



Norwegian University
of Life Sciences

Master's Thesis 2023 30 ECTS
Faculty of Landscape and Society

Solar Energy in Mozambique: Displacement, Compensation, and Justice

Turid Anita Kvislen
Global Development Studies

Acknowledgements

Shortly after my field work in Mocuba, a powerful tropical cyclone hit and caused damages to the district and other parts of the country. I would like to start off sharing my thoughts and condolences with everyone affected. To everyone who lost family or friends, houses, crops and in other ways was harmed.

I would further like to thank the people of Mocuba for their hospitality during my stay. A special thanks to my hosting family in Mocuba who warmly welcomed me to their home and took care of me during my six weeks of stay. Also great thanks to my interpreter, driver and friend Izamidine, for making the fieldwork as comfortable as possible. Humbly, I give thanks to everyone participating as informants, for their time and trust in me sharing their stories. I hope I will be able to bring your stories to a bigger audience and contribute in a way you find valuable.

Additionally, I would like to thank the Department of International Environmental and Development Studies (Noragric) at the University of Life Sciences for the opportunity, and where I clearly must thank my supervisor, Espen Sjaastad. I am grateful for the freedom I was given to choose a research topic I found engaging, for the patience and all valuable feedback throughout the process. My gratitude extends to my dear friends and family, Helle included, for your support on this journey and for proofreading my paper. Also, Henna, on behalf of the NMBU Writing centre has also contributed from early on with great advice and professional writing assistance.

Since June 2022 many knowledgeable and generous people with Mozambican roots or experience relevant to my project have shared their knowledge and social network. I am grateful to FUNDE for helping me with necessary documents. The project would not have been possible or as “easy” without this help.

Table of Contents

<i>Abstract</i>	v
<i>Acronyms and Abbreviations</i>	vi
1. Introduction	1
1.1. Research Questions	2
1.2. Structure of the Thesis	3
2.0. Literature Review	3
2.1. The Field of Political Ecology	3
2.1.1. Power Structures	4
2.1.2. Environmental Changes.....	5
2.1.3. International Best Practices	7
2.2. The Environmental Justice Framework	8
2.2.1. Recognitional Justice	9
2.2.2. Procedural Justice	9
2.2.3. Distributional Justice	10
3.0. Methodology	12
3.1. Research Design	12
3.2. Sampling Strategy	13
3.3. Data Collection	14
3.4. Data Analysis	14
3.5. Ethical Considerations	15
1.1. Limitations	15
4.0. The Case Study	16
4.2. The Process	20
4.3. The Outcome	26
5.0. Discussion	36
5.1. The Process	36
5.2. The Outcome	43
5.3. International best practices	47
6.0. Conclusion and recommendations	50
6.1. Recommendations	52
7.0. References	54
4. Appendix	60
4.1. List of Interviews	60

Abstract

This dissertation discusses the complexities and concerns surrounding green investments, particularly how they can inadvertently lead to the displacement of vulnerable populations, exacerbating issues of poverty and marginalization. The Central Solar de Mocuba (CESOM), a solar power plant in Mozambique, serves as a case study to explore the interplay between land management, climate change, and poverty. While CESOM aims to address energy access challenges through renewable sources, its implementation resulted in the displacement of smallholder farmers in the impoverished Zambezia province.

The case study, conducted in early 2023, focuses on investigating the process and outcomes of these displacements, emphasizing aspects of justice. Interviews with 37 stakeholders, including 19 of the recognized project affected people (PAPs), shed light on the dynamics at play. The PAPs were compensated in the form of new land and benefits; however, the allocation process exhibited disparities and another group of displaced smallholders emerged within the designated resettlement areas.

Uneven power dynamics during decision-making processes further complicated the situation for the affected population. By applying theories of power and the environmental justice framework, which evaluates justice in recognition, procedure, and distribution, the study examines both the process and outcomes of the displacements. These findings are also benchmarked against international best practices.

Overall, this research highlights the intricate relationship between green investment projects, socio-economic dynamics, and justice concerns. The CESOM solar power plant serves as a significant case study, revealing both positive and negative implications of such projects on local communities.

Keywords: Displacement, Renewable Energy, Compensation, Justice, Political Ecology, Power, Solar Power, Green Transition

Acronyms and Abbreviations

ADRA	Adventist Development and Relief Agency
CEO	Chief Executive Officer
CESOM	Central Solar de Mocuba (Interchangeably referred to as 'the company')
CLO	Community Liaison Officer
DUAT	Direito de Uso e Aproveitamento de Terra (Translates to 'the right to use land')
EDM	Electricidade de Moçambique (State-owned energy company in Mozambique)
ESIA	Environmental Impact Assessment
GDP	Gross Domestic Product
GTT	Grupo Technico de Trabalho
NGO	Non-governmental Organization
Norfund	Norwegian Investment Fund for Developing Countries
PAP	Project Affected People (Interchangeably referred to as 'affected people')
SLUCP	Simplified land use and compensation plan
USD	United States dollar
Household	Family unit
Livelihood	Income source
Machamba	Farming Plot/ plot (Interchangeably used in this paper)

List of Figures

Figure 1: The View of CESOM

Figure 2: A Machamba

Figure 3: The Tools

Figure 4: The Bicycle

Figure 5: One of the mills provided by CESOM

Figure 6: Mill

Figure 7: The library

Figure 8: The medical clinic

List of tables

Table 1: The Administrative structure of Mocuba

1. Introduction

Mozambique, nestled on Africa's southeast coast, is a tapestry of historical richness, cultural diversity, and striking biodiversity. Its fertile terrains and expansive forests are vital for the sustenance of many Mozambicans. Yet, daunting shadows cast by persistent poverty, climate adversities, and electrical shortages persistently challenge the nation's progress (Norfund). In the quest for sustainable energy solutions, projects like the solar power plant, Central Solar de Mocuba (CESOM), emerge as promising ventures, aiming to tackle environmental challenges and foster socio-economic development (Norfund 2020). However, while the world rushes towards "green" solutions, it is imperative to critically examine the socio-economic ramifications of these initiatives.

In 2015, CESOM, the 40-megawatt solar facility in central Mozambique, was launched as a groundbreaking endeavor by the national energy corporation, Electricidade de Moçambique (EDM). This project aimed to enhance energy availability, especially in Mozambique's rural and northern areas. With the combined efforts of Norway's Scatec ASA energy company and the Norwegian Investment Fund for Developing Countries (Norfund), the plant began operations in mid-2019. Hailed as a landmark in Mozambique's energy sector, CESOM stands as the first significant industrial solar facility integrated into the national electricity network (EDM and Impacto 2015a). With the Mozambican government's visionary goal of ensuring energy access to the entire population by 2030, prioritizing sustainable energy sources, CESOM is poised to be a blueprint for upcoming initiatives (ALER and AMER 2022).

However, the area of the power plant was once a farming ground for 223 local households (Norfund 2020). The significant dependence on agriculture by a vast majority of the Mozambican population, showcases the inherent connection between energy, land use, and food security. Despite the country's agricultural backbone, it ranked alarmingly low on the Global Hunger Index (2021), a stark testament to its food insecurity crisis. History of displacement issues concerning resource extraction purposes has been underscored in research, such as; Wiegink (2018), Twomey (2014) and Lillywhite and Sturman (2015). Furthermore, Almeida and Jacobs (2022), stresses the central aspect of land governance meeting the increasing climate changes in how the poor tend to be disproportionately affected if their land rights are not recognized, effectively implemented and respected where its consequences are justified with the purpose of combating climate changes. As land governance becomes crucial in safeguarding people's livelihoods from the impacts of climate change, addressing such displacement actions is of paramount importance.

There is an abundance of research emphasizing the outcomes of CESOM from a socio-economic lens and little attention to the implications of 'green project'. This lacuna in research becomes especially pronounced considering the global momentum towards renewable energy. Given CESOM's pioneering role in Mozambique's solar energy landscape, setting a precedent for subsequent solar initiatives, this oversight becomes particularly crucial. When international investors partner with lesser-developed countries, the stakes are raised. It is essential to ensure that the transition to sustainable energy does not inadvertently perpetuate inequalities or widen socio-economic divides, especially when these endeavors are led by influential corporations in nations already contending with challenges of poverty and vulnerability.

Given these complexities and challenges, this paper seeks to contribute valuable insights for future projects. While recognizing its inherent limitations, which will be elaborated upon subsequently, this endeavor hopes to shed light on the intertwined narratives of energy, land rights, and socio-economic implications, fostering a holistic understanding that will inform and enhance future sustainable energy ventures in developing nations.

1.1. Research Questions

One of the most daunting challenges I faced while crafting this paper was narrowing down my focus, given the myriad of compelling perspectives available. Ultimately, here lies my direction:

What are the justice implications of the displacement of agricultural smallholders that attended the construction of CESOM?

- * What structures of power influenced the decision-making process?
- * How equitable was the outcome of the compensation?
- * How does the displacements conform to international best practices?

1.2. Structure of the Thesis

This thesis will navigate an in-depth examination of the dynamics related to the displacement of smallholders due to the construction of CESOM. The forthcoming chapter, chapter two, delves into the theoretical terrain, spotlighting the domain of political ecology, which serves as the primary anchor for this dissertation. Additionally, the paper will unravel concepts and theories about power dynamics, leaning into the environmental justice framework to scrutinize justice in terms of recognition, procedure and distribution. Furthermore, the Mozambican land legislations will be presented for contextual knowledge, as well as an overview of international best practices for comparison. This chapter not only positions the study, but also provides a perspective for interpreting subsequent findings. The methodology section, chapter three, will detail chosen research strategies, fortifying transparency within the paper. Chapter four, which serves an exploration of the stories, experiences and sentiments shared by the displaced smallholders and others of relevance, enriching the research with tangible narratives. Followed by chapter five, which delves into discussions, aiming to bridge theoretical literature with insights derived from the findings, thereby addressing the research questions. Both chapters four and five are structured in two segments: the initial part delves into the process of displacement, while the latter focuses on its outcomes. The paper will then round off with conclusions.

2.0. Literature Review

Taking a Political Ecological stand, this thesis intends to evaluate justice in the displacements resulting from the construction of CESOM by applying various theories and concepts of relevance. The objective is to provide insight into diverse aspects of justice, facilitated by an examination of power dynamics, forms of transfer, the environmental justice framework and internationally recognized best practices. By studying these dynamics, underlying causes of environmental issues can be explored paving the way for identifying potential opportunities of positive change and more sustainable environmental practices. This chapter will start off with an introduction to the field of Political Ecology.

2.1. The Field of Political Ecology

Political ecology (PE) is an academic field that explores the power dynamics involved in environmental management. Emerging in the late 1970s, PE developed from neo-Marxist political economy and Cultural Ecology, encompassing normative, political, and critical perspectives (Benjaminsen and Svarstad 2021). Although various definitions exist, PE scholars

commonly agree on three key principles; Firstly, that the distribution of benefits and burdens in environmental change often is unequal among different actors. Secondly, how environmental governance influences socio-economic inequality within societies. Lastly, that power structures among involved actors tend to be disproportionate (Bryant and Bailey 1997 cited in Robbins 2012: 20). All three principles are essential when exploring justice implications of the displacement of the smallholders that attended the construction of CESOM. As a critical and constructive approach, PE can be metaphorically represented as both a hatchet and a seed. The hatchet symbolizes the deconstruction of unjust narratives and discourses, while the seed represents the provision of knowledge and guidance for the future (Robbins 2012).

2.1.1. Power Structures

Within the realm of political ecology, actor-oriented power analysis serves a comprehensive focus on how different actors exert power in shaping environmental outcomes. The sociologist Fredrik Engelstad, defined power as intentional, relational, and result oriented. This suggests that actors wield power assertively by taking intentional actions in interactions between two or more actors to achieve specific goals (Svarstad et. al. 2018). The two main forms of power that are commonly observed in actor-oriented power analysis is the dominant actors and the opposing actors. The dominant actors possess the ability to control resources, make decisions, and influence policies that impact the environment, often holding significant economic, political, or institutional power. They often include large corporations and government agencies. On the other side are actors who oppose and resist the actions of the dominant actors, advocating for more sustainable and equitable environmental practices. These actors often include local communities (Svarstad et. al. 2018).

Steven Lukes (1974), the political and social theorist, proposed a thought-provoking perspective on power, asserting that it is most effective when least noticeable. He introduced a well-known and debated three-dimensional framework that sheds light on the intricate nature of power, extending beyond overt conflicts to reveal subtler ways it operates and reproduces in social, political, and cultural systems.

(a) Drawing on Weber (1978) and Dahl (1957), the first dimension contains visible and observable power, where one actor (A) exercises power over another actor (B) to the extent that A can compel B to take actions or decisions they would not have taken under different circumstances.

- (b) The second dimension, influenced by Bachrach and Baratz (1963), recognizes power in non-decision making, where an actor's ability to avoid addressing issues of conflicting interests constitutes a form of power. This dimension encompasses agenda-setting and controlling the parameters of political discourse.
- (c) The third dimension delves into the more elusive and concealed aspects of power relations. It focuses on the ability to shape the preferences, beliefs, and perceptions of individuals and groups to the point where they are unaware of being subject to power. Power in this dimension operates through the manipulation of dominant ideologies and people's interpretations of situations, influencing the range of possibilities they consider (Lukes 1974). Moreover, the political sociologist John Gaventa (1980) studied how dominant elites exercise power and how marginalized communities respond to it. He identified mechanisms used by elites to discourage active resistance, such as shaping the beliefs and values of the less powerful to accept the current power structure as natural or inevitable. This can lead to a sense of powerlessness among marginalized groups, resulting in a state of "quiescence" where they passively accept their subordinate position without challenging the status quo.

Power and environmental change are two spheres that, at first glance, might seem distinct, but are deeply interconnected in the broader tapestry of societal dynamics. Further, a deeper look into Mozambican Land Legislations and 'international best practices' can help shed light on the specifics of the displacement process.

2.1.2. Environmental Changes

The bond between individuals and land is multifaceted and deeply rooted, encompassing both a dependence for livelihood and intrinsic values tied to identity and age-old traditions (Malik 2020). For a comprehensive understanding, an examination of Mozambican land laws will provide insights into the country's land management strategies and practices. This will be followed by a summary of international best practices for a holistic comparison.

Mozambican Land Legislations

Recognizing how Mozambique oversees land provides a context for the framework within which the process unfolded. According to the constitution, the State has the right and responsibility to govern and determine conditions to safeguard land as national interest, and to protect the rights of local communities (article 102 and 110 in Lei da Revisão Pontual da

Constituição da República de Moçambique 2018). All Mozambican land has since its independence from the colonial power of Portugal in 1975 been state property and to allocate land (Ministry of Land and Environment s.a.). Furthermore, the state shall recognize and guarantee the right to land for all Mozambicans, and that expropriation merely can take place for reasons of public purpose and under subject to reasonable compensation (article 84, Lei da Revisão Pontual da Constituição da República de Moçambique 2018). The land is governed under both statutory and customary tenure systems, which as of numbers from 2001, 80 percent of the total land was of customary land (Norfolk and Liversage 2002). The National Land Policy (1995), underscores that environmental stewardship should strive to enhance the well-being of its people, promote public engagement, and adhere to the 'polluter pays' principle (National Land Policy 1995). The Environmental Law, article 15 of the law stipulates that any activity with potential environmental consequences require an approved Environmental Impact Assessment to obtain a governmental authorized Environmental License (Lei do Ambiente 1997).

The Land Law was enacted in 1997, followed by the rural land tenure regulations in 1998 to facilitate access for investors while preserving the livelihoods of agricultural smallholders (Brink 2008, Land Law 1997). Although all land is state property, individuals, local communities, and corporations can be granted tenure rights to use and benefit from the land through a *Direito de uso e aproveitamento dos terras (DUAT)*, which translates to 'right to use land' (article 10, 11 and 12). The right to use land can last up to 50 years with possibilities of renewal and can be acquired by; a) occupancy in accordance to customary practices not contradicting with the constitution, b) occupancy in good faith for more than ten years and c) governmental authorization granted by law (article 12 and 17). The law prohibits the state from granting new occupation rights when others already hold rights to use the land, and the absence of a registration or title does not prejudice the right to use land if the occupancy is according to article 12 a) and b) (article 13 and 14). Formal DUATs are given under provisional authorization for two years for national title holders and five years for foreign title holders to fulfil the exploitation plan (article 25 and 26). Any revocation of the right to use land for public purposes, a fair compensation shall be paid to the occupants and any application for the right to use land enquire consultations with the community and statement by the local administrative assuring the land to be unoccupied (article 13 and 18 in the Land Law 1997, Regulamento da Lei de Terras 1998).

To comprehend how these regulations were implemented during the displacement process, it is essential to examine the administrative structure of the project area. Pre-colonial

local leadership was esteemed and considered representative by communities. But with the 2000 introduction of Lei dos órgãos locais do estado or 'Law of local organs', these leaders attained official institutional acknowledgment, diversifying their roles across distinct authority tiers. This move was to fortify the bond between state apparatus and grassroots society (Buur and Kyed 2005). According to the Lei dos órgãos locais do estado (2000), traditional local leaders are elected by their people to function under national guidelines as local governmental figures. They are essential mediators between state mechanisms and their community, managing essentials like education, healthcare, taxation, and land allocation (article 4). Based on article 2, leaders are mandated to collaborate with fellow authorities and gain community consensus before enacting changes. Figure 1 visualizes this political framework, showing a blend of traditional and official leadership. At the apex is the District Administrator, beneath whom is the Régulo, the locality's chief. The village is overseen by the Samassoa, and the Kanfumo manages the neighborhoods, who resolves small-scale day-to-day dilemmas, like land wrangles and societal disputes (ERM and Impacto 2015a).

Level of Territory	Government	Community (Traditional)
District	Administrator	
Administrative Post	Chief of the Administrative Post	
Locality	Chief of the Locality	Régulo
Village		Samassoa
Neighborhoods		Kanfumo

Table 1: The Administrative structure of Mocuba. (ERM and Impacto 2015a: 4-43)

2.1.3. International Best Practices

The United Nations' Food and Agriculture Organization (FAO 2022) introduced the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries, and Forests (VGGT). These guidelines, designed to protect genuine tenure rights and prevent forced land evictions, offer a benchmark for evaluating land-related displacements. The FAO (2022) lists core principles and recommendations, which include:

- (a) Legitimate Tenure Rights: The recognition and protection of legitimate tenure rights, including customary and other informal rights to ensure secure and equal land access, prevent dispossessions and promote respect of vulnerable and marginalized people.

- (b) Transparency: The guidelines encourage transparent and inclusive processes for negotiating, approving, and monitoring investment projects.
- (c) Compensation and Resettlement: In cases of compulsory acquisition of land, measures to address social and economic impacts by giving adequate and prompt compensation, access to alternative land or livelihood options are to be implemented. The livelihoods of the affected people are to be maintained or improved.
- (d) Participation and Consultation: Affected parties are to be consulted and invited to participate in the decision-making process related to the transfer by initiating inclusive dialogue, transparency, and respect for the rights and interests of all stakeholders, with emphasis on people of higher vulnerability. Affected people are to be informed of their rights and be given assistance as required for their ability to participate in consultations.
- (e) Grievance Mechanisms: The FAO (2022) encourages for the establishment of accessible and effective mechanisms for affected people to report negative or unsatisfying consequences, to seek remedies and to hold those responsible accountable.
- (f) Responsible Investments: The guidelines call for respectful investments aligned with national laws and human rights, and to conduct due diligence assessment of potential impact on tenure rights, food security and disruption on peoples' livelihoods. Affected parties should have their standard of living maintained or improved. Investors should evaluate the impact and be open to revise the conditions if the investment has left the affected people less off.

These guidelines (FAO 2022) act as a benchmark for assessing the displacement that took place. Furthermore, the Environmental Justice Framework will be instrumental in analysing various aspects of this guidance.

2.2. The Environmental Justice Framework

Environmental justice (EJ) emerged in response to discriminatory land practices in the 1980s in the United States when activists protested hazardous waste dumping in communities of colour. The protests turned into a movement highlighting inequalities in burden and benefit allocation in environmental interventions (Urkidi and Walter 2011). The movement expanded geographically, encompassing various issues, and gained recognition in academia as a normative approach promoting human rights, justice, and environmental sustainability (Walker 2012). In the realm of environmental justice, the political theorist Schlosberg (2007) among others developed the environmental justice framework to address injustices in environmental

interventions. The framework builds on the three elements of justice: recognition, procedure, and distribution which are interconnected and collectively influence overall justice.

2.2.1. Recognitional Justice

Recognition is a crucial aspect of justice in environmental interventions (Schlosberg 2007). It involves acknowledging people and groups based on their differences, impacting procedural and distributional justice. Misrecognition can lead to oppression and discrimination, as those excluded from compensation and decision-making tend to suffer injustice (Young 1990, Fraser 1998). Assessing justice in environmental interventions requires exploring who has been recognized and who has not, determining who benefits and who bears the burdens (Benjaminsen and Svarstad 2020).

The political philosopher John Rawls (1971) identified two fundamental human capabilities for a just society: the moral power of reason and the moral power of judgement (Rawls 1971). The PE professors, Benjaminsen and Svarstad (2020), refer to these capacities as 'senses of justice' and 'critical knowledge production,' representing the capacity of human beings to think rationally, engage in moral reasoning, and make informed and reasonable judgements about the difference of justice and injustice. Critical knowledge production is crucial in shaping people's sense of justice and their ability to exercise power. Unequal access to information in environmental interventions can influence judgments of justice (Benjaminsen and Svarstad 2021). Addressing inequalities in critical knowledge production is vital when assessing justice in these interventions, as biased narratives can impact the perception of what is just.

2.2.2. Procedural Justice

Procedural justice focuses on the fairness and transparency of decision-making processes, considering issues of participation and power structures (Schlosberg 2007). However, the term 'participation' is often used ambiguously, neglecting the actual influence individuals have in the decision-making process (Pretty 1995). To address this, the author Sherry Arnstein (1969) introduced the Ladder of Citizen Participation as a typology of public engagement. Arnstein (1969) emphasized that genuine citizen participation requires a redistribution of power, allowing ordinary citizens to influence decisions that affect them. Without this redistribution, participation becomes superficial and ineffective.

The model by Arnstein (1969), comprises eight rungs, representing different levels of participation, and is divided into three main degrees of participation:

- (a) Nonparticipation: At the bottom of the ladder are the levels of nonparticipation, where citizens have little to no decision-making power. This degree includes 'manipulation' and 'therapy'. In manipulation, authorities or decision-makers control the entire process, and citizens' involvement is merely symbolic, giving them a false sense of influence. In therapy, citizens may receive assistance, but their input and perspectives are not considered in decision-making.
- (b) Tokenism: The middle degrees of the ladder represent tokenism, where there is some level of citizen involvement, but it is not meaningful or substantial. The levels in this degree are 'informing', 'consultation', and 'placation'. In informing, citizens are provided with information about decisions, but there is no opportunity for them to influence the outcomes. Consultation involves seeking public input, but citizens' views are often ignored or only used to justify pre-determined decisions. Placation includes token gestures of involving citizens to give the appearance of participation, but they are easily replaceable and real decision-making power remains with the authorities.
- (c) Citizen Power: The top of the ladder is the degree of citizen power, where citizens have genuine influence and control over decisions. It includes "delegated power" and "citizen control." Delegated power refers to situations where citizens are granted some authority over certain aspects of decision-making. Citizen control represents the highest level of participation, where citizens have equal footing with other relevant actors in decision-making processes. Citizens actively shape decisions, and their perspectives and interests are genuinely taken into account.

Procedural and distributive justice represent separate facets of perceived fairness. Procedural justice addresses the fairness of the process itself, whereas distributive justice focuses on the fairness of the outcomes (Cook and Hegtvedt 1983). This means that while a process might be viewed as just, its outcomes might be perceived as unjust. Hence, it is crucial to delve into distributive justice.

2.2.3. Distributional Justice

Distributional justice concerns the allocation of benefits and burdens caused by environmental management and is the justice element most accentuated within EJ (Schlosberg 2007). The questions of relevance are *what* and *how* the benefits and burdens have been distributed to find who advantage and who carries the costs, or if the distribution leads a win-

win outcome (Benjaminsen and Svarstad 2020). However, the professor and environmentalist Walker (2012) accentuated that achieving a just distribution does not necessarily mean treating everyone as equal. Arguing that people are of different *vulnerabilities* and *needs*, as well as certain actors holding a greater *responsibility* than others in environmental change. This perspective suggests that certain individuals are disproportionately affected by environmental impacts and may face greater challenges in recovering from them.

In "A Theory of Justice," Rawls (1971) proposed that true justice is achieved through two principles: equal liberty for all and just inequalities that benefit the most disadvantaged and provide equal opportunities in a democratic society. These principles originate from the idea of decision-making under a 'veil of ignorance', ensuring impartiality. By this argument, he metaphorically envisioned a state of mind unknown of what position the decision-makers themselves would have. He argued that decision-makers would not take the risk of being worse off if they were unaware of the outcome. Eckhoff (Cook and Hegtvedt 1983) identified different approaches of distribution which can be conceived as bringing distributive justice:

1. Objective equality advocates for equal distribution, ensuring everyone has the same access to resources and opportunities, typically seen in even distribution of wealth or social goods.
2. Equality of opportunity emphasizes fairness by considering individual needs, abilities, and backgrounds. Equity addresses systemic inequalities to enable equal outcome of opportunity for all.
3. Subjective equality prioritizes resources for the most disadvantaged, considering factors like poverty and education. It values treating people based on their needs.
4. Rank order equality rewards based on merit, achievements, or skills. It supports systems like meritocracy. Often used interchangeably to merit, is desert justice. Although they bear similarities, desert justice can be understood as a subjective assessment of what an individual rightfully deserves. The distinction between desert justice and merit-based justice lies in their application: while 'merit' pertains to the commendable qualities of an individual, 'desert' is employed when an individual is accountable for a specific outcome or characteristic. This can be an outcome or characteristic the individual themselves have no control over (Celello s.a.).
5. Relative equality distributes benefits based on individual contributions, suggesting those who contribute more should benefit more.

In summary, this chapter highlights that the dissertation employs a Political Ecological framework, incorporating the discussed theories and concepts. Before delving into the case study, the methodology and its implementation will be outlined.

3.0. Methodology

The interpreter's task is to perceive through the lens of those under study. As Bryman (2016: 393) puts it, “The social world must be interpreted from the perspective of the people being studied, rather than as though they were incapable of their own reflections on the social world.” However, it is crucial to recognize that one can only provide an interpretation of the studied phenomena. Pulido and De Lara 2018 addressed the issue in how western researchers has a tendency to apply a western perspective when examining issues of the global South. This can lead to misrepresentations, oversimplifications, and a lack of understanding of the intricate cultural, social, and economic nuances inherent in these regions (Pulido and De Lara 2018). As a western woman conducting my research in Mozambique, I have tried to be conscious of this inclination. My main objective has been to amplify the voices of the individuals I have met along the way, presenting their stories and narratives with integrity and respect.

In this study, I employed qualitative methods to gather and analyse data pertinent to the research inquiry. Bryman (2016) suggests that a qualitative framework can provide a profound understanding of participants' perceptions, attitudes, and lived experiences. My aim was to deeply explore the intricacies of the case by focusing on the experiences and insights of the individuals involved. Consequently, I adopted an inductive strategy wherein the results are derived from the observed themes and patterns in the data, rather than being driven by preconceived theories or assumptions (Bryman 2016). Subsequent sections will detail the methodologies used for data acquisition and analysis, coupled with my considerations regarding research ethics, trustworthiness and reflexivity.

3.1. Research Design

This research adopts a case study methodology, delving deeply into one or several specific instances. The intent is not to draw definitive conclusions or make sweeping generalizations, but rather to illuminate a particular phenomenon, as posited by Bryman (2021). The case of this study is the displacement of local smallholders in the District of Mocuba due to the establishment of CESOM. I selected the case study approach to closely examine the experiences of the displaced group, particularly motivated by my interest in understanding the influence of a company linked to my homeland, Norway, on foreign soil.

Throughout this chapter, I will address the principles of reliability, validity, and replicability as they are relevant. These principles are crucial in safeguarding the rigor and quality of research. Specifically, reliability emphasizes the consistency and stability of findings over time, aligning with the idea of dependability. Validity, on the other hand, ensures that the study genuinely captures the intended phenomenon. Replicability guarantees that, if the research were repeated using identical methods, the results would remain consistent. I am confident that another researcher employing the same methodologies would arrive at comparable conclusions, as I will detail in this chapter (Bryman 2021).

3.2. Sampling Strategy

The phenomenological study was of a purposive sampling approach due to a strategic selection of relevant participants aligned with the research questions to gain variety and depth. As of a non-probability sampling form, the sample cannot be generalized for a wider population, but can however give valuable insight in the attitudes and experiences the participants might have in terms of the process of displacements (Bryman 2016). Regarding the sample selection, the target group for the study population was the PAP, where of 19 were interviewed individually and 21 were interviewed as part of two different focus groups. For heterogeneous depth, five displaced smallholders in a different location with four of their respective leaders, two members of the PAP representative group GTT, three CESOM workers, a former ADRA worker, the shareholders, a representative from Norfund, two EDM representatives, the Administrative Director of Mocuba and traditional local leaders were also interviewed. In total, I interviewed 37 informants (list in appendix).

Considering feasibility, the study was of a typical kind using sampling strategies of an opportunistic and snowball approach of a priori set criteria. The objective in the sampling selection among the PAPs was to achieve a variety of age, gender and area of representation based upon the list by EDM and Impacto (2015b). In practice the sampling took place either by stopping by houses in specific areas or being snowballed from one person to the other. Other informants were critically sampled for their position of relevance to the case, and contacted in advance of an interview. The study did not have a fixed number of participants planned, but rather led by the ambitions of data saturation, which is when no new informants bring new information (Bryman 2021).

3.3. Data Collection

I began gathering background information about Mozambique in the summer of 2022. This involved reviewing academic papers, tracking Mozambican newspapers, and connecting with individuals familiar with the country. My focus was on acquiring comprehensive knowledge about CESOM, the energy sector, land administration, and daily life in Mozambique. Additionally, I aimed to build a network that could introduce me to key informants. In December 2022, I travelled to Maputo to personally meet relevant individuals and immerse myself in local daily life.

My fieldwork in Mocuba spanned six weeks, from late January to early March 2023. Subsequent interviews were conducted either online or face-to-face, based on what was most practical and convenient. While the bulk of my interviews were one-on-one, I also facilitated three group discussions as a form of triangulation. As Bryman (2021) notes, triangulation serves as a method to validate results by integrating various research methods. Combining the two different methods helped give in-depth personal perspectives, while the group interview brought discussions of collective experiences (Bryman 2016). Typically, interviews ranged from 45 to 60 minutes, with the format predominantly being semi-structured, adjusted based on the participant's familiarity and the sensitivity of the subject matter. All the PAPs were posed general inquiries regarding household members, number of farming plots, distribution of compensation, and more. Supplementary questions were introduced as required to clarify or follow up on responses or delve deeper into specific aspects of the process.

3.4. Data Analysis

When analysing the data, I employed a thematic analysis approach. My initial step was familiarizing myself with the data, which allowed me to gain a better understanding of its intricacies. This deep engagement with the data was crucial in highlighting patterns and recurrent themes. Following this, I began the coding process, wherein I systematically assigned specific codes or labels to distinct segments of the data. These codes served as markers to distinguish various observations and insights. As I progressed, these individual codes transcended into broader themes, each encapsulating a specific aspect or narrative evident within the data. My objective was to group related findings under these emergent themes, ensuring a structured representation of the insights gathered from the data.

3.5. Ethical Considerations

All participants were briefed about the study's objectives and assured of their voluntary participation and the guarantee of anonymity. Each gave recorded verbal consent to be interviewed, and with their approval, interviews were recorded and subsequently transcribed. All collected data is securely stored, accessible only by me, and will be permanently deleted by August 31, 2023. During our sessions, participants were treated to refreshments and were graciously presented with a kilogram of sugar or a comparable token of appreciation. There are no photographs of the participants, and the identities of those who wished to remain anonymous have been protected. Pseudonyms replace any actual names used in the study.

As expected, ensuring privacy during the interviews was occasionally challenging, especially when family members were present. Their presence could have potentially swayed responses and posed risks to confidentiality. Yet, in some instances, these family members enriched the conversation, especially when the primary participant was elderly. At times, we requested privacy. An added ethical concern was the evident power imbalance due to my foreign status, necessitating an introspective approach and a commitment to engaging respectfully with participants. It was vital to be mindful of potential biases this dynamic might introduce from both ends (Banks and Scheyvens 2014, McLennan et.al. 2014: 149-150). Regarding reflexivity, I was conscious of local customs and the specific dynamics present in the interview setting.

1.1.Limitations

Like all studies, this research has its constraints. First, despite clearly communicating my independent role at the beginning of each interview, some informants might have perceived me as an emissary for CESOM. This could lead to skewed or inaccurate accounts, compromising the research's validity and reproducibility. Second, the primary mode of interaction between CESOM and the PAPs was oral communication, affecting the reliability of the information, especially since the displacement events transpired over five years ago. The dependence on informants' recollection raises concerns about accuracy. Additionally, my limited contextual familiarity could introduce bias or misunderstandings. Nevertheless, consulting varied sources and securing extensive background data were measures taken to mitigate this. The study is also skewed due to the absence of insights from CESOM and Scatec ASA. In hindsight, broadening my interviews to include more smallholders in Cuba and those in Igaru could have enhanced the depth and relevance of my insights.

Language posed a significant challenge. Most participants communicated in either Portuguese or their indigenous Bantu language. While I have elementary language proficiency, the majority of interviews necessitated an interpreter. Some even required a secondary translation into a specific Bantu dialect. Such multi-layered translations can introduce bias and risk the essence of the message being lost (Bryman 2016). Although I grasped some discussions, and the interpreter was proficient in multiple languages, including English and Portuguese, this added layer presents ethical considerations. Specifically, regarding the confidentiality of the participants: while the interpreter was unfamiliar with the informants, future encounters in the community are conceivable. This factor was weighed heavily when selecting an interpreter, and confidentiality concerns were reiterated and contractually agreed upon.

4.0. The Case Study

The purpose of this chapter is to provide a contextual backdrop to the case being examined. It incorporates testimonies from the displaced smallholders and insights from other stakeholders of relevance.



Figure 1: View of CESOM. Source: Private.

The Birth of a Project

The State-owned energy company Electricidade de Moçambique (EDM) initiated the construction of CESOM with the intent of bolstering energy expansion, particularly in the northern and rural areas of Mozambique. The solar plant is selling the energy generated under a Power Purchase Agreement over 25 years to EDM, who also owns 25 percent of the stakes. Further, the stakes are shared with the Norwegian Investment Fund for Developing Countries, Norfund, owning 22,5 percent and the renewable energy producer Scatec ASA as the majority investor of 52,5 percent (Norfund 2020, Norfund, s.a.). Scatec ASA is a renewable energy producer within solar, wind, hydro and hydrogen power with reported revenues of nearly NOK 6 billion in 2022 which makes approximately 580.6 million USD (Scatec s.a.A, Scatec 2023, exchange rate of 1 NOK to MZN 0.097 as of Currency World 2023a).

CESOM was built on a site spanning 126 hectares, located 13 kilometers from Mocuba's city center in an area named Bive, adjacent to the Licungo River basin (Norfund 2020). The selection of this site was aided by the Administrative Director of Mocuba, emphasizing its proximity to the Mocuba electrical substation, the city center and the principal road. Also, it was not found physically occupied by anyone. Mocuba is a district within the Zambezia province and houses roughly 400,000 residents (ERM and Impacto 2015a). The World Bank's 2016 report highlighted Zambezia as Mozambique's poorest and most populated province, with a staggering 70% poverty rate (Instituto Nacional de Estatística 2019). Moreover, in this province that's home to nearly 6 million people, about half of the individuals aged over 15 years are illiterate (Unicef 2022).

Recognizing its geographically strategic position and aiming to bridge connections with key cities in the province, the Mozambican government in 2014 declared Mocuba as a Special Economic Zone. This designation sought to lure more investments into Zambezia, thus promoting socio-environmental progress (ERM and Impacto 2015a). Despite such acknowledgment, the Administrative Director of Mocuba pointed out the difficulties in drawing industries and investors, primarily due to limited energy access and constrained water supply systems. In response, local authorities implemented strategies to mitigate these concerns, which subsequently led to a surge in new business ventures within the district.

In 2015, the consultancy firm ERM, in partnership with Impacto, conducted an environmental impact assessment (EIA) on behalf of Scatec Solar (now Scatec ASA), Norfund, and EDM. A primary aim of this evaluation was to pinpoint those who would be directly impacted by the project. The assessment identified that the land designated for the project was previously utilized by local smallholders for agricultural purposes. These individuals were

designated as 'project affected people' (PAPs), encompassing 208 households or 1,283 persons who owned 232 agricultural plots (ERM and Impacto 2015a). The EIA emphasized that the project would have a 'significant effect' due to the loss of agricultural lands and fruit trees, which would in turn impact food availability and subsistence levels (ERM and Impacto 2015a). Additionally, the assessment highlighted that the designated project location and its surrounding regions lacked electricity, relying instead on firewood, batteries, and oil lamps for illumination. The EIA accentuated that the field survey was conducted at a difficult time to evaluate since it was in-between harvest and tilling for the different crops. Additionally, the survey revealed that the majority of agricultural practices were primarily aimed at subsistence, with any surplus being sold. It emphasized the crucial role of these practices in ensuring food security (ERM and Impacto 2015a).

The Environmental Impact Assessment (EIA) identified the majority of those affected by the project as residents from nearby villages, predominantly from Bairro Samora Machel and Bairro de Mugonda, along with other adjacent areas. Out of the 1,283 impacted individuals, there was a marginally larger population of women, and a significant 90 percent were under the age of 49. Around 70 percent of the Mocuba district's inhabitants relied on agricultural activities for their livelihood. Additionally, nearly half of the impacted families had members in temporary employment, while 14 percent held permanent positions. Some engaged in selling livestock, fruits, crops, and fish. Others were involved in money transfers, crafts, or specialized trades like carpentry and blacksmithing. Notably, about 60 percent of the impacted family members had not completed any formal education, with over half being illiterate. In relation to the machambas (small-scale farms), 25 percent had inherited their lands, 38 percent occupied them, 34 percent had purchased them, and the remaining 3 percent had borrowed them (ERM and Impacto 2015a).

Furthermore, a Simplified land use and compensation plan (SLUCP) was conducted, which delved into the process of the PAPs and the situation of displacement. Among various duties, it stressed the obligation of CESOM and the local government to enlighten the PAPs about their rights and ensure a transparent and inclusive decision-making procedure. It also explored the potential vulnerability within the group of PAPs focusing on those "who on grounds of gender, age, physical or mental disability, economic, disadvantage or social status may be more adversely affected" (ERM and Impacto 2015b: 5). From this analysis, 222 individuals of the PAPs' households were classified as vulnerable individuals (ERM and Impacto 2015b).

Out of the 19 PAPs interviewed for this study, most owned multiple machambas, ranging between one to six plots. Typically, one machamba spanned half to a full hectare. They grew an array of crops including maize, peanut, rice, cassava, beans, potatoes, mango, and sesame. Leonora, one of the PAPs, with three machambas covering three hectares in total, mentioned she could garner up to 20,000 MZN during the high season and under 5,000 MZN during off-peak months. Her harvest calendar was specific; peanuts in March, maize in April, sesame in May, cassava in August, and beans in October. The months from December to February were particularly tough, making it hard to provide for her family. Earning a livelihood was challenging for many, given that the average monthly expense for a Mocuba household hovered around 20,000 Mozambican Metical (MZN), equivalent to about 313 USD (exchange rate of 1 USD to 63.9 MZN as per Currency World 2023b). Aida, also one of the affected people, described that she would use half of the harvest to feed her family and sell the remainder. During the peak season in April-May, she could earn as much as 10,000 MZN. The households of the informants would vary between two to 12 people.



Figure 2. A machamba. Source: Private

4.2. The Process

When inquired about the term "machamba", Elina, a widow from Mocuba, simply responded "*sustainability*"¹. Aida, another woman in a nearby neighborhood, referred to a machamba as the "*source of life*"². These sentiments resonated with the majority of those interviewed, as for them, their machambas were the primary source of sustenance, a tradition passed down over generations. This chapter is dedicated to the statements of the smallholders, as well as other stakeholders of relevance.

Participation

An unannounced visitor, a Régulo, approached a young man named Bruno as he was tending his machamba. The Régulo broke the news that a solar power plant would be built on Bruno's plot of land, and that a meeting to discuss the plans would be held. Later, as Leonel was plowing a nearby plot of land, he, too, was visited by the same Régulo and a few others who were setting up markers around the designated area. The news of the upcoming construction was also broadcasted on the local radio station, inviting all those who had machambas within the affected area to meet beneath a well-known tree in Bive.

As a result, a sizeable group attended the meeting, which was led by the same Régulo and representatives of the project. They were given questionnaires and numbered registration cards for compensatory measures. One meeting led to many where discussions centered around compensation. CESOM proposed providing monetary compensation for their crops and new land in the two areas Medhatube, located at an estimated 35 kilometers distance from the project area, and Cuba, about 50 kilometers distance, as restitution. The affected people initially rejected the proposal and voiced concerns about the distance, which led a counteroffer by the company of supplementing with bicycles and houses near their farming plots. During these discussions, the need for a local hospital and extension of the school was also raised, and the company reportedly promised to contribute to reality. Also, the PAPs stated to have been assured priority for employment opportunities during the construction and maintenance of the PV plant. Aida, as others, was of the impression that job rotations would take place every three to six months, allowing every PAP to have a chance to work. Daniel added that they were

¹ "Makalo'otcha" Elina, February 14, 2023. Longwe (Bantu language). As a former Portuguese colony, the official language is Portuguese, although indigenous Bantu languages remain widely spoken throughout the country (Energypedia s.a.).

² "a machamba? A machamba é para mim a fonte da vida." Aida, February 10, 2023. Portuguese.

informed about a monthly salary of 15,000 MZN for the job. The affected parties eventually settled on this proposal, but allegedly did not receive a formal written agreement.

In the meetings, Aurelio expressed his needs, but felt ignored. This was echoed by Amarildo, who had repeatedly requested better transportation options, particularly for the vulnerable members of the community, but was informed that bicycles were the only provision available. Some PAPs stated that they were given the opportunity to voice their concerns at the end of every meeting. Others said they were merely informed of company decisions without being given any chance to voice their own. Hence, the experiences among the PAPs varied when it came to the opportunity to communicate their needs and preferences. According to the Norfund case study (2020), on the other hand, all the affected people had been visited in their homes for consultation matters. However, none of the PAPs could recall such an event, except for two. Both Alisha and Leonora had been visited by the second liaison who merely took a photo of their houses and left. Also, the Régulo of the project area and the leader of the majority of the PAPs, stated that he had not been involved in the process. He learned about the relocation from some of the affected people and had not been approached by CESOM or any project representatives. He believed that the exclusion might have been intentional, as another Régulo had overseen the entire process and may have purposely kept him out to benefit alone. Further explaining that he was new in the position when the displacement took place and was unaware of the involvement of his predecessor.

To facilitate interaction with the PAPs, a community liaison officer was employed, henceforth referred to as the liaison, who was “...responsible for sustaining a positive working relationship between the community and CESOM.” (Norfund 2020: 7). The representative from Norfund emphasized the importance of having competent liaisons with special training on resettlement issues. The majority of PAPs mentioned two people who had served as liaison during the process of displacement, but Florencio recalled the presence of three individuals. As per Florencio's account, prior to the current male liaison who took the position in 2019, there were two women who had previously held the position. Albeit others did not remember the first liaison, this paper will consider the existence of three liaisons.

Cooperating with the liaison, representatives of the PAPs were elected to form the group called Grupo Técnico de Trabalho (GTT), which translates to ‘technical working group’. The GTT was selected by the PAPs in one of the earlier meetings and consisted of eight representatives, in addition to the influential Régulo and his representative. The mission of the group was to “...represent community members in matters concerning the project, and to document and follow-up on the complaints received.” (Norfund 2020: 7). Additionally, they

allegedly also had a representative in Cuba who reported to the company on local conflicts. Florencio, one of the GTTs, stated that they would inform every PAP of meetings, thus knowing where everyone lived was necessary. The GTTs got a fixed salary of 5,000 MZN a month, that was increased from 3,500 MZN in 2019. Weekly working hours varied depending on necessity.



Figure 3: The Tools. Source: Private



Figure 4: The Bicycle. Source: Private

The Transfer

A Kanfumo mentioned that a Régulo played a crucial role relocating the PAPs and finding suitable resettlement land. An area in Medhatube had initially been chosen but was not of sufficient size to accommodate all the PAPs. Consequently, alternative land was identified in Igaru, an area near the project site. A Norfund representative stated that the alternative land was prepared for the PAPs, but that local farmers required it returned. The Kanfumo added that the local peasants demanded compensation for displacement, which resulted in a continuing search for land. The Norfund representative said it had been challenging finding a new area. Eventually an area further away was bought by a local entrepreneur (Norfund 2020). The area known as Cuba.

Most of the affected people reported to be given sufficient time to harvest their produce before being accompanied by the company to their new machambas in Medhatube and Cuba. They also received seeds, maize grains, bicycles, hoes, machetes, watering cans and the resettlement machambas with formal DUATs in their names. Some had also received additional tools such as axes, boots, rakes, and pulverization spray. Laura, a lady from Muandiva, highlighted that the tools were distributed on two different occasions, resulting in an unequal allocation of the tools. Louis for instance, received double the number of hoes and watering cans. Similarly, Leonora, one of the PAPs who was also working at the plant, received two watering cans and three hoes. The compensation plots were stated to generally be of similar

size to their original machambas. Aurelio expressed dissatisfaction, stating that his new land was smaller. Conversely, Bernardo claimed that his new land was twice the size.

The monetary compensation was also distributed. Amarildo, together with other PAPs, were initially taken to an office near the local airport, where they were informed about the specific amount of compensation they would receive. Subsequently, the majority of the affected people were transported by the company to Nando Village, a hotel and restaurant in town, where they received cheques before proceeding to the bank. The company's representatives distributed the compensation cheques, while some of the local leaders and the liaison were present during the banking process. Due to the large number of affected people, this process spanned several days. Representatives from the GTT were present in the vehicles transporting the PAPs and assisted in organizing the lines outside the bank. Among the majority of PAPs interviewed, the compensation amounts varied, ranging from 20,000 to 90,000 MZN. However, one woman mentioned that she and her deceased husband owned a significant area and received one million MZN as compensation. A few of the PAPs had bank accounts and received their compensation directly to their accounts.

The Kanfumo revealed that he was aware of several PAPs who had paid a so called 'tax' ranging from 200 to 300 MZN to a Régulo, hoping for future benefits. Paolo said to have paid 200 MZN of his compensation money to a Régulo at the bank. Apparently, during their journey to the bank, a man representing the Régulo informed Paolo and others in the same vehicle about the payment, accentuated its mandatory nature and threatened to jeopardize their chances of obtaining employment at the plant if they refused to pay. Similarly, Leonora, along with everyone she knew, paid 200 MZN of her compensation money to a Régulo. Laura and her husband who was a part of GTT on the other hand paid 100 MZN to a Samassoa. According to Laura, the tax had not been mentioned in any of the meetings, leading her to believe that a few local leaders were sharing the collected money among themselves. However, not all PAPs were requested to pay this tax and therefore some did not make any payment. Louis, who also was part of the GTTs, and Amarildo, confirmed that they had not paid any taxes.

The PAPs classified as vulnerable were by CESOM offered the opportunity to start micro-businesses. The GTT had informed the classified vulnerable PAPs to meet at a school in the area where a variety of business initiatives were outlined. They were presented with photographs depicting various activities and goods, such as a woman with flowers, a grain milling machine, a man with fish, and more. The purpose of this exercise was to give the vulnerable PAPs an option to either work at two grain mills provided by CESOM or to start their own home-based micro-business. Florencio of the GTT mentioned that all vulnerable

PAPs had attended. A few chose work at the mill, while the majority went for the alternative of a home-based business start-up of fish or other types of food of preference. Gisa explained that as a result of the choices, two lists were made with the names of the vulnerable PAPs either choosing the mill or the home-business. Inesh was of those who chose the home-based microbusiness and received 20 liters of oil, 25 kilograms of rice, 25 kilograms of beans, 25 kilograms of maize, a box of soup, biscuits, salt, and dried fish.



Figure 5: One of the mills provided by CESOM. Source: Private



Figure 6: Mill. Source Private

The two micro-mills processed grain from seven in the morning to five in the evening every day, except Sundays. Valber and eight colleagues worked at the first mill, splitting into three groups that rotated weekly tasks. In the peak season from April to May, they served 15-20 customers daily, and during the off-season, around five farmers daily. Each of the nine workers earned 1,500 MZN monthly. At the second mill, Bernardo, Florencio, and another colleague shared duties. One operated the machinery, another managed the finances, and the third was in charge of weighing. In their busy months, they catered to 50-60 farmers daily, which dropped to 20-30 during slower periods. They earned between 4,000 to 5,000 MZN each in the high season and 1,000 to 4,000 MZN in the off-season. Additionally, they set aside 2,000 to 3,000 MZN every month for maintenance of the mill.

The Adventist Development and Relief Agency (ADRA), a non-governmental global humanitarian organization, was hired by CESOM to help develop and implement livelihood restorative activities as part of a livelihood restoration plan (Norfund 2020). According to a former ADRA worker, the organization assisted with the micro-businesses by educating them in how to develop a business plan. They were also hired to give financial training, as well as

agricultural training and support to the affected people in their new machambas. This involvement spanned a duration of one and a half years. The group in Samora Machel said the theoretical training and instructions were provided in a demonstration plot twice a week for the first two months. Subsequently, ADRA supported the PAPs in their new farming plots. One of the affected people, Daniel, described the training as of a conventional cultivation approach emphasizing techniques for cultivating resilient crops and achieving improved harvests. The ADRA representative saw it as essential to provide knowledge and skills above money to promote a sustainable development.

CESOM implemented several initiatives to support the communities of Mocuba. They transformed two containers into a library for the students adjacent to the primary school in Mugonda and a medic clinic. According to the local EDM substation worker, CESOM also took the responsibility of constructing dirt roads that connected the resettled areas in Medhatube and Cuba. The Norfund representative highlighted efforts by the company in building two bridges and installing drinking water boreholes. Further accentuated that the infrastructure improvements had a dual impact, benefiting both the PAPs and the hosting communities. Moreover, that CESOM created job opportunities. He explained that during the construction phase, workers were hired to prepare the area and install the panels. Later, for maintenance purposes cleaning the panels and the office, replacing broken panels, carrying out simple machinery repairs, and keeping the area tidy by mowing the grass and tending to other plants.



Figure 7: The Library. Source: Private



Figure 8: The Medical Clinic. Source: Private

Transparency

CESOM and the liaison would conduct multiple meetings with the PAPs before and during the displacement process. Inesh, a woman categorized as one of the vulnerable PAPs, mentioned that they used to have evaluation meetings every other month with CESOM particularly focusing on the group working at the mill. Florencio of the GTT partially echoed

this, stating that they along with the liaison, would hold monthly meetings with the mill workers. The liaison allegedly also held regular meetings with the GTT. Florencio further mentioned that CESOM, along with representatives from Maputo and Norway, had gathered the PAPs for evaluation mid-year 2022 conducting individual interviews asking questions concerning their experienced outcomes of the displacement process. Some PAPs had attended a meeting in February 2023, just a few days before the interview took place.

4.3. The Outcome

Participation

The group in Samora Machel claimed to have been unaware of the actual distance to their compensation machambas in Cuba when agreeing to the resettlement and expressed that many promises made by the company had not been fulfilled. They expressed appreciation for the more fertile lands in Cuba but found it unfair since it was located in another district that was too far for them to access easily. Yet, they believed that the project was a valuable addition to the national energy development and contributed to the economic growth of the local government. According to the former ADRA representative, many PAPs had shared their opinions and experiences with him, primarily focusing on challenges they faced farming in Medhatube, as well as the distant location and experiences of land conflicts in Cuba. He was of the impression that the affected people had not been adequately heard when sharing their concerns during the decision-making process. He exemplified by referring to how the solution of the company addressing the distance to Cuba were to provide with bicycles, which did not encompass the difficulties they faced in bringing family members or transporting their harvests. Additionally, he explained that the PAPs were accustomed to and preferred returning home on the same day.

When asked about the liaisons, several of the PAPs spoke highly of the second and previous officer. Aida praised her for being actively involved in their lives and engaged process of displacement. According to Aida, the second liaison had deep knowledge of where each PAP lived and where their machambas were located. She was known for listening attentively and offering assistance in their daily struggles. Daniel shared this sentiment and described the second liaison as humble, present, and attentive to their needs. Similarly, Alisha recalled how the second liaison would regularly visit and provide assistance. She had even made promises on behalf of the new liaison, assuring them of receiving doors and cooking pots. Unfortunately, these promises were never fulfilled, and communication eventually ceased. Aida and others expressed disappointment in the successor, who lacked the same level of engagement and

knowledge. On top of that, they lacked means to contact the company, besides going to the GTT. In contrast, Florencio, a member of the GTTs, had a positive view of the third liaison. He described the liaison as always available and willing to accompany them during visits to vulnerable individuals, particularly if they were ill. Florencio believed that the liaison would assist whenever necessary, although they had not yet encountered any emergency situations requiring immediate help.

In terms of the GTT, Alisha did not possess their contact information, and no meetings had been initiated by the representatives themselves. She expressed frustration, feeling unheard and not taken seriously when attempting to address issues with them. Laura and Marcia shared similar experiences, who had reached out to the GTT regarding promised job opportunities but not received any response. Marcia believed that the representatives failed to communicate this information to CESOM. Additionally, both Laura and Marcia mentioned that communication with the representatives had ceased after the displacement process. Daniel also tried to raise concerns with one of the representatives but saw no tangible change. He understood that the representatives often dealt with land conflict issues alongside CESOM representatives. Paolo, who shared a similar sentiment, had spoken to a representative twice.

The GTT representatives were occupied with other issues. Louis expressed gratitude on behalf of the affected people, but highlighted that their primary concerns revolved around the damaged bridge and the stolen water pump. He further explained that the GTT was primarily occupied with addressing land conflicts, encountering several cases each month. He specifically mentioned that land conflict issues were particularly challenging in Cuba, as only four PAPs were still cultivating in Medhatube. In fact, just the day before, he had been in Cuba dealing with a land conflict where one PAP had sold their plot and the new owners were cultivating outside the designated boundaries. Florencio added that he spent a significant amount of time monitoring the area around the plant to prevent unauthorized cultivation or any potential harm. He mentioned a previous incident where someone had cut the fence near the plant, raising concerns that individuals might start cultivating the land and subsequently claim ownership rights after a few years.

The Kanfumo was of similar impression. Along with other local leaders, he had participated in meetings led by a Régulo, the liaison, and CESOM. He felt disconnected from the process since he did not personally benefit from it. He believed that although he could raise issues with the involved parties, it was unlikely to yield significant results, as the PAPs had previously tried without much response. Jenesses saw the experience of displacement as fair, emphasized the importance of giving the affected people a voice in future projects since local

leaders may not adequately represent their interests. The Régulo who had been excluded accentuated the lack of information and transparency by the company towards the PAPs on what rights they had as displaced people. He added that such measures would enable the affected people to address their concerns more effectively when needed.

The Transfer

According to the Norfund representative, the process of finding suitable replacement land, following the inconveniences in Igaru, resulted in the PAPs resettled in Cuba receiving their new machambas later than those in Medhatube. Soil analysis had been conducted to ensure the suitability of the soil for farming in the replacement lands and there had been diligent monitoring of everyone's crops. In Medhatube, some of the affected people had faced challenges in cultivation because a significant amount of topsoil had been removed. It was projected that the soil would restore itself within one to three years. To promote food security during the soil recovery phase, the impacted PAPs were provided with food subsidies. This initiative was extended to the affected people who had to abandon their machambas before harvest and PAPs who faced delays in planting due to various circumstances. The representative concluded that thanks to the training provided by ADRA, most of the affected people had achieved improvements in their cultivation practices.

Despite this, Jenesses, resettled in Medhatube, abandoned his compensation plot after failing to grow crops for three years, citing less fertile soil than his old machamba. Consequently, he had to use the compensation money to purchase new land. He and most PAPs he knew of resettled in Medhatube had allegedly done the same. Leonel on the other hand, continued to cultivate in Medhatube, but he mentioned the disadvantage of not being close enough to access food when he was hungry, as he could with his previous machamba. Additionally, he expressed concerns about safety in the unfamiliar area, not knowing what to do in case of an emergency. While Bernardo also struggled with various challenges in Medhatube, Laura continued farming despite lower yields due to rocky soil. In contrast, Louis found his new land more fertile than his depleted old one. Paolo was still cultivating, but only cassava. He explained that it did not affect him much since he had three other machambas. The Kanfumo believed that the Régulo who initially suggested the area was aware of the poor soil conditions in Medhatube, as the neighboring community had also given up on cultivation. He suspected that the Régulo had personally benefited from the process by selling the land to the company.

Valber, after being resettled in Cuba, noted the improved fertility of his new machamba compared to his previous one. Sadly, after his compensation bicycle was stolen, his family had to walk long distances. Similarly, Aida praised Cuba's soil fertility and expanded her cultivation to maize and sesame. However, all the 15 members in the group from Samora Machel had stopped using their machambas in Cuba. Most faced issues in their first year due to transportation challenges, poor roads, and the damaged bridge. Moreover, their bikes were stolen or malfunctioned, and concerns heightened after a resettled woman was killed in Cuba. Consequently, Marcia, Alisha, and Elina ceased using their plots mainly due to transport challenges and theft. Elina felt that prior smallholders sabotaged resettled farmers by stealing crops and damaging the bridge. This sentiment was partly supported by the former ADRA representative who explained that the smallholders had not been compensated and therefore alleged retaliations, including theft of crops, burning machamba houses, and being violent.

In Cuba, a group of four local leaders expressed deep disappointments in what negative impact CESOM had brought upon their community. They explained that in 2011 or 2012, an entrepreneur stripped off several local smallholders when claiming ownership over their machambas citing plans to start a jatropha business. The business was unsuccessful within the first two or three years of storing jatropha to sell, and the land was left fallow. Suddenly in 2016, the local Régulo was visited by the entrepreneur and representatives of CESOM informing him of the planned resettlement of PAPs. The Régulo described the visitors as determined to use parts of the land in his area with the purpose of the resettlement, including both the land previously obtained by the entrepreneur and more. Allegedly, CESOM promised a school, a hospital, a hand water pump, and a bridge as well as doors, seeds, and food for the community to compensate for their loss. Because of their level of poverty, the local Régulo felt compelled to accept this offer. Besides, he was in desperate need of better options of fetching water in his community, considering a high risk of crocodile attacks in the nearby river. Subsequently, the jatropha entrepreneur suddenly obtained a DUAT for the land and sold it to CESOM.

The four local leaders described a sense of being forced to relinquish the lands, as they were not consulted or given an opportunity to voice their concerns. They believed that the issuance of a DUAT to the new owners signified the government's endorsement of the land transfer. Their disappointment deepened when most of the promised compensation, except for the water pump and bridge, did not materialize. Tragically, the bridge became unusable due to heavy rains altering the terrain, and the water pump was stolen, leaving them with nothing. Additionally, the crime rate had gone up. They had experienced robberies and a woman had

been killed. The Régulo stated that “we never experienced these crimes before the resettlement and now no more because the people from Bive had stopped coming.”³ The Régulo had five times visited the company’s office to share the concerns, but was each time laid off or given a telephone number that was inoperative. With the government's issuance of the DUAT, they felt uncertain about where to turn for redress.

The four local smallholders Antonio, Cesário, Delson and Joaquim recounted comparable experiences. They were surprised by strangers working on their machambas, asserting their rights to the land without any prior notice. For them, these machambas were central to their survival, which were clear in the tone of Joaquim when stating that “*Machamba is our life. For generations. Machamba is what we do and our only source of livelihood.*”⁴. Yet without a formal DUAT, they found themselves with limited options. Joaquim had been cultivating in his machamba for seven years before displaced. Cesário was not sure of how long he had used the plot, but suggested two to four years. Antonio was displaced right before the harvest season of 2016 and faced difficulties providing for his family while searching for a new farming plot for an entire year. Eventually, he received new land from a friend, but the far distance required him to go and stay for five-day period. Cesário and Joaquim faced similar displacements, though Cesário appreciated his employment at CESOM during his search for a new plot. Delson had been displaced years before for the jatropha venture but had managed to regain his living standards. They had noticed that the majority of the resettlement land was not being utilized by the PAPs, yet they did not want to create any conflict and had therefore not intervened.

Back in Mocuba, Amarildo was among the PAPs who had ceased utilizing his resettlement land in Cuba, but he held on to it, hoping transportation options would improve. A similar sentiment was echoed by those in Samora Machel and Marcia, many of whom were exploring or had secured new machambas. This pattern was common among the affected individuals. For instance, Bruno utilized his compensation to buy 1.5 hectares of land. While Inesh no longer cultivated her Cuba land, she valued having a DUAT to potentially sell or hand over to her grandchildren. She already cultivated what she needed in her three other machambas, and found the displacement to be fair. When asked what she would do differently if she was in the position of the company in the displacement process, she stated “*no idea! I*

³ « nunca tivemos esses crimes antes do reassentamento e agora não mais porque o pessoal do Bive parou de vir.» Int.5

⁴ «“Machamba é a nossa vida. Por gerações. Machamba é o que fazemos e a nossa única fonte de subsistência.”» Int. 7

would not know, because everyone gives what they can afford"⁵. Elina was content with her compensation, expressing surprise at the significant amount she received. With her one million MZN, she purchased a spacious house, and her sons acquired motorbikes. Louis, having gotten 80,000 MZN for his 0.5-hectare property, managed to build a house and buy a motorbike. Laura on the other hand, with a two-hectare machamba, got 35,000 MZN but claimed not being compensated for a cashew tree on her original property, deemed too small. Apparently, she had not been informed of the compensation amount beforehand.

Daniel too reported of errors in the calculation of compensation. He and his mother used to have neighboring machambas within the project area. When informed about the displacement plans, Daniel explained that their machambas were separate plots. The project representatives suggested counting the plots as a single unit, assuring them compensation for both. Despite the assurance, they only received compensation for one plot. Daniel also believed the amount given did not accurately reflect the combined size of the two plots, especially when compared to what others received. He was a young man with the objective of establishing a life for himself. However, with machamba as the only source of livelihood and no job opportunity in sight, the objective seemed impossible. He felt deprived and found the displacement to be handled unfairly. Gisa and her son also had separate machambas within the project area, but received compensation for both. Gisa, who was categorized as vulnerable due to her old age, was resettled in Cuba, while her son was given land in Medhatube. Gisa expressed her dissatisfaction, citing her age as a hindrance to traveling the distance to Cuba, and the challenge her son faced in assisting her when their plots were separated by approximately 85 kilometers. A situation that had worsened with the dismantled bridge and stolen water pump.

Aurelio felt the displacement exacerbated food shortages for his family. While the monetary compensation initially allowed him to build a new home, the longer distance to his resettled machamba made it harder to sustain his family's needs over time. As a result, they experienced hunger for up to a week, compared to just a day in their previous location. Similarly, Jenesses and the Samora Machel group reported prolonged periods of food scarcity due to resettlement. Whereas they previously faced food challenges from December to February, post-resettlement saw these hardships extend until April. Alisha, categorized as vulnerable with five machambas, used to reap eight 50-kilogram sacks of maize and beans,

⁵ "nenhuma idéia. Eu não saberia, porque cada um dá o que pode". Int. 11.

selling each for 1,200 MZN and reserving one of each for her family's consumption. After moving to Cuba, her primary concern became merely ensuring her family had enough to eat.

According to the group in Samora Machel, the PAPs classified as vulnerable had received additional food assistance and opportunities to start micro-businesses, but that these measures were insufficient to meet all. Gisa, an elderly woman, expressed her disappointment at being registered as of the vulnerable, but not receiving the assigned compensation. She discovered that her name was not included on any of the lists and despite complaining to one of the GTTs, she did not receive any response and was unsure whom else to contact for assistance. She concluded the process to be unfair. A similar situation occurred with Elina, an elderly widow. Her name had been on the initial list before it allegedly had been sent to the office in Maputo for acceptance, but her name had disappeared upon its announcement. Elina found this unfair, particularly because she had dedicated decades to supporting and helping others in need within the community. She wondered if it was because she had received a substantial amount of compensation money. Also, Alisha, had been classified as vulnerable but had not received the promised compensation. She was unsure why this happened but knew of others facing similar situations. On the other hand, Bruno, despite being retired due to his old age, had not been classified as vulnerable.

Valber secured a job opportunity through his mother, a vulnerable PAP who was unable to work herself. From his monthly earnings of 1,500 MZN, he would allocate a part for his mother and reserve approximately 500 MZN for himself. Bernardo, too, secured his job thanks to his elderly grandmother. He appreciated the employment, noting that CESOM had procured a new mill the year before to replace a malfunctioning one. Inesh was grateful for the chance to initiate her home-based business but confessed her lack of expertise in managing it efficiently. No training or guidance had been provided, leading her to consume all the food items for her family's sustenance, a trend she observed among other vulnerable PAPs. Aurelio opted for a micro-business centered around fish. It remained ambiguous if he even was aware of the business's intent, as he remarked that the food only sufficed for his family for about a month. Florencio, affiliated with the GTTs, voiced concerns about the training's adequacy, observing that many PAPs, lacking foundational business knowledge, eventually discontinued their enterprises.

The financial training provided by ADRA had varied outcome. Only one of the many groups remained, which Laura, Louis, Amarildo and Leonora were a part of. They stated to have learned the importance of saving and teaching future generations, and saved for various needs like education, farming tools and gifts. The success of the group was credited to a former

ADRA worker, although they faced fluctuating memberships seasonally. Other groups had dismantled due to various challenges. While the groups of Bruno, Aida, and Paolo had disbanded because they found it difficult to save money. As for the agricultural training by ADRA, Daniel highlighted the benefits of the training and suggested a longer contract with ADRA for sustained impact. Bruno, on the other hand, struggled with soil conditions in Medhatube despite almost two years of training. The former ADRA representative acknowledged the benefits of the training, but felt the PAPs were left adrift. He believed with closer resettlement machambas and extended training, outcomes would have been better.

According to the Administrative Director, CESOM had played a significant role in fostering positive economic development in Mocuba. The company had been instrumental in attracting new investments and creating business opportunities, which in turn brought the potential to generate jobs and bring about socioeconomic improvements for the local population. This was echoed by the EDM Director of Renewable Energy underlining that CESOM was a pioneer within the energy sector in the country as the first joint venture of its kind, and the primary industrial solar plant connected to the national grid. Thus, the process was challenged by a lack of clear governmental regulations, but she found CESOM to have brought proper experience and guidance for future projects. Additionally, the EDM substation worker found the contribution of CESOM as crucial in accommodating the area's growing electricity demand and enhancing energy quality. Many PAPs recognized the benefits of energy development, as it expanded electricity access in the country and their village. Inesh received energy access early 2022 and was content, though there were occasional outages on Sundays. Some PAPs voiced concerns about continued power shortages and highlighted that neighboring regions were still without electricity. According to the Administrative Director, there were still significant challenges in expanding energy access to rural areas, as well as addressing general infrastructure deficiencies and inadequate schools and hospitals to meet the demand. Alisha considered the construction partially fair due to its contribution to energy development in the country, but she felt that the company had failed to fulfill its promises, which she viewed as unjust.

The Samora Machel group expressed frustration over the failure by the company to deliver on their promise to construct a hospital and a school, a sentiment shared by many PAPs. Additionally, the promised machamba homes and doors had not been realized, though some PAPs knew of isolated cases where they were provided with doors. Louis from the GTT, acknowledged that the company had made some efforts, pointing to the two containers in Mogunda repurposed for community use. The headmaster of the school, highlighted that the

library container was still in need of books. He anticipated it would benefit students currently traveling to Mocuba city for library resources. Albeit he recognized the potential advantages of the library, he accentuated the priority should be school expansion rather than a library. The second container, observed during the visit, was closed with no clear signage of its purpose, with only a chair visible inside. Leonora had heard it might serve as a hospital, but noted it was mainly operated by a health activist and rarely opened due to supply constraints.

Marcia explained that most Mozambicans are poor, lack jobs and need work opportunities from new businesses establishing in the area. She pointed out that it was not the company to be blamed for the inconveniences with the lack of job rotations, but rather the corrupt local authorities. Local leaders also underscore the pressing issue of unemployment in the region. Despite assurances of job prioritization, the majority of the PAPs were left without the promised employment at the plant. Rumors circulated of individuals from distant areas, securing permanent jobs at the plant. Some from the Samora Machel group mentioned instances where individuals had paid between 2,500 to 3,000 MZN hoping for employment but were left jobless. Paolo was asked for 4,000 MZN by a GTT member for a job, but he could not afford it and was in frustration left unemployed. Jenesses briefly worked at the plant but suspected that many who secured permanent positions might have done so through bribes. Also, the Kanfumo was of similar impression.

Among the PAPs, a few had worked or was employed at the plant. Florencio of the GTTi said they would help evaluate who were potential workers at the plant to safeguard the positions. He exemplified this by saying that when choosing a security guard, it was important to find someone who has respect for rules. Hence, they would pick people whom they knew the family and history of. Bernardo obtained the job through his grandmother, and did not pay for the opportunity. Leonora was one of the 22 permanent workers at the plant. She had obtained the job through a member of the GTT without having to pay. Two non-PAPs, Joao and Manuel, also worked at the plant because their mothers, who were PAPs, were unable to work due to their age. None of them had formal employment contracts despite working at the plant every day of the week for several years. All three expressed frustration about the absence of contracts, which would provide them with rights and a more secure income. Manuel stated that when requesting contracts, the company responded by urging them to be grateful for the opportunity and stated that they were not entitled to contracts as part-time workers. Joao felt dispensable in this situation.

Transparency

The Administrative Director was of the opinion that if there were issues or disputes, the affected individuals would turn to local governance. To present date, he noted no such complaints. Aurelio had kept silent, reasoning he had no means of reaching CESOM and believing local leaders had little power. He lamented over the company's unfulfilled promises and his own unawareness of his rights during agreements. Valber noted a lack of information regarding their rights, but personally felt the procedure was equitable.

Gisa, one of the vulnerable PAPs, recalled no outreach from CESOM for feedback post-displacement. In contrast, her son had been interviewed after the move. Elina and several others also mentioned an absence of communication from the company after being displaced. Leonora appreciated the benefits she received from CESOM's establishment but was disappointed by unmet commitments. Although her husband was of the GTT, she hesitated to voice out, attributing the promises to the former liaison and CEO. She did not want to speak without a collective stance, stating that *"it is difficult to talk about it individually. In meetings it would be better, because it is not appropriate alone to talk on behalf of all when it is a group matter"*⁶. Moreover, she expressed not to have even given it a thought, but that she would consider voicing her disappointments with the GTT or suggesting mobilizing with other PAPs.

According to the Norfund representative, there had been quarterly monitoring of the project, including a comprehensive review of the relocation process in November 2018. Overall, the feedback from the PAPs had been positive at that time. Alisha recalled a woman from South Africa who asked about their satisfaction after receiving compensation. She was happy at the time, but her opinion had changed since then. Similarly, Bruno and Marcia's initial contentment waned due to unfulfilled promises and subsequent challenges. Amarildo was initially content until he learned that a permanent group of workers had been employed at the plant and he could not understand why he was not offered a temporary job as promised. He questioned why people from other districts would get permanent jobs when he was available and lived close by.

The Samora Machel group and Valber conveyed their grievances to CESOM in 2022, but received no response. Similarly, Jenesses had been individually interviewed by CESOM, but had not heard back since. Aida recalled a 2023 where the collapsed bridge and the missing water pump were discussed. Additionally, requests for new bicycles were made due to the long

⁶ "É difícil falar sobre isso. Em reuniões seria melhor, porque não convém falar sozinho em nome de todos quando se trata de um assunto de grupo." Int. 34

distances and previous thefts or malfunctions. In the meeting, the liaison allegedly clarified that the responsibility was no longer of CESOM but promised to address the government.

5.0. Discussion

The discussion is based upon my interpretation and reflections of the information in chapter four when linking to the theories and concepts introduced in chapter three. Chapter five is merely based on the information shared by the informants, and can only give interpretations and reflections on the data that was collected.

5.1. The Process

Recognitional Justice involves acknowledging and validating all individuals and groups despite their social hierarchical status, and further impacts the procedural and distributional justice (Young 1990). Thus, I find it essential to start off exploring the different groups of people experiencing displacement considering who were included and excluded. Followed by a discussion on what participation and power structures to assess fairness and transparency in the decision-making process (Schlosberg 2007).

Within the displacement scenarios detailed in chapter four, two groups of local smallholders experienced displacement. The PAPs were recognized as project affected people, and were subsequently brought into discussions about the displacement. Yet, not everyone subject to displacement received this invitation. The smallholders in Cuba were not consulted, nor even informed of the deprivation of their machambas. Nevertheless, it is crucial to address the nuances of recognition, especially given that their Régulo claimed to have been approached by both the jatropa entrepreneur and CESOM representatives. Being the dominant traditional authority in Cuba, he was elected by the community to represent their interests. Furthermore, he had the authority to distribute land in his domain, which can be argued as if the smallholders in Cuba, in some capacity, were recognized (Lei dos órgãos locais do estado (2000). Some might therefore say the rights of the smallholders had been acknowledged.

Conversely, even though the Régulo in Cuba had the authority to allocate land within his jurisdiction as per Lei dos órgãos locais do estado (2000), he was mandated to discuss the allocation with other local leaders and seek input from the community. Also, an EIA should have been implemented, due to the potential environmental impact (Lei do Ambiente 1997). In the absence of both an EIA and hearings with the smallholders using plots in the designated area, misrecognition of their rights was evident. However, it is also a question whether they were displaced as a consequence by the construction of CESOM or for a different purpose. In

other words, if they should have been recognized as 'project affected people' similar to the PAPs or not.

The jatropa entrepreneur obtained the formal DUAT during the time of period when CESOM was searching for resettlement land. Based on this information, three of the four smallholders would most likely not have been deprived of their rights at the given time if it was not for the construction. The fourth smallholder, nonetheless, had been displaced at an earlier time. Also, according to the Régulo in Cuba, the jatropa entrepreneur communicated the mission of using the land as resettlement plots for the PAPs. Moreover, CESOM representatives offered the Régulo certain benefits as compensation for their loss and were the ones who seemingly finalized the agreement. Based on this information, it is reasonable to state that the smallholders in Cuba were 'project affected people' on similar basis as the PAPs, and that they as a consequence, were misrecognized their rights.

Reflecting on the incident in Igaru in comparison to the displacements in Cuba, this was not an isolated event. In Igaru, while the company had prepared the land to resettle PAPs, it was allegedly only after the smallholders voiced their objections and demanded compensation, that the company opted to explore other potential resettlement areas. Even when faced with the rights to compensation held by the smallholders as per Land Law (1997), the company appeared to lean towards finding a different plot, rather than compensating the ones displaced. While the company acknowledged their refusal, it underlined a reluctance by CESOM to consider the smallholders as 'affected people' worthy of compensation. This stance persisted even though the necessity for the new land was directly linked to the construction of the solar plant, which relocated the PAPs. The actions by CESOM highlight a power imbalance, where their vested interests were their priority, raising questions about both their responsibility towards and recognition of the rights of local smallholders.

The situation introduces a complex debate concerning the responsibility of recognizing those displaced by the construction of CESOM. In Cuba, the jatropa entrepreneur was the one to obtain the DUAT before selling it to CESOM, thus it could be argued that he held the responsibility to follow the land legislations of engaging an EIA and consultations with the community (Lei do Ambiente 1995). On the other hand, the government was the entity to issue the DUAT, and was in charge of finding the resettlement land since all land is property of the State. According to the constitution, the government also responsible to protect and safeguard the rights of local communities (Lei da Revisão Pontual da Constituição da República de Moçambique 2018). As earlier argued, CESOM was the one to seemingly finalize the agreement with the Régulo in Cuba. Nevertheless, the National Land Policy (1995) obligates

the principle that the 'polluter pays', which in this case would be CESOM due to the objective of using the land to resettle the PAPs. Also, the Régulo in Cuba had failed to acknowledge the rights of the smallholders to have their customary rights assessed. Therefore, several actors bore the responsibility of recognizing the smallholders in Cuba for their rights as displaced. This ambiguity in responsibility could be a contributing factor to the misrecognition, as it provided an avenue for each party to sidestep accountability.

While pinpointing responsibility might be complex, it is evident that the government, CESOM, the entrepreneur and the Régulo in Cuba, all possessed more decision-making power than the smallholders in Cuba. Overlooking the rights of these smallholders, brings Lukes' (1974) second dimension into focus. Conflicting interests were evident, in how CESOM needed resettlement land for the PAPs, especially given the prolonged efforts in Igaru. This interest was presumably mirrored by the government, envisioning potential growth from the solar plant for the District of Mocuba. Entrusted with land allocation, they might have encountered difficulties finding vacant resettlement land of ample size due to the widespread customary land systems (Norfolk and Liversage 2002). The Régulo in Cuba aimed to elevate his community, emphasizing that the proposals by the company were too generous to refuse given the poverty in the area. While the motives of the entrepreneur remain unclear, Norfund (2020) stated that CESOM had bought the land of a local entrepreneur, which then, most likely benefited him financially. The Régulo in Cuba also confirmed this transfer. This narrative is centered around the concept of power, particularly within the context of land acquisition.

Lukes' (1974) initial dimension of power becomes evident when examining the choice made by the Régulo in Cuba to sanction the land transfer to CESOM, representing the smallholders who held user rights. This decision, which had profound ramifications on the livelihoods of the smallholders, raises questions. It seems unlikely that these individuals would have voluntarily given up their use of the machambas without some form of pressure or influence. The absence of protest or vocalization of their right to consultation is intriguing, leading one to ponder the dynamics at play. In a contrasting situation, the Igaru smallholders' refusal to transfer land without receiving compensation demonstrates their ability to exert influence, suggesting that the smallholders in Cuba might have possessed a similar capability. Yet, their silence in the face of the land transfer could be misinterpreted as passive acceptance or approval of the decision of their Régulo.

Building on insights from Gaventa (1980), it is conceivable that this seemingly passive acceptance by the smallholders in Cuba can be attributed to a sense of powerlessness or perhaps a perception that contesting the Régulo in Cuba, an established authority figure, would be futile.

Although, this is purely speculative given the limited information available about the intricacies of the relationship between this particular Régulo and his community. If this was the case, it could resonate with Lukes' (1974) third dimension of power, where a dominant figure or entity subtly influences and shapes the views and perceptions of those in a subordinate position. This nuanced exertion of power is often so subtle that those subjected to it remain oblivious to its influence. Given the overt and tangible exercise of power evident in this transfer, the third dimension of power doesn't seem entirely applicable.

The position of the Régulo in Cuba, while authoritative within his community, was also mired in the intricate web of external power dynamics. The widespread poverty of the community played a significant role in shaping his decisions. Facing such economic constraints, the Régulo was likely driven by a perceived obligation to seek any opportunity that promised even the slightest alleviation for his people. In this context, the offer by CESOM may have represented a small hope, especially when adjacent to the earlier land seizures by the jatropha entrepreneur that left the community uncompensated. Conversely, the Régulo was not immune to the influences of power. Given the prevalent poverty within the community, he also stated to have felt compelled to accept the proposal by CESOM. Considering the history, the offer by CESOM might have been perceived as a better deal.

Moreover, his sense of being sidelined when reaching out to CESOM indicates Lukes' (1974) second dimension of power at play, where his interests of poverty alleviation in the community were sidelined. This situation embodies the concept that power is intentional, relational, and result oriented. Once CESOM secured the consent by the Régulo, they allegedly seemed less concerned with his interests or the broader well-being of his community (Svarstad et. al. 2018). This can be interpreted as CESOM determining that further dialogue or collaboration with the Régulo was not on their priority list. It is an exemplification of how dominant entities can strategically "control the narrative" or dictate the terms of engagement, pushing secondary actors to the periphery once their primary objectives have been accomplished. It also shed light on another issue in power relations, in how entities with more power or resources can engage with less powerful groups long enough to achieve their goals, then subsequently ignore or invalidate the concerns and aspirations of these groups. Furthermore, the situation underscores the idea posited by Svarstad et. al. (2018) that power is not just about the exertion of influence but also about the relations that underpin these dynamics. CESOM's interactions with the Régulo went beyond mere negotiation; they were deliberate, strategic moves designed to achieve specific outcomes. And once these outcomes, namely the consent of the Régulo in Cuba, were achieved, the commitment by CESOM to the

well-being of the Régulo or his community seemed to wane, emphasizing the transactional and often exploitative nature of such power relations. (Svarstad et. al. 2018).

Based on the above discussion on power dynamics, the involvement of the Régulo in Cuba, who represented the interests of the community, seems superficial at best, as he was engaged only when convenient for CESOM. This mirrors Arnstein's (1969) concept of non-participation, where those involved possess negligible influence over outcomes. Despite the smallholders in Cuba being largely sidelined and uninformed about the impending displacements, the Régulo, was engaged by both the company and the jatropa entrepreneur. Yet, it is clear that the Régulo had little genuine influential power over the decision-making trajectory, which seemed to operate mainly on the terms of CESOM. Such a scenario might better align with the mid-degree of 'Tokenism' on Arnstein's ladder, where consultations serve merely to validate decisions that were already made. Thus, the level of participation did not seem to redistribute any uneven power structures.

Albeit the smallholders in Cuba had the right to protest and claim their rights to participation, it is reasonable to think that factors such as unequal power dynamics, financial resources, and lack of sufficient access to resources to obtain critical knowledge production hindered their position to challenge the uneven power structures discussed in the previous paragraph. Considering the high rates of poverty, illiteracy and lack of energy access in the province, it is likely to think that obtaining information through any reliable educative channel, as well as using a computer to search online was not an option for the majority. Their ability to access information on their rights and obligations was thus limited. Moreover, the company without doubt had such access and the resources to acquire legal support. Also, the financial resources required to challenge a multimillion USD company and the national state was presumably unrealistic for a smallholder striving to provide for his or her family. Hence, an uneven power dynamic was also evident in the disproportionate capacity of critical knowledge production between CESOM and the smallholders in Cuba. This might have manifested in how the smallholders in Cuba became dependent on the responsible parties for information about their rights and trust in being treated respectfully by law.

A similar situation could be seen for the PAPs. The EIA stated high prevalence of illiteracy and lack of completion of school among the household of the PAPs . Also, the few PAPs asked about their knowledge of rights stated to be unaware, and that they had not been informed by CESOM despite this being one of the chores listed in the SLUCP. Considering that the capability of critical knowledge production, according to Rawls (1971), is intertwined with senses of just, limited access to sources to obtain a sufficient level of critical knowledge

production might therefore have hindered their ability to engage in moral reasoning when negotiating with the company about compensation. Influencing their ability to make informed and reasonable judgements of what would be just and unjust in the process of displacement. The lack of ability of judgement was underscored by some PAPs who stated they were not aware of the actual impact of what they agreed to.

This power imbalance can further be seen in relation to Lukes' (1974) third dimension of power, where the dominant actors hold the power to shape and influence people's perceptions, preferences, and notions of justice. It worth noting that the research does not hold sufficient information to claim if CESOM and the government simply chose to ignore these differences in power or if it was based on sloppy execution. As a more elusive and concealed aspect of power relations, also the PAPs could have been unaware of being subject to such power. This might have led to a trustworthiness of the company knowing best, which partially was stated by one of the PAPs stating *"no idea! I would not know, because everyone gives what they can afford"*⁷ when asked what she would have done differently if she was in the position of CESOM towards the PAPs. When negotiating with a multimillion USD company, this underlines the unevenness in capacity of critical knowledge production. Moreover, how critical knowledge production is crucial in shaping subjective 'senses of justice', the ability of the PAPs to exercise power was limited compared to CESOM.

In terms of participation in the decision-making process, the PAPs were, as recognized 'project affected people' invited to participate in the decision-making process and even had the GTT group and liaison serving as mediators to CESOM. Many PAPs expressed experiencing the opportunity to voice their needs and preferences, and several did. Also, they had negotiated additional elements to the compensation initially offered by CESOM, and thus had some influential power. Considering the addressed uneven power dynamics, they were not on equal footing with the company. Especially considering the uneven power balance earlier addressed. Also, many PAPs stated experiencing the meetings as solely informative and that they were not given any opportunity to speak. Furthermore, the decision-making process reportedly merely relied on a survey and group meetings, treating the PAPs as a homogeneous group with similar backgrounds, needs, and preferences. This approach neglected the diversity within the group and did not empower individual decision-making authority.

Treating the PAPs as homogeneous group in the decision-making process might have hindered them to adequately negotiate solutions based on their subjective needs. Although

⁷ "nenhuma idéia. Eu não saberia, porque cada um dá o que pode". Int. 11.

having individual rights to their machambas, some might have experienced group pressure in deciding its destiny. Moreover, to share their opinions in a large group, especially for issues concerning them all. The statement by one of the PAPs *“it is difficult to talk about it individually. In meetings it would be better, because it is not appropriate alone to talk on behalf of all when it is a group matter”*⁸, underscores that the decision of the group was of priority and that individual needs, preferences, and opinions were neglected. Especially considering the offers and promises given and the high prevalence of poverty and need of work opportunities, I would say it is reasonable to predict that the majority would be in favor. Thereby, creating a social pressure to accept. If anyone happened to be against the offer or skeptical to agree, their reputation could also be at stake. It is unknown why CESOM chose to approach the PAPs as a group and if they had considered this aspect or not.

Conversely, the GTT and the liaison were engaged to foster a dialogue between the PAPs and the company. The GTT had regular meetings and a more direct line of communication with the liaison and the influential Régulo. This likely resulted in them having better access to information and potentially more influence in decision-making. Yet, from the perspective of the PAPs, the GTT appeared to serve mainly as a channel to convey information about meetings, rather than a two-way communication medium. At the time of the interview, the GTT was preoccupied with tasks unrelated to their primary role of representing the PAPs. Many PAPs mentioned having raised concerns with the GTT, only to receive minimal feedback or see no change. In the context of Arnstein's (1969) ladder, the GTT might symbolize placation, suggesting their role was more symbolic than substantive. That said, the GTT was entrusted with some decision-making power, particularly in collaboration with the Régulo who headed the group, on decisions like employment opportunities at the plant. This aligns with the 'delegated power' tier of citizen power. Yet, the absence of formal contracts and the company assigning them tasks unrelated to the PAPs suggests that their role was precarious and not holding the same influential power as CESOM.

Procedural justice pertains to the fairness of the methods employed, while distributive justice centres on the equity of the results (Cook and Hegtvedt 1983). In other words, even if a procedure seems equitable, the end results might not be. Therefore, it is essential to explore distributive justice further.

⁸ “É difícil falar sobre isso. Em reuniões seria melhor, porque não convém falar sozinho em nome de todos quando se trata de um assunto de grupo.” Int. 34

5.2.The Outcome

When assessing distributive justice, considerations in allocation of benefits and burdens are essential, accentuated aspects of needs, vulnerabilities and responsibilities. Addressing the situation in Cuba, it was evident that the smallholders faced alienation from their machambas and were excluded from compensation. Consequently, food insecurity, marginalization and inequality increased. While the PAPs on the other hand, were acknowledged and compensated.

The Land Law (1997) and the National Land Policy (1995) were enacted to ensure proper compensation for those individuals who were displaced from lands protected by DUAT, with the objective of sustaining or enhancing the living standards of the affected parties. It is evident that there were variations in compensation allocation and outcomes to the people displaced due to the construction of CESOM. It is therefore relevant to examine various justice concepts when evaluating the fairness of the situation.

The notion of objective equality posits that every displaced person, including both the smallholders in Cuba and the PAPs, should have been accorded the same treatment (Cook and Hegtvedt 1983). Yet, this standard was not met for either party. The smallholders in Cuba were bypassed entirely when it came to assessing customary tenure rights and eligibility for compensation, while the PAPs experienced inconsistent compensation. Added to this were how job opportunities were doled out, seemingly due to inconsistent, and poorly managed allocation of compensation and goods by the GTT. Also, rumors of corruptive activities were reported in terms of receiving job opportunities and paying the alleged tax for the monetary compensation. The 'tax' had reportedly not been informed in any meeting and happened in obscured ways. However, under the Lei dos órgãos locais do estado (2000), the traditional leaders can tax the people in their area, which could be a possible explanation why some PAPs were not asked to pay. Regardless, the unfolding events did not mirror a scenario of consistent fairness. Even if there was a presumed plan to evenly distribute tools, doors and bicycles among the PAPs, the actual outcome strayed from that intent. Some benefitted from multiple items, while others did not receive what was due to them.

Regarding the principle of equality of opportunity, which underscores the importance of ensuring fair chances for everyone (Cook and Hegtvedt 1983). The provision of financial and agricultural training can be seen as elements as such, allowing all PAPs the same chances for improved financial status and crop yields. Additionally, the conversion of two containers into a library and medical clinic was allegedly aimed at democratizing access to health and education. Yet, these efforts fell short of their intended purpose. Both the medical facility and the library remained closed due to a lack of necessary equipment, and a significant portion of

the affected population remained oblivious to their presence. An equitable opportunity allocation would also ensure uniform job opportunities at the plant. Contrary to assurances that all PAPs would have rotational employment opportunities, it appeared that only a select few benefitted from such an arrangement.

The distribution of job opportunities can be better discussed if described in terms of meritocratic equality, where rewards are based on merit and abilities (Cook and Hegtvedt 1983). The scenario described does not seem to be purely meritocratic. Favoritism, as cited by a GTT member, skews this principle. Instead of making decisions based on objective assessment of abilities or potential contributions, decisions become influenced by personal relationships or subjective impressions. This system is inherently flawed because it does not genuinely reward capability; rather, it benefits those who have personal connections or who are deemed subjectively "favorable." The concept of desert justice adds another layer to this. At its core, desert justice revolves around the idea that individuals should get what they "deserve" based on their actions, character, or moral worthiness. In the context provided, the GTT's allocation of jobs to those they deemed 'deserving' aligns with this concept. This raises ethical concerns regarding who determines what is 'deserving', and on what criteria. If it is based on favoritism or personal relationships, it deviates from a truly just system. Furthermore, the neglect of the smallholders in Cuba introduces another dimension of desert justice. Their user rights were not acknowledged, which suggests that they were not seen as 'deserving' of recognition as displaced people.

On the contrary, the concept of subjective equality suggests that compensation should be individualized based on specific circumstances and needs (Cook and Hegtvedt 1983). To this end, measures of vulnerability were employed among the PAPs, with the aim of providing added compensation to those deemed vulnerable. These 'vulnerable' PAPs were offered maize and opportunities for micro-businesses. Additionally, PAPs facing challenges with their harvests were also provided with maize, highlighting an effort to allocate resources preferentially to the disadvantaged and cater to individual needs. Yet, a number of PAPs identified as vulnerable did not benefit from the additional assistance promised, and the criteria for determining vulnerability seemed overly simplistic. Strikingly, some of the PAPs not labeled as vulnerable appeared to be in more precarious situations than those who were categorized as such. As an illustrative example, an older individual marked as vulnerable due to age might, in reality, have had a more stable financial and social support network, than a younger individual with several mouths to feed. Such discrepancies were evident when assessing the circumstances of PAPs with varied sources of income, household sizes, and land

ownership. Those with additional sources of income, fewer dependents, and multiple plots of land generally reported more favorable outcomes. These individuals, presumably less reliant on their original land, seemed to benefit from the compensation. In stark contrast, others who seemed to rely heavily on their initial landholding reported negative impacts and heightened food insecurity post displacement. The perceptions of fairness in the displacement process also diverged based on these outcomes. This discrepancy resulted in unequal outcomes; while some reaped benefits, others bore a disproportionate share of the costs. The unintended consequence was that the strategy, instead of alleviating vulnerabilities for some, might have exacerbated them.

Conversely, relative equality, as described by Cook and Hegtvedt (1983), emphasizes allocating benefits proportional to individual input. This principle seems to be manifested in the approach by CESOM, which offered equivalent land sizes and financial compensations at standardized rates. Yet, this allegedly standardized approach was met with discrepancies. Some PAPs reported variations in the size of the resettlement land compared to their original plots. Others felt shortchanged, having to split compensation with relatives owning adjacent lands. The SLUCP underline challenges in the timing chosen to evaluate crops and trees for determining monetary compensation, suggesting potential inaccuracies in the process (ERM and Impacto 2015b). This sentiment was echoed by several PAPs, who perceived the valuation to be inequitable. Furthermore, the SLUCP observed numerous plots in the project area to either show no visible crops or as fallowed, possibly leading to assumptions that these lands were contributing less (ERM and Impacto 2015b). This observation influenced the financial compensation determination, which, based on such observations, may have undervalued certain plots. It is worth noting, that presuming fallowed lands are unproductive can be misleading, since it can be a strategic practice to rejuvenate soil fertility, indicating planned future use rather than disuse. A significant portion of the PAPs relocated to Medhatube voiced concerns about soil quality degradation compared to their original machamba, and nearly all the PAPs resettled in Cuba lamented the increased distance to their new plots. As a result, most had ceased to use their resettlement land. These differences strayed from the concept of relative equality, but this principle might still best describe the general distribution, but with the inclusion of basic needs elements addressed within subjective equality.

There were also instances where certain compensations or activities that were purportedly promised, like the machamba houses, failed to materialize. The commitment by CESOM to establish a hospital or school is also debatable, given that the transformed containers designated as a medical center and library neither functioned as a hospital nor a

school. While they were ostensibly intended to provide somewhat similar services, they lacked the necessary equipment and infrastructure. The reasons behind these discrepancies remain uncertain in this research, but as suggested by one of the PAPs, internal changes within the company could possibly explain why. The departure of both the CEO and the second liaison from CESOM, might have led to disruptions in their commitments. In the absence of any formal contract, or at least one accessible to the PAPs, they found themselves in a position with minimal evidence and leverage to challenge the company over perceived omissions. Additionally, the potential disregard for the personal experiences and outcomes of the PAPs could be a contributing factor, a sentiment echoed by a former ADRA employee.

Using the framework that views power as intentional, relational, and result oriented, it is plausible that the attentiveness by CESOM to the PAPs evolved based on their strategic needs (Svarstad et.al. 2018). While post-displacement evaluations illuminated several concerns, there was a notable lack of response to these issues. Similarly, even when the GTT was informed about the discrepancies in compensation for some vulnerable PAPs, there seemed to be little to no rectification. This trend mirrors the dynamics observed with the Régulo in Cuba , suggesting that the dedication of the company to the PAPs might have been enthusiastic at first (result oriented) but diminishing after those objectives were met. This perspective is reinforced by numerous PAPs who recounted regular meetings during the displacement phase, which became infrequent over time, although there was a brief resurgence in interactions in the year leading up to my study. The sentiment of the PAPs feeling left behind was also shared by the former ADRA representative who described the situation as if they were left adrift by CESOM.

Such patterns resonate with Lukes' (1974) second dimension of power, hinting at a potential strategic sidelining of the concerns of the PAPs. The parallels with the situation in Cuba prompt reflection on the genuine commitment by CESOM recognizing and addressing the rights of the PAPs. One could wonder if it was recognition in earnest, or merely a calculated step towards a desired outcome. It is worth noting the company did provide financial and agricultural training for a year post-displacement and conducted subsequent evaluations, which raises a broader question regarding what duration and depth of the responsibility companies hold in situations of displacement. What is also essential to keep in mind is that this study lacks insights from the perspective of CESOM, leaving gaps in understanding the full scope of promises made.

Interestingly, many PAPs who faced disadvantages did not voice their concerns to those in authority, though a few did share their grievances with GTT representatives. Drawing on Gaventa (1980), this reluctance could be attributed to the pronounced power imbalances

highlighted in the discussion, leading to feelings of powerlessness and a state of 'quiescence', a passive acceptance of their inferior position without challenging the existing conditions. A common sentiment among many was a perceived absence of an effective channel for airing grievances, as they viewed the GTT as primarily the messenger serving CESOM, doubting their ability to effect change. The second liaison was positively viewed by many PAPs, but her departure saw many of her assurances left unfulfilled. Her successor was perceived by many as being uninterested in their concerns. When considering local authorities as a recourse, many PAPs believed they had limited decision-making power or were not trustworthy. This sentiment was also shared by some local leaders, such as the Régulo in Cuba, the Régulo of the project area, the Kanfumo, and the Samassoa. Albeit one Régulo was perceived to wield significant influence, both PAPs and local leaders felt that he did not genuinely represent the interests of the community.

5.3. International best practices

Legitim Tenure Rights: In the context of Mocuba, one of the primary concerns is the preservation of traditional or informal land rights that smallholders may possess. Legitimate tenure rights often intertwine with personal identity, heritage, and longstanding practices. When these rights are not respected or acknowledged, it can lead to profound socio-cultural ramifications, potentially leading to a loss of cultural heritage, source of livelihood and community cohesion (FAO 2022). This could be seen in the situation in Cuba where the smallholders being displaced from their land was not recognized for their rights of an assessment of holding customary rights. For three of the four smallholders interviewed, it led to food insecurity, inequality, and rumoured conflicts with the resettled PAPs. Regarding the PAPs, their rights were acknowledged, and they were compensated. One might therefore assess this principle as met. On the other hand, considerations in terms of the deeper ties some of the PAPs might have had with their plots did not seem to be sufficiently addressed.

Transparency: surpasses the mere disclosure of actions; it entails ensuring that all involved stakeholders possess a comprehensive understanding of the procedures, choices, and outcomes (FAO 2022). The absence of a formal contract accessible to the PAPs might have contributed to mistrust, potential misinformation, or misinterpretations. Furthermore, this absence could have amplified the disappointment stemming from promises that ultimately remained unfulfilled.

While the PAPs were seemingly invited to frequent meetings aimed at disseminating information about the displacement, a deeper analysis reveals a significant power imbalance

within these interactions. This power asymmetry becomes evident in the decision-making processes that materialize during these meetings. Consequently, the capacity for meaningful participation and influence might have been hindered by these uneven power dynamics.

Notably, the responsibility to inform the affected individuals about their rights was explicitly outlined in the SLUCP. However, this obligation was not adequately met. As a result, the PAPs faced unequal access to essential knowledge resources, which negatively influenced their ability to make informed decisions and assert their rights effectively. This uneven access to crucial information led to sentiments among the PAPs of being uninformed about their entitlements.

The concept of transparency here underscores the need for equitable distribution of information, which empowers all stakeholders with the information they require to make informed choices. Ensuring that formal agreements and pertinent details are accessible and understandable to the affected community members could have mitigated mistrust and the potential for misunderstandings. Additionally, addressing the disparities in power structures during decision-making processes and effectively communicating individuals' rights are essential steps in promoting transparent and equitable engagement within development projects.

Compensation and Resettlement: When it comes to compensation, it is not just about the monetary value. It encompasses restoring, if not improving, the socio-economic and cultural fabric of displaced communities. The non-functional facilities, like the so-called medical centre and library, indicate a superficial understanding or perhaps an underestimation of the holistic needs of the community. Although the PAPs received compensation for their machamba rights, one can question whether calculating someone's source of livelihood based on marked price is sufficient. Especially considering the dependency most of the smallholders had to their plots, and the level of poverty.

Participation and Consultation: Continuous dialogue is the bedrock of inclusive projects. The declining frequency of CESOM's interactions suggests that once the primary objectives of the displacement were achieved, the concerns of the PAPs may have become secondary. This kind of approach can marginalize the voices of the most vulnerable, leading to feelings of neglect and marginalization, and leaving essential concerns unaddressed.

Grievance Mechanisms: An effective grievance mechanism serves a multifaceted role in project management. Beyond offering a platform for individuals to voice their concerns and potentially find resolutions, it plays a pivotal role in cultivating trust among stakeholders and showcasing a commitment to accountability (FAO 2022). As previously explored, both the

GTT and the liaison functioned as intended grievance mechanisms for the affected people. This could be interpreted as an alignment with the stated principle.

However, a closer examination reveals that the PAPs did not experience significant assistance through these mechanisms. Consequently, the argument for the fulfilment of this principle becomes less compelling. Despite the presence of the GTT and the liaison, the discussions presented earlier underscore that the affected individuals did not perceive them as substantially helpful. This sentiment of ineffectiveness casts doubt on whether the grievances of the PAPs ever truly reached the decision-makers capable of implementing meaningful change.

The apparent shortcomings of the GTT as a conduit for addressing grievances magnify the potential disconnect between the mechanisms in place and the actual outcomes for the affected population. While these mechanisms may have been established with good intentions, their practical impact fell short of expected results. This disconnect highlights the significance of not only having grievance mechanisms in place but ensuring their effectiveness in bridging the gap between affected communities and decision-making processes.

Responsible Investments: In the realm of responsible investments, considerations extend beyond mere financial gains, encompassing broader socio-cultural and environmental impacts (FAO 2022). If the displacement of PAPs due to initiatives like CESOM resulted in adverse effects on food security, livelihoods, or cultural traditions, the overall project impact may be deemed negative, even if it generates wider economic advantages. The multifaceted actions of CESOM, including providing financial support and agricultural training, alongside potential shortcomings in fulfilling other commitments, underline the necessity to reassess the comprehensive scope of their accountability.

Furthermore, this underlying principle accentuates the importance of investments that align with national laws and uphold human rights. To illustrate within the context in Cuba, it becomes evident that discussions not only revolve around the outcomes of the displacement but also delve into the allocation of responsibility. The absence of clear regulations and guidelines in such situations further complicates this discourse. However, a more rigorous and comprehensive due diligence assessment should have been conducted to anticipate potential impacts.

Considering the principle of maintaining or improving the standard of living, this dynamic is observable among the PAPs. Some individuals expressed gratitude for the compensation and newfound opportunities brought about by the construction project. Conversely, contrasting experiences emerged, with reports of heightened poverty and increased food insecurity. This

duality underscores the complex interplay between development projects, socio-economic outcomes, and the well-being of impacted communities.

6.0. Conclusion and recommendations

Addressing the justice implications of the displacement of agricultural smallholders in the construction of CESOM requires a comprehensive examination of the underlying power dynamics, the fairness of compensation provided, and the project's alignment with international best practices. PE provides a pertinent lens through which these facets can be explored, emphasizing the unequal distribution of environmental burdens and benefits, the socio-economic disparities arising from environmental governance, and the pronounced power imbalances evident among actors (Robbins 2012).

Based on the data collected, the process of distribution led by CESOM, in its initiation and execution, appeared to exemplify a predominantly top-down decision-making approach. Here, external stakeholders, driven by vested interests, seemingly held disproportionate sway in the process, often sidelining the concerns and rights of the PAPs. Such power hierarchies were reminiscent of analogous situations in places like Cuba, reinforcing the narrative of dominant entities taking precedence over community rights and welfare.

When considering the equity of compensation outcomes, there was a discernible disparity in the distribution of benefits. Promised compensations were not always realized, leaving the most vulnerable groups disproportionately burdened. The ideal of justice demands that those with the least are shielded from bearing undue burdens, an aspect seemingly overlooked in the CESOM case.

Considering conformity of the project with the FAO's (2022) guidelines for best practices, CESOM showcased a mixed record. While there were instances of alignment in terms of compensation and post-displacement evaluations, significant lapses were evident in fostering transparency, inclusivity, and establishing robust grievance redressal mechanisms. Such observations reiterate the importance of corporations like CESOM, to ensure more than perfunctory adherence to guidelines, truly championing the welfare and rights of affected communities.

Utilizing Rawls' (1971) theory of justice provides further depth to this examination. Rawls' (1971) first principle underscores the importance of equal basic liberties for all. The dynamics observed in this paper suggest that the PAPs might not have been accorded their due rights and liberties, particularly during crucial decisions affecting their future. Moreover, Rawls' (1971) difference principle, emphasizing that inequalities should exist only if they

confer benefits for all, especially the least advantaged, stands in contrast to the disparities witnessed in the compensation outcomes for the displaced. Rawls' (1971) notion of the 'veil of ignorance' adds a poignant perspective, raising the question whether the decision-makers when unaware of their societal positions would have made different, more inclusive decisions in the management of the displacement.

To conclude, the displacement resulted by the construction of CESOM, when viewed through the lens of Rawlsian justice, highlights the pressing need for development endeavours to embed justice principles thoroughly (Rawls 1971). This approach ensures that developmental gains are widespread and inclusive, benefiting not just the ones already better off, but also the poorest and most marginalised. In essence, the case study is emblematic of the complexities surrounding corporate-led 'green projects' in fragile communities. It underscores the imperative of prioritizing justice, genuine consultations, and comprehensive compensation mechanisms to ensure that development projects truly serve the collective good.

In closing, the case study, when scrutinized through the lens of Rawls' Theory of Justice (1971), accentuates the critical need for development initiatives to genuinely integrate principles of justice at every stage. Only then can we hope for a more just and equitable society, where developments benefit not just a few but all, particularly those at society's margins. However, it is imperative to underscore the limitations inherent in this study. Notably, the absence of direct input or information from CESOM poses a significant constraint. This lacuna may inadvertently present a skewed perspective, potentially leaning towards a one-sided evaluation. It's crucial for readers and stakeholders to approach the findings with an understanding of this context, recognizing that a comprehensive assessment would benefit from a more balanced set of data sources.

Ideas for future studies

Future research avenues could delve deeper into the intricacies of the compensation provided during the CESOM project. A comprehensive analysis of the criteria used to determine compensation amounts would offer insights into whether these were consistently applied, and if they genuinely reflected the value of what was lost by the PAPs. By delving into these areas, researchers can paint a clearer picture of the intricacies of compensation in large-scale projects and potentially provide recommendations for future undertakings to ensure more equitable and just outcomes.

6.1. Recommendations

Political Ecology (PE) can be metaphorically visualized as both a hatchet and a seed, serving dual purposes. The hatchet stands for dissecting and challenging unfair narratives and discourses, whereas the seed signifies nurturing knowledge and charting a path for the future, as explained by Robbins (2012). Given that this paper adopts a political ecological perspective, it will offer recommendations based on the findings and the FAO guidelines (2022) for future projects:

Tenure Rights:

- Recognize the intricate connection between land, identity, and socio-cultural practices.
- Engage anthropologists or local historians to ensure that deep-rooted connections to the land and their implications are fully grasped.

Transparent and Inclusive Communication

- Ensure all agreements and promises are documented formally and made accessible.
- Implement regular community meetings and forums, even post-displacement, to address concerns and gather feedback.
- Ensure the community understands their rights, the project's implications, and avenues available to them for feedback or redress.
- Ensure representation of all groups, especially the vulnerable and marginalized, in the decision-making processes.

Comprehensive Compensation and Resettlement Plans:

- Beyond compensation, evaluate the socio-economic, cultural, and emotional values attached to the lands and properties.
- Work closely with the community to design resettlement areas that cater to their holistic needs, including functional facilities, livelihood opportunities, and cultural spaces.
- Provide access to alternative livelihood opportunities through education and employment, which will diversify income streams and promote sustainable living.

Grievance Mechanisms:

- Establish a transparent and efficient grievance redressal system.
- Ensure the body handling grievances is seen as neutral and trustworthy, and that it has the power to mediate and bring about tangible change.

Responsible and Sustainable Investments:

- Align projects with both national laws and international human rights standards.
- Periodically evaluate the project's impact on the local community and make necessary amendments to ensure they are not left worse off.
- Ensure that promises made during the early phases of the project are honored throughout its lifecycle.

Long-term Engagement:

- Displacement has long-term implications. Be prepared for an extended engagement to ensure the well-being of the community.

7.0. References

The referencing format employed in this document follows the Harvard style.

- ALER and AMER. (2022). *Renováveis em Moçambique 2022. Briefing Renewables in Mozambique*. Available at: https://www.lerenovaveis.org/contents/lerpublication/a4_resumo_renov_moz_2022_vfina.pdf (Accessed May 9, 2023).
- Arnstein, S. R. (1969). A Ladder of Citizen Participation. *Journal of the American Planning Association*, 35(4), 216–224. Available at: <https://doi.org/10.1080/01944366908977225> (accessed April 26, 2023).
- Askari, H., Mirakhor, A. (2020). The Utilitarian Conception of Justice and Its Critics (Bentham to Hayek). *Conceptions of Justice from Islam to the Present. Political Economy of Islam*. Cham: Palgrave Macmillan. Available at: https://doi.org/10.1007/978-3-030-16084-5_4 (accessed April 23, 2023).
- Bachrach, P. and Bartz, M.S. (1963). Decision and nondecision: an analytical framework. *The American Political Science Review*, 57 (3): 632-642. Available at: <https://www.jstor.org/stable/1952568> (accessed April 1, 2023).
- Banks, G. and Scheyvens, R., 2014. Ethical Issues. In: R. Scheyvens, ed. *Development Field Work, A practical Guide*. pp. 159-187. Los Angeles: SAGE Publisher Inc.
- Bell, D. (2004). *Environmental Justice and Rawl's difference principle*. Available at: https://www.pdcnet.org/enviroethics/content/enviroethics_2004_0026_0003_0287_0306 (Accessed May 5, 2023).
- Benjaminsen, T.A. and Svarstad, H. (2021). *Political Ecology. A Critical Engagement with Global Environmental Issues*. Switzerland: Palgrave Macmillan
- Boucher, D. and Kelly P. (1994). *The Social Contract from Hobbes to Rawls*. London: Routledge.
- Brink, R.J.E van den (2008). Land Reform in Mozambique. *Agriculture & Rural Development Notes Land Policy and Administration. Issue 43, December 2008, no. 71629*. Washington: World Bank.
- Bryman, A. (2016). *Social Research Methods*. 5th ed. Oxford: Oxford University Press.
- Bryman, A. (2021). *Social Research Methods*. 6th ed. Oxford: Oxford University Press.
- Buur, L. and Kyed, H.M. (2005). *State recognition of traditional authority in Mozambique*. Available at: <https://www.files.ethz.ch/isn/96053/28.pdf> (accessed April 10, 2023).

- Ceello, P. (s.a.). *Desert*. Available at: <https://iep.utm.edu/desert/#SH2a> (accessed August 1, 2023).
- Cook, K.S. and Hegtvedt, K.A. (1983). *Distributive Justice, Equity, and Equality*. Available at: <https://www.jstor.org/stable/2946064> (accessed May 20, 2023).
- Currency World. (2023a). *NOK to USD currency converter*. Available at: https://currency.world/convert/NOK_6000000000/USD (accessed August 11, 2023).
- Currency World. (2023b). *US Dollar (USD) to Mozambican Metical (MZN) exchange rate*. Available at: https://currency.world/exchange_rates/USD/MZN (accessed May 9, 2023).
- Dahl, R.A. (1957). *The concept of power*. *Behavioral Science*, 2 (3). 201-215. Available at: <http://dx.doi.org/10.1002/bs.3830020303> (accessed June 1, 2023).
- Ekspropriasjonserstatningslova – orvl. (1984). *Lov om vederlag ved overgiving av fast eiendom [ekspropriasjonserstatningslova]*. Available at: <https://lovdata.no/dokument/NL/lov/1984-04-06-17> (accessed: July 10, 2023).
- Energypedia. (s.a.). *Mozambique- Country Information*. Available at: <https://energypedia.info/wiki/Mozambique- Country Information> (accessed April 30, 2023).
- Environmental Law. (1997). *Law N°20/97 of October 1*. Available at: <https://faolex.fao.org/docs/pdf/moz15370E.pdf> (accessed April 29, 2023).
- ERM and Impacto (2015a). *Mocuba Solar Project. Simplified Environmental Study*. Available at: <https://disclosures.ifc.org/project-detail/ESRS/36787/mocuba-solar> (accessed July 20, 2022)
- ERM and Impacto (2015b). *Mocuba Solar PV Project. Simplified land use and compensation plan*. Available at: <https://disclosures.ifc.org/project-detail/ESRS/36787/mocuba-solar> (accessed July 20, 2022).
- Food and Agriculture Organization, (FAO). (2022). *Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security*. First revision. Rome. Available at: <https://doi.org/10.4060/i2801e> (accessed May 4, 2023).
- Fraser, N. (1998). *Social justice in the age of identity politics: redistribution, recognition, participation* (Discussion Papers, 98-108). Berlin: Wissenschaftszentrum Berlin für Sozialforschung GmbH. Available at: <https://www.ssoar.info/ssoar/handle/document/12624> (accessed May 2, 2023).
- Gaventa, J. (1980). *Power and Powerlessness. Quiescence and Rebellion in an Appalachian Valley*. Oxford: Clarendon Press.

- Glare, P.G.W. (1982). *Oxford Latin Dictionary*. Oxford, UK: Oxford University Press.
- Grebmer, K. von. (2021). *Global Hunger Index. Hunger and Food Systems in Conflict Settings*. Available at: <https://www.globalhungerindex.org/pdf/en/2021.pdf> (accessed May 9, 2023).
- Holifield, R., Chakraborty, J., and Walker, G. (eds.). (2017). *The Routledge Handbook of Environmental Justice*. First edition. Routledge. Available at: <https://doi.org/10.4324/9781315678986> (accessed April 15, 2023).
- Instituto Nacional de Estatística. (2019). *411 Folheto Mocuba 2019*. Available at: <http://www.ine.gov.mz/estatisticas/publicacoes/folheto-distrital/zambezia/411-folheto-mocuba-2019.pdf/view> (accessed May 11, 2023).
- Jenkins, K. et.al. (2016). *Energy Justice: A conceptual Review*. Available at: <https://www.sciencedirect.com/science/article/abs/pii/S2214629615300669> (accessed August 20, 2022).
- Kolm, S.C. (2000). Introduction: The Economics of Reciprocity, Giving and Altruism. *The Economics of Reciprocity, Giving and Altruism*, chapter 1: 1-44. London: Palgrave Macmillan.
- Land Law. (1997). *Land Law. No. 19/97 of 1 October*. Available at: <https://faolex.fao.org/docs/pdf/moz15369E.pdf> (accessed April 20, 2023).
- Lei da Revisão Pontual da Constituição da República de Moçambique. (2018). 2.º *Suplemento: Lei n.º 1/2018 de 12 de Junho*. Boletim da República: Publicação Oficial da República de Moçambique. I SÉRIE – Número 115. Available at: <https://faolex.fao.org/docs/pdf/moz117331POR.pdf> (accessed March 3, 2023).
- Lei do Ambiente. (1997). *Lei n. 20/97 – Lei do Ambiente*. Boletim da República No.40. 3º *Suplemento: 200(19-24)*. Available at: <https://www.fao.org/faolex/results/details/en/c/LEX-FAOC015370/> (accessed April 20, 2023).
- Lei dos órgãos locais do estado. (2000). *Suplemento. Decreto n.º 14/2000, Decreto n.º 15/2000*. Boletim da República: Publicação Oficial da República de Moçambique. I SÉRIE – Número 24. Available at: <https://gazettes.africa/archive/mz/2000/mz-government-gazette-series-i-supplement-dated-2000-06-20-no-24.pdf> (accessed June 3, 2023).
- Lillywhite, S., Kemp, D. and Sturman, K. (2015). *Mining, Resettlement and Lost Livelihoods: Listening to the Voices of Resettled Communities in Mualadzi, Mozambique*. Available at: <https://im4dc.org/wp-content/uploads/2015/05/Mining-resettlement-and-lost-livelihoods-Completed-Report.pdf> (accessed May 5, 2023).

- Lukes, S.M. (1974). *Power. A radical view*. Second edition published 2005. New York: Palgrave Macmillan Houndsmills.
- Malik, S.K. (2020). *Land Alienation and Politics of Tribal Exploitation in India*. Singapore: Springer Nature Singapore Pte Ltd.
- May, C. (2023). *A guide to squatting and adverse possessions claims*. Available at: <https://www.rwkgoodman.com/info-hub/a-guide-to-squatting-and-adverse-possession-claims/> (accessed June 1, 2023)
- McLennan, S., Storey, D. and Leslie, H. (2014). Entering the Field. *Development Field Work, A practical guide*. pp. 142-159. Los Angeles: SAGE Publishing Inc.
- Ministry of Land and Environment. (s.a.). *Right to Property*. Available at: <https://www.mta.gov.mz/en/terras/right-to-property/> (accessed May 10, 2023).
- National Land Policy. (1995). *Resolução n. 10/95 - Aprova a Política Nacional de Terras e Estratégias de Implementação*. Available at: <https://www.fao.org/faolex/results/details/en/c/LEX-FAOC062325> (accessed April 20, 2023).
- Norfolk, S and Liversage, H. (2002). *Land Reform and Poverty Alleviation in Mozambique*. Available at: <https://sarpn.org/CountryPovertyPapers/Mozambique/LandReform/LandReform.pdf> (accessed April 12, 2023).
- Norfund. (2020). *Development Impact Case Study, Central Solar de Mocuba Mozambique*. Available at: <https://www.norfund.no/central-solar-de-mocuba/> (accessed July 3, 2022).
- OECD. (2004). “Indirect Expropriation” and the “Right to Regulate” in International Investment Law”, *OECD Working Papers on International Investment*, 2004/04, OECD Publishing. Available at: https://www.oecd.org/daf/inv/investment-policy/WP-2004_4.pdf (Accessed May 10, 2023).
- Potts, D. (2012). Land alienation under colonial and white settler governments in southern Africa. *Handbok of Land and Water Grabs in Africa, Foreign direct investment and food and water security*. UK: Routledge.
- Pretty, J. N. (1995). *Participatory Learning for Sustainable Agriculture*. Available at: https://www.researchgate.net/publication/222453619_Participatory_Learning_for_Sustainable_Agriculture (accessed 26.April 2023).
- Pulido, L. & De Lara, J. (2018). *Reimagining ´justice´in environmental justice: radical ecologies, decolonial thought, and the Black Radical Tradition*. Available at: [http://refhub.elsevier.com/S0016-7185\(19\)30316-1/h0540](http://refhub.elsevier.com/S0016-7185(19)30316-1/h0540) (accessed April 30, 2023).

- Rawls, J. (1971). *A theory of justice*. Second edition published 1999. Cambridge, MA: Harvard University Press
- Regulamento da Lei de Terras (1998). *3º Suplemento, Decreto n. 66/98 de 8 de Dezembro*. Boletim da República: Publicação Oficial da República de Moçambique, I SÉRIE - Número 48. Available at: <https://faolex.fao.org/docs/pdf/moz33442.pdf> (accessed: May 11, 2023).
- Robbins, P. (2012) *Political Ecology. Second edition*. UK: Jown Wiley& Sons ltd.
- Scatec ASA. (s.a.,B). *Code of Conduct*. Available at: <https://scatec.com/wp-content/uploads/sites/7/2022/09/Scatec-CodeofConduct-2022-UK.pdf> (accessed April 7, 2023).
- Scatec ASA. (2023). *Annual Report 2022*. Available at: https://annualreport2022.scatec.com/wp-content/uploads/sites/11/2023/03/Scatec-Annual-Report_2022.pdf (accessed April 7, 2023).
- Scatec ASA. (s.a.,A). *About. Strategy*. Available at: <https://scatec.com/about/strategy/> (accessed April 7, 2023).
- Schlosberg, D. (2007). *Defining Environmental Justice. Theories, movements, and Nature*. Oxford University Press. Oxford.
- Svarstad, H., Benjaminsen, T.A., and Overå, R. (2018). Power in political ecology. *Journal of Political Ecology*. 25(1): 350-363. Available at: <http://dx.doi.org/10.2458/v25i1.23044> (accessed June 10, 2023).
- Svarstad, H. and Benjaminsen, T. A. (2020). *Reading radical environmental justice through political ecology lens*. Available at: <https://www.sciencedirect.com/science/article/pii/S0016718519303161?via=ihub> (accessed May 1, 2023).
- Twin, A. (2022). *What a Sale is, How It Works, Different Types & Ways to Pay*. Available at: <https://www.investopedia.com/terms/s/sale.asp> (accessed May 11, 2023).
- Twomey, H. (2014). Displacement and dispossession through land grabbing in Mozambique. *The Limits of International and National Legal Instruments. Working paper series no. 101*. Refugee Studies Centre. Available at: <https://www.rsc.ox.ac.uk/files/files-1/wp101-displacement-dispossession-land-grabbing-mozambique-2014.pdf> (Accessed May 5, 2023).
- Unicef (2022). *Main Sociodemographic Indicators of Zambezia 2022*. Available at: <https://www.unicef.org/mozambique/media/4546/file/Mainpercent20Sociodemographicpercent20Indicatorspercent20ofpercent20Zambézia.pdf> (accessed May 5, 2023).

- United Nations (2015). *Land and human rights. Standards and applications*. Available at: https://www.ohchr.org/sites/default/files/Documents/Publications/Land_HR-StandardsApplications.pdf (Accessed April 27, 2023).
- United Nations Development Programme. (2022). *Human Development Report 2021/2022. Uncertain Times, Unsettled Lives: Shaping our Future in a Transforming World*. Available at: <https://www.undp.org/egypt/publications/human-development-report-2021-22-uncertain-times-unsettled-lives-shaping-our-future-transforming-world> (accessed March 21, 2023).
- United Nations. (s.a.). *Topics. Energy*. Available at: <https://sdgs.un.org/topics/energy> (Accessed May 10, 2023).
- Urkidi, L., and Walter, M. (2011). Dimensions of environmental justice in anti-gold mining movements in Latin America. *Geoforum*, 42(6), 683–695. Available at: <https://doi.org/10.1016/j.geoforum.2011.06.003> (accessed April 3, 2023).
- Walker, G. (2012). *Environmental Justice. Concepts, evidence and politics*. London: Routledge
- Weber, M. (1978). *Economy and society: an outline of interpretive sociology*. Berkeley, California: University of California Press.
- Wiegink, N. (2020). *Learning lessons and curbing criticism: Legitimizing involuntary resettlement and extractive projects in Mozambique*. Available at: <https://www.sciencedirect.com/science/article/abs/pii/S0962629819300770> (accessed May 5, 2023).
- World Bank. (2016). *World Bank-supported social protection activities foster economic inclusion*. Available at: <https://www.worldbank.org/en/news/feature/2016/02/16/world-bank-supported-social-protection-activities-foster-economic-inclusion> (accessed April 12, 2023).
- Young, I. (1990). *Justice and the politics of difference*. Princeton: Princeton University Press.

4. Appendix

4.1. List of Interviews

The subsequent list provides a chronological record of the interviews conducted. All names have been changed to protect identities.

1. The group in Samora Machel (PAP)
2. Three local leaders in Cuba
3. Antonio, smallholder in Cuba
4. Cesário, smallholder in Cuba
5. The Régulo of Cuba
6. Delson, smallholder in Cuba
7. Joaquim, smallholder in Cuba
8. Aurelio (PAP), use of additional translator.
9. Jenesses (PAP)
10. Valber (PAP)
11. Inesh (PAP)
12. Samassoa
13. Aida (PAP)
14. Daniel (PAP)
15. Alisha (PAP)
16. Bernardo (PAP)
17. The money savings group (PAP)
18. Leonel (PAP)
19. Gisa (PAP), use of additional translator.
20. Elina (PAP), use of additional translator
21. The former ADRA representative
22. The Kanfumo
23. Paolo (PAP)
24. Laura (PAP)
25. Manuel (CESOM worker)
26. The local EDM substation worker
27. The headmaster
28. Louis (PAP and GTT)

29. Florencio (PAP and GTT)
30. Bruno (PAP)
31. Amarildo (PAP)
32. The Administrative Director of Mocuba
33. The Régulo of project area
34. Leonora (PAP and CESOM worker)
35. Joao (CESOM worker)
36. EDM
37. The Norfund representative



Norges miljø- og biovitenskapelige universitet
Noregs miljø- og biovitenskapelige universitet
Norwegian University of Life Sciences

Postboks 5003
NO-1432 Ås
Norway