

# International migration dynamics in Mozambique and natural resource exploration: Gold and forest predation

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## Abstract

In recent years, global connectivity has led to the phenomenal movement of people across Mozambique in search of natural resources. Easier communication has turned the world into a nutshell in terms of time and distance. It is predicted that the growth of international migration will become aggravated in the coming years. Given Mozambique's openness to foreign direct investments (FDIs), the peace that followed the country after the General Peace Agreement in 1992, and the subsequent era of coal, oil, and gas discoveries, the country came into the spotlight before the international community. Countless international migrants have entered the country by road, air, and sea in search of gold and forestry resources, while large companies came to explore oil, gas, forests, and coal. Thus, this paper seeks to reflect on the depredation of natural resources, perceived by many to be caused by international immigrants with either legal or illegal status. The literature review, data collected in the Cabo Delgado and Gaza provinces in the context of artisan mining and environmental refugees, and empirical evidence from news sources help to shed light on the issue. The main research question is: Is Mozambique again facing a new era of resource predation?

**Keywords:** international migration, natural resources, predation, gold, forests



## 1. Introduction

Mozambique is comprised of 819,380 km<sup>2</sup> overall, of which farm land spans 786,380 km<sup>2</sup>, inland waters measure 13,000 km<sup>2</sup>, and the marine surface spans 120,000 km<sup>2</sup> (Dos Muchangos 1999). According to the 2017 IV census, of all people registered, the nation has 27,106,207 inhabitants, including 26,899,105 Mozambicans (99.24%) and 207,102 national foreign residents (0.76%) (INE 2019). Historically, Mozambique has been shaped by in-bound and out-bound migration: first by Arabs, later by Portuguese, and most recently, by people from all over the world. Raimundo and Raimundo (2017) pointed out that current migration and resource exploration are influenced by the General Peace Agreement, signed by the government led by the Mozambique Liberation Front (FRELIMO), the National Resistance of Mozambique (RENAMO), and the state's openness to foreign direct investments (FDIs). Further, with the spark of conflicts around the African Great Lakes and in the Middle East, numerous refugees have been displaced, driving them to migrate to Southern Africa, including Mozambique. 'Mining' discoveries, together with FDIs, have attracted a new wave of immigrants, including Asian ones. Two natural resources for this analysis were chosen: gold and forests. Both are discussed widely in the media; artisanal miners from abroad seek gold, while the plundering of forests (due to over-exploration) is blamed on the Chinese, 'who cut trees down 'without any pity and export loads of logs'. This is against the approved Policy and Strategy for the Development of Forests and Wildlife (Boletim da República de Moçambique 1997), which is aligned with the principles of sustainable development.

Aquino *et al.* (2018) showed that Mozambique possesses 34 million ha of forests, which covers 43% of the nation's surface area. The country lost 267,000 ha between 2003 and 2013. Between 2014 and 2016, about 86,000 hectares of forests were lost, with direct consequences for carbon emissions and a lack of resilience to climate events. The causes of deforestation in Mozambique are linked to poverty, swift population growth, low-scale agriculture, and wood demand from the international market. In response to global trends in forest and wildlife protection, the government has adopted several legal instruments, including the recently approved Law of Forests and Wildlife passed in 2016. Despite this law, according to Magalhães (2014), a system for monitoring and staffing is lacking, in addition to a shortage of efficient forest management systems and a dearth of industries. Thus, Mozambique exports wooden logs, with a low contribution to the country's revenue.

Raimundo *et al.* (2020) found a new geography of international migration in Mozambique that began in the 1990s, demonstrated by the influx of immigrants from places that were previously thought of as unthinkable of producing them. Up until 1990, the country was solely seen as an outbound (not a receiving) country. The movement of people towards gold mining areas and the deforestation of trees is unprecedented. Raimundo (2018) wrote a report commissioned by the International Organization for Migration (IOM) titled, 'A comparative perspective on the trends and potential of managed migration flows within responsible informal artisanal mining in Angola and Mozambique'. Raimundo revealed

that in Cabo Delgado Province, namely in Namuno and Ancuabe districts, a group of artisanal miners from Tanzania is squandering gold and forest resources. Moreover, the IV General Census of Housing and Population illustrates that the number of foreigners rose by about 12% compared to the previous census. What do they seek in a country where the official language is Portuguese, and the nation is known for being affected by natural disasters (floods, cyclones, and droughts) and military instability (16 years of war, plus insurgencies and armed attacks in Cabo Delgado Province)?

Local and international news argue that ‘the country is under attack’, ‘the country’s resources are being stolen’ and ‘the country’s forests and mineral resources are deteriorating’. What kind of policy can curb or prevent the depletion of natural resources and control migration and labour contracts in Mozambique?

The literature review, data collected in the Cabo Delgado and Gaza provinces in the context of artisan mining and environmental refugees, and empirical evidence from news sources helps to shed light on the issue. In this paper, I discuss the concepts of artisanal mining and environmental refugees. World Bank Group-IBRD-IDA (2013) defines artisanal mining, also known as small-scale mining, as an activity done outside of regulations and carried out using technology with minimal machinery. Alexandre (2009), the former national director of the National Directorate of Mining in Mozambique, stressed that many workers in the mining sector do not possess mining certification and operate in undesignated areas. International agencies have not arrived at a consensus on what constitutes an environmental refugee, according to the Climate Migration Coalition.<sup>1</sup> Broadly, environmental refugees move due to changes in the environment, such as natural disasters, which are linked to events beyond climate change. Under these circumstances, is Mozambique again facing a new era of resource predation?

## 2. Methodology

Studying people on the move poses a challenge in demographic studies. According to Rocha-Trindade (2015:71), it is hard to identify the various components of people moving from one site to another, particularly foreigners, who cross national borders without declaring when and in which circumstance they crossed a specific one, and even less so when it comes to describing their length of stay in a country, such as with tourists. This is not new, as migration scholars have already pointed out. To make things worse, difficulty arises when it comes to data, as institutions in charge of registering migrants keep information secret. The IV General Census of Population and Housing of Mozambique was administered in 2017; the general results were released in 2019. Researchers’ requests for access to the database on

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<sup>1</sup> <http://climatemigration.org.uk/environmental-refugees-definition-numbers>

migrants were denied, as they were considered to have been seeking classified information.

The Immigration National Service (INS) keeps data on international migrants. Its principle is similar: ‘This cannot be disclosed because it is classified information’. Thus, the only way to obtain data is through indirect methods, including indirect calculations or measurements based on projections, World Bank facts, IMO facts, information circulated by local newspapers, or case studies undertaken by different scholars in diverse contexts, including dissertations and consultancies. Further, all foreigners are deemed immigrants found in mining areas, as in Cabo Delgado Province (northern Mozambique) and in the forest sector, as in Gaza Province (southern Mozambique). Certain ministries, including the Ministry of Labour, also do not disclose any data about workers or related information.

Obviously, it is hard to obtain information about their migration journeys, but through interviews between 2017 and 2018 in Cabo Delgado and Gaza provinces, I was able to identify where they came from and their length of stay in Mozambique. Another challenge in obtaining real information is the double status or citizenship of most interviewees. For instance, in Gaza Province, there are Mozambicans, South Africans, and Zimbabweans, while in Cabo Delgado, there are Tanzanians, Mozambicans, Congolese, Ugandans, Burundians, and Rwandans.

Even though it is difficult to measure aspects of people on the move, the censuses undertaken in Mozambique give some idea of international immigration circumstances. Usual information about migrants is captured by asking them about their place of birth/origin, their current place of residence, and how long they lived in a particular location 1-5 years before the census.

As proposed in the title, I discuss the relationship between immigration and natural resource depletion. It was difficult to establish a clear link between those who deplete resources and their citizenship. To make things easier, I relied on reports about some kinds of citizenship of people who have been accused of depleting resources. These are Chinese, Nigerians, and Tanzanians and those who fall in the category of ‘refugees’, namely Rwandans, Burundians, and Congolese.

Taking these challenges into account, I wrote this paper on international migration and the relationship with natural resources deprivation due to various studies undertaken in the context of migration, artisanal mining, and environmental refugees in Gaza and Cabo Delgado provinces. I consulted different reports related to the mining and forestry sectors and migration in Mozambique. The commonality of these studies is that people are living in a ‘strange’ environment because they settle in a home or a place where they can invest and contribute to development. During my studies, I came across citizens from Tanzania, Burundi, China, India, Portugal, Rwanda, Congo, and Nigeria; they all claimed to be in Mozambique due to business opportunities. They used long-standing migration routes, kinship relationships, and the fact that some of them have been evicted from South Africa on account of xenophobic attacks and other hostilities, to enter the country.

### 3. Mozambique: A blessed and cursed country due to its geographic location and natural resources

#### 3.1. Geographic location

Mozambique is geographically located in Southern Africa (see Figure 1).



Figure 1. The geographic location of the Republic of Mozambique in Southern Africa.

#### 3.2. General physical characteristics

The country, apart from exuberant forests and rivers, is extremely rich in mineral resources; some claim it has the largest reserves in the world. Some of these minerals are gold, diamond, graphite, oil, gas, and coal (Brandão 2010, Notícias 2017, Raimundo and Raimundo 2017). These riches attract people from around the globe. Mining areas are also attractive to locals, who decide to move to these zones on a temporary or definitive basis.

#### 3.3. Population, urban and rural characteristics

Mozambique has approximately 27,909,798 people: 13,348,446 (48%) males and 14,561,352 (52%) females. From 2007 to 2017, the population increased by 7,277,398 (35%), as seen in Table 1. In terms of economic activities, 66.8% of people are engaged in agriculture, forestry, fishing, and mineral extraction.

Table 1. Population growth between 1980 and 2017

<b>Year</b>	<b>Total population</b>	<b>Population growth rate (%)</b>
1980	12,137,000	2.5
1997	16,100,000	1.7
2007	20,670,000	2.5
2017	27,106,207	2.8

Source: INE (2019).

Other than Mozambicans, the largest proportion of total population comprises Malawians, followed by Zimbabweans, Tanzanians, Portuguese, Indians, and Pakistanis (Table 2). Chinese are not yet represented in statistics.

Table 2. Population living in Mozambique by the time of the IV census (2017) by place of origin

<b>#</b>	<b>Country/region of origin</b>	<b>Total population</b>
1	Mozambique	26,899,105
2	South Africa	14,698
3	Zimbabwe	15,083
4	Tanzania	10,083
5	Zambia	2,388
6	Burundi	3,418
7	Rwanda	1,626
8	Malawi	65,295
9	China	1,346
10	Portugal	5,560
11	India	3,349
12	Pakistan	1,259
13	Other African countries	12,694
14	Other European countries	1,624
15	Unidentified countries	3,384
16	Other foreign countries	207,102
	<b>Total population</b>	<b>27,106, 207</b>

Source: INE (2019):Tables 4.24 & 25.

### 3.4. Migration

The exact number of people who move to these areas and where they settle is not known; neither is their origin. However, it is known that the number of immigrants has risen drastically in response to both national and international factors. Migration represents an important demographic response to poverty and environmental stress in Africa and elsewhere. It is not a new phenomenon in Southern Africa, nor in Mozambique. Thus, there is a need to fully grasp the patterns of such movement. Understanding patterns of migration flows could assist governments in planning and formulating accurate policies that drive proper management and development. Countries have exchanged their populations for centuries, including for labour migration. However, common regulations to satisfy all countries have still not been reached. The lack of concrete action on migration in Southern Africa has led to very flexible migration laws. This is observable through bilateral visa agreements. The effective visa exemption between Mozambique and several Southern African countries is responsible for these signs of change.

Studies by the Southern African Migration Programme (SAMP) and other migration experts have stressed that several African nations from Southern Africa have been involved in the labour system towards South Africa, which has a dynamic, robust economy. If there are regional studies on migration, little can be said about migration and natural resource depletion, as discussed in this article.

#### 3.4.1. Migration flows, trends and data

Migrants are an essential component of international, regional, and national economies, and comprise a significant channel of the flow of labour (Castles and Miller 2009, Akesson 2018). Some scholars have conventionally perceived migration as negative with respect to its relationship with development, rapid urbanisation, and illegality, which is why countries are protecting their borders from migrants. However, they become friendlier when it comes to tourism, as tourists bring money.

The migration process begins for a reason. This means that a decision is made (i.e. to move or not to move) based on a complex set of factors. Such factors may involve many people, households, families, or the community, and depend on the circumstances in which the decision is made. No country can avoid receiving and sending migrants, particularly when it comes to states experiencing war, such as Mozambique, on account of the blossoming of mineral resources, including oil, gas, and coal.

Obtaining data on migration is challenging. There is a widespread belief that migration data are derived from population censuses or public registers (for a given interval of time), which track migrants and their movements. Based on this assumption, countries should have a good data system for to collect information if people enter on a regular basis, cross borders formally, and possess valid documents. If international data are difficult to capture, the situation worsens when it comes to internal migrants.

### 3.4.1.1. International migration in Mozambique

The idea of emigration (outbound migration) and immigration (inbound migration) entails displacement of people from one place to another. Generally, those who move hope to be well-received, and those who host immigrants expect not to be invaded by ‘aliens’ and not to see their resources spoiled by immigrants. International migration in Mozambique has different scenarios and features. Within its 45 years of independence (Raimundo and Raimundo 2016; 2017, Muanamoha and Raimundo 2018a; 2018b, Raimundo 2018), the country has faced civil war for 16 years, natural disasters (floods and cyclones), political and military stability immediately after the signing of the General Peace Agreement in 1992, and so-called ‘mining’ discoveries (Raimundo and Raimundo 2017).

During my research in Cabo Delgado, I asked one of my interviewees about how he came to Ancuabe District to loot gold. He stated:

Your question is interesting. I found Mozambique as I have relatives here in Macomia. My cousins are my relatives in Macomia. But I am a Tanzanian and I came down here to find some gold, as I am a businessman and I need to do businesses in my country (Ancuabe, 17 November 2017).

During the same session, I met another individual from Tanzania involves in sales, who said:

I am here for gold. The quality of gold here is the same as that of Tanzania. There are many people looting gold. We are living in a highly competitive world. And because they are many people, I had to find another place. Here, it is still a virgin area (Ancuabe, 17 November 2017).

### 3.4.1.2. Cross-border migration

The locals have a long history of buying and selling goods in the region, especially with countries that share the same borders. People have crossed borders not solely for selling, but for paying visits to their friends and each other, especially between Tanzania/Mozambique, Malawi/Mozambique, Mozambique/Swaziland, and Mozambique/Zimbabwe (Raimundo and Raimundo 2016). There are other motives as well, such as studying and obtaining medical treatment.

People from several South African states trade with each other regularly. A recent study undertaken by SAMP on border monitoring indicates a trend (Raimundo and Chikanda 2016). In Mozambique, crossings are facilitated by kinship ties and by the border facilitation agreement signed between the governments of Mozambique, Malawi, Swaziland, and Tanzania during the 1980s due to the military situation in Mozambique.



Southern African developing countries (SADCs) agreed to facilitate the movement of people and goods and the harmonisation of their currency. By January 2008, free trade was implemented. Duties for goods produced in the region of the Customs Union were eliminated by 2010. The Common Market was established in 2015, the Monetary Union by 2016, and then the Single Currency and Economic Union in 2018. According to SAMP, this program shows the importance of understanding the dynamics of small-scale, cross-border trade to enhance border management and movement through border posts. The majority of traders (approximately three quarters) are women. Businesspeople and entrepreneurs fear that integration will definitely help cross-border traders since, according to an unpublished study on border monitoring, interviewed people declared that their enemies were the customs services and immigration officers, whom they try to avoid at all costs.

One issue of cross-border or irregular migrants is those who are in illegal status because they do not possess valid documents; they overstay their visas and simply do not hold any identification documentation with them. To possess a passport means that a person must at least be registered in his or her birthplace. However, in Mozambique, many people who have reached the age of Forced Military Service (18 years) were not registered. Several Mozambicans lost the habit of living with identity documents due to their state of mobility, the civil war, and floods. It is a ‘vicious cycle’ because to get a passport requires an identity document; this, in turn, depends on having a birth certificate. People have lost their identification primarily due to the aforementioned reasons or because they were not registered.

### **3.4.1.3. Internal migration**

As in other regions of Africa and elsewhere, there is a long history of internal migration. This feature has many reasons and continues. The growth of rural impoverishment and unemployment in urban areas has driven people to move instead of remaining at home. Following this global trend, scholars have found that regional migration has become feminised. Women who were not born in cities have been involved in the informal economy and are engaged in cross-border migration to maintain their incomes.

According to Raimundo and Raimundo (2017) and Chemane (2019), links between rural and urban areas developed by migration are significant at promoting remittances, encouraging community-level initiatives for the construction of public facilities and infrastructure, and connecting rural procedures to urban markets. In general, the rapid urbanisation of Southern African countries and its feminisation result from intense rural-urban migration. When news of mineral resources spread, people were drawn to these places. The increase in poverty and lack of a better future have exacerbated the situation, as one of those interviewed by STV-Mozambican Television said, ‘We are here in gold-digging to find something for our family’. However, there is no accurate information about people who have moved to these places of mining.

### **3.4.2. Migration and resource depletion**

Trying to blame migrants and resource depletion is aligned with the perspective of ‘blaming migrants as being the cause of all ills in a host country’. Thus, in this article, I do not necessarily blame migrants for resource depletion, but I try to shed light on the role of the mismanagement of migration, which could facilitate poaching by immigrants (those who are not authorised to work in Mozambique) and illegal activities that include looting gold and other precious and semi-precious stones, wood cutting, and illegal exports; local media, writers such as Konijn (2014) and Chemane (2019), and some interviewed people have mentioned these issues. Also, in this discussion, I include mass investments in mining and forestation and deforestation, which bring immigrants and are causes of depletion.

Both gold and forests have high value in the international market. Historically, gold has been used as an exchange currency among populations from coastal and hinterland zones, and has continuously been used in the stock market (Raimundo and Raimundo 2017).

## **4. Investments and resource depletion: Mozambique’s awakening to the world**

### **4.1. The investment environment in Mozambique**

Since 1992, Mozambique has opened up to the world due to its desire for FDIs and the growth of its economy. As Monié and Carvalho (2019) and Francisco (2020) pointed out, since the late 2000s, the country has been seen as a model of the emergent economy or an ‘economic miracle’ due to a sustainable gross domestic product (GDP) and the influx of a considerable volume of foreign investments in industrial megaprojects and infrastructures, which were planned to promote competitive insertion in a global world. One sector that has received attention from investors is coal mining, followed by oil and gas. Several nations such as Brazil, China, India, and Portugal have invested deeply in Mozambique (Jafar 2017, Patel 2017, Raimundo and Raimundo 2017).

For instance, Jafar (2017) considered China’s exploratory nature, environmental invisibility, workers, and social problems arising from the rampant exploration of natural and human resources, emphasising the historical relations between China and Mozambique, and Chinese investments in natural and human resources based on readings done in 2011, 2010, 2012, 2011, and 2006. In his debate on Chinese migration, he discussed the context of Chinese migration, which is the response of an overpopulated nation where Chinese have lower incomes towards a country where one can easily accumulate income or capital.

In the context of Mozambique, the process of capital accumulation is characterised by a rampant exploration of natural and human resources by investing in capital and the involvement of Chinese enterprises and the labour force (Chemane 2019, Jafar 2017). Chichava (2010), Jafar (2017), Allen (2019), and Chemane (2019), in their examination of the long-standing Chinese presence, asserted that they came to Mozambique due to China’s opium war in the 19<sup>th</sup> century, when many artisans were

obliged to flee China due to unemployment, a dictatorship, and unequal internal opportunities. They may have been pushed out by the Dutch East India Company from the Eastern Cape of South Africa. Medeiros (1998) revealed that the Chinese first settled on the Island of Mozambique (Ilha de Moçambique) in 1858. They knew many arts and worked as carpenters, stone workers, blacksmiths, and stone shoppers, whose role was to bring to Africans the spirit of hard work, as for them Africans ‘were lazy’. Previously, they settled in the city of Beira (in the central region) and the capital of Maputo.

Allen (2019) showed that during the 1800s and 1900s, there was a considerable number of Chinese under the category of Asians. This reality was also defended by Medeiros (1998) when he stated that the number of Chinese was so significant that they had to create a Chinese Association. During one of my interviews in a study undertaken with Migration for Inclusive African Growth (MIAG), I spoke with my uncle (married to my aunt), whose late father was Chinese. He said:

My father was one of the presidents of this Chinese Association and used to be a vendor at the central market of Beira, and had a shop where he sold groceries and wine. This association was recognized by the Portuguese Colonial State, as Mozambique was part of the colonial empire of Portugal (Maputo, 23 August 2020).

There are debates on the country’s Chinese presence; its importance depends on which ‘side’ each analyst is. There are those who mention the colonial character of the Chinese presence, those who refer to cooperation and the development perspective, and a third group (mainly locals) who believe that the Chinese are coming to explore ‘our resources’. This is why in areas such as Manica, Zambezia, Tete, and Sofala, they obtained new land made of vast areas of clearings.

In 2018 when I was in Zambezia Province, I met a family in Nicoadala District at the administrative post of Manhonha. I came across a report by a local TV station about ‘various trucks that belonged to Chinese and that were caught by forest guards, full of wooden logs’. Apart from negativists, some of my interviewees argued that the Chinese presence is crucial in the sense of selling cheaper things, unlike citizens such as Indians, Portuguese, and Arabs.

According to Orre and Ronning (2017), the Mozambican government’s economic strategy has focused on the country’s vast natural resources including hydropower, coal, forestry, fisheries, and oil and gas to attract a massive inflow of capital from abroad. Regarding debts and international investments, China has been considered the leading creditor, having lent Mozambique USD 886 million. This credit is meant for building infrastructure. Referring to the same source on page (2), China invested USD 6 billion in 2005 and 2015 in coal and mineral resources. Japanese investments have also increased in sectors such as agriculture, construction, and the mining of coal and gas.

Macqueen and Falcão (2017) and Muianga and Norfolk (2017) discovered that the main forest

product to export is wood due to not requiring a high investment and a low level of technology. Other factors are: (1) lack of a system for monitoring and staffing; (2) the shortage of an efficient forest management system; and (3) a dearth of industries. Thus, the country exports wooden logs, with a low contribution to the nation's revenue (Magalhães 2014). One of my interviewees in Gaza Province said:

Communities blame the government for using a false policy towards deforestation and poaching, as there are no harsh measures against those who pay wood cutters and poachers. The government blames communities for the attitude of a merchant's ear (meaning that people pretend that did not understand) because they continue to chop down wood, to poach, and refuse to settle in predetermined areas for settlement (Chinhacanine, 22 November 2019)

Another said:

They are saying that we have to watch our forests and depend on aid. What does this aid bring? Only canned sardines, cooking oil, maize flour, beans...in ridiculous quantities...we fight to get some of this stuff. We want to decide what we produce and what to eat. True, we know how important trees are and how to protect them, as they mean everything. During the floods of 2013, we settled temporarily under trees where we stretched our tents. When we arrived here, we used to worship under a tree that we found over there... (Chinhacanine, 22 November 2019).

This is why wood exploration is very high, with consequences for deforestation. Among African countries, Mozambique is the main supplier of wood to China, which represents 90% of exports to China (Muianga and Norfolk 2017). Due to China's high demand for Mozambican wood, these enterprises are responsible for illegal wood cutting (ibid.10), which leads to corruption in all value chains of wood production, a lack of transparency regarding title deeds, and a lack of monitoring and control.

#### **4.2. Artisanal mining (gold looting): The evildoer of Mozambique for sustainable development and resources preservation**

There is no common definition of artisanal mining or Small Scale Mining. However, World Bank Group-IBRD-IDA (2013) refers to informal mining activities carried out using low technology or with minimal machinery. It is estimated that more than 100 million people rely on this sector for income, mainly in developing countries. Data in this sector are difficult to gather, as in many cases, artisanal mining is illegal, and there are actions by poachers. Further, World Bank Group-IBRD-IDA (2013) stated that

artisanal and small-scale mining occur in approximately 80 countries. Globally, approximately 100 million artisanal miners exist. The sector supplies about 80% of the world's sapphire, 20% of gold, and up to 20% of diamonds. It is widespread in developing countries in Africa, Asia, Oceania, and Central and South America. Although the informal nature and generally un-mechanized operation usually results in low productivity, the sector represents an important livelihood and income source for those living in poverty. Approximately 100 million people and their families depend on artisanal mining in Mozambique, compared to about 7 million people worldwide.

Like most African countries, Mozambique is blessed with minerals, as seen in Figure 2, which varies from clay, bauxite, bentonite, limestone, coal, kaolin, copper, iron, gas, graphite, marble, and gold.

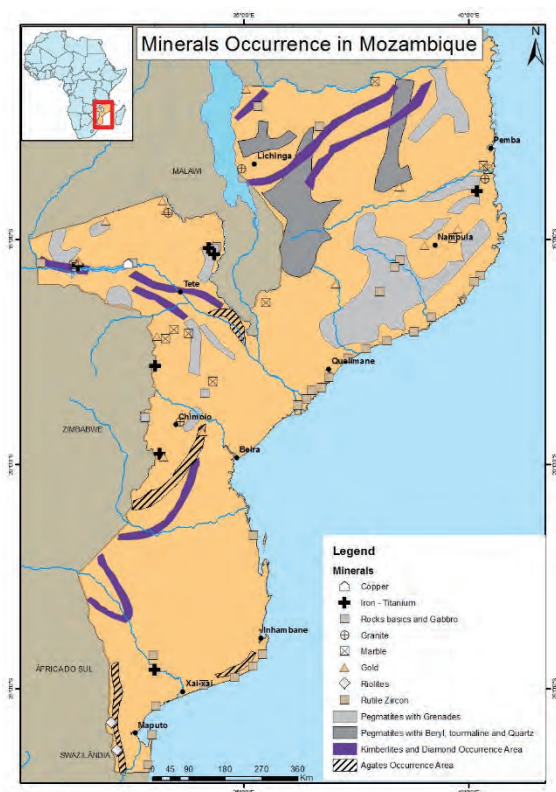


Figure 2. Mineral mining in Mozambique

According to Jackson (2014), Mozambique faces uncertainties concerning the administration, interpretation, and enforcement of existing regulations on mining (Figure 19). Mozambique ranks 79 out of 122 countries on the Investment Attractiveness Index (ibid. Table 1).

In Mozambique, gold mining is supposedly the most dominated by artisanal operators and the use of children as a work force, as TV reports indicate. In central Mozambique, almost 20,000 people are involved. Only 30% of the labour force is linked to legal associations, but they need to be integrated into environmental, health, and safety programs. Artisanal mining sites in Mozambique are numerous, dispersed, and often remote. This takes into account the size of the country, which is in the midst of the

second largest forest of the world after the Amazon in the equatorial zone. According to the literature, new sites are discovered every day, while others abandoned, and others still are rediscovered and revived.

Mining in small-scale areas can both facilitate and hinder development. On the one hand, it provides jobs for thousands (if not millions) of people, gives families an income, and contributes to GDP. On the other hand, there are situations where mining is illegal, there are no permissions or licences, land rights are absent, there is exploration, and mineral transportation from the government. Illegal mining draws people in irregular conditions that include illegal migration (including unaccompanied migrant children) and tax avoidance. In most cases, people working in illegal conditions suffer from all kinds of abuses and human rights violations, including no access to health facilities. This worsens the situation according to the IOM (2016) and Raimundo (2018), in the following ways:

- Lack of a national and cross-border monitoring system;
- Limited knowledge and understanding of migration and health;
- Limited inter-sector and inter-country debates and partnerships;
- Limited cross-border referrals, resulting in poor continuity of care and an increase in defaulters;
- Limited harmonisation of protocols (treatment, prevention, etc.), as these agreements do not adequately protect African migrants from host countries.

#### **4.3. Illegal mining sites**

Media reports have informed the public about abuses through pillaging and assaults, including human rights violations perpetrated in the context of extortion by state agents. Moreover, minerals have been used to fund civil wars and crimes against humanity, war crimes, and other violations of international humanitarian law, including rape, pillaging, and the use of child soldiers.

Mozambique Land Law was approved by the Council of Ministers. Known as the 1997 Land Law, it reaffirms state ownership, defined in the first constitution of 1975. The first land law was enacted in 1979, then amended in 1986. The amendment emphasised tenure and land possession. All versions of the law (1979, the amendment of 1986, and the version of 1997) recognise and safeguard rights acquired traditionally through occupation and inheritance. The law also creates incentives for investment by granting land use concessions to private entities for renewable periods of 50 years. Article 109 of the revised (2004) constitution stresses that land is owned by the state. Mozambicans have the right to a title deed known as the *Direito de uso aproveitamento da terra* (DUAT, or land usage title document), which allocates a title deed to someone who occupies a plot of land.

The government approved the Mining Law in 2014, which regulates the terms to exercise rights and duties related to mineral resources regarding the environment and the national economy. Article 4 states that mineral resources found underground, in interior waters, offshore, in the economic exclusive zone, and along the continental platform are state property, according to the constitution. Article 5 defines

legalities for the recognition, prospection, research, and exploration of mineral resources acquired through the following deeds and authorisations: a recognition licence, prospection and research licences, mining concessions, mining certificates, and mining passwords.

#### 4.4. Gold looting, tax evasion and soil excavation

Gold looting has spread outside of government authorisation. Article 7 of the Mining Law of 2014 refers to the requirements for the attribution of mining titles. However, there is no easy way to get a mining title due to the bureaucracy claimed by my interviewees in Namuno and Ancuabe in 2018. Because of gold looting, mineral exploration has become an activity, even though it is practised in ‘remote’ areas and facilitates the movement of people as nationals or foreigners. In Ancuabe and Namuno, gold looting has become the main source of household income. My interviewees relinquished agriculture and fishing in favour of looting gold. Gold looting, apart from diverting people from traditional activities, has another aspect: tax evasion. This is bad for foreigners who are digging without work permits and do not declare their incomes, as they do not have legal status in the country. A government officer from the Ministry of Energy and Mining told me: ‘Most gold looters have a nomadic life style and hide under local chiefs’ protection; there is no way of tracking them’ (National Directorate of Mining; Maputo, 10 October 2018). Gold looting also provokes excavations with immeasurable consequences (Figure 3). Figure 4 indicates soil erosion due to gold looting in Ancuabe District, Cabo Delgado.



Figure 3. Gold looting in Namuno District, Cabo Delgado Province.

Source: Picture taken by Inês Raimundo, Namuno District, on 17 October 2018.



Figure 4. Soil erosion in Ancuabe District, Cabo Delgado Province

Source: Picture taken by Inês Raimundo, Ancuabe on 7 October 2018.

#### 4.5. Mining and forest activities

Mining is a long-standing activity in Mozambique. Hence, it is necessary to have an accurate understanding of the activity and its context, considering the following:

- Mozambique’s pre-colonial and colonial history is marked by the exploration of minerals: first alluvial gold along the Zambezi River, and later by industrial enterprises.
- For centuries, mining has been small-scale and in the artisanal system.
- The long-standing civil war and military instability—which displaced thousands of people in the country—as well as refugees across other African states, have impacted the mismanagement of the movement of people and uncontrolled mining areas, thereby facilitating illegality and smuggling activities.
- Mining areas have become ‘free zones of movement’ to people from all over the country.
- One legacy of military instability is the openness of borders, including porosity supported by the long-standing history of neighbourly relations, and the fact of being a refugee for Mozambicans.
- Smuggling characterises artisanal mining areas, including the poaching of rhino and ivory tusks.
- Long-lasting mining activity, economic growth observed after the war, and relative peace in Mozambique have attracted numerous people from all over the African continent, particularly from the Great Lakes region, including the Democratic Republic of the Congo (DRC) and from



the Horn of Africa, to mining areas. Similarly, these zones attract nationals from rural and urban locales.

- The regional movement of people is facilitated by labour agreements, but also by informal networks that have developed over the years, most of them related to cultural, religious, kinship, and friendship ties (Raimundo 2009, Raimundo and Raimundo 2016).
- Internally, people's movement is typically prompted by prospective workers seeking employment, family reunification, and displacement due to natural disasters such as floods, drought, cyclones, and war.

Migration in the mining zone is poorly discussed in the literature, and the number of migrants in an illegal situation is not accurately known. However, the following are certain:

- There has been a rise in undocumented migrants or those with illegal status found by the police and reported in the media.
- There is a rise in illegal activities such as poaching and mining; migrants from other African countries are reported to be behind illegal activities.
- Mining is a decoy of skilled and unskilled migrants from everywhere.
- Likewise, the informal economy absorbs a large number of workers. There is an assumption that this sector, after agriculture, might absorb a larger portion of the workforce.
- Mining areas are populated by migrants operating in small-scale enterprises in both legal and illegal practices; in this case, under the connivance of local authorities.
- Inbound migrants mix with locals, who are jobseekers and wealth seekers at all costs. They are involved in the exploration and commercialisation of stones, without control and exemptions from taxes. The richest provinces are Zambezia, Tete, and Niassa.

#### **4.6. The state of forests and deforestation in Mozambique**

According to Dos Muchangos (1999) and the forest map of Mozambique (Figure 5), the country is 'blessed' by several types of trees that form the forests of the Miombo woodland, the savannah, xerophytes, and aquatic forests (Table 3).

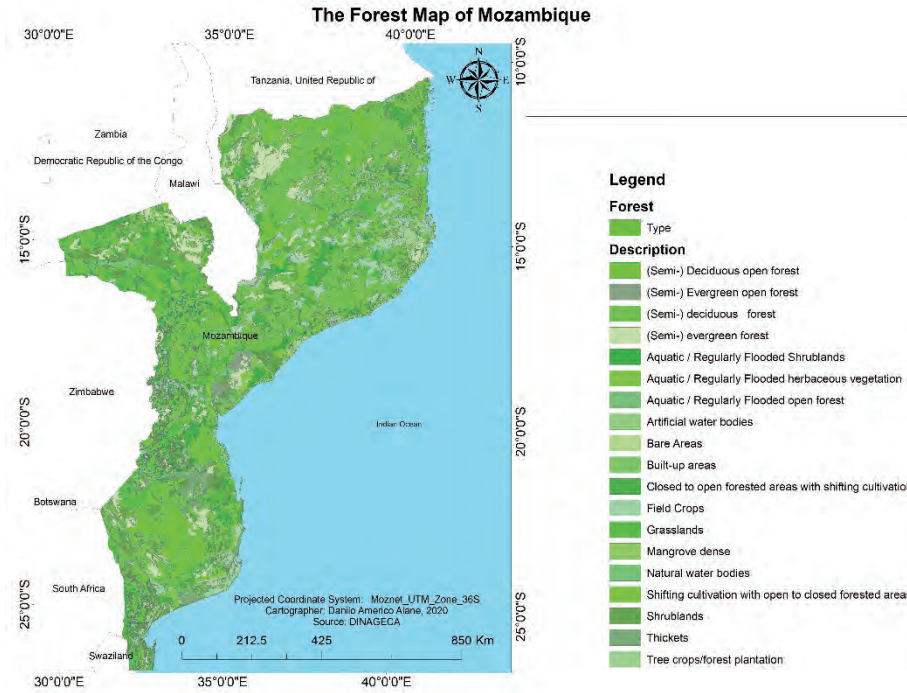


Figure 5. The forest map of Mozambique

Table 3. Forest typologies found in Mozambique

#	Name of forest	Forest class	Location	Provinces
1	A perpetually green forest, higher than 1000 m in altitude	<i>Pittosporum</i> , <i>Ilex</i> , <i>Rapanea</i> , <i>Widdrintonia</i> and <i>Podocarpus</i> and grasses formed of <i>Panicum monticola</i> , <i>Oplismenus hirtellus</i> .	Located in the hills and mountainous regions of Mozambique	Niassa, Cabo Delgado, Manica and Zambezia
2	Forest of caduceus leaves, higher than 500m and less than 1000m in altitude	Reed and bamboo, <i>brachystegia</i> and <i>julberernardia</i>	Sub-plateau and along humid areas	Sofala, along with Libombo heights and parts of Inhambane Province and river and riverine areas of Mozambique
3	Xerophyte Savana arboreal	<i>Adansonia</i> and <i>Setaria</i>	Nearby sea and ocean, and lack of fresh water	Southern Save River: Inhambane, Gaza and Maputo

				provinces
4	Aquatic forest	Mangrove	Coastal saline and/or brackish water	Coastal zone and in the mouths of rivers

Source: Dos Muchangos (1999:76).

Against this background of an abundance of forests, some industrialised countries see Mozambique as a state where excavation is still possible (Orre and Ronning 2017, Konijn 2014, Chichava 2010).

The government has identified deforestation as an issue (Boletim da República de Moçambique 1997). Between 1972 and 1990, the country lost around 4.27% of its forest cover. Maputo Province fared worse because of high exploration due to a highly concentrated population. Among the typologies of forests, mangroves, located in the estuaries of large rivers, were the most affected, as the deforestation rate was approximately 2.9% in the same period (equivalent to 12,000 ha). In the same period, the country planted 46,000 ha of forests, mainly in Manica Province (central Mozambique). Eucalyptuses (which provide fuel) and pines were planted near the three large urban areas of Maputo, Beira, and Nampula (Boletim da República de Moçambique 1997: 51/2). Macqueen and Falcão (2017) recognised that Mozambique still possesses abundant forests, even though there is faster reduction due to deforestation. What is missing is a set of incentives for wood forest operators that could drive them to improve economic, social, and environmental sustainability. To them, the priority is to widen the discussion of what has to be included in forest legislation through a national debate among wood operators and Chinese companies. One of the biggest achievements is the creation of the National Agency for Quality Control (AQUA), which is based on controlling the influx of wood in real time from places where trees are cut down to where they are destined.

The study in Gaza Province shows that deforestation occurs for firewood and charcoal. The following specimens were used for this purpose: *Chamate*, *Mopane* (*Clophospermum mopane*) *Simbirre* and stakes. Forests are cut for construction. The target trees are *Chamate* and *Simbirre*. For timber, the following are used: *Mondzo*, *Chanfuta* (*Azelia quanzensis*), Sandalwood, *Chacato preto*, *Umbila* (*Pterocarpus Angolensis*), *Panga-panga* (*Millettia stuhlmannii*), and *Chanatse*. Lastly, for tea production, there are other uses: Tea-chicutse (*Bossia albitrunca*) and *Macuácuá* (*Strychnus madagascarensis*).

Macqueen and Falcão (2017) found that Chinese in Mozambique are working in two spheres: one in which forestation and others are involved in wood exploration, and one that entails mining, infrastructure, and agribusiness. One of the biggest projects of China is Governance Forest China and Africa, which aims to strengthen joint actions to improve Chinese investment in African forests. China is the main importer of African forests; Mozambique exports about 93% of its forest products to China. However, Macqueen and Falcão mention sustainability and legal problems. The government adopted a new Policy

and Strategy of Forests (2016-2026), which includes the issues of legality and the introduction of new licences for log wood exportation. In 2016, all forest operators were assessed, and 31 assessment criteria were developed by Eduardo Mondlane University and the Ministry of Land, Environment, and Rural Development. Meanwhile, Chinese enterprises are not the sole voice in discourses on forest losses and unsustainable exploitation. Chinese enterprises are not uniform as they are of different sizes. In addition, local enterprises are responsible for this. One of my interviewees in Gaza Province, when asked about forest exploration, answered.

The Forest Law and Wildlife of 1999 and Regulations of 2002 divided native forests into three categories, all belonging to the state according to the Land Law of 1997. The forests were divided as follows (Table 4). According to the Forest Law, concessions for forest exploration are approved by the National Directorate of Land and Forests. For greater concessions (e.g. over 100,000 ha), only the Council of Ministers can give permission. One needs a *Direito de Uso e Aproveitamento de Terra* (DUAT) to explore forests and land in Mozambique.

Table 4. The classification of forests in Mozambique

Category of forest	Characteristics	Legal access	Size/surface
Productive forest	Possesses high-quality wood	<ul style="list-style-type: none"> <li>- Concession for a long period to all collective and individual entities based on the presentation of a management plan for 50 years and the installation of a transformative industry within the country</li> <li>- A simple, short-term licence only for Mozambicans (up to 10,000 ha) and subject to a tax payment based on size, and the obligation of a management plan for up to five years</li> </ul>	26.9 million hectares
Multiple use areas	Characterised by the presence of forest and other wood specimens, but with some other high-value forests	<ul style="list-style-type: none"> <li>- The DUAT is given for different uses of land</li> <li>- Can be used for agriculture</li> <li>- The communities can establish agro-forest activities, plantations</li> </ul>	14 million hectares

		for biomass, and wood exploration under a simple licence	
Protected areas	Are divided into rich areas for wild animals and forests and park hunting, wild farms and national parks, and reserves.	As for jurisdiction, these are divided into rich areas of the Ministry for Tourism and Culture and the Ministry for Agriculture and Food Security.	

Source: Adopted from Macqueen and Falcão (2017:9–10).

#### 4.7. International migration dynamics in Mozambique and natural resource exploration: Gold and forest predation

As proposed in the title, I seek to shed light on international migration dynamics, represented by the influx of immigrants and foreign investment, which are causes of the predatory quest for gold and forests in Mozambique. The following 10 statements below illustrate the situation of deforestation.

Box 1.

We have received people from Maputo and elsewhere in search of charcoal and wood. We have received businesswomen from Maputo who come here for maize and charcoal. They bring money to us. With money we can buy many things for our families. Here, either you do agriculture, or you are engaged in supplying wood or charcoal for suppliers. It's up to you. But if they catch you, you are gone. (Chihaquelane, 23 November 2019)

Box 2.

Here, by the end of the day, everybody cuts trees. It is a profitable business. (Mabalane District, 27 January 2019)

Box 3.

Yes. I have heard that it is because we are cutting trees that there is no rain. The issue is we didn't know that cutting trees, which God has given us, could prevent the fall of rain. (Chinhacanine, 22 November 2019)

Box 4.

Here, if we don't flee war, we flee the impetuosity of the Limpopo River. I never thought the river

would flood again, likewise in 2000. I am reliving those moments. I regret my stubbornness. I lost my belongings and now I am trying to recover. It is hard. There is no business. I lost my job in South Africa, so I only have this business of coal. We have heard that if the inspectors catch us cutting trees such as *umbila* [*Pterocarpus Angolenses*], they will fine us. But...I don't have a word to say on this. (Chihaquelane Resettlement Camp, 23 November 2019)

Box 5.

But if someone comes and says to you: 'All of these are forest products, and what you are doing is not correct as you are cutting trees indiscriminately. Oh...this is our means of livelihood'. (Chihaquelane, 24 November 2019)

Box 6.

We are hungry and we need to do something. Our children are unemployed. Those who went to South Africa were evicted and attacked by xenophobic people who hate us. So what can we do? (Chinhacanine, 22 November 2019)

Box 7.

They are saying to fine us a million meticaais if they find us cutting trees...yes, they will fine all of us. (Chihaquelane, 23 November 2019)

Box 8.

We know that it is happening. It has not rained for months. We don't know what is going on. As far as I know, there is no rain because we cut trees for charcoal production. In the past we used to produce charcoal for cooking. Perhaps we are exaggerating because we produce charcoal for selling, or perhaps there is over-exploration. But when it is about to rain, I don't know how to explain it—people say that we are responsible for drought because we cut down trees. Now I am not sure if the reason is that or not [laughs]. (Chinhacanine, 22 November 2019)

Box 9.

We are involved in the charcoal business because we are hungry. Some of us sell chickens. But it's not enough. (Chinhacanine, 22 November 2019)

Box 10.

What I defend in this case is the enforcement of the replanting law. Thus, a forest management plan,

a tree re-setting plan, and something related to that. This is the only way to force people to see the damage they are creating with that cutting activity. The other group, which understands their actions, is composed of people who have been impacted by floods or drought. Really, the tree cutters are not necessarily people who live here. They come from other districts—even provinces—including people from Maputo. They have money to hire people who can cut trees in order to produce charcoal sold in Maputo. Wood and charcoal is a big business. Last but not least, we are paying for what we are not responsible for. (Director of Chokwe Agrarian Institute, 26 July 2019)

The above statements point to the prediction of deforestation without replacement, which will cause the country to become a desert. Whom shall we blame? I would say that nationals and international agencies are responsible because structural problems have not been resolved such as poverty reduction, regulations, and monitoring, while international agencies act consciously or unconsciously in the way that they explore Mozambican resources. Immigration as a movement is not a problem, but when immigration occurs in an irregular way and when foreign citizens enter Mozambique without a work permit or other regular or legal permit to poach, loot gold, and engage in irrational deforestation, the problem begins.

## 5. Conclusion

Forest and mineral maps of Mozambique demonstrate that the country is blessed, as it possesses a variety of minerals including gold, heavy sands, and precious and semi-precious stones. Due to its geographic location, which comprises coastal areas and a hinterland in a tropical zone, the nation has an abundance of several kinds of forests, including mangroves.

Mozambique has 34 million ha of forests, which cover 43% of its total surface. The country lost 267,000 ha between 2003 and 2013. Between 2014 and 2016, about 86,000 ha were lost, with direct consequences for carbon emissions and a lack of resilience to climate events. The causes for faster deforestation include poverty, swift population growth, low-scale agriculture, and wood demand from the international market. While Mozambique is moving towards deforestation, it faces another threat: illegal mining through gold looting in Cabo Delgado Province (the study area) and other central and northern regions.

The country has reached this stage over the 45 years following its independence due to civil war, natural disasters, the General Peace Agreement, openness to FDI, and the increase in irregular migration facilitated by the porosity of its borders.

China has been blamed as the lead reason for deforestation, as some Chinese enterprises have stimulated tree cutting and the export of wooden logs to China, which is the largest country in the world that imports wood from Africa. Apart from China, other states such as Portugal, China, India, and Brazil

are the biggest investors in the mining and agriculture sectors, thereby affecting the local economy. For instance, the Cabo Delgado communities of Ancuabe and Namuno are slowly giving up their agriculture and fishing activities to make way for mining for gold, which allows people to earn money more quickly. In Gaza Province, people are cutting down trees indiscriminately, and are backed by businesspeople, without any inspection from the government.

In this paper, I tried to establish a connection between resource depletion and migration as an interlinked phenomenon for the following reasons:

- Migrants come to Mozambique following the routes of mines, including the long-standing mining of gold.
- Migrants come to Mozambique in search of business opportunities. Once in the country, they realize that regulations (for forests and mining and work) are so weak that they can easily get around them.
- Migrants come to Mozambique following their ancestors and traditional migration routes established before colonialism.
- The country's openness to FDIs has created conditions behind the money a group of citizens who follow the money of their countries.

Gold and forests are both shown in the media. Gold is operated by artisanal miners who come from abroad, while forests' over-exploration is blamed on the Chinese, who cut down trees 'without any pity for trees and export them in log loads', which is against the approved Policy and Strategy for the Development of Forests and Wildlife.

Local and international news opine that 'the country is under attack', 'the country's resources are being stolen' and 'the country's forests and mineral resources are deteriorating'. What kind of policy can curb or prevent the depletion of natural resources and control migration and labour contracts in Mozambique?

Is Mozambique again facing a new era of resource predation? I believe there are main points of discussion, and the paper did not answer the question, as I explained that obtaining data on mining and forests is a burdensome exercise.

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## References

- Akesson, L. 2018. *Postcolonial Portuguese Migration to Angola: Migrants or Masters?* London: Palgrave Macmillan.
- Alexandre, E. 2009. ‘O papel do governo na promoção da mineração artesanal e de pequena escala (MAPE) como parte integrante do desenvolvimento rural’. Unpublished report. Maputo. <[http://artisanalmining.org/Repository/01/The\\_CASM\\_Files/CASM\\_Meetings\\_International/2009\\_Maputo\\_AGM/Presentations/CASMSept8\\_Session3\\_Mozambique\\_NationalDirectorofMinesPresentationFinal.pdf](http://artisanalmining.org/Repository/01/The_CASM_Files/CASM_Meetings_International/2009_Maputo_AGM/Presentations/CASMSept8_Session3_Mozambique_NationalDirectorofMinesPresentationFinal.pdf) / Accessed on 2 September 2020>.
- Aquino, A., C. Lim, K. Kaechele, and M. Taquidir 2018. *Notas Sobre a Floresta em Moçambique*. Banco Mundial. <<http://documents.worldbank.org/curated/pt/pdf/Portuguese-Country-Forest-Note-Final-PORT.pdf> / Accessed on 2 September 2020>.
- Allen, N. 2019. ‘Indo-Mozambicans in Maputo: Oral narratives on identity and migration from 1947-1992’. Unpublished PhD thesis presented at the University of the Witwatersrand, Johannesburg, SA-African Centre for Migration and Society, Graduate School of Humanities.
- Boletim da República de Moçambique (Official Gazette) 1997. *Publicação Oficial da República de Moçambique - Política e Estratégias de Desenvolvimento de Florestas e Fauna Bravia*, Terça-feira 1 de Abril de 1997, 1 Serie no (14).
- Brandão, J.M. 2010. ‘O Museu de Geologia Colonial das Comissões Geológicas de Portugal: contexto e memória’. *Revista Brasileira de História da Ciência, Rio de Janeiro* 3 (2): 184–199.
- Castles, S. and M. Miller 2009. *The Age of Migration: International Population Movements in the Modern World*. 4<sup>th</sup> Edition. New York: Palgrave Macmillan.
- Chemane, V.A. 2019. ‘Parceria Moçambique-China: Cruzamento de Estratégias Seeking em Contexto de Globalização Financeira (Um Olhar aos Resultados do Período 2001-2016)’. *Revista Conjuntura Austral* 10 (49): 62–80.
- Chichava, S. 2010. *Moçambique na Rota da China: Desafios para Moçambique*. Maputo: IESE (Instituto de Estudos Sociais e Económicos).
- Dos Muchangos, A. 1999. *Moçambique Paisagens e Regiões Naturais*. Maputo: INDE-Tipografia

- Globo, Lda.
- Francisco, A. 2020. 'O anti-milagre económico moçambicano: Já batemos no fundo?' *Diário Económico.co.mz*. Issued on 8 October 2020. <<https://www.diarioeconomico.co.mz/2020/10/08/-0-anti-milagre-economico-mocambicano-ja-batemos-no-fundo> / Accessed on 10 October 2020>.
- INE (Instituto Nacional de Estatística) 2019. *IV Recenseamento Geral da População e Habitação-Moçambique 2017, Resultados Definitivos*. Maputo.
- IOM (International Organization for Migration) 2016. *Health, Border and Mobility Management: IOM's Framework for Empowering Governments and Communities to Prevent, Detect and Respond to Health Threats along the Mobility Continuum*.  
<[https://www.iom.int/sites/default/files/our\\_work/DMM/IBM/updated/Health\\_and\\_Humanitarian\\_Border\\_Management.pdf](https://www.iom.int/sites/default/files/our_work/DMM/IBM/updated/Health_and_Humanitarian_Border_Management.pdf) / Accessed on 2 October 2020>.
- Jackson, T. 2014 *Fraser Institute Annual Survey of Mining Companies 2014*.  
<<https://www.fraserinstitute.org/sites/default/files/survey-of-mining-companies-2014.pdf> / Accessed on 2 September 2020>.
- Jafar, S. 2017. *Presença Chinesa em Moçambique, 2000-2015: Hetero-Identidades, 'Neocolonialismo' e 'Apartheid' Sócio-Laboral?* Centro de Estudos Sociais, Universidade de Coimbra.  
<<https://estudogeral.uc.pt/bitstream/10316/83434/1/Presenca%20chinesa%20em%20Mo%20c3%a7ambique.pdf> / Accessed on 29 October 2020>.
- Konijn, P. 2014. 'Chinese resources for infrastructures swaps: An escape from the resource curse?' SAIIA- South African Institute of International Affairs. Occasional Paper 201. <[https://www.researchgate.net/publication/311844260\\_Chinese\\_Resources-For-Infrastructure\\_R4I\\_Swaps\\_An\\_Escape\\_from\\_the\\_Resource\\_Curse](https://www.researchgate.net/publication/311844260_Chinese_Resources-For-Infrastructure_R4I_Swaps_An_Escape_from_the_Resource_Curse) / Accessed on 30 September 2020>.
- Macqueen, D. and M. Falcão 2017. *Reforço da governação florestal em Moçambique: opções para a promoção de uma exploração florestal mais sustentável entre comerciantes de madeira chineses e os seus parceiros moçambicanos (Série de Recursos Naturais do IEED 33)*. London: International Institute for Environment and Development (IIED).
- Magalhães, T.M. 2014. *Análise do Sistema de Exploração dos Recursos Florestais em Moçambique*. Maputo: Justiça Ambiental.
- Medeiros, E. 1998. 'Formação e desagregação das comunidades de origem chinesa nas cidades moçambicana da Beira e Lourenço Marques'. In *Actas do Seminário - Moçambique, Navegação, Comércio e Técnicas*. Ed. Comissão Nacional para as Comemorações dos Descobrimientos Portugueses, Maputo: Arquivo Histórico de Moçambique, pp. 297–314.
- Monié, F. and D.M. Carvalho 2019. 'Mining and space restructuring in Moatize Mozambique'. *AbeÁfrica: Revista da Associação Brasileira de Estudos Africanos* 3(3): 178–202.
- Muanamoha, R. and I.M. Raimundo 2018a. 'Cartografia das migrações internas de Moçambique'. *The*

- Journal Revista Interdisciplinar da Mobilidade Humana* 26 (54): 31–59.
- 2018b. ‘Migrações Campo-Cidade e Integração no Meio Urbano’. In *Migrações internas para áreas de concentração de Grandes Projectos*. Eds. João Feijó and I. Raimundo, Maputo: Publifix, pp. 63–111.
- Muianga, M. and S. Norfolk 2017. *Investimento Chinês no sector florestal Moçambicano*. Mozambique report October 2017, London: IIED.  
< <https://pubs.iied.org/pt-pt/13592PIIED> / Accessed on 2 December 2020>.
- Notícias 2017. *Garimpo retira crianças da escola*. Edição 30109, 26 de Julho de 2017: 4.
- Orre, A. and H. Ronning 2017. *Mozambique: A Political Economy*. Research report commissioned by Norwegian Institute of International Affairs and CMI Michelson Institute, Oslo.
- Patel, H.H. 2017. ‘Oportunidades e desafios para Moçambique na expansão indiana em África’. *Revista Brasileira de Estudos Africanos* 2(4): 64–95. <<https://seer.ufrgs.br/rbea/article/view/77928> / Accessed on 2 December 2020>.
- Raimundo, I.M. 2018. *A Comparative Perspective of the Trends and Potential of the Managed Migration Flows within Responsible Informal Artisanal Mining in Angola and Mozambique*. Unpublished Research Report to IOM, Pretoria.
- 2009. ‘International management and development in Mozambique: What strategies?’ *International Migration* 47 (3): 93–122.
- Raimundo, I.M. and J.A. Raimundo 2016. ‘A migração moçambicana na África Austral: Povoamento e formação de famílias transnacionais’. In *Território e circulação: a dinâmica contraditória*. Eds. A. Mónica and C.A.C. Rita (org), São Paulo: Annablume Editora, pp. 239–270.
- 2017. ‘O impacto do discurso das ‘descobertas’ dos recursos minerais no despovoamento rural de Moçambique’. *IBEROGRAFIAS, Centro de Estudos Ibéricos* (13): 137–152.
- Raimundo, I.M., A.M. Bazagari, and J.A. Raimundo 2020. *Análise geográfica da imigração internacional em Moçambique: Um estudo de caso na Cidade de Maputo- Geographical Analysis of International Migration in Mozambique: A case study of Maputo City*. Lisboa: Finisterra. (in press)
- Raimundo, I.M. and A. Chikanda 2016. ‘Informal entrepreneurship and cross-border trade between Mozambique and South Africa’. *African Human Mobility Review* 3(2): 943–974.
- Rocha-Trindade, M.B. 2015. *Das Migrações às Interculturalidades*. Lisboa: Edições Afrontamento.
- World Bank Group-IBRD (International Bank for Reconstruction and Development)- IDA (International Development Association) 2013. ‘Artisanal and small-scale mining’. Issued on 21 November 2013. <<https://www.worldbank.org/en/topic/extractiveindustries/brief/artisanal-and-small-scale-mining> / Accessed on 5 November 2020>.