempt from controversies. For more on this, see MacKenzie 2009.

(Asiyanbi 2016), and for promoting processes of capitalist ‘accumulation by decarbonization’ (Bumpus and Liverman 2008). Building upon some of these critiques, this chapter will, however, provide a multi-level and historical analysis of the assumptions inherent in, as well as the implications of, these interventions as they are conceived within an international policy-making arena, and then locally implemented. The urgency to solve the problem of climate change has increasingly propelled policy solutions that involve forests and the land sector in the Global South. Under this logic, the World Bank has been promoting a series of initiatives in Mozambique intended to reduce this country’s carbon emissions by preventing deforestation. For the Bank’s officials, deforestation in Mozambique is caused by rural (and poor) populations’ ‘unsustainable’ practices of slash-and-burn and charcoal production – all of which ought to be prevented with conservation agriculture, intensification of cashew production, and an industrial plantation of eucalyptus. These types of interventions in the Global South have been criticized for constituting forms of colonialism that create regimes of exclusion and sustain processes of capitalist accumulation.

Drawing on Wolf’s scholarship, and interweaving data from ethnographic research in Mozambique with information collected during archival research on Portuguese colonial practices in the forestry sector, the chapter explores the continuous (yet historically differentiated) interconnections between a larger capitalist system and the ‘people to whom history has been denied’ (Wolf 1982, 23). It provides a multi-level and historical analysis of the political implications of these interventions as they are conceived internationally, and implemented and experienced locally. The chapter interweaves a critical analysis of the mode of production around carbon as a new commodity with histories of conservation agriculture, and modes of production of older commodities such as cashew and cellulose for paper production. The aim is to analyse current discourses about climate change and the environment to substantiate an argument that such discourses have legitimized a new political economy responsible for the perpetuation of forms of capitalist accumulation and the creation of new and diverse forms of local exclusion in Mozambique. The chapter then provides different examples from Mozambique of historical and contemporary extractivism, again on the rise in global political economies, which typically renders local forms of agricultural production invisible and negates the agency of small-scale farmers.

2 **Creating a New Commodity: The International Policy-Making Arena**

The use of forests to reduce emissions was introduced early in the political negotiations to tackle climate change – held under the United Nations Framework Convention for Climate Change (UNFCCC) – but always rejected. This rejection was related to technical issues concerning the accounting of reduced emissions, the permanence of those reductions, and the fear that, by using forests to reduce emissions, countries would not devote enough effort to reducing emissions in other sectors (Fogel 2005). Responsible authorities in African countries, however, were as much concerned about social and environmental impacts known from prior experiences of programmes led by Western countries in the management of African landscapes that all too closely resembled colonial enterprises of timber exploitation and cash-crop plantations.

Despite these concerns, after 2005 industrialized countries were able to push forward the creation of a global carbon market through a new mechanism of reducing emissions by simply avoiding deforestation: since forests are carbon sinks – meaning that they act like giant storages tanks – emissions could be reduced just by keeping forests intact. This mechanism, called REDD + (Reduced Emissions from Deforestation and forest Degradation, with the ‘+’ sign standing for the enhancement of carbon sinks) meant, in practice, that countries in the Global South would be paid to maintain their forests, thus generating carbon offsets – a new commodity – and compensating for pollution by industrialized countries.

The first REDD + projects were marked by serious conflicts when forests were fenced and closed to local populations, who lost access to forested areas on which they depended for food and other important resources (Asiyanbi 2016; Chomba et al. 2016; Mahanty et al. 2012). However, even when projects abandoned the fences and sought to engage local communities, practitioners still faced the same problems affecting other forest-based development projects: financial, technical, and human resource requirements, dependence on donors, inability to address the drivers of deforestation, conflicts over ownership rights, weak local governance, and rule enforcement (Lund et al. 2017, 132). Ultimately, the implementation of REDD + projects was challenged by the disjuncture between local modes of production and a global capitalist system with investments in the creation of new forms of capital accumulation.

Wolf defined a mode of production as a ‘specific, historically occurring set of social relations through which labour is deployed to wrest energy from nature

by means of tools, skills, organizations, and knowledge' and identified three main modes: kin-ordered, tributary, and capitalist (Wolf 1982, 75–6). Although the capitalist mode of production became dominant, it was not exclusive, hence the utility of the concept of mode of production: it can 'reveal the changing ways in which one mode, capitalism, interacted with other modes to achieve its present dominance' (Wolf 1982, 76). Unlike the other modes of production, the capitalist mode is defined by three features: capitalists detain the means of production; labourers, deprived of the means of production, are forced to sell their labour to capitalists; and the extraction of surplus is intended to accumulate additional capital (Wolf 1982, 78).

The creation of carbon offsets as a new commodity – although justified with environmental reasons – follows from a capitalist logic, since not only does the trading of offsets generate profit, but more importantly, the production of carbon offsets in countries of the Global South enables companies from industrialized countries to continue polluting as usual – and therefore, continuing to accumulate capital. Many of the problems faced during the implementation of REDD + projects had to do, therefore, with the ways in which the capitalist mode of production of these projects interacted with and came to dominate different local modes of production. Ultimately, the difficulties experienced demanded change in the relationship between local and capital modes of production, which shifted the scale of operation from 'project-based' into what practitioners termed a 'jurisdictional level' – to include an entire province, state, or even country (Wunder et al. 2020).

This shift in scale expanded the scope of the interventions in the forests of the Global south: any type of land-related activity considered to have the potential to reduce emissions (either directly or indirectly) could thereby be included under the REDD + umbrella. Concomitantly, this transformation was followed by a progressive erasure of this acronym, and its replacement by other expressions such as 'sustainable forest management' 'rural development', or 'landscape approach'. If such discursive changes have allowed the continuity of certain intervention practices (Lund et al. 2017), they have also enabled a new political economy justified by the fight against climate change. As such, while commodities that have historically connected the Global south to international markets (such as timber and cash crops) continue to be part of this political economy, a new carbon-based commodity with powerful effects has emerged. This new commodity – carbon offsets, or simply the idea of reducing emissions in the forest and land sectors – has thus authorized new forms of transnational intervention in the Global South with far-reaching consequences for local organization.

3 Connecting Mozambique to Global Climate Change

The process of REDD+ implementation in Mozambique offers a compelling example of this new political economy. Although considered a country highly vulnerable to the effects of climate change (Ministry of Foreign Affairs, 2019), rather than a culprit in the current situation, Mozambique is being called upon by leaders of the developed world to shoulder the efforts to reduce emissions through its forests. With that purpose, the World Bank has been funding the country since 2008 to support the creation of a framework for REDD+'s implementation. Despite the disbursement of a significant amount of money,² in 2014 there was not a single REDD+ project in the country or plans to implement one. Rather, government officials and World Bank officers gradually dropped the acronym, talking instead about the need to change the modes of production of subsistence farmers and reform the forestry sector – all of which would supposedly lead to a reduction in the country's emissions.

During a public event held in Maputo in March 2016, several authorities, members of various NGOs, business representatives, and academics discussed the events of the 2015 Paris meeting and its much-celebrated 'Paris Agreement'. The event was inaugurated by the Minister of the Environment, who expressed the official position of the country: the Agreement was not as ambitious as Mozambican authorities would like it to be, but it was still an important achievement in the fight against climate change. Since Mozambique is already suffering from its impacts (namely floods in the north and droughts in the south), the Minister concluded that the country must do its part in fighting climate change, and that the reform of the forestry sector would be Mozambique's contribution to reducing emissions.³ This reform included the protection of some tree species (particularly affected by demands from the Chinese markets) but, more importantly, the implementation of a vast programme targeting forests and the rural sector in general – especially in the province of Zambézia (see map).

This programme was referred to as a 'landscape approach' and was justified by authorities and World Bank officials by the need to have a more comprehensive approach to the rural sector, promoting both the 'rural development' of poor areas like the Zambézia province, and the reduction of emissions. This dual goal would therefore be achieved through the implementation of REDD+

2 In 2012 Mozambique was awarded \$200,000 to prepare its Readiness Preparation Proposal, and in 2014 entered into an additional grant agreement of \$3.6 million to prepare for REDD+. See Legal Agreements in <https://www.forestcarbonpartnership.org/country/mozambique>.

3 Fieldnotes, 23 March 2016.

but, more importantly, through the development of other activities such as the promotion of conservation agriculture, the intensification of specific cash crops, and a large-scale plantation of eucalyptus.



FIGURE 8.1 Map of Mozambique with Zambézia area, adapted by Author

SOURCE: UNITED NATIONS DATABASE

AQ_1

Underwriting these plans was an old environmental narrative according to which the main deforestation drivers are poor peasants' unsustainable practices of slash and burn, and charcoal production (Skutsch and Turnhout 2020). World Bank officers were particularly adamant in singling out these problems, to the point of having forced the redrafting of an official document on the national strategy to implement REDD+, to emphasize these drivers while omitting others. Thus, if the old document identified multiple drivers of deforestation, including commercial large-scale agriculture, urbanization, or mining, the new one only briefly mentioned these, highlighting instead the role of shifting agriculture and charcoal production.⁴ Under this rationale, the solutions to tackle these two culprits involved ending farmers' mobility as well as their traditional methods of charcoal production – all to be achieved through conservation agriculture, the promotion of cash crops, and eucalyptus plantations. Conservation agriculture would render fire and the rotation of cultures unnecessary; cash crops would undermine farmers' mobility and increase their productivity; and the eucalyptus plantations would provide a sustainable source of wood for charcoal production – all the while achieving rural development. If conservation agriculture and cashew production were not exactly new endeavours in Mozambique, the eucalyptus plantation – which was part of a major investment by a Portuguese pulp and paper company, partially funded by the International Finance Corporation⁵ – was presented as a new enterprise with great potential for the development of the rural world.

Government officials and members of the World Bank talked about these initiatives with great enthusiasm, noting their potential to modernize Mozambican agriculture by integrating it in global markets and promote economic development, while also tackling climate change. However, this enthusiasm constituted a major disjuncture in the face of a long history of past attempts at promoting these same initiatives, all of them failing to either change traditional agricultural practices or generate development – here understood as the improvement of lives through the application of practices that increase production and stimulate economic growth.⁶ In fact, these initiatives only seemed to add to a persistent history of exclusion as experienced by small-scale and poor Mozambican farmers.

4 See Moçambique n/d and Moçambique 2016.

5 The International Finance Corporation is a member of the World Bank Group that promotes the development of the private sector in poor countries.

6 While this is how development is understood by development agencies, NGOs, and donor countries, this chapter takes a critical approach to this perspective and concomitant interventions (see Escobar 1995; Rist 1997).

4 Conservation Agriculture: A Long History of Failed Repetitions

According to the World Bank, shifting agriculture is the most important driver of deforestation in Mozambique, “responsible for more than 65 percent of forest cover loss throughout the country between 2000–2013” (World Bank and Moçambique n/d, 2). In fact, this mantra was constantly repeated by World Bank officers working in the country:

Here, it's several small farmers doing that [deforesting] as a survival strategy. They do the mobile system because ... well, because that's the way they have always done it, and there's no support to do it in any other way. Changing that will be very difficult. (...) [But] if we want to reduce deforestation, you can forget everything, just do one thing: agriculture! (...) If you don't change the agriculture, then forget about it. If we can't really enhance the productivity of small farmers, and with Mozambique's birth rate, there's no way.

Maputo 29 March 2016⁷

Implicit in this perspective, and as expressed by Arnaldo⁸ (one of the World Bank managers for Mozambique), is the assumption that Mozambican farmers have no history, since their modes of production simply replicate *what has always been done*, and at the same time, their form of agricultural production has no real value to society because it is inherently destructive. The solution is thus, conservation agriculture – even if implementing it can be very difficult, as Arnaldo recognized. In fact, despite the many years during which different development organizations have tried to implement conservation agriculture in Mozambique (and other African countries, for that matter), none was successful at sustaining this practice over the long run (Giller et al. 2009). Yet, Arnaldo and some governmental officers presented this initiative as a new one, expressing excitement at its expected outcomes.

The Food and Agriculture Organization (FAO) defines conservation agriculture as a farming system that promotes maintenance of a permanent soil cover, minimum soil disturbance (i.e., no tillage), and diversification of plant species; claiming that this method promotes biodiversity, water conservation, and reduced greenhouse gas emissions due to lower energy inputs, improved nutrient use efficiency, and lower release of carbon from soils (FAO 2017).

7 All conversations with government authorities and World Bank officials were held in Portuguese. Translations were made by the author.

8 All names are pseudonyms.

Before concerns over global climate change came to dominate development interventions in countries of the Global South, conservation agriculture was already part of development agencies' and NGOs' toolkit to tackle poverty and low agricultural yields. Mozambique was no exception to this logic, having hosted several conservation agriculture projects led by European and North American NGOs (Silici et al. 2015, 35–7) – especially after the end of the civil war that followed the country's independence from Portugal.

Despite the claimed benefits of conservation agriculture (which now include the reduction of carbon emissions) by FAO and some NGOs, the results have been disappointing. In fact, some scholars have provided empirical evidence demonstrating low adoption rates by farmers – and even reduced yields – due to high labour and input requirements, as well as risk aversion (Giller et al. 2009; Silici et al. 2015). According to these same scholars, conservation agriculture practices are knowledge-intensive, requiring a continuous process of learning and experimenting that marginalized and poor farmers cannot risk trying. Moreover, it demands increased labour (often falling on women's shoulders) and expensive inputs (such as herbicides and improved seeds) that farmers simply cannot afford once NGOs stop supporting them. It is thus not surprising that Mozambican farmers resist implementing these practices to the chagrin of some of my interlocutors, like Fabian, working for a French NGO involved in the efforts to implement conservation agriculture in Zambézia:

[Farmers] produce corn and manioc for three, four years, depending on the soils, and then leave ... The fertility of the soils is very weak ... so they go out and deforest another hectare – and that is how they are deforesting at an incredible rhythm ... They are deforesting as much as 14 thousand hectares a year, and it is 95 percent subsistence agriculture. That's it ... The only solution is conservation agriculture. To try and maintain the fertility of the soils ... [But] farmers are not big fans ... they hardly change their practices ... They don't like risk, and since we're talking about subsistence agriculture, the risks are even higher.

Maputo, 3 March 2016

While Fabian acknowledged the reasons for Mozambican farmers' aversion to risk – if crops fail, farmers face famine – and Arnaldo recognized how difficult it is to change farming practices, neither could he explain why conservation agriculture is still pushed on Mozambican farmers despite a history of past failures. Arnaldo even denied such a history, arguing instead that, if there were failures in the past, these were due to projects being too small and not having a

market approach that could sustain the farmers at a scale beyond subsistence farming.⁹

Their trust in conservation agriculture as a panacea for deforestation and low agricultural productivity was, in many ways, like the reliance of Portuguese colonial authorities on scientific agriculture – often going against traditional practices of Mozambican farmers. At that time, low agricultural yields were seen as technical and not political problems, to be addressed through technical solutions that often disregarded locally specific ecological conditions, and farmers' practices intended to reduce the risks of farming (Isaacman 1996, 69). One of those practices was precisely shifting agriculture – equally deplored by colonial authorities – which constituted a strategy of risk diversification against historical patterns of erratic rainfall and chronic drought (Lubkemann 2008, 126). Significantly, all attempts made in the past to bind Mozambican peasants to fixed locations – from the colonial *aldeamentos*, to the post-independence communal villages – failed dramatically, leading to situations of crisis and famine (Lubkemann 2008, 211; Yañez Casal 1996). History has thus proven that the mobility of Mozambican farmers is not just a necessary risk aversion strategy perfectly adapted to local ecological circumstances, but also a strategy that allowed farmers to maintain possession over their means of production.¹⁰ Although some scholars have argued that conservation agriculture cannot be taken as a universal panacea (Knowler and Bradshaw 2007), development agencies and international NGOs continue to promote it as if no other alternatives existed (Giller et al. 2009) – and the more so, since the reduction of greenhouse gas emissions has become one of the main goals to be achieved through conservation agriculture.

5 Slash and Burn: Reproducing Colonial Anxieties

The idea that traditional farming practices are responsible for Mozambique's emissions is reinforced by authorities' anxieties regarding the use of fire. While historically fire has been a crucial tool to clear fields, improve soil fertility, and control certain pests and weeds (Isaacman 1972, 64–5), for authorities and World Bank officers, it is the main culprit with responsibility for deforestation. In their view, fire is not only unacceptable for causing deforestation, but also for generating carbon emissions. Their anxieties over the use of fire echo, with

9 Interview 29 March 2016.

10 Colonial authorities sought to control Mozambicans' labour process, undermining their relative autonomy as small farmers (Isaacman 1996: 38, 48).

remarkable similarities, colonial concerns about the irreversible loss of forests and important timber resources by fire.

In a 1950 publication from the former Portuguese Ministry of Colonies, engineer Esteves de Sousa wrote about the “balance” between forest communities and the environment in Mozambique, considering “the fearsome African fires” as the most important agent of destruction to such a balance. However, there was an important difference between understandings of this imbalance among white settlers and the ‘indigenous’. While the former destroyed the forest to create ‘agricultural enterprises’ (which, even if technically inadequate and doomed to failure, should still be praised), the latter’s objective was a ‘rudimentary’ agriculture, with constant moving from one plot to the next once the first one was exhausted. For this forest engineer, fire had a predominant role not just in the destruction of forests, but also in the degradation of soils, disruption of weather patterns, and lack of productivity (1950, 10). He stated, ‘Only those who have witnessed one of these immense fires can appreciate its destructive power’ (1950, 11) – as such, he suggested, heavy fines should be implemented to prevent the use of fire to clear fields for agriculture (1950, 15). Perhaps more to the point is the report of a 1948 forestry mission to Mozambique, also published by the Portuguese Ministry of Colonies. Its author explained:

The negro man, still numbed by centuries of intellectual apathy, solves his banal problems ... in the simplest way ... When thinking about his nourishing needs, he marked a plot in the forest ... and set it on fire, which finally came to kill those giants [the trees], often centuries old. For four or five years he repeats the plantation of sorghum ... until, once [he has] exhausted the fertility of the soil ... he looks for another plot in the forest where to set, once again, his meagre agriculture. It is through this process, primitive but infallible, that the most beautiful forests of this territory have become ... true graveyards of the best forest and flora specimens

JUNTA DAS MISSÕES 1948, 28–30

However, the author noted, the same detrimental practices were carried out when local farmers were ‘asked’ to prepare fields for cash crops such as cotton and wheat, also causing the destruction of Mozambique’s forests on a yet-larger scale (Junta das Missões 1948, 31). Setting aside the extraordinary racism of this excerpt and the fact that Mozambicans were never ‘asked’ but instead forced (often violently) to plant cotton (Isaacman 1996), the deforestation caused by cotton plantations (and other cash crops) was never a matter of great concern for colonial authorities. Both authors cited here recognized (and lamented) the large-scale deforestation caused by industrial agriculture;

however, its productivity – in the context of a colonial enterprise – justified the environmental destruction. This form of agriculture, operated under a capitalist system of production, was intended to turn Mozambique into a specialized producer of important raw materials, such as cotton, generating damning consequences for Mozambican communities and households (Wolf 1982, 310) – including famine and death (Isaacman 1996, 150–70). This capitalist mode of production was, therefore, praised against the ‘primitive’ and ‘rudimentary’ subsistence agriculture practised by Mozambican peasants. As such, the development of the capitalist mode of production depended not only on rendering local forms of agriculture obsolete, but of neglecting the agency of local producers and the social organization that went with it to chastise them into sedentary cash crop farming for export markets.

Similarly, World Bank officers blame slash and burn practices of poor farmers for the current levels of deforestation, neglecting to acknowledge the effects of industrial activities (such as large-scale agriculture and mining), the expansion of urban areas, and the increasing demand for high-quality timber by Chinese markets. In fact, it is very hard to find studies connecting Mozambique’s deforestation with mining activities or urban expansion. Even if some studies recognize the direct and indirect effects of mining activities on forest cover (Sitoe et al. 2012, 19),¹¹ they do not quantify the scale of deforestation caused by it. Considering that just the province of Tete holds an estimated 23 billion tons of coal reserves, and a projected area of extraction of 6 million hectares, with at least 1,400 households (who will need to be relocated),¹² it is hard to imagine that this area will remain mostly forested. And yet, most of the time, documents prepared by authorities and the World Bank relegate mining to a footnote, or consider it to have a limited impact. In the same way, although demand for timber has been causing devastating effects in Mozambican forests (MacKenzie 2006; Ekman et al. 2013) – a situation constantly denounced by local media¹³ – it is not considered ‘deforestation’ but rather, ‘degradation’, which does not seem to concern authorities and the World Bank as much as ‘deforestation’.¹⁴ In this specific case, this reduced level of concern might also

11 An indirect effect, for instance, is the deforestation caused by people relocated from the mining areas.

12 See Environmental Justice Atlas: <https://ejatlas.org/conflict/resettlements-for-mining-projects-in-tete-province>.

13 See newspapers *Canal de Moçambique* March 23 (Mulungo 2016), and *Savana* March 25 (Senda 2016), and TV news reports on STV April 1, 2016.

14 In the definitions used by FAO and the UNFCCC, deforestation entails clear-cutting and a complete shift in land use.

be due to the involvement of high-level governmental officials in this trade – a situation also denounced by the local media and mentioned by some people during fieldwork.¹⁵

Significantly, illegal logging, mining, and industrial agriculture are all part of complex networks of international trade and global capitalism processes related to highly demanded commodities, involving many different stakeholders, across many countries. This renders almost any local policy, social movement, or social organization to end deforestation ineffective, if not powerless. This is because actions against increased immersion into the global capitalism system, even if involving widespread deforestation, are framed as outright detrimental for the development of country – just consider the possibilities of retaliation by powerful companies such as the Brazilian Vale, or the British Rio Tinto (both involved in coal mining in Mozambique), or by Chinese officials. In this context of increasing pressure to open up the country to diverse forms of extractivism and the benefits that follow for the select few, it is not surprising that slash and burn or charcoal production continue to be arraigned as the main culprits in deforestation: both can be addressed locally (even if ineffectively), and both are constitutive elements of an ‘environmental narrative’ (Skutsch and Turnhout 2020) that became hegemonic within the development world (Crewe and Harrison 1998, 11). Thus, for the World Bank and national authorities, fighting deforestation and reducing emissions boils down to one thing: banning the use of fire among poor farmers, negating any potential benefits of this form of agricultural production, and pushing for sedentarization.

6 Trendy Cashew: Continuing to Ignore History

Another strategy pursued by the World Bank and government officials to counter the mobility of farmers was the promotion of cashew production. The idea was that once cashews became profitable, farmers would necessarily stay on their plots to take care of their trees instead of roaming into the forest to open new plots. According to an official from the Ministry of Agriculture,

the cashew is very valuable here in Mozambique and normally, people conserve it ... [S]o the goal of the project is to create this border [around the plots] with cashew plantations, because conservation happens

15 Fieldnotes 20–21 April 2016.

automatically ... By incentivizing [the cashew], they will reduce the areas to explore for firewood and charcoal.

Maputo, 10 July 2014

Fabian agreed with this assumption, explaining the strategy implemented among farmers in Zambézia:

[T]he price of the cashew is too low in comparison to that of Tanzania.... That is why, in the past twenty years, the production has not increased, unlike in the rest of the world ... Our idea ... was to pay more to those farmers who elect conservation agriculture ... And the Bank liked this idea a lot because it's trendy ... And also, the increase in the production scale is necessary in order to find an international buyer for the cashew – all at a better price.

Maputo, 3 March 2016

The assumptions behind this plan ignored the complicated history of cashew production in Mozambique, and the fact that low productivity has nothing to do with farmers' unwillingness to take care of cashew trees, but, rather, with difficult weather conditions, the very long war that affected the country (Penvenne 2015, 219–221), the interconnection of the crop with international markets, and the domestic policies ruling this sector. In fact, cashews are cherished by Mozambicans for being truly national, almost a 'national symbol' – unlike other cash crops promoted by colonial authorities such as cotton (Pitcher 2002, 225).

In the early 1970s Mozambique was 'the world's largest combined producer of raw and processed cashew nuts, contributing around 40 percent of global production in the peak years of the early 1970s' (Penvenne 2015, 217). Although cashew processing was protected by both colonial authorities and the independent Mozambican government, during the 1990s authorities liberalized the whole sector. This decision followed a *suggestion* by the World Bank, which actively promoted the liberalization of whole agricultural sectors across the Global South, together with the withdrawal of input support from state institutions.¹⁶ According to Bank officials, the sector had a problem of low production and profitability due to all the protectionist measures applied to cashew processing. The government then lowered the tariffs on the export of raw

16 The word 'suggested' is rhetoric, since the World Bank threatened Mozambican authorities with refusal to restructure the country's debt or renew its credits if they did not reduce the tariffs on the export of raw cashew nuts (Penvenne 2015: 224).

cashews, which increased sales but broke the vertical integration that characterized the sector. Within two years of the liberalization, most of the cashew processing units were closed, thousands of jobs were lost, and prices failed to increase contrary to predictions by the World Bank (Pitcher 2002, 227–9). If the Mozambican cashew production was already in dire straits due to weather and war conditions, and fierce competition from other markets, after the measures imposed by the World Bank the sector was almost destroyed – hitting poor farmers and workers from processing units the hardest.

The fact that in 2015 World Bank officials were, once again, suggesting measures to incentivize cashew production was ironic, if not downright insulting. Even if the sector could certainly benefit from new cashew orchards, increased productivity would still face a weakened processing industry, as well as ‘oligopolistic practices’ that continue to keep the raw nut prices very low (Pitcher 2002, 229).¹⁷ Cashew production has recovered significantly since the 1990s, but it is mostly led by small producers, and is far from the levels reached during the 1970s (Penvenne 2015, 229).

By insisting on cashew production as a solution to rural poverty or, more recently, as a deterrence to shifting agriculture, World Bank and government officials only demonstrate their ignorance of both the importance of cashews in Mozambique’s domestic economy as part of the farmers’ strategies to tackle risk and achieve some level of food security,¹⁸ and the history of wrong policies that almost destroyed the sector. Their enthusiasm for cashew production demonstrated, once again, how some government and World Bank officials conceive Mozambique as disconnected from a capitalist world economy, in which over time, some regions are central and strategic – as Mozambique once was – only to become auxiliary, occupying marginal positions later (Wolf 1982, 353). Like the history of conservation agriculture and eucalyptus plantation (next section), tracing the plight of cashew production in Mozambique also demonstrates how ‘new’ ideas around agricultural production furthered historical processes of excluding small-scale land users. To increase production to the market scale targeted by the World Bank, the national processing industry would need significant investment,¹⁹ and the government would have to

17 According to Pitcher, the problem is that the government liberalized trade without liberalizing the wholesale traders allowing them to keep prices low. The reason is that these traders include companies that have historically supported the government (2002: 231).

18 Which includes consuming cashews in the face of food shortages.

19 The landscape approach program mentions the launching of a cashew-processing unit with an installed transformation capacity of 5,000 tons of raw cashew nut, employing 600 workers, but during interviews this unit was never mentioned (UT-REDD/MITADER 2015: 20).

enforce policies to counter the low prices of raw cashew nuts maintained by other international actors.²⁰ None of these are part of the 'landscape approach' proposed by the Bank and the government to promote 'rural development'.

7 Eucalyptus Plantation: Reliving Colonial Dreams

The main element of the 'landscape approach', however, was a scheme for a large plantation of eucalyptus led by a Portuguese paper company. The plantation was not exactly a new endeavour, since for several years other private companies have developed, similar projects²¹ – but this one was being presented as an integral part of a governmental programme targeting 'rural development'. Through this programme, Mozambican authorities gave the Portuguese company two concessions with more than 300,000 hectares, across the provinces of Zambézia and Manica. Although the company recognized that not all this area would be planted – since it also contains an estimated 25,000 households – the goal was to occupy a total of two thirds with eucalyptus trees.²²

In a governmental document describing the several interventions planned for the forestry sector, this plantation was presented as a large investment, partially funded by the International Finance Corporation, intended to reduce the country's emissions, as well as provide employment opportunities for local communities (amongst other benefits offered by the Portuguese company), and to source charcoal production. The idea was to increase the productivity and economic growth of poor rural areas, while also helping tackle climate change:

The vision is to take a landscape of *low productivity* such as the current mosaic of slash and burn agriculture, *degraded lands*, and forests, and turn it into a *highly productive landscape*, creating prosperity that will subsequently be shared by all those living within the landscape.

UT-REDD/MITADER 2015, 67²³

20 Namely, by India. Given its dominant role in the raw cashew nut market, Indian traders can pretty much define the price they are willing to pay Mozambican producers (Penvenne 2015: 225).

21 The Norwegian company Green Resources, for instance, has several monoculture plantations in Nampula, Niassa and Zambézia.

22 Interview with the director of the company, fieldnotes March 2016.

23 Emphasis added.

These same promises of development and improvement of *degraded lands* through eucalyptus plantation were made during a workshop organized by the government and the World Bank in Quelimane, the capital of Zambézia. During that event, a representative of the Portuguese company noted that only around 60 percent of the total area would be planted, that the customary rights of the local populations would be respected, and that the goal was to improve the food security and the annual income of the families living in the area.

The project would entail a mosaic structure interspersing areas operated directly by the company, and others under the responsibility of Mozambican farmers, who would sell back to the company the timber harvested. As described by Wolf, the development of capitalist agriculture leads to the creation of 'factories in the field' and the growth of small-scale specialized producers whose operations are dictated by cash-product markets – precisely what the company was proposing; other farmers, stripped of their means of production, would have no recourse but to sell their labour power (Wolf 1982, 314). Indeed, this was a major concern for some of the participants in the workshop²⁴ (along with the possibility of forced displacements) – while the possibility of easy cash from selling the timber seemed appealing, the scenario of losing a family's source of food – the land – to eucalyptus plantation was very real.

Although other eucalyptus plantations in the country have been fraught with controversies – some of them leading to violent conflicts amongst disgruntled communities (Lexterra 2016) – the government and the World Bank were very keen on making this plantation the showcase for the whole 'landscape approach' in Zambézia.²⁵ The reason (besides the capital accumulation enabled by this investment) is that it offered a persuasive narrative about tackling climate change while promoting development. The plantation was presented as an instrument to preclude shifting agriculture (by fixing households to single tree plots), and a sustainable source for fuelwood and charcoal production, leading to a reduction in the country's emissions. Simultaneously, it would also promote rural development by providing jobs, increasing family income, and creating the conditions for the emergence of 'small entrepreneurs' – an important selling point at the workshop. Except for the most recent goal of reducing emissions, arguments about rural development were also used by colonial authorities to promote eucalyptus plantations in

24 Fieldnotes on the Zambézia Forum, 20–21 April 2016.

25 So much so, that it was the World Bank who invited the Portuguese company to include the plantation in the governmental strategy of emissions reductions – until then, the company was not aware of carbon offsets' generation through tree plantations. Interview with director of the company, fieldnotes March 2016.

Mozambique. In 1966, the 'Technical Commission for Economic Planning and Integration of the Mozambique Province' prepared a report about the forestry sector which suggested that local communities in Manica and Sofala should plant eucalyptus to supply themselves (and other communities) with firewood and timber. Additionally, the report continued, farmers should intensify such plantations to export the timber to South Africa and Rhodesia – all with the goal of 'avoiding the growing and centrifugal degradation of the natural vegetation surrounding urban centres' (Comissão Técnica 1966, 885). The concerns of colonial officials with the 'degradation of the natural vegetation' were not exactly environmental. Rather, their goal was to improve the economic profitability of the colony, which could be challenged if high-valued timber was being used by natives to supply their needs instead of being exported. Additionally, by incentivizing eucalyptus plantations, these officials were promoting a new commodity with significant economic potential.

Unsurprisingly, The World Bank and the Mozambican government were reliving colonial dreams of turning eucalyptus into a new cash crop, creating a new source of capital accumulation. The colonial logic underwriting the Portuguese company's decision to carry out such a significant investment in Mozambique was not even disguised. First, it followed from the impossibility of expanding the 120 thousand hectares the company already explores in Portugal (Lusa 2015).²⁶ The Portuguese authorities denied such an expansion, probably because this monoculture is becoming increasingly unpopular due to its water demands and, more recently, its high flammability – which fuelled the tragic fires of 2017 where more than 100 people lost their lives (Camargo and Castro 2018). Thus, the eucalyptus plantation constitutes the mere transference to a poor African country of what cannot be done in (the metropole) Europe – a common practice in a global capitalist system to avoid labour costs and environmental regulation. Second, the company also announced that it does not intend to produce paper in Mozambique but instead, to export cellulose to where paper production will take place – namely, Asian markets (Lusa 2015). In other words, as in all colonial enterprises, this company only intended to use Mozambican resources (i.e., land, water, and labour) to export a raw material, and not a transformed product. Once again, poor Mozambican peasants – those *without history* – were being drawn into a system that harnesses the world's resources to the cause of capital accumulation (Wolf 1982, 353).

26 Portugal is the country with the largest eucalyptus area in Europe and the fifth-largest worldwide, occupying 9 percent of the territory (www.ejatlas.org/conflict/eucalyptus-monoculture-and-common-lands-Portugal).

Many environmentalists across the world have denounced the argument that plantations of fast-growing species such as eucalyptus or pine can reduce carbon emissions as being deeply flawed, given the fact that these trees are ultimately meant to be cut down (The Oakland Institute 2014; WRM 2017). However, such critiques have not deterred the development of several industrial plantations throughout the Global South which, tragically, resemble prior colonial enterprises of forest management, marked by the systematic exploitation of labour and resources (Sodikoff 2012), violent encroachment, and land grabbing (Hughes 2006; Moore 2005). The repetition of these forms of violence and the stripping of poor peasants from their means of production has, ironically, been enabled by narratives about climate change. In these narratives, the land used for these monoculture plantations is always portrayed as idle, degraded, or unproductive, while the plantations themselves are presented as powerful instruments to reduce emissions, either because they will be used to produce biofuels (thus replacing fossil fuels), or because they will absorb a significant amount of emissions from the atmosphere – or both.²⁷

AQ_2

8 Deforestation: A History of Persistent Connections and Exclusions

The long-standing narrative that portrays poor farmers in the Global South as carrying out less-productive and environmentally-damaging activities, resorting to ‘primitive’ methods of slash- and-burn and charcoal production (*‘because that’s the way they have always done it’*) has recently been re-enacted in the context of climate change policy-making. Taken at its face value, this narrative seems logical and valid: when scientists warn against the increasing level of greenhouse gases in the atmosphere, burning forested areas to develop agriculture, or using valuable forest resources to produce charcoal are understandably condemned. As such, efforts to reduce deforestation by replacing these practices with more-sustainable and less-polluting methods of production can only be praised. This is one way of understanding current World Bank interventions in Mozambique to implement REDD+ and a ‘landscape approach’ programme that also claims to promote “rural development”.

However, as Wolf showed, things do not happen in isolation and this narrative needs to be contextualized not just historically, but, more importantly, in

²⁷ See <https://newgenerationplantations.org/en/studytours/13>; <http://newforests.net/sha-red-value/>; <https://www.climatechangenews.com/2019/08/08/un-science-reports-show-biofuels-essential-climate-action/> or <https://www.aidforafrica.org/member-charities/trees-for-the-future/> as examples of these narratives.

its wider connections to a global capitalist system. These brief histories of conservation agriculture, anxieties regarding slash and burn, cashew production and eucalyptus plantations exemplify the multiple processes of connecting Mozambique to global circuits of capital accumulation – ultimately promoting the disenfranchising and exclusion of small-scale land users. Indeed, there is an interconnectedness between a long history of forest and land-use management (including the promotion of capitalist forms of agricultural production) in the Global South, and the different ‘encompassing systems’ in which such management occurred (Wolf 1982, 23). In the past, modernity imperatives of efficiency and profitability – namely those tied to colonial systems of production – justified the imposition of an export-model agriculture and scientific forestry (Scott 1998). The purpose was to improve productivity, providing fiscal and commercial revenue, independently of the needs of native populations. In the process, native practices were deemed unproductive, ‘rudimentary’ or outright ‘primitive’, especially when fire was used to clear new plots of land. Reports prepared by colonial authorities about Mozambique clearly expressed this position.

The anxieties that natives’ practices created amongst colonial authorities were not just related, however, to the environmental destruction perceived to be caused by fire – of greatest concern was the mobility of farmers enabled by such fire. It is not surprising, thus, that both Portuguese colonial authorities and the Mozambican post-independence government tried to preclude such mobility, confining peasants to specific areas. Even though shifting agriculture constitutes one of the most important risk-aversion strategies employed by farmers, current interventions in the Mozambican rural world emulate the goal of confining peasants to allocated places. Conservation agricultural schemes, featuring cashew and eucalyptus plantations, have been described by World Bank officials and Mozambican authorities as important tools of development and emissions reduction; but their underlying goal is to simultaneously hinder farmers’ mobility. Once farmers are circumscribed to specific areas, the development of large-scale projects (whether in agriculture or mining) faces fewer obstacles.

At the same time, by considering shifting agriculture and charcoal production the main culprits responsible for deforestation in Mozambique, the scope of action is simplified and limited. In other words, if deforestation is caused by these practices, it can be addressed locally. This assumption facilitates the World Bank’s culture of disbursement, and enables national authorities’ access to much-needed funds, while both can claim to be doing something about climate change. However, and perhaps more importantly, this assumption also isolates the problem of deforestation from its complex connections to global

circuits of capital accumulation, which means that while interventions remain focused on slash-and-burn or charcoal production, other industrial enterprises (such as mining, industrial agriculture, and illegal logging) can proceed without being challenged for the deforestation, exclusion, and marginalization (through forced displacements) that they cause.

By disconnecting deforestation from these global circuits of capital accumulation, forests in the Global South can be presented as in need of protection from local threats – namely, deforestation caused by local agents (that is, poor farmers) due to their lack of knowledge, of resources – and even, as some suggest, of active will to protect those forests. In current discourses about climate change, not only are these forests presented as being under threat and in need of protection, but they are also championed as a significant part (if not the whole) solution to the climatic problem.²⁸ In other words, the protection of these forests becomes necessary to save the planet from climate change.

9 Conclusion: Climate Change Discourses and the Emergence of a New Political Economy

Discourses about climate change and deforestation fail to explain why poor countries in the Global South are supposed to shoulder burdens in the efforts to fight climate change – in sacrificial proportions that are similar, if not superior, to those of industrialized countries – when their contribution to the accumulated concentration of greenhouse gases in the atmosphere is residual. In the case of Mozambique, its vulnerability to the impacts of climate change is far higher than any developed country – as seen recently, when Beira province was hit by the deadly cyclone Idai.²⁹ And yet, Mozambique (along with other poor countries) has been part of the efforts to tackle climate change, while excluded from the financial resources needed to remedy its impacts.³⁰

28 See as examples: <https://www.worldwildlife.org/initiatives/forests>; <https://www.iucn.org/resources/issues-briefs/forests-and-climate-change>; <http://www.fao.org/forestry/climate-change/53459/en/>; <https://www.rainforest-alliance.org/articles/relationship-between-deforestation-climate-change>.

29 Idai hit Mozambique on 14 March 2019, killing more than 600 people and destroying more than 100,000 homes. Since then, the central part of Mozambique has been hit by three more tropical storms (Chalane, Eloise, and Ana) which have affected more than 300,000 people. International funding for relief continues to fall short in the face of the increased demands. See <https://reliefweb.int/report/mozambique/2-years-cyclone-idai-and-mozambique-has-already-faced-additional-3-cyclones>.

30 Setting aside the bureaucracies faced by countries like Mozambique to access funds from the Green Climate Fund, the comparison between the money raised to rebuild Notre

By eliding the disproportionality of the efforts required from countries like Mozambique *vis-à-vis* their responsibility (or lack thereof) for the problem of climate change, and their vulnerability to its impacts, the industrialized world is also able to deflect difficult questions about their own efforts to reduce emissions. One such question could be why France is insisting on developing a natural gas project in Cabo Delgado, when the use of such gas will only increase the amount of greenhouse gases in the atmosphere – not to mention the extreme violence that has been generated around this project since 2017.³¹

More to the point, while Mozambican forests (and those of others) can compensate for the pollution generated in Europe and North America, industrialized countries will not be forced to make demanding changes in their production and consumption patterns. At the same time, these discourses about climate change legitimize colonialesque interventions in countries of the Global South, which include large-scale plantations and other industrial agriculture projects – none of which are identified as drivers of deforestation. In the same way that Portuguese colonial authorities considered the environmental destruction caused by cotton and other cash crops justified, World Bank officials and Mozambican authorities refuse to acknowledge the high levels of deforestation caused by eucalyptus plantations and other large-scale agricultural enterprises being developed in the same country³² – these investments, too are as readily justified.

Discourses and assumptions about the role of forests in the Global South in tackling climate change have enabled the perpetuation of a capitalist system of accumulation based on both the extraction of older commodities, and a new political economy. Plantations of eucalyptus and other monocultures of fast-growing trees are already part of a global system of capitalist accumulation that includes other countries in the Global South. The same can be said about all the other components of the ‘landscape approach’ intended to preclude Mozambican peasants’ mobility, such as conservation agriculture or cashew plantations – ultimately, all these components aim at either transforming

Dame (\$1 billion) and the donations to Mozambique after Idai (\$74 million) should be enough to illustrate this point. See <https://www.nytimes.com/2019/04/20/world/africa/mozambique-cyclone.html>.

31 The account of the violence generated around French Total's gas development falls outside the scope of this chapter. For more information, see Introduction to this volume.

32 One of such enterprises is ProSavana, a massive agricultural project to be developed in the Nacala corridor. The contestation to this controversial project reduced its initial area of implementation however, it continues to instill fears of land-grabbing and other forms of exclusion amongst rural populations. See Shankland and Gonçalves 2016 for more information.

these farmers into 'small-scale specialized producers' conditioned by the urges of global markets (Wolf 1982, 314) or stripping them of their means of production (of which land is the primary example). In sum, as in colonial times, Mozambique continues to be a source of important raw materials, land, and labour, while the country's immersion in the global political economy demands the denunciation and obligatory vanishing of alternative forms of local agricultural production. There is, however, a new political economy, with a new commodity, that expands this system of capitalist accumulation – that is, the claimed goal of tackling climate change by generating carbon offsets through emissions reductions. Even if the goal of 'development' still underlies some of the activities and interventions promoted by the World Bank (and other transnational organizations), the reduction of emissions is the ultimate justification for all of them. Conservation agriculture reduces emissions because it releases less carbon from soils while also preventing the use of fire and subsequent deforestation; cashew orchards reduce emissions because they prevent shifting agriculture; and eucalyptus plantations reduce emissions because the trees constitute carbon sinks, while also providing for a sustainable source of charcoal. A new carbon-based commodity thus emerges, either in the form of a quantifiable carbon offset – traded in carbon markets – or in a more abstract form that serves the purpose of authorizing specific activities that emerge by reorganizing labour relations.

This new political economy generates powerful effects, as it legitimizes interventions in the Global South that otherwise would be considered outright neo-colonial. Paraphrasing Wolf, the categories through which climate change ought to be perceived deny the existence of alternative categories, or, in this case, the existence of alternative interventions to tackle climate change (1982, 388). By understanding climate change as a mere problem of excessive carbon emissions – and not as the necessary outcome of an intensive global system of capitalist accumulation – solutions can thereby simply address those excessive emissions, notably by using forests in countries of the Global South to offset them. While understanding climate change through this lens exempts industrialized countries from their responsibilities in creating this problem, it also denies Mozambican farmers the agency to adapt to climate change impacts, preventing them from pursuing their traditional risk-aversion practices. Local farming practices lose their ecological and socio-cultural significance and, instead, are deemed threats to the environment and enemies of the activists who seek to tackle climate change.

Simultaneously, current discourses about climate change and the role of forests in the Global South legitimize modes of production that sustain persistent practices of global capitalist accumulation (using land, natural resources,

and labour) – which only exacerbate the problem of climate change – while producing new forms of exclusion. Mozambican peasants are excluded from deciding whether they want to make sacrifices to fight climate change (which include the risk of famine), from the processes through which their agricultural practices are defined (and then imposed upon them), and from the deals that ultimately seize their lands and livelihoods. And although Mozambican authorities are active agents in this process, the country is still excluded from accessing much needed resources that could help mitigate the impacts of climate change.

References

- Asiyanbi, Adeniyi P. 2016. "A Political Ecology of REDD+: Property Rights, Militarised Protectionism, and Carbonised Exclusion in Cross River". *Geoforum* 77: 146–56.
- Bumpus, Adam G., and Diana M. Liverman. 2008. "Accumulation by Decarbonization and the Governance of Carbon Offsets". *Economic Geography* 84 (2): 127–55.
- Camargo, João, and Paulo Pimenta de Castro. 2018. *Portugal Em Chamas: Como Resgatar as Florestas*. Lisboa: Bertrand Editora.
- Chomba, Susan, Juliet Kariuki, Jens Friis Lund, and Fergus Sinclair. 2016. "Roots of Inequity: How the Implementation of REDD+ Reinforces Past Injustices." *Land Use Policy* 50: 202–13.
- Comissão Técnica de Planeamento e Integração Económica da Província de Moçambique. 1966. *III Plano de Fomento, Parte II, Relatórios Sectoriais, Volume I Agricultura e Silvicultura, Tomo VI Capítulos 18º e 19º*. Lisboa: Ministério do Ultramar.
- Crewe, Emma, and Elizabeth Harrison. 1998. *Whose Development? An Ethnography of Aid*. London: Zed Books.
- AQ_3 Dikoff, Genese. 2012. *Forest and Labor in Madagascar – From Colonial Concession to Global Biosphere*. Bloomington & Indianapolis: Indiana University Press.
- Ekman, Sigrid-Marianella Stensrud, Huang Wenbin, and Ercilio Langa. 2013. *Chinese Trade and Investment in the Mozambican Timber Industry A Case Study from Cabo Delgado Province*. Bogor, Indonesia: Center for International Forestry Research (CIFOR).
- Escobar, Arturo. 1995. *Encountering Development: The Making and Unmaking of the Third World*. Princeton and Oxford: Princeton University Press.
- FAO. 2017. "Conservation Agriculture." FAO – AG Dept factsheets. <http://www.fao.org/publications/card/en/c/981ab2a0-f3c6-4de3-a058-fodf6658e69f/>.
- Fogel, Cathleen. 2005. "Biotic Carbon Sequestration and the Kyoto Protocol: The Construction of Global Knowledge by the Intergovernmental Panel on Climate Change". *International Environmental Agreements* 5: 191–210. <https://doi.org/10.1007/s10784-005-1749-7>.

- Giller, Ken E., Ernst Witter, Marc Corbeels, and Pablo Tittonell. 2009. "Conservation Agriculture and Smallholder Farming in Africa: The Heretics' View". *Field Crops Research* 114: 23–34.
- Hughes, David McDermott. 2006. *From Enslavement to Environmentalism: Politics on a Southern African Frontier*. Seattle and London: University of Washington Press.
- Isaacman, Allen. 1972. *Mozambique: The Africanization of a European Institution – The Zambezi Prazos, 1750–1902*. Madison: The University of Wisconsin Press.
- Isaacman, Allen. 1996. *Cotton Is the Mother of Poverty: Peasants, Work, and Rural Struggle in Colonial Mozambique, 1938–1961*. Portsmouth, London, Cape Town: Heinemann.
- Junta das Missões Geográficas e de Investigações Coloniais. 1948. *Missão Silvícola de Moçambique – Relato Dos Estudos Efectuados Nas Áreas de Chimoio, Mavita e Dombe, Referente Ao Período Dos Primeiros Seis Meses de Trabalho*. Lisboa: Ministério das Colónias – Junta de Investigações Coloniais.
- Knowler, Duncan, and Ben Bradshaw. 2007. "Farmers' Adoption of Conservation Agriculture: A Review and Synthesis of Recent Research". *Food Policy* 32: 25–48. <https://doi.org/10.1016/j.foodpol.2006.01.003>.
- Lexterra. 2016. "The Progress of Forest Plantations on the Farmers' Territories in the Nacala Corridor: The Case of Green Resources Moçambique". Livaningo, Justiça Ambiental, União Nacional dos Camponeses. https://wrm.org.uy/wp-content/uploads/2017/04/The_Progress_of_Forest_Plantations_on_the_Farmers_Territories_in_the_Nacala_Corridor_the_case_of_Green_Resources_Mocambique.pdf.
- Lubkemann, Stephen C. 2008. *Culture in Chaos: An Anthropology of the Social Condition in War*. Chicago and London: The University of Chicago Press.
- Lund, Jens Friis, Eliezeri Sungusia, Mathew Bukhi Mabele, and Andreas Scheba. 2017. "Promising Change, Delivering Continuity: REDD+ as Conservation Fad". *World Development* 89: 124–39.
- Lusa, Agência. 2015. "Portucel lamenta ter de plantar eucaliptos em Moçambique em vez de Portugal". *Observador*. Accessed April 7, 2020. <https://observador.pt/2015/09/08/portucel-lamenta-ter-de-plantar-eucaliptos-em-mocambique-em-vez-de-portugal/>.
- MacKenzie, Catherine. 2006. "Forest Governance in Zambézia, Mozambique: Chinese Takeaway! Final Report for FONGZA". Tanzania Forest Conservation Group. <http://coastalforests.tfcg.org/pubs/GovernanceZambezia-MZQ.pdf>.
- MacKenzie, Donald. 2009. "Making Things the Same: Gases, Emission Rights and the Politics of Carbon Markets". *Organizations and Society* 34: 440–455. <https://doi.org/10.1016/j.aos.2008.02.004>.
- Mahanty, Sango, Sarah Milne, Wolfram Dressler, and Colin Filer. 2012. "The Social Life of Forest Carbon: Property and Politics in the Production of a New Commodity." *Human Ecology*. <https://doi.org/10.1007/s10745-012-9524-1>.

McAfee, Kathleen. 2017. "Profits and Promises: Can Carbon Trading Save Forests and Aid Development?" In *The Carbon Fix: Forest Carbon, Social Justice, and Environmental Governance*, Stephanie Paladino and Shirley J. Fiske, 37–59. New York: Routledge.

Ministry of Foreign Affairs, Government of the Netherlands. 2019. "Climate Change Profile Mozambique". Ministry of Foreign Affairs. https://reliefweb.int/sites/reliefweb.int/files/resources/Mozambique_4.pdf.

AQ_4

Moçambique, República de. n/d. "Estratégia de Redução de Emissões Por Desmatamento e Degradação Florestal: Reduzir as Emissões de Carbono e a Pobreza Melhorando o Maneio Das Florestas". Ministério para Coordenação da Acção Ambiental MICOA.

Moçambique, República de. 2016. "Estratégia Nacional Para a Redução de Emissões de Desmatamento e Degradação Florestal, Conservação de Florestas e Aumento de Reservas de Carbono Através de Florestas (REDD+) 2016–2030". Ministério da Terra, Ambiente e Desenvolvimento Rural – MITADER.

Moore, Donald S. 2005. *Suffering for Territory: Race, Place, and Power in Zimbabwe*. Durham and London: Duke University Press.

Mulungo, André. 2016. "Operadores Florestais Acusam Governo de Falta de Vontade Para Acabar Com Exploração Ilegal." *Canal de Moçambique*, March 23, 2016.

Parker, Charlie, Andrew Mitchell, Mandar Trivedi, and Niki Mardas. 2009. *The Little REDD + Book: An Updated Guide to Governmental and Non-Governmental Proposals for Reducing Emissions from Deforestation and Degradation*. Global Canopy Programme. http://redd.unfccc.int/uploads/2_162_redd_20091201_gcp.pdf.

Penvenne, Jeanne Marie. 2015. *Women, Migration & the Cashew Economy in Southern Mozambique: 1945–1975*. Suffolk and New York: Boydell & Brewer, James Currey.

Pitcher, M. Anne. 2002. *Transforming Mozambique: The Politics of Privatization, 1975–2000*. Cambridge: Cambridge University Press.

Rist, Gilbert. 1997. *The History of Development: From Western Origins to Global Faith*. London: Zed Books.

Scott, James. 1998. *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed*. New Haven and London: Yale University Press.

Senda, Raul. 2016. "Abate Indiscriminado de Madeira Na Província Da Zambézia: Um Crime Antigo, Mas de Que Ninguém Se Dá Conta." *Savana*, March 25, 2016.

AQ_5

Shankland, Alex, and Euclides Gonçalves. 2016. "Imagining Agricultural Development in South–South Cooperation: The Contestation and Transformation of ProSAVANA". *World Development* 81: 35–46.

Sitoe, Almeida, Alda Salomão, and Sheila Wertz-Kanounnikoff. 2012. *The Context of REDD + in Mozambique*. Bogor, Indonesia: CIFOR. http://www.cifor.org/publications/pdf_files/OccPapers/OP-79.pdf.

Silici, Laura, Calisto Bias, and Eunice Cavane. 2015. "Sustainable Agriculture for Small-Scale Farmers in Mozambique: A Scoping Report". IIED – International Institute for Environment and Development.

Skutsch, Margaret, and Esther Turnhout. 2020. "REDD +: If Communities Are the Solution, What Is the Problem?" *World Development* 130: 1–9. <https://doi.org/10.1016/j.worlddev.2020.104942>.So.

Sousa, Esteves de. 1950. *Considerações Acerca Do Equilíbrio Entre as Comunidades Florestais e o Ambiente Em Moçambique*. Lisboa: Ministério das Colónias – Junta de Investigações Coloniais.

AQ_6

The Oakland Institute. 2014. "The Darker Side of Green Plantation Forestry and Carbon Violence in Uganda: The Case of Green Resources' Forestry-Based Carbon Markets". The Oakland Institute. https://www.oaklandinstitute.org/sites/oaklandinstitute.org/files/Report_DarkerSideofGreen_lorez.pdf.

UT-REDD/MITADER. 2015. "FIP Forest Investment Program in Mozambique – Investment Plan First DRAFT Version 11/12/2015".

Wolf, Eric. 1982 (1997). *Europe and the People Without History*. Berkeley, Los Angeles, London: University of California Press.

World Bank, and República de Moçambique. n/d. "Zambezia Integrated Landscape Management Program: Towards a Sustainable Forest Management and Improved Livelihoods of Rural Communities". World Bank IBRD-IDA. <http://documents.worldbank.org/curated/en/945201525957363451/pdf/WP-ZILMP-Brochure-Jan-11-PUBLIC.pdf>.

AQ_7

WRM World Rainforest Movement. 2017. "The Paris Agreement on Climate Change: Promoting Tree Plantations and Reducing Forests to Tradable Carbon Stores | WRM in English". February 6, 2017. <http://wrm.org.uy/articles-from-the-wrm-bulletin/viewpoint/the-paris-agreement-on-climate-change-promoting-tree-plantations-and-reducing-forests-to-tradable-carbon-stores/>.

Wunder, Sven, Amy E. Duchelle, Claudio de Sassi, Erin O. Sills, Gabriela Simonet, and William D. Sunderlin. 2020. "REDD + in Theory and Practice: How Lessons from Local Projects Can Inform Jurisdictional Approaches." *Frontiers in Forests and Global Change* 3 (February): 1–17. <https://doi.org/10.3389/ffgc.2020.00011>.

Yañez Casal, Adolfo. 1996. *Antropologia e Desenvolvimento: As Aldeias Comuns de Moçambique*. Lisboa: Ministério da Ciência e Tecnologia Instituto de Investigação Científica Tropical.

Author Queries

chapter 8

AQ1: Please provide in-text citation for “Figure 8.1”	208
AQ2: Please note that the cross-reference ““Sodikoff 2012” (“Sodikoff 2012”)” has not been provided in the reference list. Please provide the same.	221
AQ3: Please note that the reference ““2012”X” has not been cross-referred in the text. Please provide the same.	226
AQ4: Please note that the reference “n/d” has not been cross-referred in the text. Please provide the same.	228
AQ5: Please note that the reference ““2016”X” has not been cross-referred in the text. Please provide the same.	228
AQ6: Please note that the reference ““1950”X” has not been cross-referred in the text. Please provide the same.	229
AQ7: Please note that the reference “n/d” has not been cross-referred in the text. Please provide the same.	229