



FACULTY OF ECONOMICS & BUSINESS STUDIES

**SUSTAINABLE ECONOMIC DEVELOPMENT
IN MOZAMBIQUE**

Against the backdrop of climate change

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Table of Contents:

Abstract.....	Page 3
Chapter 1) Introduction	Page 4
Chapter 2) Mozambique: Political and Economic context.....	Page 6
2.1. Basic Information	Page 6
2.2. Historical Context.....	Page 9
2.3. Economical Context.....	Page 15
2.4. Political and Institutional Context	Page 17
Chapter 3) Mozambique: Climate Change	Page 20
3.1. Defining Climate Change	Page 20
3.2. Confronting Climate Change	Page 22
3.3. Climate Change in Africa	Page 24
3.4. Climate Change in Mozambique	Page 27
3.5 The Economics of Climate Change	Page 30
Chapter 4) Mozambique: Sustainable Economic Development.....	Page 31
4.1. Defining Sustainable Development	Page 31
4.2. Defining Sustainable Economic Development.....	Page 32
4.3. Sustainable Economic Development in Mozambique	Page 33
Chapter 6) Conclusion.....	Page 36
Bibliography	Page 37

Abstract

A country like the Republic of Mozambique, one of the most underdeveloped nations according to the UNDP, and the most impacted by the effects of the climate crisis, according to the most recent CRI report, should occupy a central role on the global stage in discussing sustainable development and climate change. Emerging economies like this one require more attention for no other reason than that they heavily influence economic stability on a global scale, more so than we think. And, in order for sustainable development to succeed, no country can be left behind, as the very nature of sustainability requires longevity and inclusivity. This paper introduces the Republic of Mozambique as its protagonist, and sets the scene against the backdrop of the climate crisis, before launching into its main purpose: sustainable economic development, namely the country's past and present attempts at it and how climate change, among other obstacles, has complicated its journey to sustained economic prosperity.

Chapter 1) Introduction

The intention of this paper is not to find the optimal path and ultimate solution for sustainable economic development in Mozambique, but rather to shine a light on the challenges being faced by this and other emerging economies in the context of climate change, in addition to its efforts in pursuit of economic success as an independent nation.

Since 1975, Mozambican authorities have made attempts at economic development through a series of different approaches, ranging from a central planning economy strategy to a market economy strategy. Each time, they encountered different obstacles, including armed conflicts in and around the region, a lack of infrastructure investment and competitiveness in international markets, a hidden debt crisis and rising Islamist insurgency in the northern territories. These barriers ultimately meant that any attempts at economic development in the region proved unsuccessful, thus rendering them unsustainable. What's more, the country experiences such a degree of climate vulnerability that landed it first place on the Climate Risk Index scoreboard in 2019. For this reason, the paper focuses not only on sustainable economic development in the region, but also recognises climate change as the backdrop against which the pursuit of it is set.

The second chapter in this paper contextualises the region subject to analysis, the Republic of Mozambique. It consists of four sub-sections containing basic facts and figures of the region, its historical and social context, its political and institutional context and, finally, its economic context. This chapter is geared at granting a glimpse into the country that is to be the protagonist of this essay.

Chapter three begins by seeking to define climate change, the proposed dual approach in combating climate change and, finally, the impact of the effects of climate change on the African continent and, more specifically, in Mozambique. The chapter is concluded by a brief sub-section on the economics of climate change, thus allowing for further analysis of the economic impact of the effects of the climate crisis on the global economy; it also highlights the suffering of emerging economies, as more often than not, they are the countries suffering the brunt of the climate crisis. This is causing a reinforcement spiral, with climate change causing further damage to a country's economy, while its efforts to reduce

its emissions and fight the climate crisis are being hindered by a fragile economy unable to prioritise, or even to simply invest in, climate mitigation and adaptation attempts.

Finally, the fourth chapter in this paper is dedicated to defining sustainable economic development, in addition to discussing this concept in the specific context of Mozambique. The sub-section of Mozambique goes into more detail in regards to the economic context of the region, detailing any and all efforts made to progress its economy from its independence in 1975, to the discovery of Liquefied Natural Gas in its northern territories in the year 2010. The latter constitutes an important opportunity for economic development in the region, but the question is: will it be sustainable? The framing of the projects being created for its extraction and circulation are very much sustainability focused, referring to potential sources of income, infrastructure innovation, knowledge transfer and job creation, among others. Unfortunately, these projects have since been delayed due to Islamist insurgency in the regions surrounding the oil basin. This, in addition to the COVID-19 pandemic and the after effects of the 2016 revelation of a hidden debt crisis, has meant that economic development in the region has been stagnant for some time. There is still uncertainty regarding the sustainability of its economic development, as it is pending the removal of barriers and the subsequent implementation of these projects that stand to greatly impact Mozambican economy and sustainable development.

In the conclusion, we circle back to the aim of this paper, which is to highlight the efforts being made to develop an emerging economy in the midst of a climate crisis and a long list of regional distresses hindering progress in Mozambique. Though it may seem far away and unimportant to some, there is a chaos theory called the butterfly effect whereby small change in one state of a deterministic nonlinear system can cause a large change in a later state. Therefore, Mozambique's commitment to sustainable development endeavours could be considered the first domino effect: one piece falling into place can cause all the remaining pieces to do so too, which is likely to have important developmental implications on a global scale.

Chapter 2) Mozambique: Political and Economic context

2.1. Basic Information

Mozambique is a country located in South-East Africa, above South Africa and beneath Tanzania. It's entire Eastern border is a coast of the Indian Ocean, situated directly across from Madagascar. It's Western frontier borders Zimbabwe, Zambia and Malawi. The total area of the country is 786,380 square kilometres (World Bank, 2022) and its capital is Maputo, located in the Southern area of the country, on the Western shore of Maputo Bay.

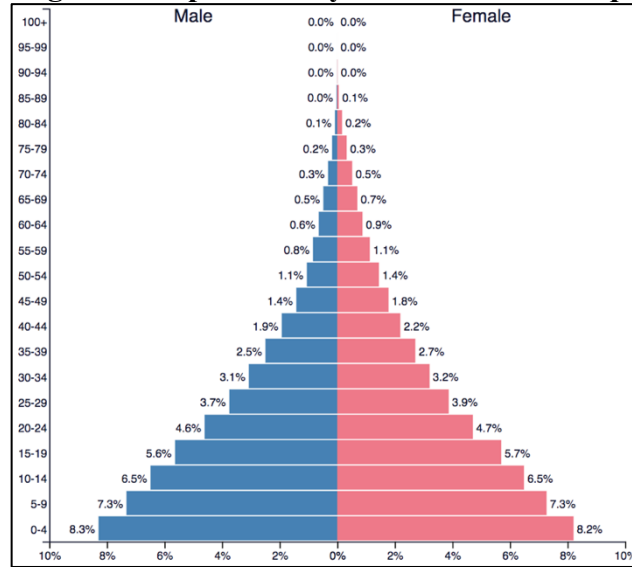
Figure 1: Map of Mozambique



Source: WorldAtlas.com

The population of Mozambique is currently estimated to be 30,832,244. Women account for up to 51.72% of this amount, according to the National Institute of Statistics. It is also projected that only 34.02% of its population live in urban areas, meaning the majority of the population live in rural areas (Instituto Nacional de Estatística, 2014). The official language is Portuguese, but there are a number of indigenous dialects spoken across the country, including Lomwe, Makonde, Chopi, Chuwabu, Ronga, Kimwani, Zulu, and Tswa (Central Intelligence Agency, 2021).

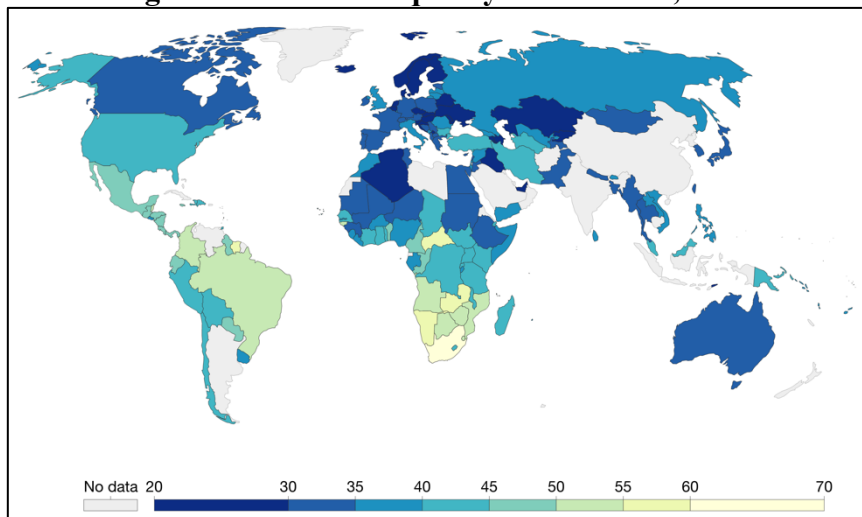
Figure 2: Population Pyramid of Mozambique



Source: PopulationPyramid.net, 2020

The most recent Gini coefficient for Mozambique dates back to 2014 and stands at 54.0 (World Bank, 2022). This tells us that the country has a substantial level of income inequality. In fact, Mozambique currently places 8th in the world for its Gini coefficient. Its neighbour to the South, South Africa, stands at 63.0 and heads the table (OurWorldInData, 2019). It should be noted that only a handful of African countries score under the median (for reference, 37.40) and fewer still in the Sub-Saharan region.

Figure 3: Income Inequality - Gini Index, 2019

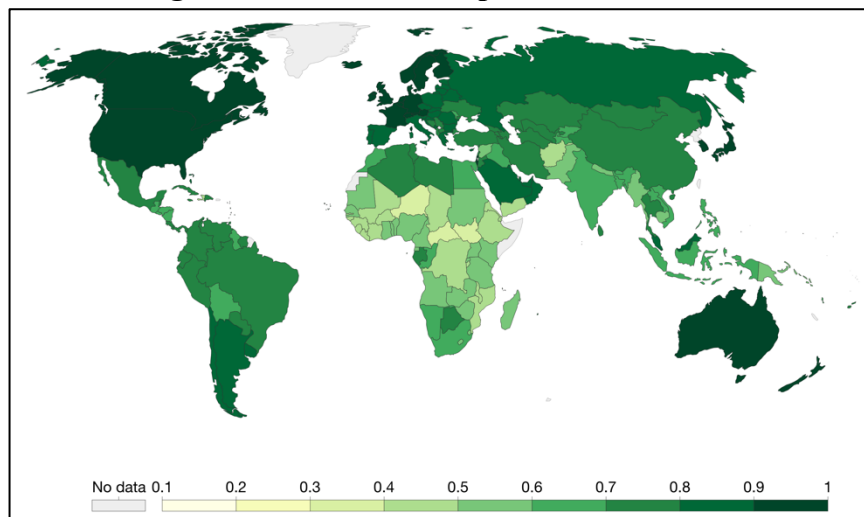


Source: OurWorldinData.org, 2021

The most recent Human Development Index (HDI) for Mozambique dates back to 2020 and stands at 0.456 (UNDP, 2020). In this case, a high score indicates a high level of

development. The HDI emphasizes the people and capabilities of a country, not just its economy. The data taken into consideration for its calculation are average life expectancy, education level and per capita income indicators. Mozambique places 181st in the world for its HDI, meaning it is among the 10 countries with the lowest HDI score in the world. As will be discussed further on in this chapter, this classification can find root causes across a range of challenges the country has faced, most notably a brutal and drawn-out civil war, which has severely divided the country and stunted socioeconomic development. While the country has taken incisive steps to stabilise the divide and move towards a more participatory democratic state, the reality is that power is still concentrated in a few political parties with little possibility for other stakeholders to be involved in the decision-making process. The World Bank’s Development Research group have shown that there is a direct and important correlation between political institutions and governance structures and the non-income dimensions of human development (Ziegler, 2009). In this sense, the paper argues that living in democracies – or governments that appear democratic – positively impacts the factors taken into account to measure human development. In Mozambique, where the decision-making is concentrated in such a small group of stakeholders, it is inevitable that the population feel disenfranchised from their government, and thus less able to make an impact on the evolution and development of their country.

Figure 4: Human Development Index, 2017



Source: OurWorldinData.org, 2018

2.2. Historical and Social Context

Mozambique has a rich history, from the settlement of the Bantu people in the 3rd century to the arrival of the Portuguese in the 16th century. This said, much of it remains unspoken due to colonial influences and efforts to reshape the history of the African continent in this regard. The country's history is also intrinsically tied to complex regional politics and failures in the nation building suffered by its neighbours.

Centuries before Vasco de Gama ventured into the world of Indian Ocean trade, politics and society, Bantu speakers from the West of the continent migrated toward the South-East of Africa. These people formed elaborate communities that flourished on the basis of agriculture, cattle raising, mining, crafts and trade. This led to a steady increase in population that required an expansion of their territory, eventually taking them to Mozambique (Rodrigues, 2019).

From the Bantu community emerged the nyika tribe, households in southern Mozambique ruled by one chief or chief household. In the 10th century, a number of them joined forces and formed a settlement on the upper reaches of the Limpopo River, which was to be the first iteration of what would eventually be Zimbabwe. The nyika communities developed intricate socio-political structures as their local industries flourished. They became experts in mining and trade, constituting the region's centre of production and intra-African trade, in addition to non-African trade. The earliest link for Mozambique came from the Middle Eastern and South Asian people. Then came the Portuguese in 1498, as Vasco da Gama rounded the Cape of Good Hope, thus marking Europe's entry into the happenings of the Indian Ocean (Correa, 2011). They pushed their way into the interior and tried to consolidate their settlement and trade positions by means of "pazos" tied to European occupation.

In the meantime trade continued as usual, but interest in the area peaked due to the colonies' need for African labour. This led to a "scramble" among the colonial powers in southern Africa to acquire access to more land and control over the African people. The Portuguese claimed present-day Mozambique, but had to concede Great Britain's definition of the Western and Southern borders (Rodrigues, 2019).

Parallel to this, slaves had become a substantial part of Mozambique's export trade led by the Portuguese colonial powers. After the British abolished slavery in 1807 and the Navy attempted to quash their sale in Western Africa, export from Eastern Africa grew exponentially, primarily from Zambia, northern South Africa and Malawi through Central and Northern Mozambique (Electoral Institute for Sustainable Development in Africa, 2008). Approximately one million slaves were sold through Mozambique in the 1800s (Silva, 2022).

The 19th century also saw the proliferation of military groups, such as the Jere and the Ndwandwe. The latter crossed the Limpopo River into Southern Mozambique and consolidated the Gaza state. They later became depleted by a conflict of succession and ultimately succumbed to the Portuguese in 1897. Around this time, Portuguese colonial powers decided to lease out portions of this land to private companies in order to develop the territory. These companies had full control over the land and its people, and in return, they ensured economic development and infrastructure investments. This meant that these decisions were usually fuelled by company interests, often at the expense of the indigenous African people (Direito, 2013). Eventually, the Government terminated these concessions and Mozambique returned under its direct rule, but the corporate exploitation ensued, particularly for slaves and ivory in the internal regions of the country.

In 1926, a coup brought about the Estado Novo – or New State - regime in Portugal and, much as the abuses in Mozambique continued – and often intensified - , the New State regime promoted conditions that would concentrate the profit in Portugal and among Portuguese actors (Encyclopedia Britannica , 2006). For much of the colonial period up to 1942, Portuguese colonial administration divided the country into separate administrative zones which fragmented national progress and prevented the emergence of a common system of law and administration. The location of the capital in the southern part of the country next to South Africa, together with concentrated resources also in the south meant the rest of the country was often marginalised from major decision-making and financial gains.

This situation further intensified in the early 1950s when the Portuguese government decided on development plans for Mozambique designed to enhance national transportation and communication infrastructure. Portuguese were encouraged to invest in, and expand,

existing businesses in the country, and together with the post-World War II economy, which favoured tropical commodities, the colonial economy grew. However, this growth did not trickle down to Mozambicans, but rather returned back to Portugal where the New State kept a tight leash on their colonies, keeping the profit to themselves and depriving Mozambicans of any growth of their own. Instead, the response an increase in Portuguese settlers keen to take advantage of the opportunities that had been denied to the Mozambican people, further antagonising the indigenous populations and deepening the divide between the colonisers and the colonised. To accommodate these settlers, the Portuguese government took land from the indigenous Mozambicans – often with little or no compensation – and conceded them to the settlers, instituting policies that guaranteed them a cheap labour force so they could profitably grow cotton and cashew nuts (Africa Studies Centre, University of Michigan, 2020).

Discontent which had been growing for some time in response to hard-line Portuguese colonial policies began to simmer, and formal opposition to the regime began to formalise. In 1962, a group of exiled Mozambicans, with support from left-leaning regional partners such as Zambia and Algeria, founded the Frelimo political party (Encyclopedia Britannica , 2006). The Frelimo party had socialist and modernising ambitions for the country, and articulated an exciting vision to cleanse the country of the colonial corruption and exploitation. The people were quick to join the anticolonial wave – also sweeping across many other countries in the region - and while they demonstrated openness to negotiate with the Portuguese, this was met with staunch disapproval, so in 1964 they launched their first attacks; this would be the beginning of a long military struggle in the country. Over the next years, Frelimo won over the support of the vast majority of people in Mozambique. Rural villages welcomed them and offered them food and shelter, and they also received military support from China, the Soviet Union and other Eastern European countries, as well as Tanzania and Zambia who allowed them access to their land to launch attacks on Portuguese forces in Mozambique (Williams, 2013).

By 1974, Frelimo had occupied most of the North and had infiltrated Central Mozambique. In April, they mounted a coup and then insisted on a cease-fire. On June 25th, 1975, Mozambique became an independent single-party state led by Frelimo. While the independence was welcomed, the aftermath was debilitating for the newly established

independent nation. An exodus of Portuguese settlers, abandoning and/or sabotaging productive infrastructure as they left, a human resource base which had been reliant on colonial ruling and was largely unskilled and a high rate of illiteracy meant the political and administrative situation was left in disarray (Gbla, 2004).

Three years after taking power, at its 3rd Congress in 1977, Frelimo adopted important structural and ideological measures by transforming the liberation movement into a Marxist-Leninist party. Doing away with opposition, and imposing centrally-planned and collectivist socio-economic policies led to widespread social disillusionment. This antagonism was especially evident in the central and northern regions of the country, where anti-Frelimo sentiment became increasingly evident (Carbone, 2003). This anti-Frelimo sentiment translated into the Resistência Nacional Moçambicana (Renamo), which filled the vacuum of opposition against Frelim.

Renamo was renowned for its approach of alternating raids and devastation with relatively stable control over the country, and progressively built up the economic stability in regions overlooked by Frelimo. Thus began the civil war in Mozambique, with numerous reports of international influence, especially from white minority regimes in Rhodesia and apartheid South Africa, aimed at destabilising the region (Vines, 2018). It is often claimed that Renamo was originally created and nurtured by these regimes to weaken the Mozambican government, but not necessarily overthrow – the ensuing civil war has been catalytic to the country's posterior development, and critical to understanding the current situation.

The end of the cold war and also apartheid in South Africa echoed in Mozambique, and, coupled with devastating drought and limited resources from extended conflict, allowed space for the warring groups to come to a settlement. A military stalemate prevailed in 1992, with an international mediation playing a key role in facilitating the end of the civil war. The mediation group was formed of a large group of regional and western groups (Kenya, US, Portugal, UK and Italy, especially), combined with faith organizations and the private sector, too. Renamo in particular needed the support, as it had to transition its governance structures from reactive militia group to participation in high-scale political negotiations (Hume, 1994).

The signing of the 1992 peace agreement – the Rome General Peace Accord - marked a new beginning for Mozambique and set in place a transitional process for disarmament and reintegration through the creation of new joint army and the agreement to hold Mozambique’s first-ever multi-party elections in 1994, overseen by a UN peacekeeping operation. The Agreement consisted of seven protocols with two key objectives: the formal resolution of the Mozambican civil war and the establishment of a new political system, which would bring stability to the country. The crux of the agreement was the put in place of a competitive multi-party democracy elected by majority, with a parliament elected under proportional representation (Gbla, 2004). Also of note was the recognition of legitimacy by the Accords of the government and its laws, administrative structures and constitution.

This transition was mostly successful with peaceful elections, a flourishing joint army and a move from a party-state to a formal liberal democracy. Of particular interest during the transition was an internationally funded program “pay and scatter” to disperse and reintegrate many of the combatants – a strategy which has been replicated following numerous other civil conflicts around the world (McMullin, 2013, p. 132). However, this process was not without its complications, such as Renamo’s leader being allowed to maintain an armed militia under the guise of a “presidential guard”. These complications, coupled with a lack of inclusive growth, problems of coordination and management at the government level, challenges of knowledge generation and sharing, and even donor coordination meant that the country’s reconstruction was slow and far from linear (Gbla, 2004). Continued opposition between Frelimo and Renamo did not help the situation either, with the two parties getting caught up in election opposition and leaving national development to the wayside. With the election of President Guebuza of the Frelimo party in 2004, the party began its strategy of attempted representative domination, which only served to alienate the Renamo party, and eventually pushing them to take up targeted armed violence again in 2013.

Thankfully, the armed conflict only lasted one year, with a generous peace agreement signed in 2014 that provided for a more politicised electoral process, specific jobs for Renamo members in the army and the police, demobilisation and an amnesty for crimes committed since 2012. The elections following this agreement also appeared to favour Renamo’s return to violence, as the group won increased seats. Disjointed negotiations

between the two groups began, which resulted in yet another phase of armed conflict from May 2015 to December 2016. After five rounds of international mediation, a truce was extended and has subsequently been made indefinite (Pearce, 2017). While the situation has since stabilised, with both parties actively participating in an active political space, the remnants of the war are never far from the surface and the scars from the civil war can still be felt by society at large.

An additional factor in Mozambique's socio-political tapestry is the entry of the Al-Shabab group – linked to the Islamic State (ISIS) – which has attacked numerous villages, killed women and children and forcibly recruited boys to its military campaign (Human Rights Watch, 2022). The conflict began in 2017 when the group targeted three (3) police stations in the port town of Mocímboa da Praia, with the most recent attack being in late 2021 when they carried out a series of attacks in the northern region of Palma, forcing more people to flee and leaving a weakened security situation. The United Nations High Commission for Refugees (UNHCR) currently estimates over 800,000 people have been internally displaced, of which 48% were children, with over 3,000 civilian deaths (UNHCR, 2022). Al-Shabab – also known by many other names including Ahla al-Sunnah or ISIS-Mozambique – seeks to establish a breakaway Muslim regime in northern Mozambique, taking advantage of its weak governance, socio-economic problems, allegations of international interference in natural resources and religious marginalisation from Maputo (Global Centre for the Responsibility to Protect, 2022). Their insurgency solidified in 2020 when they took over the Cabo Delgado region, prompting several countries – including Angola, Botswana, member states of the European Union, Rwanda, South Africa, the United States and others to send soldiers, equipment and military advisers to Mozambique in mid-2021 to support the government response. It is worth noting that the Cabo Delgado region is also home to the budding natural-gas industry; more information on this can be found later in this report. Thus far the movement's success stems from their capacity to hide in rural areas and the fear they have caused in local populations with their violent tactics (International Institute for Strategic Studies, 2021).

Given Cabo Delgado's strategic geographic location on the coast, close to high-potential natural resources, the situation will have a profound impact on Mozambique's sustainable development planning.

2.3. Economic Context

Mozambique's economic progress has reflected much of the political disarray suffered by the country for the second half of the 20th century, but it has also enjoyed periods of intensive growth.

At the end of the civil war in 1992, the Mozambican government adjusted to a market economy, which has remained largely unchanged since then, and implemented a package of macroeconomic reforms to better utilise the country's natural resources and transition towards a market economy. The IMF showed support for the fiscal policies adopted, such as the government's decision to lower trade barriers and simplify the tax system. GDP per capita remained insufficient, but some authors (Bachin, 2017) continued to advocate for the country's potential. International support for Mozambique's post-civil war transition also took an economic shape. Donors provided generous support conditional on compliance with a standard package of structural adjustment policies, including the removal of price distortions on foreign exchange and essential commodities, improved fiscal and financial discipline and civil service reform, among others (Gbla, 2004).

In 2010, the discovery of natural resources off the country's coast cast an optimistic light on the future of the country's economy, and with Mozambique's GDP showing an average yearly increase of 7.40% from the early 2000s (World Bank, 2022) the country appeared to be riding the wave of economic growth and development. Moreover, in 2014, the International Monetary Fund (IMF) selected Maputo to host their Africa Rising conference. Christine Lagarde, the managing director at the time, spoke of Mozambique's performance as proof that 'years of institution building and sound economic management'¹ can lead to financial success and be used as an example for peers in the region.

Unfortunately, a series of devastating droughts shrivelled the country's economic situation (Wren, 1992), coupled with the agricultural crisis of the 80s and 90s brought on by colonial agricultural structure and the Portuguese exodus had long-lasting and damaging effects on the economy (Raikes, 1984), that were worsened with continued weather devastation in the 2000s, too. The El Niño drought of 2016 wreaked further havoc on the already fragile economy, leaving thousands of farmers destitute and leaving the

¹ <https://www.imf.org/en/News/Articles/2015/09/28/04/53/sp052914>

government with no choice but to declare the country under red alert (FAO, 2017). However, the 2016 debt scandal was the ultimate nail in the coffin of Mozambique's rapid growth. Mozambique's "Hidden Debt" case is particularly relevant to this thesis, as it illustrates the poor financial governance system the country has been under and serves as an important factor to assess progress and capacity for engagement in other economic areas. In April 2016, the government acknowledged the existence of lending operations hidden from the public, partners and IMF which amounted to USD 1.4 billion (Fund, 2018). The loans were undertaken by private companies with public ownership (including by the Defence Ministry), and the total amount was upwards of 15% of the 2015 GDP. While the government alleged that much was allocated to defence expenditures and EMATUM bonds, the operations violated the Budget law and the legal threshold for guarantees provided by the Ministry of Finance. The guarantees were also deemed illegal by the Parliamentary Inquiry Commission set up to investigate, as well as the General Attorney's Office. A subsequent independent forensic investigation into the companies who undertook the loans by audit firm Kroll found that nearly USD 1.2 billion (55% of the loans net proceeds) remain unaccounted for. This led to the IMF to conclude an Article IV consultation together with a Debt Sustainability Analysis in March 2018 which deemed Mozambique in "debt distress". The Article IV report further highlights the need for fiscal consolidation and a debt rescheduling deal with creditors, as well as recommendations on governance reforms, some of which are already being implemented by the government (Roker, 2018). It has been estimated that it could take up to a decade for creditors to be repaid, with the government remaining hopeful that the money due from the Liquefied Natural Gas (LNG) production could help pay off some of the country's debt (Chilamphuma, 2018). However, in 2018, the Minister for Finance announced that there would be delays until the late 2020s due to political and economic instability in the country. There is a reason many refer to the "resource curse", a term coined by British economist Richard Auty (Auty, 1994) – in the case of Mozambique, since the discovery of LNG, the country appears to have been unable to support other industries in pursuit of its offshore riches. Since then, in 2019 Mozambique agreed to a USD 20 billion deal with TotalEnergies to produce LNG in the northern region. However, the aforementioned insurgency attacks by Al-Shabab have halted proceedings with the project currently projected to restart imminently (Carpenter, 2021).

These events, coupled with the devastating climate impact in Mozambique and heightened insecurity at the hands of insurgency groups highlight the need for greater economic transformation in Mozambique, but this needs to go hand in hand with strengthened governance structures. Mozambique is now a Low Income Country (LIC) with a gross national income per capita of just USD 460, ranking the country 44th of 54 African countries. While past high GDP growth extreme climate vulnerability and a weakened internal system that requires strategic sustainable investments to ensure long-term financial stability and enhanced climate adaptability.

2.4. Political and Institutional Context

The civil war in Mozambique wrought havoc on the country's nation-building efforts since independence in 1975. However, the country has seen important progress, including an increase of ten (10) years in average life expectancy, an increase of 60% in primary school enrolment and a 50% growth in agricultural production (Porter, 2018).

Control over the nation's institutions have long been fraught, with the civil war dividing the people and national identity. Throughout the civil war, Frelimo and Renamo battled it out for control of the nation, which hindered all governance and institutional strengthening. In 1994, with the end of the civil war, Mozambique ceased to be a one-party nation, but Frelimo retained its control of the Government winning successive elections. Despite the Accord implementing a proportional representation system in its National Assembly, the power is still concentrated in the executive branch of Government and at its helm is the President of the Republic, currently Filipe Nyusi.

As previously noted, one of the key points of the 1994 peace agreement was the establishment of free and fair elections. The 1994 elections were the first multi-party elections in Mozambican history. However, despite a strong start, there has been a gradual slowing in electoral participation – both for presidential and congressional elections - since 2004 when participation reached 36.42% , 44.63% in 2009, 48.64% in 2014 and, most recently, 51.84% in 2019. In 1994, participation stood at 88.03% and 69.51% in the second elections in 1999 (Institute for Democracy and Electoral Assistance, 2022). Electoral registration remains high at 89.79% (Electoral Institute for Sustainable Development in Africa, 2019). This is a clear sign of Mozambican's interest in their nation's political development, but decreasing participation rates also reflect a growing fatigue over the constant

bi-party battle for leadership. The people of Mozambique are hungry for change, but with Frelimo and Renamo engaging in political ping-pong for power, insufficient thought is given to the needs of the people.

Freedom House (FH) awards Mozambique a 43/100 for its freedom and its 'Political Rights' a mere 14/40, so 'Partly Free' (Freedom House, 2021). In order to obtain this number, FH studies the electoral process, a country's political pluralism and participation and, ultimately, its Government. There are considerable concerns about the electoral process, particularly regarding their impartiality and transparency. Reports of violence indicate that people do not feel safe at the polls and Frelimo's use of public money (Louw-Vaudran, 2019) to fund their campaigns does not align with democratic principles. Opposition rallies have regularly encountered push back from the authorities, with reports of numerous politicians and activists dying in the violence on and around election day (Amnesty International, 2019). The elections are regularly condemned as fraudulent, with civil society associations claim they are neither free, fair, nor transparent (Economist, 2019). In fact, some reports indicate Frelimo utilise the National Elections Commission (CNE)'s appointment process for the purpose of influencing the outcome of the elections (Electoral Knowledge Network, 2006).

Subsequent to the 2019 elections, discrepancies surfaced in reference to the records kept by the CNE in contrast to records kept by the National Institute of Statistics, namely pertaining to the number of registered voters. Numerous reports note a lack of transparency in the electoral process in Mozambique with claims of miscounted ballots and inconsistent vote tracking (Pitcher, 2019).

In terms of government composition, at present the Government is made up entirely of members of the dominant party, Frelimo. At the most recent elections in 2019, the president obtained 73% of the votes and, as the party obtained the most votes in all of the provinces, Frelimo was able to select all 10 Governors. President Filipe Nyusi is currently in his second (and final) 5-year term. For a young democracy that has suffered decades of civil war, this concentration of power could lead to power imbalances that could be peace-threatening.

In this sense it is worth noting that it took until 2018 for a constitutional reform to allow for indirect election of governors. This reform was passed to enhance the diversity in institutional leadership and allow for greater representation at the highest echelons of political power; it was also said to be a promising sign of political decentralisation and stability in Mozambique (Kossler, 2018). However, the result of the 2019 elections meant that Frelimo could select all 10 Governors, thus rendering these changes ineffective. As previously noted, one of the key factors for a successful post-civil war political transition is ensuring power balances are maintained and key stakeholders are not excluded from decision-making. By having a government formed entirely of members of one party, there is a possibility for resentment to breed and lead to instability.

The National Assembly is the second most important decision-making body in Mozambique and is comprised of 250 seats, with its members also elected to 5-year terms. At present Frelimo holds 184 seats, Renamo holds 60 and MDM holds 6 (European Union, 2019). While this does demonstrate a greater level of political pluralism, the balance is still skewed. Moreover, reports of harassment and threats faced by the opposition are rife (Nhamire, 2019), not to mention their lack of resources in comparison with the dominant party. For this reason, Frelimo continues to dominate the political landscape decades after it initially took control of the Government.

Chapter 3) Mozambique: Climate Change

“Well-defined problems lead to breakthrough solutions” (Spradlin, 2012).

In order to find a solution to a problem, it is crucial to understand the issue, from its causes and consequences to its core. This enables a full comprehension and efficient discussion on the matter at hand. It is globally acknowledged that climate change is one of the most pressing challenges currently affecting humanity, with its effects and consequences far-reaching and widespread, from the economy to global health. This chapter begins by seeking to provide a comprehensive definition of climate change, that will allow for a more accurate analysis and investigation into the challenges and opportunities Mozambique faces in this regard. The chapter then sets forth the dual approach taken by experts to date, which suggests the option to mitigate and/or adapt to its effects. Finally, the chapter concludes by circling in on the African continent and, specifically on Mozambique, the protagonist of this research paper.

3.1. Defining Climate Change

In 1979, the National Research Council coined the term ‘climate change’ to describe the “long-term change in the Earth’s climate” as a result of increasing amounts of carbon dioxide in its atmosphere (Chasan & Rossa, 2016). The National Research Council is a branch of the United States National Academies of Sciences, Engineering and Medicine, and is under the authority of a board composed of councillors belonging to each of these three schools. The Academies are non-profit institutions created to inform public policy by means of empirical research, promoting progress and change, and ultimately to “confront challenging issues for the benefit of society” (National Academies: About Us, s.f.).

Climate change is one of the most – if not the most - challenging issue being confronted by society. In the years since the term first came to be, the United Nations created the Framework Convention on Climate Change (UNFCCC), which has since achieved near universal membership with 197 countries having ratified. The Convention entered into effect in 1994 and its Article 1 defines climate change as “a change of climate which is attributed directly or indirectly to human activity that alters composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods” (UNFCCC: What is the UNFCCC?, s.f.). The Framework exists under

the umbrella of the United Nations, an international organisation geared at maintaining international peace and security, in addition to protecting human rights and promoting progress in a broad range of areas including, but not limited to, sustainable development and the protection of the environment (United Nations: Climate Action, s.f.).

More broadly, the United Nations describes climate change as the phenomenon caused by rising temperatures and continuously changing atmospheric conditions on our planet. These shifts can be both natural and manmade in nature, due to solar cycles and greenhouse gas emissions, respectively. The emissions causing climate change hail from all around the globe and affect the population as a whole, but not equally. In fact, the one-hundred least-emitting countries generate a mere three (3) percent of total emissions, and the one-hundred most-emitting countries generate an astounding sixty-eight (68) percent. (United Nations: Climate Action, s.f.). This of course begs the question, should some take more climate action than others? Should climate action be scaled in proportion to a country's emissions?

In 2017, Monika Hinteregger, a Professor of Torts at the University of Graz, authored an article on tort remedies for climate change damage. The main problem she identified in the article is in relation to the attribution of responsibility. In order for there to be tort remedies for climate change damage, there must be liability. This requires causation to link the accused of inflicting climate change damage to the actual harm done. Here lies the issue: "damage is caused by multiple emitters" and "emitters and injured parties are located far from each other". Furthermore, Ms. Hinteregger includes another level of complexity in that it is practically impossible to determine if the damage is a result of climate change or an entirely unrelated natural occurrence bound to take place regardless of climate change, though it is strongly suggested that these natural occurrences happen more frequently as a consequence (Hinteregger, 2017). That said, "in some countries, doctrine and courts are open to proportional liability" (Spitzer & Burtscher, 2017). That is, the idea that each emitter can be allocated their precise proportion of damage caused, thus being induced to reduce future emissions by the same amount produced in the first place (Hinteregger, 2017). Though climate change has become a legal category in and of itself, is it intrinsically linked to public policy. The capping of emissions needs to be accompanied by the ability to impose liability on those failing to reduce their carbon

footprint, thus helping to ensure climate change mitigation ensues (Spitzer & Burtscher, 2017).

Setting aside the blame game, humans experience climate change differently. Some suffer its consequences far more than others, namely inhabitants of small island nations and emerging economies. Consequently, the number of climate refugees is expected to rise exponentially as some areas become increasingly uninhabitable (United Nations: Climate Action, s.f.). In 2018, the World Bank estimated that three regions (Latin America, sub-Saharan Africa, and Southeast Asia) will generate 143 million more climate migrants by 2050 (Kumari Rigaud, 2018). Moreover, in 2017, 68.5 million people were forcibly displaced - more than at any point in human history. Estimates suggest that approximately one-third of these (22.5 to 24 million people) were forced to move by “sudden onset” weather events—flooding, forest fires after droughts, and intensified storms (McDonnell, 2018).

In order to preclude the effects of climate change, there is consensus on a dual approach consisting of climate mitigation and adaption measures. The former consists of actions adopted to diminish and impede greenhouse gas emissions, while the latter consists of actions adopted to curtail its effects, reducing susceptibility to climate change (UNESCO, 2019). The following section will explain each approach in further detail.

3.2. Confronting Climate Change

As mentioned, there are two general courses of action to tackle climate change: adaptation and mitigation.

Climate mitigation seeks to address the root cause of climate change while climate adaptation addresses its impact. Examples of mitigation efforts include practicing energy efficiency and adopting adequate modes of transport to reduce greenhouse gas emissions (GHG). Examples of adaptation efforts include landscape restoration and agroforestry to counteract its effects (UNESCO, 2019), or even capacity building and redesign of infrastructure to support resilience to the effects of climate change. While there are arguments in favor of one approach over the other, both approaches are equally important to combat climate change and are highly context-dependent. Furthermore, for these to truly gain traction, measures must be adopted by all, both on a corporate and individual level. Of

course, some subjects' impact far surpasses that of others, but global, concerted action will be the only way to achieve impact at the scale needed to limit the climate damage.

On the one hand, climate mitigation can imply using technologies and energies to substitute their high emitting counterparts. It can also mean changing our habits and management practices, as consumers and as businesses. Mitigation projects can be far-reaching and laborious, such as urban planning efforts to create high-tech underground systems. These practices can also be implemented on a smaller-scale, such as carpooling or using bicycles and other climate-friendly forms of transportation (UNEP, s.f.); the latter has been increasingly promoted by governments through strategic policies such as “cycle-to-work” schemes or tax deductions for using greener electricity, for example. Mitigation tactics and projects have often been favoured due to being more easily quantifiable and measurable. On the other hand, climate adaptation is the approach taken by those climate vulnerable countries and governments who need more than mitigation to curb the impact of climate change on their territory. For example, small island states who need sea walls to curtail the rising sea levels or building more temperature resilient homes in countries where temperatures are rising exponentially.

Despite the differentiation, governments are gradually becoming aware that mitigation needs to be accompanied by adaptation (Suarez, 2020). Particularly in areas that are suffering the changes in atmospheric conditions at exponential rates, such as emerging economies and developing countries. Some countries are particularly vulnerable to the effects of climate change, thus creating a need for international cooperation and financing (UNEP, s.f.); unlike other global challenges, climate change is indiscriminate and its effects can be felt by all countries, regardless of their emissions levels. Moreover, climate adaptation and mitigation measures are costly, meaning developing countries often have to make difficult prioritisation on where they should allocate their limited resources to protect themselves as best as possible. The African continent is the perfect example of an agglomeration of countries bearing the brunt of the effects of climate change, despite a relatively lower emission level than other regions, such as Europe for example. The greenhouse gas emissions from these regions accounts for a mere 3.82% of global emissions² and yet they are amongst those that suffer most from the devastating onslaught of

climate change, with droughts that leave thousands destitute and many others homeless, displaced or even with health afflictions.

Despite all this, there is no one-size-fits-all approach to climate change, and given the urgency of the issue, urgent action is needed. The UNFCCC has long been advocating for the need to ensure average temperatures do not go up by more than 1.5 degrees by 2030, which would involve a 45% reduction in global GHGs (United Nations: Climate Action, n.d.). The UNFCCC's Intergovernmental Panel on Climate Change produces a yearly report that analyses climate action taken and the results it has achieved, and in 2022 produced a devastating account of the lack of climate ambition by the world's richest countries, with majority action taken by developing nations (IPCCC, 2022). The reality is that change will not come from overpromising policy change in intergovernmental forums, but from strategic financial investment to ensure climate action can actually take place; this will be described in more detail in the following chapter.

3.3. Climate Change in Africa

The UN has a self-proclaimed 'Least Developed Countries' group, containing a number of African nations, and reported as being some of the most susceptible to climate change. They are considered the least able to endure climate stresses and their economic development is intrinsically linked to climate-sensitive sectors (UNDP, 2011).

Climate change threatens the fragile progress made by these emerging regions. They lack the necessary funding and infrastructure to adopt mitigation and adaption projects in the way needed to achieve global climate goals. While some countries have made their commitments to achieve net zero GHG emissions, many are unable to make this commitment. South Africa and Malawi have pledged to reach net zero by 2050 for example (Mitchell, 2021), while Nigeria has pledged to do so by 2060 (Olurounbi, 2021). The remaining fifty one (51) countries either claim to be net zero already, due to their modest emission rates, or lack the capacity to do so due to political instability, insufficient financial resources or even weak governance structures for implementation, among others.

The African continent is facing significant collateral damage from climate change, posing systemic threats to its economies, infrastructure investments and, ultimately, livelihoods. Some of the factors contributing to the region's susceptibility are its dependence on rain-

fed agriculture systems and the dependence of its GDPs on agriculture and other climate sensitive activities (African Development Bank Group, s.f.). Seven of the ten most susceptible countries to climate change are located in Africa, the top of said list being Mozambique. Research commissioned by UNEP found that the cost of adapting to climate change across the continent could reach fifty (50) billion dollars by the year 2050 if the global increase in temperatures remains the same³ (African Development Bank Group, s.f.). Many of these countries outlined optimistic aspirations in their Nationally Determined Contributions (NDCs) to the 21st Conference of the Parties (COP) Paris Agreement, committing to enhancing climate action through reducing emissions and building resilience. But for the continent, adaptation to the detrimental effects of climate change is pressing and requires immediate action (African Development Bank Group, s.f.). The promised and required measures are costly and dependent upon adequate financial, and technical support – oftentimes governments lack the capacity needed to design and implement the right projects for their needs (Thornton, 2018). In November of 2019, forty nine (49) African countries ratified their NDC's, underlining the need for investments of more than three (3) trillion dollars to implement the mitigation and adaptation measures set forth in them by 2030 (African Development Bank Group, s.f.).

The Sustainable Development Goals (SDGs) have been a crucial tool in this regard. Described by former UN Secretary General Ban Ki Moon as the “People’s action plan for ending poverty in all its dimensions”, the SDGs are a set of seventeen (17) goals that aim to end poverty, fight inequalities and tackle climate change by 2030. From 2016, all governments around the world have joined the pledge (British Council). However, for the continent to reach the SDGs, in addition to any other international commitments they may have, the key element will be the mobilisation of financing, both domestic and from abroad. Financial capital needs to be deployed in order for the region to take climate action, and not just from the public sector (Zubairu, 2021).

The Development Finance Institutions should be accompanied by private capital in mobilising funds, by implementing inventive investment vehicles and creating catalytic blended finance models that reduce the risk of climate investments, thus increasing the supply of profitable projects (Zubairu, 2021)

³ 2°C above preindustrial levels

There is a trend causing a surge in demand for green bonds and ESG related investments, but Africa runs the risk of being side lined. It has been noted that this changing financial architecture is being reshaped by and for richer countries' emissions targets. Throughout COP26, policymakers and leaders focused their attention on net zero commitments, thus overlooking the continent once again (Zubairu, 2021). International climate action must not overlook Africa's position, for this region suffers the consequences of circumstances it did not create. The effects of climate change are not proportional to its perpetrators, hence why the continent needs access to financing to not only mitigate, but adapt to changing climate conditions (Zubairu, 2021).

The priority for African countries seems to be more focused around climate adaptation than before. The effects of climate change are increasingly impacting upon the continent and, in recent years, conditions are reaching unmanageable levels. In the past couple of years alone, the region has seen countless unprecedented droughts and rainfalls, coupled with rising temperatures and unpredictable weather. Mozambique alone has had to endure a number of tropical storms and cyclones that cause substantial damage to its economy. With its economy heavily reliant on agriculture, as is the case for many African countries, it makes this sector particularly climate vulnerable. In fact, the floods suffered by Mozambique in 2019 were classified and declared by the World Food Program as being a Level-3 emergency, putting the country on a par with Yemen and Syria, both war stricken nations at the time (WFP, 2019). Ninety (90) percent of the infrastructure in Beira, the epicentre of the cyclone, was destroyed; this region also houses important energy infrastructure investments and natural gas deposits (African Development Bank Group, s.f.).

Not only does the African region bear a disproportional brunt of climate change, but the countries also suffer the consequences of decolonisation and foreign exploitation, which continue to this day. These nations are developing, their economies emerging, hence why climate change has not been prioritised in the past. Of late, it has become a trending topic, but the fact remains: insufficient funds, or lack thereof, are once again holding back this region. This inequality will now only be exacerbated – without the funds to properly tackle – and protect themselves from – the impacts of climate change, the region will once again fall behind its peers in terms of its development. Well-designed, strategic policies, and funds could enable support for the expansion of clean technologies and energies,

alongside other sustainable practices. This could earn the African continent a notable milestone, that of becoming the first region to reach specific levels of economic and industrial development using cleaner energy sources (Zubairu, 2021).

3.4. Climate Change in Mozambique

This thesis seeks to assess sustainable development opportunities in Mozambique, however to properly understand the context within which this should be implemented, it is key to have a thorough understanding of the particular climate context in the country.

With a coastline of over 2,500 km, and two thirds of its population reliant on agriculture for subsistence, Mozambique is a climate vulnerable country. This, coupled with high climate variability and susceptibility to extreme weather events only adds to its vulnerability. Furthermore, its protracted shoreline exposes the country, especially its coastal territories, to rising sea levels and dangerous meteorological conditions. Not only that, but the country's climate insecurity is further exacerbated by its low adaptive capacity, poverty, limited investment in modern technology, and weakness in its infrastructure and social services, especially in those related to health and sanitation (Climate Investment Funds, 2022).

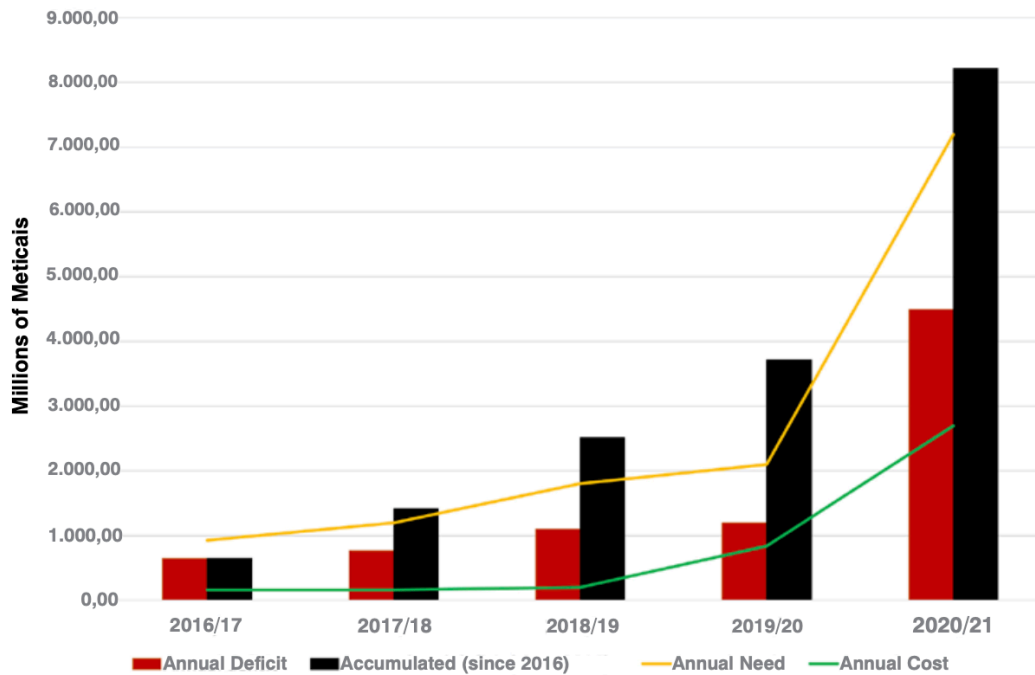
The effects of climate change in Mozambique can already be appreciated. Recent precipitation patterns and temperature fluctuations, in addition to a rise in sea-levels and in the frequency of cyclones, can only be attributed to climate change. According to the Red Cross, the intensity and frequency of precipitation is projected to increase, causing further flooding accompanied by long periods of drought, exacerbated by an estimated 1.5°C to 3°C increase in temperatures (Red Cross Climate Centre, 2021). These consequences lead – and have led to - the loss of human life, crops and animals, not to mention the destruction of social and economic infrastructure (Manuel, 2020). This then leads to Mozambique being more dependent on international support, oftentimes causing an increase in food prices, among other consequences. Thus, the country suffers greatly from decelerated economic development, as it is unable to progress against the backdrop of climate change, and this only makes it more susceptible to its effects; it is a dangerous cycle. This is a situation all too many developing nations are familiar with, whereby they rely on economic development to combat climate change, all the while they are unable to develop their economies because of the effects of climate change.

It is with this in mind that the UNFCCC requires governments to submit their NDCs – it is a tool to encourage governments to commit to plans of action on climate change, and also add an element of accountability by publishing them, holding governments accountable to their climate promises.

Mozambique’s first NDC, submitted in 2015, aims “to increase resilience in the communities and the national economy including the reduction of climate risks, and promote a low- carbon development and the green economy through the integration of adaptation and mitigation in sectorial and local planning” (Ministry of Land, 2015). The NDC goes on to indicate that, despite important legislative and institutional progress made, these ambitions can only come into effect with the financial and technological support from the international community. Interestingly, and with clear forward-thinking vision, Mozambique’s first NDC focuses on adaptation, presenting eight (8) strategic actions aimed at building resilience and reducing climate risk for communities, national ecosystems and the economy, with the ultimate goal to create a green economy across all social and economic sectors. These actions fall under three over-arching pillars of work: institutional and legal reform, research and systematic observation, and capacity building and technology transfer. This action will be translated into a National Adaptation Plan (NAP), as per UNFCCC suggestions, with one of the short-term objectives being to enhance its reporting capacities on long-term and near-term adaptation visions, goals and targets.

In 2021 Mozambique submitted to the UNFCCC an update of its NDC, to cover the period from 2020-25 (Ministry of Land and Environment, 2021). The document is the result of an iterative and participatory process, involving feedback and inputs from civil society, academia and the private sector – demonstrating Mozambique’s commitment to inclusive climate action. The document begins by outlining the economic backdrop against which it will delimit its climate ambition, including its response to the COVID-19 pandemic and the price of commodities on the international market. Below is a figure from Mozambique’s updated NDC that illustrates the annual and accumulated cost deficits since 2016 for national reconstruction.

Figure 5: Annual and accumulated cost deficits since 2016 for national reconstruction in Mozambique



Source: Mozambique’s Updated NDC (2021)

While Mozambique underlines the conditionality of its commitment to receiving international support, it outlines a set of strategic and ambitious climate commitments. On adaptation, Mozambique commits to strengthening its early warning system to provide adequate meteorological information to key stakeholders, including agricultural workers and fisheries; strengthened climate risk preparedness, including ensuring a bottom-up and top-down communication channel, and improving early warning information dissemination at the local level, and increasing the resilience of two key economic sectors, fisheries and agriculture, including by developing more low-carbon agricultural practices. Other adaptation commitments include reducing people’s vulnerability to climate change disease vectors, planning and management of biodiversity and coastal ecosystems, and the development of resilience mechanisms for urban areas and other settlements. Interestingly, Mozambique’s updated NDC provides greater detail and emphasis of adaptation measures aimed at strengthening its citizens’ resilience to climate change, as well as of its infrastructure and economic sectors. This change in focus reflects the political developments in the country and the openness to meet international best practices in this area.

The NDC also includes a table outlining its mitigation commitments, from improving access to renewable energy to promoting the creation of energy-distribution micro-grids, promoting low-carbon urbanisation, management and waste recovery and enhancing and expanding conservation of agro-livestock farming techniques.

While Mozambique's updated NDC does focus more heavily on adaptation, its commitment to designing a strategic plan where adaptation and mitigation action is complementary and efficient illustrates efforts to make progress on tackling climate change in the country, despite the adversity it has faced with regards to its sovereign debts, climate impact, the global pandemic and the Islamic insurgency in the northern territories.

3.5. The Economics of Climate Change

“The changing climate, largely wrought by humans, is bringing rising sea levels, temperature extremes, and more frequent and harsher storms. These threaten to displace lives, livelihoods, and communities, with clear economic consequences, often at a high price tag, around the world” (Bhatta, 2019).

Global economies are estimated to endure a ten (10) percent decline in value by the year 2050 should the projected trajectory of climate change continue (Swiss Re Institute, 2021). For this reason, reducing global emissions according to the targets set forth in the Paris Agreement is as much a priority for economic policy as it should be for all areas of national planning. Climate change impacts global economies through “damage to property and infrastructure, lost productivity, mass migration and security threats” (Wade & Jennings, 2016). Its effects are responsible for more frequent and damaging natural disasters, such as droughts and floods, that cause significant economic repercussions on a global scale. That said, emerging economies are most at risk, suffering greater losses as a result of the climate crisis. “Because of their growing systemic relevance, this group of countries helps anchor global stability” (Bhatta, 2021), but their susceptibility to the climate crisis could cause greater instability in a post pandemic environment.

Chapter 4) Mozambique: Sustainable Economic Development

4.1. Defining Sustainable Development

The publication in 1987 of ‘Our Common Future’ contains the most commonly used definition of sustainable development, as development that “meets the needs of the present without compromising the ability of future generations to meet their own needs” (Vitalis, 2003). Sustainable development therefore hinges on three concepts: firstly, development, from a socio-economic standpoint, equating to progress; secondly, needs in regards to the acquisition, distribution and use of natural resources for the purpose of ensuring quality of life for all; and, thirdly, future generations that require the long-term duration of natural resources (Klarin, 2018).

Thus, for development to be considered sustainable, it must be inclusive and maintainable in time. Its definition is intrinsically linked to the concept of the Triple Bottom Line. This theory is founded upon the notion that there are three pillars of sustainability and that “complete sustainable development is achieved through a balance between all these pillars” (Klarin, 2018). Therefore, sustainable development is born out of the intersection of all three pillars, consisting of social sustainability (people centred), environment sustainability (planet focused), and economic sustainability (profit seeking).

Figure 6: Triple Bottom Line, 1994



Source: Dalibozhko & Krakovetskaya, 2018

The independent intersection of the pillars leads to a series of outcomes that differ from sustainable development in that one of the three pillars is missing and has therefore been sacrificed for the so called greater good. The result of crossing people centred sustainability and planet focused sustainability leads to bearable development. The result of crossing planet focused sustainability and profit seeking sustainability leads to viable development. The result of crossing profit seeking sustainability and people centred sustainability leads to equitable development. Any of these three scenarios are preferable to pursuing a single pillar to develop and yet, this encroaches on utilitarianism, whereby we must choose whether to sacrifice one livelihood over another. In this case, livelihood refers to either the viability of the people, the planet or the profit.

Social sustainability “strives to ensure human rights and equality, preservation of cultural identity, respect for cultural diversity, race and religion” (Klarin, 2018). While environmental sustainability focuses on “maintaining the quality of the environment which is necessary for conducting the economic activities and quality of life of people” (Klarin, 2018). And, finally, economic sustainability is required to “maintain the natural, social and human capital required for income and living standards” (Klarin, 2018). This is all to say that for development to be sustainable, it must pay attention to all three pillars, in accordance to the theory of the Triple Bottom Line.

4.2. Defining Sustainable Economic Development

Once the concept of sustainable development has been discussed and explained using the Triple Bottom Line theory, the matter subject to analysis today is that of sustainable economic development. As has been touched upon the previous chapter’s sub-section on the economics of climate change, the climate crisis has an undeniable impact on the global economy. Countries’ economies are susceptible to changes in their environments, influenced by national planning decisions of all kinds and requiring sustainable development as much as any other discipline. Building on the foundation set in defining sustainable development, economic progress must be maintainable to be considered sustainable. Not only that, but it must be inclusive in nature for its maintenance to be truly sustained.

Furthermore, as an intersectional discipline, “success or failure on sustainability goals cannot be measured only in terms of profit and loss. It must also be measured in terms of

the wellbeing of billions of people and the health of our planet” (Elkington, 2018). That said, “the discipline of economics can assist the policy-making process in two inter-related ways: first it can help identify the necessary trade-offs that arise when the impacts of differing policy options supporting different pillars of sustainable development inevitably clash [and] second, and flowing on from the identification of trade-offs, economics can help design efficient least-cost measures to implement policies designed to improve the efficiency of the trade-offs” (Vitalis, 2003). Thus, economics benefits from sustainability, in that the progress made is maintained, as sustainability benefits from economics, in that it contributes to and supports the materialisation of any and all attempts at sustainable development, in all areas.

4.3. Sustainable Economic Development in Mozambique

Since gaining independence from Portugal in 1975, Mozambique has sought to progress socio-economically through a series of economic strategies. In the beginning, the Frelimo party adopted a central planning economy, before transitioning to a market economy system. In more recent years, the focus of Mozambican economic policy has shifted to the extraction of natural resources. As it stands, the country’s economy is delicate, suffering the consequences of the pandemic, in addition to climate change. Not to mention the poor management and misuse of public finance that has been festering for the past 45 years, in addition to the hidden debt crisis made public in 2016. In 2019, Mozambique scored 0.456, on a scale of 0 to 1, in the United Nations Development Program’s Human Development Index. Thus ranking it 180th out of a total of 189 countries. For reference, this indicator studies a country’s success in ensuring “a long and healthy life, access to knowledge and a decent standard of living” for its people over time (UNDP, 2020). That same year, it ranked 1st out of a total of 180 countries in the Global Climate Risk Index. This measurement analyses the impact of dangerous meteorological conditions on countries, using socio-economic indicators to inform its scores. Mozambique was therefore considered the country most susceptible to the adverse effects of climate change in 2019 (Eckstein, Künzel, & Schäfer, 2021). This is due in part, though not entirely, to the increased cyclone activity in the region, causing significant damage to local communities and impacting national supply and demand. As such, the country’s economy took another hit in the climate crisis.

Initially, following the fight for independence from Portugal, Mozambican authorities centralised education and healthcare, in addition to the administration of resources, during its first decade as an independent nation. Their priority consisted of accelerating economic success through rapid industrialisation, aiming to substitute food imports for the import of equipment and machinery not yet produced internally. The country relied on financing from domestic consumers and companies, in addition to the Organisation for Economic Co-operation and Development and socialist states, primarily. This approach ultimately failed for a number of reasons including, but not limited to, the obscure management of the national budget and the breakout of multiple armed conflicts in and around the area at the time. By the mid-1980s, Mozambican economy suffered a financial crisis that distorted prices and production, leading to shortages and an imbalanced economy in both internal and external markets (Cruz & Mafambissa, 2020).

In October of 1986, Samora Machel died in a plane crash and his replacement, Joaquim Chissano, pursued an Economic Reform Programme that aimed to reduce public expenditure, increase public income and liberalise prices and trade. By the end of the decade, the reformist and moderate factions of Frelimo had successfully substituted the more left leaning side of the party. They pushed social policy and incorporated the Millennium Development Goals, predecessor to the Sustainable Development Goals, into their national planning (Cruz & Mafambissa, 2020). In implementing a market economy system, the country's economy successfully flourished, becoming one of the top performers in the region. Though Mozambique's post-conflict recovery influenced its economic prosperity, its "solid macroeconomic management, pursuit of a wide range of economic governance reforms, and substantial inflows of foreign aid and political stability" are responsible for it being sustained through the years (Jones & Tarp, 2016). That said, the country still lacked structural transformation and required substantial infrastructure investment to counteract its weak competitiveness in international markets and incipient poverty rates (Cruz & Mafambissa, 2020).

In 2010, Frelimo shifted its focus to the extraction of natural resources after Anadarko Petroleum found Liquefied Natural Gas in the Rovuma Basin, located off the northern coast of Mozambique (Reuters Staff, 2010). The U.S. firm, acquired by Occidental Petroleum in 2019, entered into a natural gas and petroleum exploration contract in the region circa 2006 as part of Mozambique LNG. This project consists of "the design, build,

operation, and transfer of an integrated Liquefied Natural Gas (LNG) plant” in Area 1 and “could see Mozambique become one of the world’s leading natural gas exporting countries” (African Development Bank Group, 2019).

Also in 2006, another exploration contract came into existence, thus creating the Mozambique Rovuma Venture project. Both are closely related and, as such, the companies pertaining to each signed an agreement “to jointly develop some of the onshore and nearshore facilities and to coordinate common natural gas reservoirs” (BankTrack, 2022). An environmental impact assessment was undertaken for both projects and received approval from the Ministry of Coordination and Environmental Affairs in 2014, followed by the issuance of the project environmental licenses in 2018 on behalf of the Ministry of Land and Environment, formerly known as the Ministry of Land, Environment and Rural Development (TotalEnergies, s.f.). These projects present a potential transformational opportunity for Mozambican sustainable economic development, as they promise tax and profit-sharing revenues, foreign exchange income, infrastructure improvements, technology and knowledge transfer, and employment opportunities (African Development Bank Group, 2019).

That said, in 2017, Islamist insurgents staged attacks in Cabo Delgado, the region where these projects were to take place (Miguel & Baptista, 2021). Since then, a total of 1210 organised political violence events have taken place, with a total of 3885 reported fatalities, of which a total of 1691 are civilians (ACLED, 2022). This insurgency in the northern region of Mozambique has stalled the extraction of natural resources on which the country’s economy is so dependent, but TotalEnergies aims to restart LNG this coming year (Reuters, 2022). For context, Anadarko sold its stake in Mozambique LNG to French company TotalEnergies for 3.9 billion dollars back in 2019 (Reuters Staff, 2019), and now the latter is preparing to start the project back up again. TotalEnergies had had to declare force majeure following an attack on the town of Palma, which is home to many of the project’s workers. The company’s CEO, Patrick Pouyanne was hopeful earlier this year in an interview, but was aware that work was still needing to be done so as to ensure the sustainability of these projects (Reuters, 2022).

Chapter 6: Conclusion

In setting out to write about the Republic of Mozambique, I have not only learnt about a country I was almost entirely unfamiliar with, but I came to develop a deeper understanding of the impact history has on a country's present day level of development, informing its political and institutional context as well as its economic policies and strategies. Though ever evolving, a country is a product of its past, present and future. And it coexists in an international community, influencing its neighbour near and far, direct or indirectly. One country can change the course of history, one country can save the planet. One step at a time and not on its own. Mozambique has potential to help and be helped, if only it occupied a central role on the global stage in discussing matters such as sustainable development and climate change.

Furthermore, in studying the definition of climate change, in addition to the suggested methods of confronting the climate crisis and the impact of its effects on continents, countries and economies, I believe I have come to understand the role it plays in global policy, economy and development. In other words, the potential is has for destruction, as well as how mitigating and adapting to it can both assists and be assisted by economic development. Which brings me to the third and final section of this paper, sustainable economic development, a concept of infinite possibilities that too often encounters a great many barriers. Everything in this paper is intrinsically linked and is subject to in depth scrutiny in and of itself. I have brought them all together to paint a picture of a country struggling to keep up, an economy trying to emerge, against the backdrop of a climate crisis hindering any and all efforts to develop. My aim is to highlight to you, the reader, that like Mozambique, there are countless others, and they cannot be left behind.

You cannot have one without the other, meaning you cannot fight the climate crisis without developing your economy and vice versa. Just like one country cannot achieve sustainable development without all countries doing so.

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