Green livelihoods and women's economic empowerment

A case study from Mozambique

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Research report prepared by

Muva

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About MUVA

MUVA is a Mozambican non-for profit committed to women's economic empowerment that started as a program funded by FCDO and implemented by the UK consulting company OPM. MUVA aims to enhance the capacity of female youth to benefit from Mozambique's economy.

MUVA's vision is a world in which young women and youth have the skills and agency required to access decent economic opportunities in a supportive, inclusive and gender equitable environment.

The approaches designed, tested and delivered by the consortium include: skills development with blended interventions in the areas of entrepreneurship for young female entrepreneurs ready to expand their small businesses, and for micro-entrepreneurs interested in improving income and vision for their businesses; soft skills for employment and digital literacy, job creation and internships.

During the last 5 years, MUVA has delivered solid achievements:

- MUVA counts today more than 10,000 direct participants in its different interventions, including entrepreneurship.
- It has trained and managed more than 200 facilitators, mentors and trainers.
- It designed and tested successfully more than 15 approaches for Women Economic Empowerment.
- It triggered public policies changes.
- Some of its best practices have already crossed borders and are being implemented through partners in Chad, Guinee Bissau, Brazil and Malawi.

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Abbreviations and acronyms

AFD	Agence Française De Développement
AfDB	African Development Bank
ANAC	Administração Nacional das Áreas de Conservação
CA	Conservation Area
DFID	Department for International Development
FCDO	Foreign, Commonwealth and Development Office
FGD	Focus Group Discussion
FBS	Family Budget Survey
FEE	Female economic empowerment
HWC	Human-Wildlife Conflict
ICRW	International Centre for Research on Women
ILO	International Labour Organization
INGO	International Non-governmental Organisation
JPAL	The Abdul Latif Jameel Poverty Action Lab
MEL	Monitoring Evaluation and Learning
MICOA	Ministry for the Coordination of Environmental Action
NCCAMS	National Climate Change Adaptation and Mitigation Strategy
NGO	Non-governmental Organisation
NTFP	Non-Timber Forrest Product
OPM	Oxford Policy Management
SADC	Southern African Development Community
SDGs	Sustainable Development Goals
UN	United Nations
UNCBD	United Nations Convention on Biological Diversity
UNCEDAW	Convention on the Elimination of all Forms of Discrimination Against Women
UNCRPD	UN Convention on the Rights of Persons with Disabilities
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
USAID	United States Agency for International Development
WEE	Women's economic empowerment

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Executive summary

Women Economic Empowerment (WEE) is the capacity of women to participate in, contribute to and benefit from growth processes in ways that recognise the value of their contribution, respect their dignity and make it possible for them to negotiate a fairer distribution of the benefits of growth.[1] In the last decade the importance of WEE has gained more recognition, with more acknowledgement that half of the world's population cannot be ignored and the impact that this has on economic and social growth potential. In order to promote the empowerment of women the MUVA programme has developed a theoretical framework which highlights the critical importance of a combined bundle of skills, opportunities and agency.

For the last 20 years the conservation work has increasingly been looking into enabling a socio-economic growth of the population that live in the conservation areas and the buffer zone. Attempts at nature conservation that have failed to positively integrate the areas dwellers have either required expensive investment in law enforcement and/or failed at protecting the use the natural resources. Therefore, communities have been increasingly involved in the opportunities the conservation areas provide, acquiring new skills and income. More recently a focus on ensuring women participation has significantly changed the demographics of those interventions' participants.

This formative research is the first step to design an intersectional approach to work on WEE in conservation areas in Mozambique. The research was done in five conservation areas across the country. It explored if and how green livelihoods activities in conservation areas have strengthens women's agency at home, in their community and in their roles in natural resource management. The findings of this research aim to provide practice insight for the stakeholders that work on conservation and any program that looks to strengthen inclusive development with a specific gender component of the conservation work.

This report has six main sections.

1. **An introduction which** briefly presents the work of MUVA and its approach to WEE and gives the background to this research project.
2. **Research methodology** presents the background to this research project, the theoretical framework, the research questions and details of the five conservation areas studied.
3. **Concepts and context for this research** presents a brief literature review and explores the key concepts of agency, WEE and green livelihoods as well as the broader context of women's engagement in conservation, biodiversity and climate resilience in Mozambique. It also explores the intersection between agency and green livelihoods.
4. **The research findings** section presents the results of the research and data collection in the field. It explores the different type of green livelihoods that were observed, women's engagement within these activities, and the impact that these have had on women's economic empowerment and agency within the five conservation areas studied.
5. **Conclusion.** The research main conclusion points about the research question on green livelihoods impact on agency and being a tool for transformative change is provided.
6. **Key lessons and next steps** sets out the main conclusions and lessons coming out of this research, including some key considerations based on the research findings and areas where further research would be useful. These will drive the next steps of the MUVA approaches to be co-created with potential partners.

1 OECD DAC Gender Equality Network, 2011, Kabeer 2012, Eyben *et al.* 2008.

1 Introduction

> “MUVA aims to enhance the capacity of female youth to participate in and benefit from Mozambique’s economic growth.”

1.1 What is MUVA?

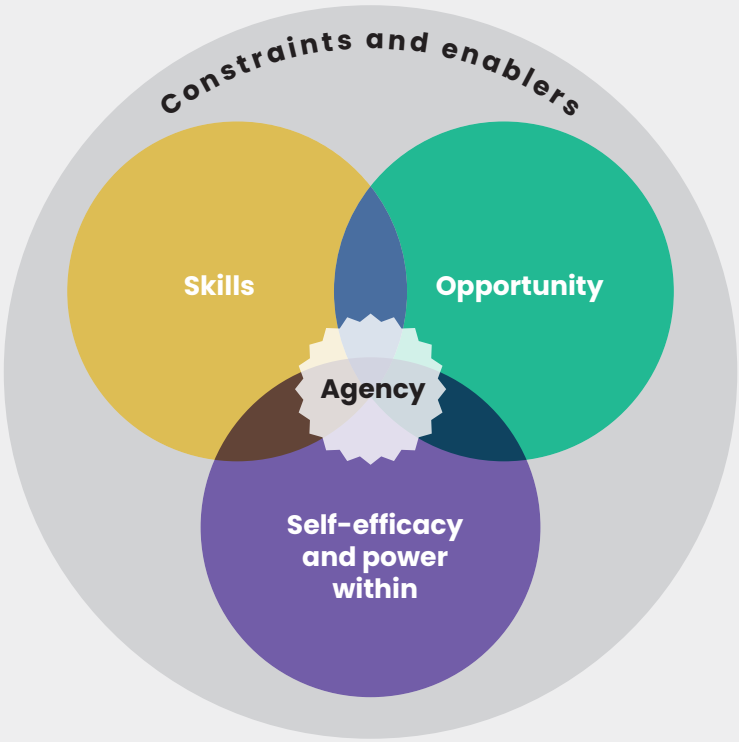
MUVA **is a social incubator**. It is designed to innovate, to develop creative solutions, to trial, to assess and reflect, to rethink, and to push the boundaries of current thinking and practice on WEE in the urban South. This sets MUVA apart from other Non-Governmental Organizations (NGOs) and non-for profits. It is neither project-dependent nor project-driven. Rather, MUVA’s objective is to be guided by its purpose as a social incubator and by the desire to innovate, to accelerate, and to develop evidence on new and effective approaches to enhancing WEE. As such, MUVA has elements of **a Mozambican think tank involved in applied research**. This identity shapes both MUVA’s way of working, and its financial position, as to be able to truly operate as an incubator, MUVA needs to have some level of financial independence from its project funding. Conversely, the direct implementation of activities is invaluable to both MUVA’s mission and financial viability. Indeed, project work is essential to MUVA’s ability to build relationships, to demonstrate the sustainability of the approaches it has developed, and to develop new methodologies and/or adapt relevant ones to the Mozambican context.

MUVA aims to enhance the capacity of female youth to participate in and benefit from Mozambique’s economic growth and employs a definition of “capacity” that responds to the feminist influence in development gender policy. MUVA’s framework for WEE involves skills, opportunities and agency. Agency involves women’s ability to: i) define and act on aspirations; ii) make decisions that matter to them, and iii) participate in the economy and public life.[2] This framework is based on evidence as there is a broad consensus that combined/bundled interventions work better than single-intervention programmes.[3]

Our research and experience has shown that providing technical skills and access to economic opportunities alone is not enough to empower women and that the critical element needed to bring about WEE is that of power within and self-efficacy, which enables one to use the skills and opportunities at one’s disposal to their best advantage. Agency is necessary for women to be able to overcome the challenges posed by a restrictive and un-enabling economic environment and the access challenges this brings, exacerbated by patriarchal structures, which often constrain women to a passive role in society and limit their economic and social aspirations.

2 Adapted from JPAL, expanding on Kabeer, 1999.
3 Kabeer 2012 for India; Bandiera *et al* 2013 for Uganda; Fewer *et al*. for multi-country evidence; Edmeades *et al*, 2014 for Ethiopia; Jewkes *et al* 2014 for South Africa; Marcus and Brodbeck 2015.

Figure 1: MUVA Women's Economic Empowerment framework



1.2 The background to this research project

The French Development Agency (AFD) support to MUVA (2021-2024) included the design of a new approach to WEE that would focus on the biodiversity sector in Mozambique. Biodiversity is one of the priority sectors of AFD. In Mozambique, over the past 15 years, they have been supporting the development and rehabilitations of 9 of the 17 protected areas in the country, funded the combat of elephant poaching and have created and still support the BIOFUND trust which aims to sustainably finance the country's protected areas. AFD is also supporting Mozambique to set up a compensation mechanism for damage to biodiversity caused by economic development projects.

Improving the gender approach in conservation is part of their priorities. Hence, they have tasked MUVA to design and test a new WEE approach intersecting with biodiversity. With a global shift underway towards zero carbon and the greening of the global economy, Mozambique is at a crossroads to shift itself onto a greener, more sustainable growth path that diversifies the economy away from its traditional sectors (including a focus on the extractive industries) leading to the creation of new economic opportunities in a diverse range of new 'green' sectors. Today with 17 protected areas the country has formally 25% of its territory protected. In 2021 Mozambique has become the first country to receive payments from a World Bank trust fund for reducing emissions from deforestation and forest degradation.[4] The protected areas are however seldom established with and for the population, and the opportunities they provide are yet to focus on the inclusive economic and social growth of the people living in them – and do not include a gender lens.

4 The Forest Carbon Partnership Facility (FCPF) paid Mozambique $6.4 million for reducing 1.28 million tons of carbon emissions since 2019. The payment is the first of four under the country's Emission Reductions Payment Agreement (ERPA) with the FCPF that could unlock up to $50 million for reducing up to 10 million tons of C02 emissions in Mozambique's Zambézia Province by the end of 2024. World Bank, 2021

The development of a MUVA approach to WEE follows the key steps:

1. **Be based on global evidence** to ensure innovative approaches are designed using existing and up-to-date knowledge. A global literature review on biodiversity and gender was conducted, including what existed in Mozambique. This study aimed to explore three main questions around which of the key "green sectors" offered the most potential to generate employment or economic opportunities for women and youth, what examples exist of interventions and best practices for promoting women and youth engagement in these sectors already existed, and where MUVA could add most value in supporting women and youth to make the most of these opportunities in urban areas of Mozambique. The report identified five main sectors as potential areas of focus, namely (i) conservation, eco-system management, urban forestry and farming, (ii) sustainable infrastructure, green energy and green urban development, (iii) waste management and the circular economy, (iv) ecotourism, (v) green entrepreneurship.[5]

2. **Be based on local partners and institutions.** An initial mapping of the existing interventions in the country and their interest in working with gender and innovative approaches were mapped. It identified 18 key actors all engaged in the promotion of livelihoods in different sectors of the green economy. It assessed the work of these actors according to five key criteria which included their involvement in the green economy, their capacity to engage in innovative programme design and shared learning experience, their sustainability and access to funding resources, their existing and past partnerships and potential for future scale-up, and finally their ability to engage with the potential for social disruption and challenge gender normative behaviour.[6]

3. Following this in-depth mapping, MUVA made the decision to **focus in on the area of livelihoods linked to natural resource management and conservation**, given that this is a key priority area for Mozambique's economy with more than two thirds of the population engaged in agriculture/resource-based livelihoods, and given that the question of conservation and environmental sustainability is a critical issue in a country like Mozambique which has such a wealth of terrestrial and marine ecosystems and biodiversity, whilst also suffering from high levels of poverty and climate vulnerability, both of which threaten long-term conservation. Through the mapping work, MUVA identified five key partners interested in this research project, and potentially in working together with MUVA to design and test a WEE approach to generate relevant evidence and identify best practices.

4. **Local formative research on the research question identified to support the design and co-creation of the WEE approach to be tested.** This is the research that was conducted in 5 conservation areas, and this is the final report.

Based on this research, MUVA plans to develop a new intervention for implementation in 2022 that can test out how, bringing a stronger focus on agency and women's economic empowerment to conservation activities and green livelihoods, can enhance both economic, social and environmental impact. This report is a critical step in this process.

5 Carried out by the UK-funded WOW Helpdesk (WOW 2020).
6 Carried out by the Mozambican environmental consultancy, Verde Azul, 2021.

The partners that were part of this research are from south to north of the country areas of intervention:

1. **Peace Park Foundation**, as managers of the Reserva de Maputo.
2. **Foundation Micaia** that works in the Parque Nacional de Chimanimani and the Lower Zambezi Valley. As the research focused on conservation areas and their buffer zone it only looks at the former area of intervention.
3. **Parque Nacional da Gorongosa**, as manager of the Nacional park.
4. **François Sommer Foundation**, as supporters of the Reserva Nacional de Gile.
5. **Zoological Society of London** and the **Associação do Meio Ambiente de Cabo Delgado** who support a community managed marine reserve on the cost of Cabo Delgado.

This report does not differentiate the situation in the different conservation areas and interventions. The findings are provided at the national level. The research data has been anonymized and shared with the partners. A shorter dedicated report for each of the areas was prepared and shared only the specific conservation area partners.

1.3 Structure of the report

Following this brief introduction the report has six main sections:

- **Research methodology** presents the background to this research project, the theoretical framework, the research questions and details of the five conservation areas studied.
- **Concepts and context for this research** explores the key concepts of agency and WEE and Green Livelihoods as well as the broader context of women's engagement in conservation, biodiversity and climate resilience in Mozambique.
- **The research findings** present the results of the research and explores the different type of green livelihoods, women's engagement within them and the impact that these have had on women's economic empowerment and agency.
- **Conclusion.** The research main conclusion points about the research question on green livelihoods impact on agency and being a tool for transformative change is provided.
- **Key lessons and next steps** sets out the main conclusions and lessons coming out of this research, including areas where further research would be useful.

2 Research methodology

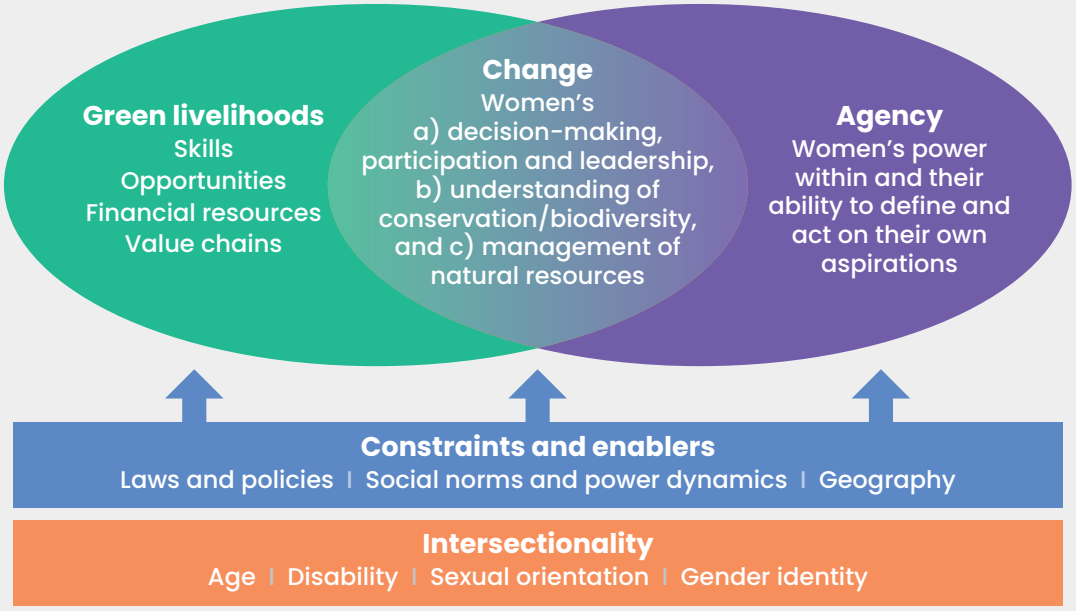
> “How can green livelihoods strengthen women’s agency at home, in their community and their roles in natural resource management in Mozambique?”

2.1 Research theoretical framework

This formative research aims to generate evidence through joint learning and contribute to the co-creation of a new MUVA intervention, enhance the effectiveness of partners’ and donors’ interventions, and contribute to the global evidence gap on women’s economic empowerment (WEE) and green livelihoods.

This research has focused on agency and the gender-specific constraints and enablers relating to agency and women’s economic empowerment in green livelihoods and natural resource management, as seen in the figure below.

Figure 2: The conceptual framework for the research



2.2 Key research questions

The overall research question is how can green livelihoods strengthen women’s agency at home, in their community and their roles in natural resource management in Mozambique? Several questions were laid out to address this question and have driven the design of tools for data collection. The questions are organised in themes and sub-themes that are in line with this research’s framework, as can be seen in the tables below:

Table 1: Key research questions

Theme	Sub-theme	Questions	Tools
Green livelihoods	**Understanding of green livelihoods**	1. What does a green livelihood (linked to conservation, biodiversity and natural resource management) mean to women? Partners? Community members?	Interviews FGDs
	Details on livelihoods	2. How many women are supported? 3. What kind of livelihood? 4. How many hours are spent in activity each week? 5. Is the work seasonal? If so, what season? 6. How is the activity integrated with the rest of their activities (for women, men and children)?	Partner profiles
	Income from green livelihoods	7. What income do women receive from green livelihoods? 8. What in kind support do women receive?	Partner profiles
	Skills and knowledge	9. What skills and knowledge do they acquire through green livelihoods?	Partner profiles
	Opportunities	10. What opportunities and other benefits are offered to women as part of their green livelihood?	Partner profiles
Intersectionality		11. Do women with disabilities and women of different ages, marital status and sexual orientations and gender identities take part in green livelihoods in different parts of Mozambique?	Partner profiles

Theme	Sub-theme	Questions	Tools
Change **How agency and livelihoods empower women and lead to better conservation outcomes**	**Decision-making and power dynamics**	1. How do women and men feel green livelihoods and agency influence women's decision-making in the household, community and in their roles in natural resource management (considering financial, education, work, time, division of tasks, mobility, care, access to SRH etc issues)?	Interviews FGD Case study
	Participation	2. How do green livelihoods strengthen women's participation in community committees and/or natural resource management?	Interviews FGD Case study
	Leadership	3. How do green livelihoods strengthen women's leadership in community committees and/or natural resource management?	Interviews FGD Case study
	Understanding and valuing of conservation and biodiversity	4. How do green livelihoods change how women understand, value and become advocates for conservation and biodiversity?	Interviews FGD Case study
	Impact on natural resources	5. How do green livelihoods and agency impact on the management of natural resources by women, their households and their communities?	Interviews Case study
Intersectionality		6. What are the experiences and outcomes for women with disabilities and women of different ages, marital status and sexual orientations and gender identities in different parts of Mozambique?	Interviews Case study

Table 1: Key research questions continued

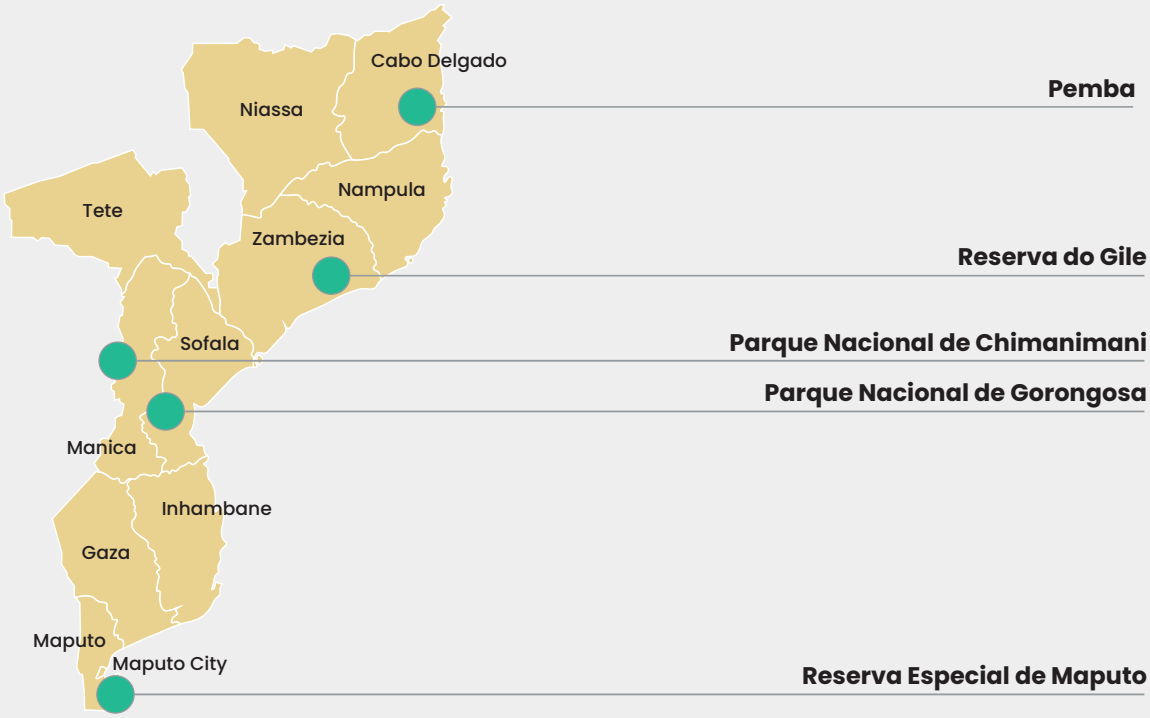
Theme	Sub-theme	Questions	Tools
Women's agency	**Understanding of agency**	1. What does agency meant to women? To partners? To other community members?	Interviews FGD Case study
	Aspirations	2. What does success mean for women in green livelihoods? 3. What does increased well-being as a result of green livelihoods mean?	Interviews FGD Case study
	Power within	4. How have green livelihoods changed how women see themselves (confidence, dignity and self-esteem)? How others see women? 5. How have green livelihoods changed what women feel they can do at home and in the community (realising the possibility of doing something)? How others see women's power within?	Interviews FGD Case study
Intersectionality		6. What are the perceptions and experiences of women with disabilities and women of different ages, marital status and sexual orientations and gender identities in different parts of Mozambique?	Interviews Case study

Theme	Sub-theme	Questions	Tools
Constraints and enablers	**Laws and policies**	1. What international instruments impact on women's agency in green livelihoods? How? 2. What national laws and policies impact on women's agency in green livelihoods? How?	Desk review
	Social norms and power dynamics	3. What social norms related to gender and economic activity affect women in green livelihoods (e.g. gendered occupational and value chain segregation, land ownership)? 4. What broader social norms about appropriate activities for women and men of different ages disadvantage women at home and in the community (e.g. care responsibilities, mobility, VAWG)? 5. Do women internalise and reproduce social norms? How does that impact them?	Desk review Partner profile Interviews Case study
	Geography	6. How does location impact on women's agency in green livelihoods?	Partner profile Desk review
Intersectionality		7. How do constraints and enablers impact on women with disabilities and women of different ages, sexual orientations and gender identities, in different parts of Mozambique?	Desk review Interviews Case study

2.3 Methodology

This formative research was mainly based on qualitative data collected through interviews and focus group discussions. It was conducted in four conservation areas selected according to where partners had existing relationships with communities, and MUVA could potentially work with them. The chosen areas included Maputo, Pemba, Gilé, Chimanimani and Gorongosa such as illustrated below.

Figure 3: The research locations



The study was designed based on three assumptions: firstly, that the conservation partners involved have the knowledge and capacity to deliver the skills women require for green livelihoods and the opportunities for them to use these skills in green sectors; secondly, that women's participation in green livelihoods has the potential to deliver their economic empowerment; and finally, that agency is critical for women's economic empowerment.

2.3.1 Data collection and analysis

The data collection took place over a two week period in November 2021 in the five different conservation areas and involved 42 in-depth interviews with female participants of green livelihood projects, 2 case studies, 29 focus groups (11 with female participants of livelihood interventions and, 6 with female non-participants; and 8 with male participants and 4 with male non-participants)

Table 2: Areas and communities included in the research data collection

Conservation area	Conservation partner	Communities visited
Reserva Comunitaria de Mecufi Cabo Delgado	Zoological Society of London (ZSL) Asociacao do MeioAmbiente (AMA)	Mecufi Mecufi District
Reserva Especial de Maputo	Peace Parks Foundation (PPF)	Gala Guengo Tchia Salamanga Matutuine District
Reserva de Chimanimani	Micaia Foundation	Mussapa in Sussundenga Mucauayo in Dombe
Reserva Nacional do Gile	Fondation François Sommer/IGF	Mihecue Naesse Namurrua Troncone Txopene e Vassele (District of Gile)
Parque Nacional de Gorongosa	Gorongosa Restoration Project (GRP)	Cascata na Serra da Gorongosa Zingazinga Vunduzi Mutche Nhamatanta comunidade de Vinho

2.3.2 Ethical issues

This research took all the necessary steps to ensure the respect of participants' confidentiality and to ensure that safeguarding procedures were in place. It defined protocols and trained the research teams to ensure their observance of the best procedures during data collection. Protocols included the minimum required age for participants of 18 years old, and oral consent was requested before any interview or data collection started. Specific protocols were implemented, considering the risks related to COVID, including masks and maintaining social distancing and avoidance of enclosed spaces.[7]

2.3.3 Limitations

The absence of individuals with visible disabilities or who acknowledged special needs limited our ability to adequately capture their reality or give sufficient attention to questions around intersectionality. Despite our efforts to ensure some level of diversity within the focus group discussions (married vs widows, young vs older, etc.), it was challenging to identify elements of intersectionality and our ability to focus on issues around disability, sexuality, ethnicity religion, civil status was limited. In addition, language barriers may have produced a loss of information due to translations.

7 See the methodology notes for more details.

The close relationship with the conservation partners was critical for this research to be able to take place. However, it may also have created a selection bias by potentially selecting the individuals who work in close relationships with the partners. Despite careful attention not to create or raise expectations of community members, there is always a risk that the participants may still expect some support in the future. This expectation may also have affected how they responded to the questions asked, highlighting equipment, material, or financial support needs. In addition, we observed some evidence of a social desirability bias with respondents stating what is generally accepted by social norms or what they thought the researchers wanted to hear.

To mitigate interviewer biases, we organised teams composed of a mix of nationals and expatriates, men and women. Focus Groups Discussions (FGD) were led by facilitators of the same gender as the participants whenever possible, then endeavouring to create a safe space for participants to express themselves more freely.

2.4 Research disclaimers

This report is produced for the MUVA team and for the partners collaborating with the objective being to co-create a new intervention to enhance female participation and agency in green livelihood activities. This research aims to help strengthen the effectiveness of conservation partners' work regarding women's economic empowerment and promotion of women's agency, as well as to contribute to the broader evidence base on what works to promote women's economic empowerment within the green (and blue) economy. The report is the result of formative research conducted within a limited timeframe of two weeks that includes qualitative data collection in five different conservation areas across Mozambique. It is essential to note that this study is limited to the conservation areas studied, and caution should be taken before generalising or extending findings to other regions or sectors in Mozambique.

3 Concepts and context for this research

> "MUVA's work sees gender not as merely biological but as social attributes and opportunities."

3.1 Women's Economic Empowerment, agency and social norms

3.1.1 Women's Economic Empowerment

Women's economic empowerment is a process where women's lives are transformed from having limited agency and access to economic assets to a situation where they have access to and control over decent work and economic support (including financial, land, technology and livestock) (Hunt and Samman, 2016). It requires that the constraints that hinder and the enablers that support access to and control over decent work and economic assets – such as social norms, geography, rules and institutions – are addressed or built upon.

Definitions of empowerment have been evolving in development theory and practice since the 1970s, when 'feminist consciousness raising and collective action' began to influence development practice (Cornwall 2016). Since this time, disputes have arisen around varying interpretations of how 'power' is conceived in development processes. As Gita Sen has argued, empowerment is, 'first and foremost, about power; changing power relations in favour of those who previously exercised little power over their own lives' (Sen 1997).

MUVA's work sees gender not as merely biological but as the social attributes and opportunities associated with being male and female and the relationships between women and men and girls and boys, as well as the relations between women and those between men, acknowledging that gender is part of the broader socio-cultural context. This means that in most societies there are differences and inequalities between women and men in responsibilities assigned, activities undertaken, access to and control over resources, as well as decision-making opportunities. MUVA's work therefore goes beyond just 'including' or measuring the number of women involved, to actively address power imbalances, which are both visible and invisible, as well as based on the individual and the collective social norms. Hence, **WEE** for MUVA is the participation and benefit of women in growth processes in ways that recognise the value of their contribution, respect their dignity and make it possible to negotiate a fairer distribution of the benefits of growth".[8]

8 The OECD DAC Gender Equality Network, 2011, Kabeer 2012, Eyben *et al*. 2008 definition talk about the capacity of women, while in MUVA we consider it's about their actual participation. OECD definition: Women Economic Empowerment (WEE) is the capacity of women to participate in, contribute to and benefit from growth processes in ways that recognise the value of their contribution, respect their dignity and make it possible to negotiate a fairer distribution of the benefits of growth

Box 1:
A snapshot of feminism theory

A fundamental disjuncture in the definition of power has been characterised as the difference between 'liberal' and 'liberating' empowerment (Sardenberg 2008). The former individualised perspective has predominated gender policy in the international development sector and views power in largely neoliberal terms: something that can be 'acquired, bestowed and wielded' (Cornwall 2014: 5). This formulation sees female economic independence and education as having productive rather than intrinsic value. It can be seen very clearly in the following remarks made by the World Bank Vice President for Africa, Hafez Ghanem in 2019: "Empowering women will help boost growth. African policy makers face an important choice: business as usual or deliberate steps toward a more inclusive economy [....] After several years of slower-than-expected growth, closing the opportunity gap for women by removing barriers to their economic participation is the best way forward."[9]

The feminist 'liberating' interpretation of empowerment, by contrast, has tended to focus on deep-rooted power imbalances and the need for structural transformation (Cornwall & Edwards 2014; Sardenberg 2008; Kabeer *et al*). These approaches view empowerment as having intrinsic value, as being the ultimate 'goal', irrespective of its wider economic effects. They understand the institutionalisation of gender in so far as it permeates not only formal laws, policies and social norms, but is also internalised within the minds of individuals. It exists within, and therefore requires attention to, the consciousness of disempowered groups and individuals. A feminist influence in development policy has resulted in an emphasis on the 'power within' (Rowlands 1997; 2016). As Cornwall and Edwards argue, empowerment is not just about enlarging the boundaries of action. It is also about expanding the horizons of possibility, of what people imagine themselves being able to be and do (2014).

3.1.2 Agency

Women's agency will vary depending on their characteristics, where they live, and what rules and norms govern how people behave and what they can do. Empowerment and agency are complex, culturally and contextually specific processes that change over time (Anand *et al*., 2019). All individuals have different characteristics which affect their agency – such as their gender, age, race, ethnicity, religion, disability, class and so on – and discrimination based on these characteristics can multiply the barriers to their agency (World Bank, 2018). Social norms lead to biases and stereotypes, which further restrict what women can aspire to and achieve (ibid). Sets of rules that govern access to finance, assets and work can discriminate against women. These factors mean that interventions may also need to vary depending on women's characteristics, where they live and the norms and rules that affect them in that context and at that time (Hunt and Samman, 2016).

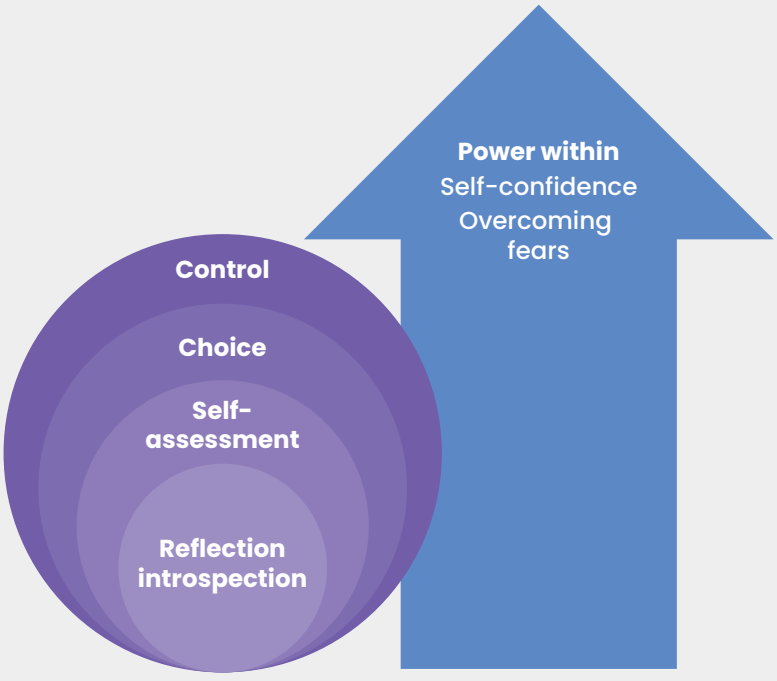
MUVA's interpretation of agency is that of having the power within and the ability to make choices and have control (self-efficacy). When speaking about the "power within" we adopt the definition by the VeneKlasen and Miller (2012) who describes it as: The sense of confidence, dignity and self-esteem that comes from gaining awareness of one's situation and realising the possibility of doing something about it. When talking about self-efficacy we adopt the definition of Bandura (1977) as an individual's belief in his or her capacity to execute behaviours necessary to produce specific performance attainments. It reflects confidence in the ability to exert control over one's own motivation.

9 World Bank Blog, 'Global Uncertainty Continues to Slow Growth in Africa's Economies', Press Release, October 9 2019.

Defining WEE and agency is critical, but does not provide a roadmap for action, and it is notoriously challenging to operationalise power. Our experience has shown that the internal transformation process happens as we take the following steps.

- **Introspection and reflection.** Building a person's "power within" usually starts with nudges for reflection and introspection. Creating a safe space is crucial to facilitate a process in which young people can start learning about themselves as well as the social norms that surround them. Placing a particular focus on reflection around gender norms, helps (men and women) understand and challenge the power relationships that determine the roles assigned to them by society.
- **Self-awareness, self-assessment and negotiation.** In a next step, the person starts to critically engage with her- or himself and her or his life. By sharing their experiences and thoughts with a wider group of similar people, they become aware that they are never alone with their struggles and difficulties. This creates a feeling of solidarity and strength and allows the individual to evaluate what their relative strengths and weaknesses are. Developing self-awareness, the ability to understand one's own emotions and how they impact their own behaviour, can improve one's capacity to negotiate effectively. The questioning is the precursor to action which starts with a negotiation and is about making ones voice heard.
- **Choice and control.** The element of choice is fundamental in strengthening a person's capacity for pro-activity and initiative. Knowing that the path one is on is the result of one's own decision, leads to greater ownership, sense of responsibility and motivation to succeed. Finally, this chain of introspection, reflection, self-awareness, awareness of the other, and choice leads to greater control. It leads to greater control over one's personal and professional decisions and over the use of one's resources, including time.

Figure 4: The pathway to agency



This transformation process is not a linear process. Rather it is a process that can be re-visited again and again once a person has the emotional capacity to do so. Different experiences and new challenges continuously require a person to re-assess their capabilities and preferences and negotiates their choices. The more often this cycle gets repeated the stronger the agency becomes, leading to the capacity to overcome fears and barriers and ultimately being able to make choices and have more control. Control over ones' life, body and resources.

For MUVA developing ones' "power within" is a pathway to stronger agency. The confidence, dignity and self-esteem that comes from gaining awareness of one's situation and realising the possibility of doing something about it (VeneKlasen and Miller, 2012). 'Power within' has also been defined as the knowledge, individual capabilities, sense of entitlement, self-esteem, and self-belief to make changes in their lives, including learning skills for jobs or to start an enterprise. It is complemented by three other aspects of power and agency that are all necessary to contribute to women's economic empowerment and include 'power to' which includes economic decision-making power within the household, community and local economy (including markets), not just in areas that are traditionally regarded as women's realm but extending to areas that are also regarded as men's realm; 'power over' which is defined as access to and control over financial, physical and knowledge-based assets, including access to employment and income generation activities; and 'power with', which is the ability to organise with others to enhance economic activity and rights (Hunt and Samman 2016).

Evidence suggests that access to and "power over" physical and financial assets are crucial for women's economic empowerment and are linked to the effectiveness of natural resource management. Globally, women's rights to land and property, and access to essential natural resources such as water are not always met (UN Women, 2018). In many countries, women also have limited access to agricultural services, information, credit, labour, technology, markets and conservation funds compared to men (Hunt and Samman, 2016; UN Women, 2018). This leads to women often having less control over the types of crops cultivated, methods of cultivation, and the sharing of benefits. It also means they are less able to access information and technology that can help them adapt to climate change and environmental degradation (DFID, 2014). Women can play significant roles in the sustainable management of, for example, agriculture and forestry but tend to be excluded from decision making and land ownership (ILO 2017).

Women's agency also means having the ability to make decisions about economic matters, participate in public life, and take on leadership roles. 'Power to' involves economic decision-making power within a woman's household, community and local economy, not just in areas that are traditionally regarded as for women (Hunt and Samman, 2016). The World Bank (2018) defines three areas that prevent women from making economic decisions: time scarcity, where they have no time to be involved in decision-making; financial scarcity where they do not even have the economic resources to meet basic needs; and aspirations scarcity where having no mid or long term goals affects decision-making (ibid).

3.1.3 Social norms[10]

Social norms can be understood as the implicit and informal rules that most people accept and follow, and which are influenced by beliefs, economic circumstances and sometimes by the rewards and sanctions we might expect for either adhering to or disobeying them (ALIGN 2021). Social norms and lead to biases and stereotypes which further restrict what women can aspire to and achieve (Anand 2019). Sets of rules that govern access to finance, assets and work can discriminate against women and vary according to women's characteristics, such as where they live and the norms and rules that affect them in that context and at that time (Hunt and Samman, 2016).

10 It should be noted that the social norms described below may not be in keeping with the legal and policy frameworks in the country and this may cause tension if social norms are in contravention of the law of the country. The key laws that govern the areas described are the Family Law, the Law on Domestic Violence, and the Land Law, and others.

Globally, social norms define women and men's work roles at home and in the community (Goh, 2012; Hunt and Samman, 2016). In Mozambique this often restricts women's activities to small-scale farming and hampers women from gaining access to better economic opportunities, including in green livelihoods. Women require the authorization of their husbands or other male relatives to engage in economic activity (FAO). While social and customary norms vary from one region to another in Mozambique, patriarchal gender relations generally restrict women's access to land rights, livelihoods and natural resources in community and private life. In Northern and Central Provinces of Mozambique, the main social unit is the matrilineal extended family where women only have rights through their male relatives, such as their brothers or maternal uncles. In Southern Provinces a patrilineal system is more common with women's land rights, livelihood and natural resources dependent on her husband and male relatives.

Gender norms shape women's access to and control over decent work and economic assets, including land, knowledge, livestock, technology and other financial assets. Women may internalize social norms about their status and have preferences that reflect and accept inequality; it can be challenging to understand whether women's preferences are their own or what society demands of them (Glennerster *et al*.).

Gender norms also shape behaviours and preferences related to the natural environment also influence how women and men gain and use different knowledge about plant and animal species as well as how they have different roles in agriculture and food production, land use, accessing water and energy, natural resource management and conservation, and household activities (UN Women, 2018). This knowledge of biodiversity and use of natural resources differs by age, culture, and other factors and is often transmitted from older to younger generations (ibid). The division of roles based on gender is often a result of gender-based inequalities that limit women's rights to, ownership of and access to land and other productive resources.

Changing social norms can be challenging and takes a long time. Change requires a critical mass of women to challenge norms otherwise they can be reinforced. Old and new norms can co-exist in communities meaning that the extent to which women can exercise agency can vary from household to household and will depend on the extent to which the opinions and values of families and communities also change (Matusse, 2019). People are motivated to adopt a new behaviour when other members of their group engage in the same new behaviour (World Bank, 2018).

Challenging gender "myths" is also important. Evidence from women's economic engagement in cashew processing in Mozambique shows that it is also important not to treat all women as the same or to stereotype men (Kanji and Vijfhuizen, 2004). This research challenged "myths" that women all lack control over land and trees, that agricultural extension and local organization is gender-neutral, and that women are better suited to some jobs in cashew processing which require "nimble fingers". The reality is more complex: competition over jobs meant that men were doing jobs which were previously seen to be "women's work", and equal opportunities were not being provided to women to work in the full range of jobs available.

The strategies that can help change norms are highly context-specific, complex and non-linear. The kind of support that can help change norms includes: promoting women's economic well-being; being able to organize collectively; support to groups traditionally holding power (often men); increased access to media and communications challenging discriminatory norms; legal changes; education; and role models (Hunt and Samman, 2016).

Changes in gendered social norms can also be reversed. In crisis or conflict, women's economic empowerment can be necessary and new norms seemingly adopted. However, discriminatory norms can re-emerge when the crisis has passed (Hunt and Samman, 2016). Some of the most effective strategies involve working with children and youth, including boys, to break entrenched and discriminatory social norms passed down between generations (ibid). After-school programmes that create a safe space for adolescent girls to discuss their aspirations and support them to challenge gender norms in the workplace and economic life have also been shown to work (World Bank, 2015).

Social norms can and do change in the course of broader social change processes not related to intentional programmatic intervention. A review of the broad-sweep drivers of change in gender norms by Marcus *et al* (2014) finds that in general processes of change in gender norms have been driven by several factors simultaneously. Of these, education, economic change, exposure to new ideas and political and social mobilisation have often been the most critical.

Evidence shows that a number of themes or 'opportunities' through which norms change are discernible and include important drivers such as education, economic change, exposure to new ideas, and political and social mobilisation. 'Opportunities' where norms can change appear to include processes through which women's living arrangements become separate from men's – via migration, divorce or widowhood. Individuals also appear to be able to exploit 'norm gaps' in some circumstances – such as in periods of crisis or broad social change, or when personal circumstances allow it. In other cases, economic necessity has stimulated deviance from norms, but sometimes at a high cost to individuals. Exposure to new norms can also be influential in driving change, such as through access to role models, TV and other media.[11]

Those changes can also create a violent reaction, and work that challenges social norms must be done with care and mitigate the potential risk. Collective action can play a critical role in challenging social norms, such as restrictive attitudes or rules about women's access to and control over decent work and economic assets. Participation in informal groups can help women develop confidence and effective leadership skills within the group which paves the way for them to take on these roles in the community or in a more formal structure. Formal and informal collective action is also supported by work to prevent and protect against the backlash that can happen when women's participation and leadership challenges existing power dynamics. Research in Mozambique has shown how by challenging social norms and being supported by each other, some women have begun changing their internalized gendered views on women leaving their husbands, discussing these issues as a family in an attempt to change the husband's behaviour, and protecting their daughters from early marriages by sending them to stay with family members in town so that they can continue going to school (Kingman, 2019). Women also reported gaining more respect from their husbands as a result of taking part in the project (Kingman, 2019).

A number of conservation areas and green livelihoods interventions in Mozambique are already starting to challenge social norms, not least by encouraging and promoting women's economic activities in traditionally male-dominated sectors (such as honey production). The people, and women, living in those areas are currently in a transition phase. The green livelihoods projects that are bringing knowledge and additional income to their participants, including women, are acting as drivers of change and hold the potential to enhance the agency of both women and men.

11 Ligada literature review: what works for Female Economic Empowerment, 2016.

3.2 Conservation, biodiversity and green livelihoods

3.2.1 Conservation and biodiversity in Mozambique

Mozambique is a country rich in biodiversity and natural resources, despite being the sixth poorest country globally. Between 1992 and 2015, the country achieved high economic growth rates and positive human development progress (albeit from a low base), consolidated its peace process and held consecutive peaceful elections. One of the main drivers of growth has been the extractive industries, with significant coal reserves, rubies and offshore gas. However, a combination of external shocks, including climate shocks, corruption and conflict, have stalled growth in the past few years, only to be exacerbated further by the COVID pandemic since 2020. With the country highly exposed to the negative impacts of climate change and with a global shift underway towards zero carbon and the greening of the global economy, Mozambique is at a crossroads with an opportunity to 'build back' better from the pandemic and shift itself onto a greener, more sustainable growth path that diversifies the economy and leads to the creation of new economic opportunities in new 'green sectors'. The greening of the Mozambican economy presents new opportunities to achieve social and economic objectives, with the potential to act as a new engine of growth and a generator of decent, green jobs, as well as contributing to poverty eradication and social inclusion (Ngum 2021).

Conservation in Mozambique has been shaped by its colonial history which has shaped the way in which land has been designated for conservation with the first creation of reserves in 1944 under Portuguese rule laying the foundations for future conservation areas, although at the time these were quite contentious due to the way they deliberately excluded local people from access and use of resources and prioritised their use for white settlers, including for hunting purposes (Matusse 2019). The first national parks, reserves and game reserves were created a few years later in 1953 under Decree 40040, allocating management and control of these to the state and ignoring the role of indigenous populations. The first national park to be established in Mozambique was Gorongosa National Park (in 1960) which had previously been a hunting concession.

The civil war which led to Mozambique's independence had devastating social and environmental impacts, including on conservation and biodiversity. Post-independence, Mozambique ratified several international conventions related to conservation, yet it was not until the 1990s and the creation of a new Ministry for Coordination of Environmental Affairs and in 2003, that Mozambique embarked on the development and implementation of its own National Strategy and Action Plan for Conservation of Biological Diversity, with a refresh in 2015. This strategy acknowledges the importance of the human impacts of conservation as well as the necessity for gender-sensitive policies and practices. It includes a target (by 2035) to strengthen the capacity of key stakeholders and improve the integration of gender issues, to enable the effective implementation of national targets (MITADER 2015).

The National Administration of Conservation Areas (Administração Nacional das Áreas de Conservação or ANAC) is responsible for the management of the country's national parks and reserves and for ensuring that biodiversity is protected, and tourism is developed in a sustainable manner. According to law, local communities living in and around government areas, are entitled to a 20% share of the revenue which these generate. This 20% is managed through local natural resource management committees, which are elected at community level and are responsible not only for promoting sustainable conservation activities in their communities but also for deciding on how best to spend the revenue allocated through the 20%. The original guidance on the creation of these committees stipulated that 50% of members should be female, but over time female representation has it seems not always been maintained.

Green livelihoods and the sustainable management of natural resources is critical in a context such as that of Mozambique, which is highly vulnerable to climate change as large areas are exposed to tropical cyclones, droughts and river/coastal storm surge flooding (USAID, 2018). The country has 2,470 km of coastline, where more than 60 per cent of the population live in low-lying coastal areas. Storms from the Indian Ocean and sea-level rise put infrastructure, coastal agriculture, key ecosystems and fisheries at risk (ibid). More severe storms, droughts and floods will impact agriculture, leading to reduced yield and damage to crops, shifts in growing seasons, and the disruption of local markets and livelihoods. Coastal resources will also see a loss of/damage to mangroves, coral reefs and seagrass, impacting small-scale fisheries and tourism revenue (ibid). All of this points at the critical importance of identifying sustainable livelihoods for vulnerable populations that are not only resilient to climate shocks and increasingly harsh climate conditions, but which can also contribute to the more sustainable management of natural resources and the environment in a way that preserves them for future generations.

The conservation of natural resources and biodiversity and the well-being of local communities are closely linked (World Bank, 2015). In rural areas, around 80 per cent of the population depend not only on agriculture but also on forests, e.g. firewood and traditional and modern medicines. About 20 per cent of the population rely on fisheries for income and food security. Currently, approximately 26 per cent of the national territory in Mozambique is protected in conservation areas. Still, these suffer from lack of financing and challenges around human-wildlife conflict and limited livelihood options for local communities. The sustainable management of these conservation areas depends on providing economic alternatives and ensuring communities' land rights. It also depends on learning from local communities on traditional land-management techniques and providing incentives for better management of resources that are becoming scarcer as crops and livelihoods are affected by climate change (Ichii *et al*., 2019; World Bank, 2015).

3.2.2 Green livelihoods

The concept of a livelihood revolves around securing the necessities of life through activities that use a range of both material and social resources that can include land/property, crops, food, knowledge, finances and social relationships. Livelihoods cannot be understood without considering their interrelated connection with the political, economic, and sociocultural characteristics of an individual community. The original definition of sustainable livelihoods, developed by Chambers and Conway in 1992 highlights the importance of considering not just the assets and activities required to generate a living, but also the question of capabilities (Islam 2016), and the freedom to choose different functioning or ways of life, linking us to the concept of agency, and the focus of this research.

Livelihoods and natural resources are deeply connected. However, the different ways in which women and men's livelihoods relate to natural resource use and management are often overlooked (Porsani at al., 2020). Women and men's relationship with natural resources, and roles in relation to the use, management and conservation of natural resources are different. Research shows that often women act as primary caretakers and natural resource managers for example, collecting firewood, managing household waste, and using natural resources to provide healthcare through traditional medicines (UN Women, 2018). As a result, women and men develop different knowledge about different species, their uses, as well as how to manage them.

Women have different, though equally important technical knowledge and skills that are not fully harnessed in natural resource management. There are also differences between the roles and responsibilities of men and women in their ability to participate in decision-making related to natural resources, their access to and control over economic opportunities, land, livestock and other assets. Despite their specific knowledge and skills, women's lack of land rights and constraints to their participation in local governance and national policy leaves them more vulnerable to the effects of biodiversity loss (UN Women, 2018).

The term '**green livelihood**' is a more recent concept that has been developed to cover livelihoods that are natural resource based and are sustainable not only for the people engaging in them, but also for the environment. Whilst many people in Mozambique are engaged in resource-based livelihoods, the extent to which they contribute to environmental management, conservation and sustainability is often not clear cut (even to those engaged in the activities). The challenge around these livelihoods is that they can only function in a sustainable and feasible way if the benefits that they generate for the participants outweigh the potential costs of any environmental constraints or restrictions involved, or if they can operate within the 'win-win' space where the gains to the individual coincide with the gains to the environment. This is a live debate in contexts such as Mozambique, where people in rural communities live in conditions of poverty and where meeting their basic needs takes priority over long-term conservation objectives.

Box 2:
Introduction to the concept of Non Timber Forest Products (NTFP)

Non Timber Forest Products (NFTP) are one source of green livelihoods, and include any type of commodity obtained from the forest that does not incorporate harvesting trees. Some examples of these type of products include nuts, mushrooms, medicinal plants, and maple syrup.[12] There are many definitions of NTFPs depending on users' interests and objectives and the existing socio-economic and ecological environments. In traditional forest communities, NTFPs may be used for subsistence may act as the main or only source of income. Some NTFPs have significant cultural value, as totems, incense or other ritual items. Others have important medicinal value and contribute to the community's health and well-being. As forest areas decrease and human populations grow, and traditional management of forest resources are weakened, the sustainable production of many NTFPs is no longer guaranteed (Wollenberg 1998). The term is also used for products that are not limited to forests and can include any products used by the people who harvest them as food, construction materials, fuel or medicine and that do not harm the environment. Over the past two decades, governments, conservation and development agencies and non-government organisations have encouraged the marketing and sale of NTFPs as a way of boosting income for poor people in the tropics and encouraging forest conservation.

The initial enthusiasm for NTFP commercialization (Ros-Tonen and Wiersum 2005; Kusters *et al*. 2006; Belcher and Schrekenberg 2007; Sills *et al*. 2011) has now been replaced by other research that has demonstrated the risks (at times the realities) of NFTPs being overharvested and harming the environment while impeding the people who used to have access to the resources to be able to anymore, achieving a double negative impact. It is important to clarify that these success and failure factors are considered in the relatively narrow sense of achieving commercialization, livelihood, and conservation outcomes and do not reflect broader benefits, and that further research is needed on the links between NFTPs, poverty reduction and gender equality.

12 Definition of the UK college of Food and Agriculture https://forestry.ca.uky.edu/nontimber_forestproducts

In the context of Mozambique, green livelihood activities that were identified included a wide range of agricultural and natural resource based activities including the production of honey, coffee, chilli peppers, cashew nuts, baobab fruit and the harvesting of mushrooms. It also included sustainable activities linked to the marine economy such as inter-tidal fishing and harvesting of bivalve aquaculture, when this was conducted in a way that preserved coastal areas and led to long-term conservation outcomes. More details on these are given in section 4.1.1.

In cases where green livelihood activities work well, they have the potential to deliver positive economic, social and environmental outcomes for the participants involved, for their wider communities and for the natural resources that they work with. Not only do these livelihoods have the potential to improve incomes and security for participants, to empower women and enhance their status within their communities, but they can also enhance environmental awareness and understanding around natural resource management (and climate resilience) and lead to positive conservation outcomes. It is this nexus between the positive environmental and social benefits of green livelihoods that this research was keen to investigate.

Conservations Areas (CA), independently of their status (reserves, parks, community based managed or under national regulation) bring an additional constraint to the work on natural resources managements and green livelihoods. The Oxford dictionary defines CA as "an area of notable environmental or historical interest or importance which is protected by law against undesirable changes". There are many ways those are implemented, but what they all have in common is a limitation on access to and utilization of the area and what is in it. While this can have positive impact on the area and on the people living there is also brings a series of challenges.

In Mozambique, attitudes to conservation in communities near national parks are complex and influenced by conflicts between parks and communities, which were exacerbated by the civil war (Matusse, 2019). People living in or drawing their livelihoods from the protected area, or any adjacent areas, have an important stake in the survival of protected areas and their biodiversity (Pringle, 2017). Communities affect natural resources through activities such as hunting and firewood collection, and at the same time conservation rules affect their ability to hunt for food and collect firewood (Sundström *et al.*, 2019). Additionally, apart from a few hundred kilometres in the Limpopo national park, none of the conservations areas in the country have fences. This means humans have a restricted access and get controlled, but the animals can roam freely.

> *"Agora o problema é que os animais não estão respeitando o limite do parque. A gente está respeitando. Se for para chamar parque tinha que vedar. Chamar parque sem vedação nunca ouvimos."*

Box 3:
African Wild Honey – a positive outlier

Wild Honey is an outlier as an NFTP that has been particularly successful in generating livelihoods for rural communities for many reasons:

- **New production techniques have been developed** (replacing the traditional use of tree based hives) that protect the trees and the bee colonies from the use of fire and smoke, therefore having a positive impact on the ecosystem and its conservation, working in harmony with the natural wild honey-bee population. The bee colonies of the indigenous African honey bee live within the forest and forage on nectar and pollen from a very wide range of floral species. Forest beekeeping involves the construction of man-made beehives that increase the number of bee nest sites in a given area. Once or twice a year, depending on local seasonal cycles, beekeepers harvest honey comb, comprising two products in one, honey and beeswax. Forest beekeeping is not honey hunting, which involves taking honey comb from wild-bee nests located in natural cavities (e.g., hollow trees and cavities in rocks). It also does not include the use of frame or top-bar hives, even if these are located in forests, since they are movable comb beekeeping systems that allow colony manipulation. In movable comb systems, beekeepers tend to focus on individual bee colonies as productive units with hives kept close to home, to manage and protect the colonies and hives.
- **Honey does not suffer the same challenges of 'over-exploitation' as other NFTPs**, because there is no such a thing as having too many bees. Other NFTPs, such as commercialisation of the Cameroonian Prunus Africana bark has led to degradation of the resource base and the "bread tree" (Encephalartos cerinus) so that this is now subject to CITES trade prohibition (Stewart 2003; Donaldson 2008). Forest beekeeping does not cause resource degradation as the primary resource is nectar. Honey bees are merely agents, transforming nectar (a readily replenished plant product) into honey. Even where total cropping is practiced (when all the honey is taken, causing the bees to abscond) there is no evidence that the bee population is threatened. In fact, as honey demand increases, beekeepers place more hives in the forest, which is likely to increase the survival rate of swarms, although this has yet to be studied.
- **Honey production can be managed and predicted in a sustainable way** and beekeepers can invest in more hives within harming the environment, unlike many other NTFPs where the quantity, harvest time, and location are unpredictable and hard to manipulate and returns on labour can be low. Forest beekeepers can increase the number of nest sites by placing more hives. Since hive ownership confers ownership of the honey harvest, beekeepers can rely on their harvest (except in the rare cases of theft). No time is wasted looking for wild nests, and so harvesting time can be managed (Bradbear 2009).
- In addition to the **income generation from the sale of honey**, when beehives are strategically installed around the edges of agricultural areas, they can help protect crops from invasion by large animals, such as elephants. It is not bullet proof and in the long term additional methods need to be added so as to stop the elephants getting into the crops around the Conservation Area but it reduces significantly the loss of crops.[13]
- While producing honey the bees also **help to pollinate plants and flowers in the conservation areas**, therefore preserving biodiversity and helping with the strengthening of the natural biome.

13 Janet Lowore, African Forest Honey: an Overlooked NTFP with Potential to Support Livelihoods and Forests, Environmental Management, Feb 2017

3.3 The intersection between conservation, green livelihoods and Women's Economic Empowerment

Gender equity has become enshrined in the global environment and development agenda through global commitments, policy and funding. This global agenda and key initiatives (Convention on Biological Diversity, International Panel for Climate Change, Green Climate Fund, and the Global Environment Facility) have now working groups and action plans to address gender equity across conservation projects (Manolis *et al*. 2009), and in conservation as a scientific discipline (Handley *et al*. 2015).

3.3.1 Livelihood and gender

Evidence suggests that access to and "power over" physical and financial assets are crucial for women's economic empowerment and are linked to the effectiveness of natural resource management. Globally, women's rights to land and property, and access to essential natural resources such as water are not always met (UN Women, 2018). In many countries, women also have limited access to agricultural services, information, credit, labour, technology, markets and conservation funds compared to men (Hunt and Samman, 2016; UN Women, 2018). This leads to women often having less control over the types of crops cultivated, methods of cultivation, and the sharing of benefits. It also means they are less able to access information and technology that can help them adapt to climate change and environmental degradation (DFID, 2014). Women can play significant roles in the sustainable management of, for example, agriculture and forestry but tend to be excluded from decision making and land ownership (ILO 2017).

Box 4:
Livelihoods and gender equality

- Globally, **women earn 77 per cent of what men earn** as they work fewer hours, are kept out of certain jobs, or are paid less for the same work (de Haan, 2017)
- **Women make up 40% of workforce** but hold only 23% of agribusiness management positions and make up only 5.4% of entrepreneurs in the agriculture sector globally (Biegel and Lambin, 2021).
- In Africa, **women benefit from only 10% of credit to small farmers** and less than 1% of total credit to agriculture (AfDB, 2018).
- **Only 6% of women in Mozambique are wage workers**, compared with 24% of men (World Bank).
- In Mozambique, **women account for 87.3% of the labour force in agriculture**, but are only 25% of the land owners holding official user rights (UN Women).

3.3.2 Conservation and gender

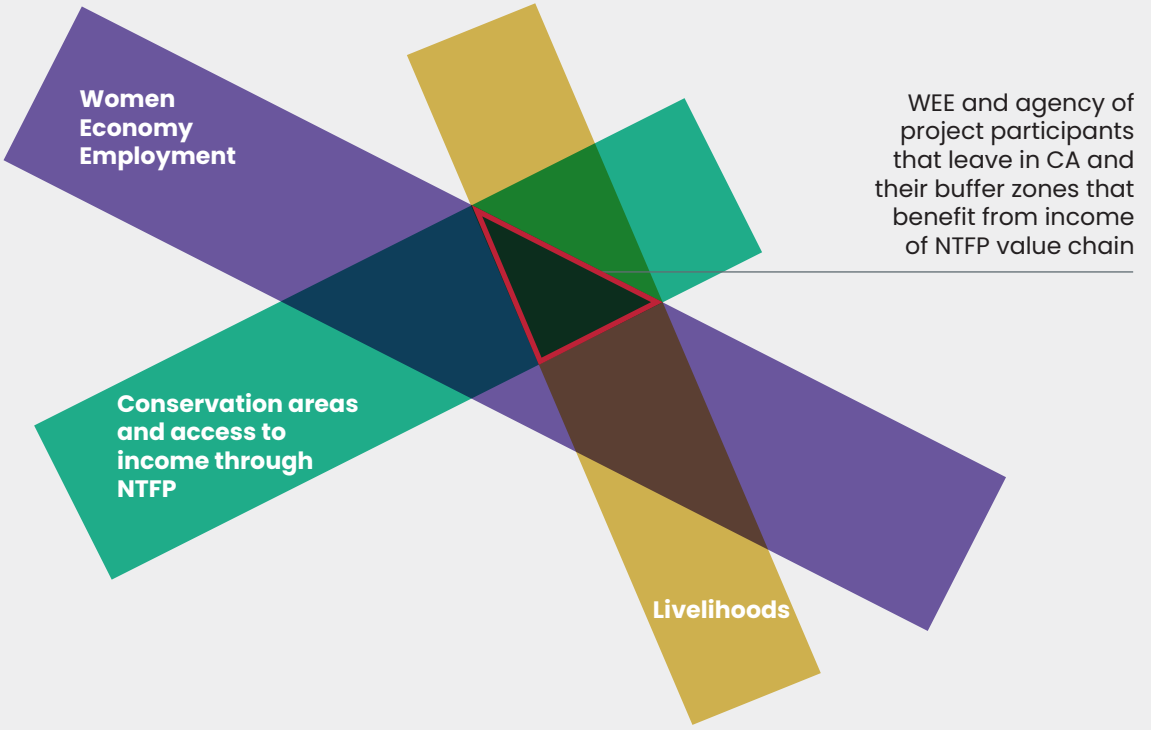
Conservation is historically linked to hunting in the region and was conceived as to protect areas against humankind. It is only recently that a shift in the sector has happened towards considering people, and especially the ones living in and around the conservation areas as part of the area, and not something to remove.[14] Once the conservation projects started considering that people needed to be included in the interventions and considered part of the solution and not confined to be the source of the problem it was mainly focused on men.

14 Mara Goldman, Partitioned Nature, Privileged Knowledge: Community-based Conservation in Tanzania, Development and Change, Nov 2003; Cockerill, K. A., and S. M. Hagerman. 2020. Historical insights for understanding the emergence of community-based conservation in Kenya: international agendas, colonial legacies, and contested worldviews. *Ecology and Society* 25(2):15. https://doi.org/10.5751/ES-11409-250215

For various reasons, including because of its hunting origins, conservation biodiversity often takes a simplistic view of gender as synonymous with women or as a dualism between women and men. (J. D. Lau 2020). Mainly projects remain gender blind (Brown & Fortnam, 2018; Kariuki & Birner, 2016) or at best treat gender as a women-versus-men problem and only address women's issues. Alongside lack of technical capacity, awareness, and interdisciplinary training (Mai *et al.* 2011), viewing people as either the ends or means of conservation (Mace 2014) influences whether gender equity is pursued for its own sake (intrinsic value) or as a means to enhance conservation effectiveness (instrumental value) and thus affects how deeply conservation engages with gender. This narrow view risks promoting inequitable processes and ineffective outcomes. A simplistic treatment of gender may lead to perverse outcomes, such as increasing women's labor burden or backlash from powerful stakeholders (Arora-Jonsson 2014). To avoid the confusion of the word gender becoming synonym with the biological sex of women we have used in this report the concepts of WEE and of agency.

This research was motivated to better understand this intersectionality and its complexity in the case of Mozambique's conservation initiatives. This includes both the current dynamics between livelihoods, conservation and agency as well as the considerations that environmental transformation will lead to transformations in how social difference is defined. (Nightingale 2017:11).

Figure 5: The intersectionality between conservation areas, livelihoods and Women Economic Empowerment



4 Research findings

> "The most lucrative and sustainable green livelihoods were those that generated income through cash crops."

4.1 Green livelihoods in conservation areas

4.1.1 The pros and cons of living close to a conservation area?

Our research showed that living within or close to conservation areas presented both advantages and disadvantages in almost equal measures. Both men and women conveyed that one of the most positive elements of living near to conservation areas was the improved infrastructure and capital resources. The improved access to roads, primary schools, boreholes, which are facilitated or provided by conservation partners were all appreciated. As well as being in a place that had more projects and they can benefit from the unfolding economic activities because of visitors (tourism in a limited manner, but mainly research and other projects drew in thanks to the interest in the area) and the activities (and work and income) this brings.

The main disadvantage regarded Human-Wildlife Conflict (HWC) usually with regard to elephants. The conflicts were largely due to loss of livelihoods (food and cash crop destruction as well as loss of livestock), as well as fear for their safety. In all conservation areas accidents that ended up having a person (and children) killed have traumatized the community. As the main mission of the conservation partners is to protect the natural habitat, including its animals it often makes the people feel less considered and the interventions related to community development as a mitigation answer to compensate for their loss. In Mozambique, it is estimated that 200,000 people live in close contact with wildlife as they live inside natural parks and reserves or in their buffer zones.[15] When humans and wildlife share the same habitat it often leads to conflict. HWC occurs when the needs and behaviour of wildlife impact negatively on humans or when humans negatively affect the needs of wildlife. These usually result when wildlife damage crops, threaten, kill or injure people and domestic animals.[16]

> *"A reserva é muito boa e nós gostamos mas o pessoal do parque não nos quer aqui. Eles não nos querem aqui."*

> *"O projecto comecou por causa do conflito homem-animal que provocava fome. Para além do elefante, tem outros animais que devastam as culturas."*

15 Human Wildlife conflict in Southern Africa: riding the whirl wind in Mozambique and Zimbabwe, Sebastian Lebel, September 2011.
16 Sillero-Zubiri C, Switzer D. Crop raiding primates: searching for alternative, humane ways to resolve conflict with farmers in Africa. People and Wildlife Initiative. Wildlife Conservation Research Unit. Oxford: Oxford University; 2001.

This is not a specific Mozambican challenge. It is estimated that the African continent has the world's largest reserves of wildlife, and the HWC is a constraint to wildlife conservation[17] in a region that is experience rapid human population growth. In 2010, SADC pronounced HWC was one of the main challenges for Africa's rural populations in terms of personal security and economic loss, and the situation is getting worse (LeBel *et al*., 2010). Literature on HWC has grown significantly since the 2000s.[18] There is however still very little economic analysis of the consequences of these conflicts, and Mozambique specifically has an even bigger dearth of research and data on the issue.

The history of the country seems to add to this regional challenge. During the independence struggle, and then the civil war animals were killed in large numbers (hunted and poached). In the case of elephants this has made them more aggressive towards humans.[19] The more recent history is in the reintroduction of wildlife, which means that human populations who no longer had to share their habitat with wildlife, suddenly have to deal with those re-merging conflicts. The research findings showed some difference in attitudes towards HWC between those people who participated in green livelihoods compared to those who did not. Project participants showed greater awareness of the challenges and appreciated the additional efforts made by conservation partners to provide them with a complementary income (or to compensate them for the costs of living near to wildlife). This was not enough, however, to compensate for the loss of their crops and the fear of the animals. In some places there is a strong feeling of resentment as the communities feel that the animals are more important than the humans.

> *"Eles não se importam com as pessoas apenas se importam com os animais. Não sei porque pedem para a gente votar. Eles que são os filhos deles que deveriam ir votar."*
> *[em referência aos elefantes]*

4.1.2 The activities and the income they bring

The communities studied are all in rural areas located in conservation areas and the buffer zones, including a community managed marine reserve. They mainly depend on subsistence agriculture, fishing and cash crops, with very few formal jobs available.

Green livelihood projects implemented around the conservation areas were related to coffee production, commercial horticulture, piri-piri, collection of honey, wild mushrooms, and oysters' production as well as the cultivation of mangrove saplings. Additional activities are being explored, such as medicinal plants collection and essential oils production. Each of the other projects have potential to have a positive impact on both the biodiversity, as well as in providing an additional income. Honey production was the most widely found activity.

17 Coexistence between human and wildlife: the nature, causes and mitigations of human wildlife conflict around Bale Mountains National Park, Southeast Ethiopia, Seki Mekonen, 2020.
18 König HJ, Kiffner C, Kramer-Schadt S, Fürst C, Keuling O, Ford AT. Human-wildlife coexistence in a changing world. Special section: challenges of and solutions to human-wildlife conflicts in agricultural landscapes. Conserv Biol. 2020;34(4):786-94.
19 Kaitlyn M. Gaynor, Effects of human settlement and roads on diel activity patterns of elephants (Loxodonta africana), African Journal of Ecology, nov 2018.

The most lucrative and sustainable green livelihoods were those that generated income through cash crops such as coffee and piri-piri or honey production. The main reason for these activities proving to be so successful was not just the sustainable production methods, but also the assurance of a reliable market with all coffee and piri-piri production sold in advance to regular buyers. On the other hand, value chains around mushrooms and oysters still require further development, and securing an access to market that can guarantee a sustainable income for those involved.

It was found that it is critical to considered in the design and implementation of these livelihood interventions how they can be sustained once the formal 'project' or support of the conservation partner is concluded, and to what extent they can continue to operate without external intervention, when those are designed for short term interventions. This requires not only the building of skills and capacity of participants, the creation of sustainable governance structures and institutions, but also robust access to markets to ensure a sustainable income stream in the future.

Other green livelihood activities hold the potential to generate sustainable income for women in the future, although they are still under development. Sustainable oyster and mushrooms production techniques for markets are still in early stages and had not yet generated a sustainable income for participants at the time of this research, as both have only recently been initiated requiring more time to enlarge production and ensure market, noting that the oyster production is still in an experimental phase. On the other hand, the generation of mangrove seedlings has been successful in the past but currently has a very limited market.

Access to market was found to be the critical factor that enables the activities to generate an income in a sustainable way. This is enabled by interventions that not only focus on sustainable production but also facilitate or strengthen market access, either by the conservation partner directly buying and marketing the production themselves, or by putting the producers in contact with buyers. Historically, market access has always been a challenge in rural Mozambique, with weak infrastructure and limited mobility of rural populations making it difficult for smallholders to access markets. By providing the infrastructure, information and connections with markets, conservation partners can transform what have been subsistence activities into profitable green livelihoods by integrating local populations into viable green value chains. This has a value to local communities not just in generating an income but also in terms of economic integration and the sense of pride and belonging that this can bring as they see their products reaching new markets. Those value chain and the links to the markets of the green livelihoods activities don't seem to have had a spill-over effect for the other agricultural products, at least not yet. Although the research didn't focus on this, one of the main barriers seems to be distance and remoteness of the areas and the communities participants.

In most cases green livelihoods needed to be complemented by other economic activities. Whilst these activities were valuable in providing a new or additional source of income to participants, this was rarely enough to justify giving up other (subsistence) farming activities to produce food for own consumption (working in their machamba) and in some cases participants were obliged to continue with other income generation activities that were not always complementary to their green livelihoods, occasionally undermining the positive environmental benefits of these livelihoods when these activities involved making charcoal or in some cases, hunting of animals. This was found to happen more regularly in areas where the income from the Green Livelihood was seasonal or irregular, with some activities designed to provide year-round income, whilst others played more of an income smoothing role by providing complementary income at times of need. One example of this was the creation of new livelihood opportunities for coastal or lakeside communities at time when fishing is not permitted for conservation reasons.

The level and regularity of income generated by green livelihoods differed between value chains, in some cases providing large enough sums for participants to construct themselves new homes, while in other cases the sums were smaller and were used for household repairs, capital investments or more day-to-day expenditures like children's school uniforms and food products. Even these relatively small income amounts were appreciated by participants, many of whom had not had the opportunity to earn cash before this.

In some cases the increased income earned had created new opportunities for savings and financial inclusion, this was mostly through informal village-based savings group rather than the formal banking system (or e-banking or mobile money) due to the remoteness of the communities studied, the lack of infrastructure and access to formal banking facilities. Nonetheless, the impact of having money to save (however small) and joining a savings group was found to have positive effects on women's agency and self-esteem as explored in section 4.2.1.

Against initial assumptions there was no evidence or findings in any of the research areas that the additional income being generated through Green Livelihoods was being used by husbands for drinking or other vices. The research did not find any instances of the additional income was being the source of more alcohol consumptions or new Gender Based Violence (GBV).

4.1.3 Communities, including women's participation in green livelihoods

In the five conservation areas studied, the green livelihood interventions were providing new economic opportunities for women. In some cases, the interventions targeted only female participants, whilst others aimed for gender equality and at least 50% female participants. This inclusion was often the result of donor requirements, with the global agenda for Gender Equality now being actively implemented in the field. In all cases, the women involved in intervention with the conservation partners are receiving training and skills development, as well as provision of equipment and materials. However, the types of livelihood activities varied across the different conservation areas, and the motivation for women's participation in activities to preserve the environment differed significantly.

Some of the key observations around women's participation in the green livelihoods activities included:

- **Encouraging women to participate was the first challenge.** Although women are already actively involved in a wide range of natural resource-based activities, these are often linked to subsistence rather than income-generating projects. By actively targeting them for inclusion in activities orientated around cash crops (as opposed to subsistence farming) and new value chains, project interventions have successfully challenged social norms and women's status within their communities. Nonetheless, for this to be successful, it has been necessary to take account of the power dynamics, patriarchal structures and social norms within the communities which restrict women's participation. In many cases this involved negotiation with key gatekeepers and men within the community (particularly husbands). The partners had to work hard and try different approaches to manage enrolling women. Finally, a range of strategies worked such as: i) having women mobilizing other women and better even women from the community and/or who speak the local dialect (not only language); hiring women as part of the partner staff who can be role models by being seen doing the job; iii) making it mandatory and asking the men to bring women from the community; iv) ensure the proper infrastructure is available (i.e. separate spaces for the men and the women, female trainers for the women's groups); among others.

- **For women's engagement in green livelihood activities to be sustainable and empowering, they have to find strategies to manage their existing workload** (including the unpaid burden of domestic chores) as well as to obtain approval and support from their partners and other household members for their participation in the projects. Many women mentioned that they now have changed their time use and planning of their days. While in the past some female producers tended to work on their agricultural plots on a daily basis for home consumption, now some women are selecting the days of the week that they should dedicate for domestic agriculture and the days that they will spend on their green livelihood activity, often having to secure the agreement and permission of their partners first.[20] The general perception is that men have the right to decide whether women take on extra activities. In the case where women defy this authority and contravene the social norms and rules, there were some reported cases of domestic violence towards the women. Some women mentioned how violence was used as a means to correct behaviour, punishing women for disregarding their husbands' authority. It was noted, however, that the use of gender-based violence was mentioned more among women who were not part of the projects, possibly indicating that those women who tend to be free from this type of violence are more likely to engage in green livelihood initiatives than those who suffer from violence, or, alternatively, that those women participating in the activities are more empowered to stand up to and resist violence.[21]

- **Empowering women through green livelihoods requires attention to social norms and the risks around their involvement.** When considering gender as simply "getting the women in", some interventions were not prepared to work differently or to address the social norms that were constraining women in the first place. In the worst-case scenarios, there was a risk that this approach could actually risk causing conflict or doing harm, in cases where women might be exposed to harassment or violence through their participation, or where they were not able to decide with autonomy how to spend their earned income, or where their role in the programme and increased earning capacity threatened their husbands' masculinity and led to increased risks of violence within the household.

"Nós gostaríamos de ter mais mulheres como "apicultoras líderes" mas é difícil conseguir que venham a formação. Não podemos fazer a formação na comunidade porque precisamos dos apiários modelos. E porque os maridos não querem que elas aprendam de um homem precisamos ter treinadoras mulheres para as mulheres."

"No começo a gente não sabia (que os formadores para mulheres tinham que ser mulheres). Mas um dia um marido veio pegar a mulher dele no meio da formação quando ele descobriu que o formador era homem. Ela apanhou demais."

In all cases, it was evident that there is still a lot of learning to do around what works with regard to addressing social norms and bringing about systematic change through Green Livelihood interventions and how to work in the intersectional space between conservation and empowerment.

20 Note from one of the areas reports.
21 There was not enough information from the research to determine which of the hypothesis is correct.

4.2 Agency, social norms and Women's Economic Empowerment

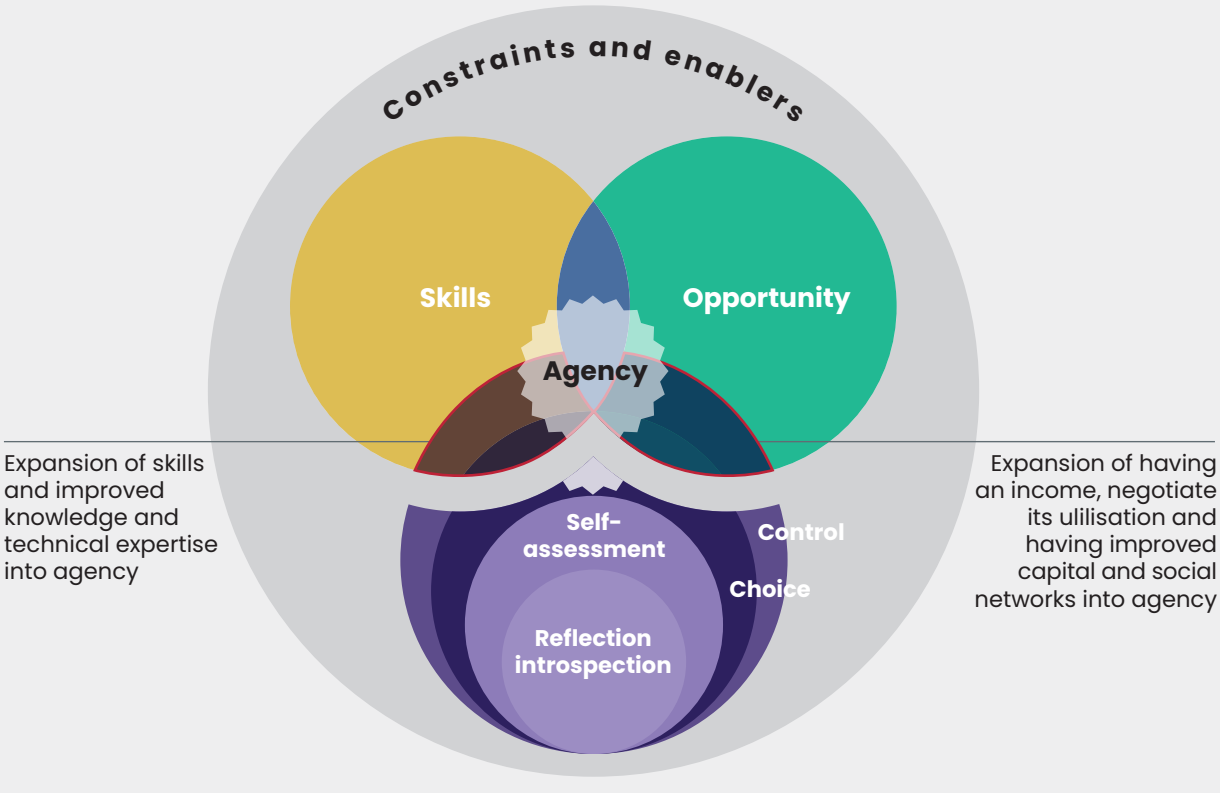
4.2.1 Agency in the field – what was found

Interpretations of agency are culturally and geographically sensitive – making it important not to make generalisations or impose our own interpretations or definitions of what 'empowerment' looks like in different contexts. History is also a critical influencing factor (as is geography, cultural context and proximity to conservation areas) and our research showed that people's perceptions of what an 'empowered woman' or a 'woman with agency' looks like varies not only by geographical context but also between gender and age group

As presented in section 3 empowerment is a process, and acquiring stronger agency is part of this process. It's however not a linear process. What we saw in the field were starting points.

Most of the interpretations of agency that stood out in discussions with women were the result of the expansion of the work the partners are doing on skills and opportunities.

Figure 6: MUVA's WEE framework with research findings



Agency as improved knowledge and technical expertise: Whilst the economic impact of women's participation in livelihood activities was usually stated as the main empowering factor that enhanced their agency, the research found that it was not just about the money, and that the knowledge, skills and technical expertise that women gained through their participation in different green livelihood activities was also critical in contributing to their empowerment and self-confidence. For some women it was about gaining new knowledge and skills that had previously been restricted to men (or in some cases new skills which nobody in the community held), usually around a specific activity, whether conservation agriculture, honey production, coffee-growing, mushroom harvesting or aquaculture production.

Agency as improved social capital and social networks: For many women, their participation in new green livelihood activities was empowering not just because of the income it generated but because of the social capital that it generated, in terms of the new relationships that they were able to develop, the sense of solidarity with the other women participating and the sense of 'belonging' and being part of something. For women whose former activities may have been somewhat isolated, in terms of working on their own (or only with direct family members) on their own plot of land, and with little time for leisure activities, friendships or time for social networking, the power of joining a larger activity that enables them to build new relationships, exchange information and learn from one another is invaluable and had numerous positive repercussions. Women talked about the benefits of joining new 'female-only' spaces (particularly savings groups) where for the first time they found a safe space to meet, talk to and learn from other women. In some cases this enabled them to discuss taboo subjects which they would otherwise not have the space to talk about, including issues around sexual and reproductive health and access to family planning, or issues around gender based violence. Women also spoke about the status that came from 'belonging' to a project (sometimes through the provision of T-shirts or clothing which the women use to identify themselves and show their link with the project, but often just through their simple membership of the association).

Agency as enhanced income and negotiation over its use. Many women commented on how the increased and more regular income they had gained as a result of their participation in green livelihoods had enabled them to start negotiating with their partners around use of money within the household. Being able to contribute to the household income opened new spaces for negotiation and decision-making with their husbands and have more influence over decisions around what to spend on – whether regarding house repairs, children's education or investment in productive assets. Many women spoke about how this was the first time they had had the opportunity to negotiate with their husbands, thereby challenging existing social norms around men being the 'Galo de Casa' and starting to make their voice heard, to negotiate their own space within the home and to participate in household decision-making. This is an important first step in the path to empowerment.

> *"A mulher começa a contribuir para a renda familiar e esta contribuição é reconhecida pelo homem. Esta oportunidade também tráz um espaço e abertura para diálogo e partilha de decisão entre o homem e a mulher."*

Conversely, some women stated that while new sources of regular income gave them more status within their household to negotiate with their husbands, when this income ceased for any reason (such as projects ending or failing to generate sufficient income) their empowered status would be undermined and they would lose the respect of their husbands and no longer had the authority to influence household decision-making.

Our research did not have time to do an in-depth analysis how the income generated from Green Livelihoods was used, but looked more at the power dynamics around the decisions on how the money earned was used. This varied from geography to geography, and from household to household, with different factors influencing the extent to which women were able to control their own income and decide how it was spent. At the furthest extremes were women who were obliged to hand over their earnings to their husbands (or whose husbands accompanied them to the market where their products were commercialised in order to control the income), whilst at the other extreme were women who saved their earnings directly, often through a village savings group to which only they (and not their husband) had access, thereby protecting what was theirs.

Most common, however, was a process of enhanced negotiation and discussion between couples, where women stated that for the first time their husbands would consult them and listen to their opinions. In other cases it seemed to lead to a more equitable space for dialogue within the home, where women's ability to be able to contribute to household expenses (including repairs, purchase of seeds or costs of children's education) meant that they were also able to take on more decision-making around these issues.

Agency as enhanced status within the community: The assets and the income and status gained from participating in green livelihood activities not only enhances women's negotiating power within their household, but was also found to alter their status within their communities. Many women commented on how their participation in activities (and the income this brought) meant that they were perceived with more respect by others within their communities.

> *"Por ter este espaço e este rendimento, as mulheres são vistas como um exemplo para as outras e ganham prestígio."*

> *"Sendo a mulher a proprietária das colmeias e dotada de conhecimento técnico esta repassa ao homem e ao resto da comunidade."*

This enhanced status results not only from the way they are 'seen' (sometimes linked to the fact that they can now afford new "capulana", or uniforms and shoes for their children) but also from the fact that some women are now able to afford to employ casual labour to work on their land or to support their economic activities, thereby shifting their roles from 'labourers' to 'employers'.

Some other observations on agency from the field showed that marital status is a critical influencing factor on women's agency and empowerment, with those women who are household heads (either due to separation, widowhood, or the migration of male partners) tending to have more space and autonomy to engage in green livelihood activities without having to negotiate or "ask permission". Similarly, it was found that these women tended to occupy 'male spaces' with more confidence and frequency than other women and were therefore more confident to speak out, to take up leadership roles or to challenge gender norms around what they could or couldn't do.

Another factor that was found to influence women's agency was the role of government legislation and policies, not only with regard to women's participation in natural resource management committees (for which the guidance suggests 50% female representation) but also with regard to issues such as Gender Based Violence. Both male and female participants in the research commented on how awareness-raising by local authorities (and also by the church) around laws related to gender based violence had had a positive impact within the community by raising awareness of women's rights and discouraging men from using violence to control or silence women.

As one man in a focus group discussion pointed out "*antigamente era o homem que tomava as decisões, e casos de violência doméstica eram comuns, mas agora as coisas reverteram pouco a pouco*".

Agency in new opportunities for leadership: The patriarchal nature and governance structures found in many communities, such as those around the five conservation areas studied, mean that leadership opportunities for women are often few and far between. Traditional community governance is often led by men, and whilst women may hold roles within some committees, their decision-making power and ability to speak out is often constrained by social norms around how they should behave. With the emergence of new green livelihood activities, however, new spaces, institutions and structures have emerged that provide unique opportunities for women to take up to leadership positions and have more space to express themselves.

This was particularly evident in the creation of female-only savings groups, where women meet on a weekly basis to save small amounts of money, but also use this space to discuss other issues, learn from one another and share ideas for how they will use their savings. As one women said, these female only spaces provide a space for leadership and "*espaço de treino de partilha das suas opiniões*". In some cases, women use these female-only spaces as a type of launching pad for taking on other leadership roles in their communities, gaining confidence in speaking out that allows them to challenge social norms around women's leadership.

Both men and women acknowledged that women's engagement in new green livelihood opportunities had provided new spaces for them to take on leadership and speak up with regard to that particular activity, and yet this did not always translate into greater leadership, voice or control in other areas of local governance or local committees. As one man commented about women in the green livelihood projects.

> *"Apesar de elas estarem mais presentes nas reuniões da comunidade e de participarem nelas ainda não assumem posições de liderança na comunidade."*

> *"Maioritariamente pensam que são respeitadas no entanto quando opinam na reunião não são levadas em consideração."*

4.2.2 Women's perceptions of agency

Women's views on their own agency varied between geographical areas, but with some similarities, such as the general perception that women are the household 'managers' who have to ensure that everything runs smoothly at home "*as mulheres é que conhecem as necessidades da família*" yet, despite this responsibility the majority of women interviewed did not feel that they held decision-making power or agency within their households. This varied, however, according to women's marital status.[22]

Amongst married women across all five research areas, there was a clear recognition that men are the household heads. Across all groups (men, women, beneficiaries of projects or not) it was recognized that the men was the "*galo de casa*". It was not only the lack of decision-making power and authority over household income that constrained women's agency within their own homes, but also the unequal burden of unpaid domestic chores which women take.

> *"Trabalho de mulher não acaba. Vai de sol a sol."*

Lack of space and time for reflection was one of the constraining factors to women's agency with little awareness amongst the women interviewed of the concept of 'inner power' or how this might manifest itself in their life. This was linked to a general lack of aspirations amongst women interviewed, whose dreams for the future tended to focus on their children achieving more than they had, rather than on improving their own lives in any way.

Research in rural Mozambique has shown that women disproportionately suffer time-poverty, spending approximately the same amount of time doing agriculture or other income-generating activities as men, but significantly more time on food production and other unpaid household chores, including collecting water and firewood and the care of children, elderly and sick household members so have less time free and almost no leisure time (Arora, 2015). This time poverty was evident in all five areas, where it was clear that women's responsibility for feeding their families and the time they spend in subsistence agriculture with many hours spent on their "machamba", collecting water, or preparing food and caring for children/old people leaves them less time for doing paid work or for participating in other activities.

22 Note that the research did not discuss polygamy.

Domestic activities are assumed to be the responsibility of women and girls, but not men or boys.[23] As a result, women's time availability to participate in remunerated green livelihood activities is constrained, and most of the paid work or activities that can lead to economic gains (including charcoal production, cash crops, artisanal work etc) are led by men. This was not an imperative factor that precludes women from participating in activities but social norms around domestic tasks and the resulting time poverty they suffer is something that needs to be considered and taken into account in the design of new economic opportunities for women. Most important is to avoid the assumption that just because women are not earning money, they somehow have lots of time to spare. Women will make time to participate, but there is an opportunity cost to this (often linked to the care of their families) and this needs to be taken into account. As one woman in a conservation area mentioned: "*We participated [in the project] because we wanted to. We saw our poverty and no local market. This was a chance for us women to engage.*"[24]

4.2.3 Social norms and agency

Globally, social norms define women and men's work roles at home and in the community (Goh, 2012; Hunt and Samman, 2016). In Mozambique this often restricts women's activities to small-scale farming and hampers women from gaining access to better economic opportunities, including in green livelihoods. Women require the authorization of their husbands or other male relatives to engage in additional economic activity (FAO). This division of labour and roles was clearly seen across all five conservation areas where it appeared that many of the more high-value renumerated economic activities (including fishing, charcoal production, mining of salt, artisanal production or odd jobs etc) were restricted to men, not because of any physical reason linked to women's strength or capability, but due to social norms that dictate which activities are suitable or accessible to women.

While social and customary norms vary from one region to another in Mozambique, patriarchal gender relations generally restrict women's access to land rights, livelihoods and natural resources in community and private life.[25] In Northern and Central Provinces, the main social unit is the matrilineal extended family where women only have rights through their male relatives, such as their brothers or maternal uncles. In southern provinces a patrilineal system is more common with women's land rights, livelihood and natural resources dependent on her husband and male relatives. Access to assets also vary between women and men in Mozambique and can support or constrain their agency and access to livelihoods.

Gender norms shape women's access to and control over decent work and economic assets, including land, knowledge, livestock, technology and other financial assets that are likely to be owned or controlled by men (Porsani *et al*. 2019). Women may internalise social norms about their status and have preferences that reflect and accept inequality; it can be challenging to understand whether women's preferences are their own or what society demands of them (Glennerster *et al*). Research has shown the importance of older women both as guardians of social norms, and as key actors in challenging and reassessing social norms, with the unique role that they hold in upholding traditions and social hierarchies, but also in shifting beliefs and negotiating change (Shell-Duncan 2018). While this research project did not have enough time to explore issues of intersectionality and age in depth, it was observed that attitudes, knowledge and behaviour differ between generations and that older women play an important role in passing on traditional knowledge and that the authority that they have over young women (particularly daughters or daughter-in-laws) gives them a certain power in acting as potential changemakers. This is an area that we would like to highlight for further research and analysis.

23 25 out of 29 focus groups mentioned that women should take on the domestic workload.
24 Notes from a focus group facilitated on the 1st of November 2021.
25 https://www.fao.org/gender-landrights-database/country-profiles/countries-list/customary-law/en/?country_iso3=MOZ

Gender norms also shape behaviours and preferences related to the natural environment also influence how women and men gain and use different knowledge about plant and animal species, as well as the different roles in agriculture and food production, land use, accessing water and energy, natural resource management and conservation, and household activities (UN Women, 2018). This knowledge of biodiversity and use of natural resources differs by age, culture, and other factors and is often transmitted from older to younger generations (ibid). Although we were not able delve deeply into this aspect – other research in Mozambique indicates that the division of roles based on gender is often a result of gender-based inequalities that limit women's rights to, ownership of and access to land and other productive resources.

The enabling – or disabling – environment affects everybody, but there are a number of features that affect women differently, and in ways that puts them at a greater disadvantage than men. This operates through both formal and informal institutions and practices. Legal provisions for gender equality do not guarantee gender equal practice in relation to FEE, but they can contribute to promoting an environment that is more conducive to equality. Gender equality is well established constitutionally in Mozambique (see e.g. World Bank and IFC 2013), but there are several formal gaps (including in the labour law for instances) as well as in practice (MUVA, 2015).

Box 5:
Key stats on gender and regional differences in Mozambique

Mozambique has a patriarchal tradition, despite the presence of regional differences. For instance, World Bank data from 2007 shows decision making on education, health and food to be overwhelmingly in the hands of men in male-headed households, with 100% of education decision making, 96.2% of health, and 64.2% of food. Data from DHS (2011). In Nampula Province for instance a large proportion of women have no decision-making power over their income (33.4%) DHS (2011). In other areas such as Maputo and Tete Province, the majority of women had sole decision-making power over the use of her income (59.6% and 52.7% respectively). Male control in the household has historically extended to control over women's outside work, and there is some evidence that it continues to do so (COWI study 2015). On the other hand, Tvedten *et al*. (2010a) found in Gaza that traditional marriage and patrilineage has largely been replaced by 'cohabitation' and individual household decision-making; Southern provinces have very high levels of female headed households. These offer an interesting picture suggesting that divorce and separation can be enabling for WEE – and therefore represent opportunities – in some circumstances.

Parts of this enabling – or disabling – environment can be found across the country. Access to education for example still has a gender gap in rural areas (get data), while the link between education and WEE is more than recognized. **Rates of early marriage and early pregnancy**, which also feature as constraints to FEE, are much higher in Mozambique than the averages for the Eastern and Southern African sub-region: 14.3% of Mozambican girls between the ages of 20 and 24 were married before 15 years of age and 48.2% were married before 18. Marriage before 15 is most common in Niassa, with 24.4% of girls. The unsurprising association of early marriage with **early pregnancy** represents an additional constraint. Overall in the UNICEF study, 7.8% of young women had their first birth before 15 and 40.2% before 18. Again, there is significant regional variation – in Maputo city, 20.5% of women had their first birth before 18, but 51.7% in Nampula. (UNICEF 2015 a and 2015b).

It is also noted that on the other hand that **divorced and separated women** who had higher levels of education than the rest were most likely to be found in better paid forms of employment, many employing other women to look after their children (Oya and Sender 2009). One study noted by Kabeer (2012) suggests that it is mainly single, divorced and widowed women who join associations, whereas married women tend to be subject to restrictions by husbands (Gotschi *et al*. 2008), adding texture to the role of networks and social capital in WEE. In an important finding, UNICEF (2015) state that girls living in female headed households have a significantly lower probability of getting married before 18 than girls living in male headed households, and early marriage also decreases unambiguously with the age of the head of household.

4.2.4 Masculinities and the role of social norms on gender relations

Gender, as distinct from biological sex, holds the ideals of masculinity and femininity; the term refers to the relations of power between women and men, boys and girls (and shapes relations among men and among women, boys and girls); it encompasses is both the beliefs and the practices of gender that structure our experiences as men and women. Every society and every era has distinct gender norms; this is because gender itself is a fluid and ever-changing entity. However, most societies have some common denominators when it comes to specific norms for women and men. Indeed, patriarchal cultures, where men hold power and women are to varying degrees excluded from power through both formal and informal mechanisms, are the global norm.[26]

The ICRW's 2018 report states that "If women are becoming empowered but the men are being left behind (either in terms of programming or in terms of gender norms/attitude changes), women may be unintentionally put at risk". All the evidence of the last 2 decade highlights that gender relations cannot be transformed if men are not engaged in that transformation.

There was little difference in attitude amongst the male respondents (beneficiary or not, married or not) regarding both their interaction with the reserve and the nature surrounding them as well as the women. This differed from female respondents, where a much larger difference could be seen in the attitudes, knowledge and behaviours of those who participated in projects and those who did not.

Men tended to have similar knowledge of conservation and the importance of protecting the eco-system surrounding them regardless of their participation. They had a good understanding of what was allowed and not and the impact of some activities (such as cutting wood, hunting, or burning the land) on the environment. More than the women's voice we noted the role of men as disseminators. There was only limited indication of a different attitude towards conservation – unless there was a tangible gain – as the rest of the natural resources are still abundant. Only what was directly linked to the project or what was forbidden and policed was respected. However, they seemed to communicate more than their female counterpart about what was allowed or not.

> *"Aquilo que ouvimos com pessoal da reserva nós chegamos aqui na comunidade e falamos para as outras pessoas não fazerem. Aqueles que insistem vamos dizer no parque: aquele lá está a insistir."*

> *"As plantas são as únicas coisas que devem usar com cautela, a água e a terra são abundantes e podem ser usados normalmente." segundo eles*

26 Engaging Men, Changing Gender Norms: Directions for Gender-Transformative Action, UNFPA.

Both groups demonstrated the presence of the predominant patriarchal social norms.

In the research we asked both women and men who was the "galo da casa". The answer was unanimous: the man! We also asked both men and women who worked more. The answer was also unanimous: the women do! It is powerful to see that both women and men agree on this point. For the latter there was no questioning. That's how things are and should be. There is a recognition, again both from the project participants and not that the women who participate in the project are more respected because they bring an additional income home. The income was the major factor of change. There was a strong recognition of the importance of this income and that it was hers. That did not however give her to autonomy to make decisions or to have a more equitable relationship between both. The words of this men summarize the findings.

> *"O homem é que traz a mulher para casa."*

> *"Eu é que sou responsável pelas despesas da casa."*

> *"Para ter filho depende de mim."*

> *"As mulheres são vistas duma forma diferente das outras que não fazem nada, elas ajudam os maridos nas despesas de casa conseguem construir casas melhoradas. Mas são os homens que são os galos da casa, as mulheres não tem poder nem autonomia mesmo com os ganhos que tem."*

When asked about if there was something the men were able to do to support the answer was negative. The women complained about it and the men acknowledged.

> *[Um dos homens disse] "Eu sou o galo da casa, fui pedir a mão em casa dos pais, ela lá comia, vestia... tudo quem comprava era os pais. A partir do momento que começou a viver comigo eu sou o dono dela porque quem faz as despesas sou eu."*

Social norms change are difficult to capture, especially while they are happening. In the places visited, for the people who know Mozambique you could see small changes. In many of the FGD with project participants the women and the man came and sat down under the same tree. Before the interventions this was not possible. In some instances when deciding who would stay in the shade of the tree and who would look for another place there was a negotiation and the women won and stayed. Again, changes in happening. While telling their day to day stories men often mentioned having to accompany the women to the hospital or the health centre. That has traditionally not been the case. They would never go. The stories that came up showed that now they don't go in, but they accompany.

> *"Eles não ajudam em casa. Só quando estamos doente que eles poderiam ajudar e mesmo assim nada."*

The main factors that could be noted to have an impact were first and foremost the income the women now brought home. The men's socio-demographic also appeared as a variable. The younger ones and the ones how had access to an urban centre being more tolerant to have a relationship with a more autonomous woman.

> *"Há pessoas na comunidade que criticam os que participam da associação mas agora mudou porque vêem algum rendimento."*

> *"São consideradas porque do jeito que vivem agora é diferente do antes, elas conseguem ajudar nas despesas de casa, construção de casas melhoradas e abertura de machambas grandes. Então as pessoas da comunidades lhes veem como mulheres trabalhadoras e batalhadoras diferentes daquelas que não fazem parte do Projecto."*

The income they brought home was recognized by the men as income of the women. All the women explained that they had to show him the money when they got it but, there were indeed able to express an opinion and, in some cases, decide what to do with the money. In this continuum we didn't find that the income would be taken by the men and used by him alone, with a couple of exceptions it was always done either together or by her. In some cases, the men also explained that they showed their income and the decision was made jointly. The concern that was expressed in some instances of the risk of the income causing more gender-based violence and increased consumption of alcohol was not found in the field. The alcohol consumption came out in the discussions, but it was independent of cash, as the drinks are usually homemade. The research didn't go into the detail of how the money was spent but it was able to identify a trend where larger expenses were the responsibility of the man, while domestic ones of the women.

There were some indications that beyond the income, the knowledge they had and their presence in public spheres were mainly recognized as positive changes by both men and women (with some exceptions). This was limited to having the women present in new public spaces. It didn't enable them to take a leadership role.

> *"As mulheres que estão no projecto são respeitadas porque elas tem uma visão diferente. Por causa de participar nos encontros com diferentes tipos de pessoa."*

In contexts in which gender inequality remains unquestioned, the privileges and benefits men gain outweigh their negative experiences of manhood. In this situation they tend not to notice gender inequality. When those issues start being discussed the costs (to men, as well as women) of traditional gender norms start being noticed. This can open up the possibility for change. MUVA has seen this in all its work. During the research the space for discussion of the working groups was appreciated by women, but maybe even more by men who also said they never have this opportunity.

Those open discussions also is a space where the men realize that some of the fears are shared and that new norms are possible. It was the opportunity for many to realize that some of their peers were open to change, if one of the main concerns – which was the reaction of the others could be addressed. The fact that "this is not how it's supposed to be" and that is they would let their women be more autonomous the community would judge, would say that she drugged him was strong.

4.3 Environmental awareness, behaviour change and conservation outcomes

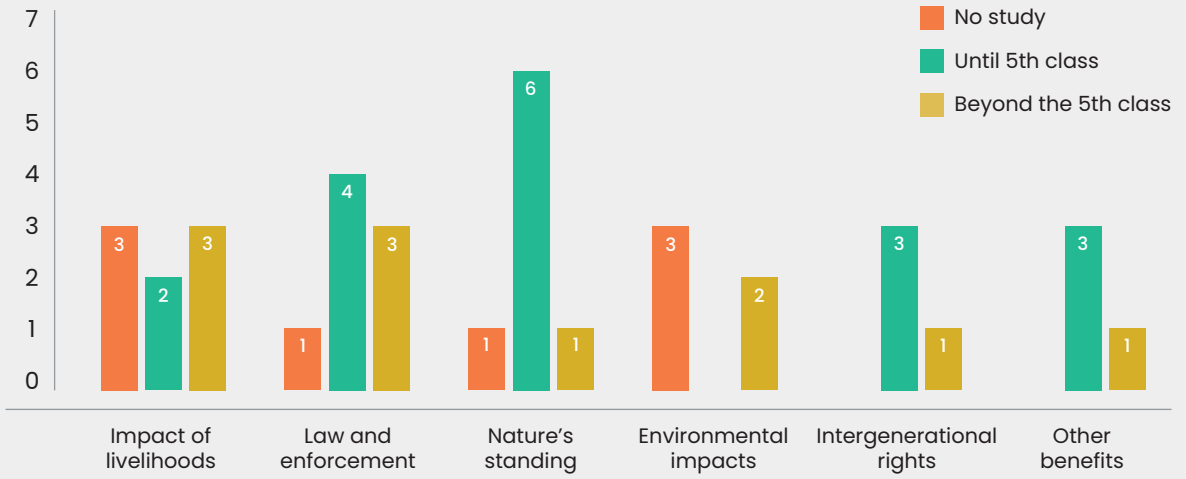
4.3.1 Technical skills and conservation

Behaviour changes promoted by partners' projects have increased both women and men's environmental awareness and enabled new behaviour that protects the environment and the conservation areas. Interviewees and participants within the projects generally acknowledged the learning of new skills and techniques that have enabled them to participate in green livelihood activities and enhance their knowledge and understanding on how to use natural resources related to their activity and production or collection in a more sustainable way. It is interesting to note that while most men interviewed for this research project (whether participants in the interventions or not) seemed to understand the concept of conservation and purpose of interventions to promote the sustainable use of natural resources, this was not true with the women interviewed. In this case, a marked difference was seen between female participants and those women who were not involved in the projects, possibly indicating the higher level of social exclusion and barriers to knowledge and information suffered by women compared to men within the community. One can assume that the social interactions of men and their domination in public spaces within the communities facilitates the transmission of knowledge and information.

For example, techniques to produce honey no longer require the use of fire to smoke out the bees and gather the honey, even though this was previously very common. The use of fire and smoke to facilitate honey collection not only constrained this activity to men (as it was seen for too physically demanding and dangerous for women) but also increased the risks of uncontrolled fire in the parks. New production techniques promoted by the conservation partners are leading to longer-term environmental benefits that will protect the conservation areas from uncontrolled fires.

However, while the provision of green livelihoods provided a clear economic incentive for the sustainable management of natural resources, other important reasons for protecting the environment were also given. When asked about how communities contribute to protecting the environment, the responses provided showed some increased awareness of environmental awareness and techniques for promoting conservation. Some of the reasons given for protecting the environment included law enforcement and fear of punishment for breaking rules around conservation, with some interviewees mentioning that "the park could take you to jail.", but they also included consciousness of the environmental impacts of bad resource management, such as "if we cut the trees, the rain will not fall "or even some understanding of nature's standing or its rights to exist and procreate, such as the interviewee from Chimanimani who mentioned that "plants can breathe as we do. A tree makes the shade we are. That's why it is important to keep them alive.". Interestingly, while intergenerational rights were only mentioned by those interviewees with higher levels of education, only the interviewees from Gilé National Park mentioned this as a reason. The motivations expressed by participants for protection of the environment seem to be affected by the projects' geography, history, context, educational level of participants, and local culture. The table below illustrates the main reasons provided by each educational level group.

Figure 7: Reasons for respecting the environment



In many cases, local communities have received instructions on things that they should or should not do with regard to natural resource management and conservation. The level of environmental awareness and the ability of participants to understand the limits of their behaviour reflected this. Examples of changes in behaviour that have arisen as a result of local communities' enhanced understanding of conservation questions included avoiding the use of fires for land management, helping to control access to protected areas, limiting the cutting down of trees and bushes (particularly for charcoal), and not hunting for wild animals. Only in one specific area, examples included other active ways of supporting the protection of the environment, such as helping to plant new trees or limiting fishing to certain months of the year.

Despite this, there was little evidence that people's wider environmental awareness or knowledge about the risks of unsustainable resource management had increased. In general communities' relationships with natural resources appeared to be quite pragmatic and transactional, linked to their own use of these resources and the role they play in supporting their livelihoods rather than in any long-term concern around conservation or biodiversity. Promoting attitude or behaviour change towards these resources, therefore, is only feasible and practical in cases where local communities understand and see a clear tangible benefit resulting from this change. This is hardly surprising in a context of chronic poverty where people depend on the exploitation of natural resources for their survival, and where concerns for the next day take precedence over concerns around conservation and biodiversity in future decades, but is an ongoing tension and challenge for conservation projects and interventions which work to a different time frame to people's every day realities.

New skills, technology and knowledge provided by the conservation partners have also had a positive impact on women's income and their ability to contribute to conservation. In the area of mushroom collection, local women have been trained on the sustainable harvesting of wild mushrooms within the forest which has helped to maintain the supply of the mushrooms, as well as improve their nutritional value. These new techniques have led to the proliferation of wild mushrooms which were previously threatened by unsustainable harvesting and were disappearing from the park.[27]

> *"Antigamente não sabiamos que não deviamos arrancar o cogumelo de qualquer maneira. As vezes depois eles não cresciam mais."*[27]

27 Interview conducted on the 3rd of November 2021.

4.3.2 The economic, social and sustainability challenges

Balancing environmental and social outcomes

Whilst the objective of most interventions supporting Green Livelihoods is to achieve both social and environmental outcomes, creating employment whilst also promoting better natural resource management and conservation, there are occasionally tensions and trade-offs in how to achieve this. One of these regards the selection of participants and targeting of beneficiaries for interventions. If the objective is to maximise environmental impacts and effectiveness of resource management, projects may target women who already have a minimum level of knowledge, capacity and experience. It can also be advantageous to include women in the project who already display some level of autonomy and agency (in terms of holding existing roles and responsibilities in their communities) as these women will be more influential and act as role models for others to follow.

Yet, targeting these women may mean leaving behind and excluding the more vulnerable and marginalised within the community, thereby limiting the social impact and transformative potential of the intervention. It comes down to a question of prioritisation and what the intervention is trying to achieve, and whilst both objectives may be possible, the question of who is being left behind and excluded is a critical one. This trade-off was particularly clear in the case of some of the village savings groups set up by participants of green livelihood interventions, the members of which appeared to be substantially more confident, empowered and vocal than other women, yet were all women with income-generating activities, unlike other women in the community who could not afford to join groups as they had nothing to save and who also appeared less 'connected' and networked, with less access to information or activities that might enable them to generate income and start savings.

This tension between including the most marginalised and working with the more dynamic and influential women in the community is one that conservation partners need to be aware of. It may be possible to find a middle ground, where key 'gate-keepers' are identified and integrated into the project, whilst also maintaining a focus on inclusion and outreach to those women who have less access to information, resources and may face more constraints in joining the project.

Balancing short-term interventions with the need for long term vision and time for change and impact

Another challenge is the question of timing of green livelihoods in terms of the long-term conservation objectives (which may take years to achieve and require a sustained investment, particularly when they involve planting or agro-forestry or when time is required to build up the value chain and identify buyers) and the short-term nature of many interventions that do not have adequate time or resources to invest in the many different aspects required (skills development, productivity, market development etc). Our findings showed that the most successful interventions are those in which the partner goes in with a long-time horizon and adequate resources and market linkages that they are able to stick with the project for long enough to build up the skills, capacity and market needed for it to become sustainable, autonomous and be transferred to local ownership. This is particularly true in cases where interventions are taking place in highly remote, rural locations with low levels of education and skills, weak access to market and inexistent infrastructure. Expecting any Green Livelihood intervention to become economically sustainable in these circumstances without long-term investment is simply unrealistic.

Importance of alignment between conservation objectives and local government development plans

Another observation from the research study was around the possible tension that can sometimes arise between the vision and actions of conservation partners and those of local government authorities. Whilst Mozambique's increasing vulnerability to climate shocks has led to increasing awareness and commitment, at both central and provincial levels, to promote actions to build climate resilience (including actions around biodiversity, forests, agriculture and water), tensions can still remain between local development plans and conservation activities. The National Climate Change Adaptation and Mitigation Strategy (NCCAMS) for 2015-25 sets out clear objectives at both central and local level to address the increasing threats of climate vulnerability and includes a mandate for the development of 'Local Adaptation Plans' which aim at "sustainable development, with the active participation of all stakeholders in the social, environmental and economic sectors" (NCCAMS 2012). Yet, district development planning is not always carried out in a way that is consultative, participatory or takes account of the social and environmental needs of local communities. This was seen in several of the research areas where conservation activities were constrained, rather than supported, by local authorities, or where the actions of conservation partners did not seem to be in line with local plans and were sometimes undermined by these (for example the expansion of government endorsed salt mines, leading to further deforestation in mangrove plains that conservation partners are working to reforest).

Tensions between high levels of poverty and natural resource restrictions

As one of the poorest countries in the world, and in a context where 60% of the population live in extreme poverty and continue to depend on natural resources for their livelihoods, promoting conservation and restricting access to natural resources in Mozambique is always going to be a challenge. The geographical areas for many conservation activities are often remote, excluded and with high levels of poverty and illiteracy. Consequently, education levels and environmental awareness (in terms of altruistic concerns around conservation) is quite low in these areas, with limited understanding of the complexities around sustainable resource management, biodiversity and longer term conservation outcomes. Where people depend on natural resources for their own food security and day to day survival, it is unreasonable to expect them to willingly accept new constraints and restrictions on how they access or use these resources. In some cases, conservation projects have been able to access sufficient funding to be able to respond to some of the basic needs of local populations (including access to health and education) but given the shortage of resources available for conservation in Mozambique and the high level of need, it is not realistic to expect conservation areas to be able to provide all of the basic services that people require to exit poverty. Nor is it realistic to expect that Green Livelihoods can provide income-generation opportunities for entire communities, or even for the most marginalised and vulnerable within these communities. It is therefore important to be aware of the highly challenging environment in which conservation partners are operating and in which Green Livelihoods are being implemented, in a context of extreme poverty, but also a context which is becoming increasingly fragile and challenging due to the increased presence of extreme weather events and climate shocks, all of which undermine resource-based livelihoods.

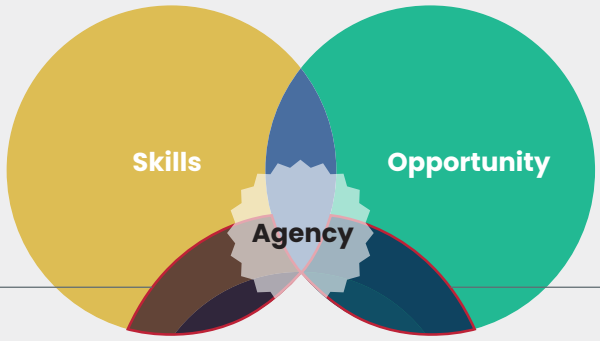
Our research findings showed that in general, in contexts where people had had more access to education and attained higher levels of schooling, their environmental awareness and commitment to conservation was greater, with this being particularly evident for women. In cases where access to formal education had been limited, some conservation partners compensated by offering other forms of environmental education and awareness (whether through training, community outreach and events or youth clubs) which also served to build understanding and commitment to broader conservation objectives. Without this, however, it was evident that there is a high risk that local communities fail to understand either the purpose or the rationale for conservation areas existing, perceiving that they only exist for others and that they have no benefit for the local population, and often creating animosity and tension around this.

5 Conclusion: Green livelihoods and transformative change

> “Bringing about social change requires the understanding and support of key change makers and influencers within the community.”

The purpose of this research project was to explore the potential for Green Livelihoods to bring about transformative change in women’s lives, not only through the creation of new forms of income generating activities, but also by building their confidence, agency and self-efficacy in a way that contributed to their economic and social empowerment. There were three main ‘pathways’ to this change which were observed through this research which are illustrated in the image below.

Figure 8: The leveraged potential of complementing the interventions with “the purple”



The skills that Green Livelihoods interventions brought to participants increasing their technical knowledge with regard to resource management was evident in all the research areas and has a positive impact on the women agency.

Knowledge are one of the ways to achieve agency and the research found that from the skills gained changes in the communities and women agency could be observed. For many female participants, who had had had limited access to formal education or schooling, this opportunity to gain new skills was transformational in itself. Women spoke about feeling valued, acknowledged and respected as they were targeted for skills development in a way that had never happened before. In addition to the positive benefits these new skills brought them in terms of their livelihood activities, it had other positive impacts in terms of making them feel valued and visible and in building their connections with other women and members of their community with whom they participated in the skills development or training activities. In addition, by investing in women’s human capital and ensuring they benefited from new skills development and training opportunities, the way that they were perceived within their communities changed as others (particularly men) started to gain more respect for what women could achieve.

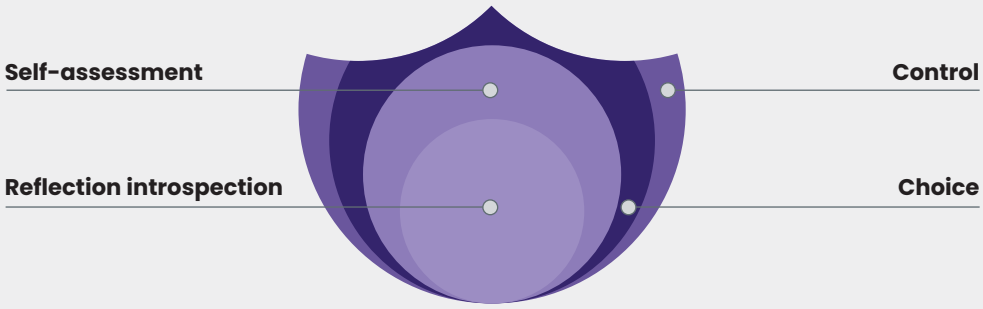
The opportunities in terms of income, new assets and social capital that the green livelihoods interventions also bought played an important role in providing an opportunity for more voice, choice and control of the women.

One example of this was the transfer of modern bee hives to women involved in honey production, where the possession of the hive gave the women some autonomy as well as sense of pride as they took ownership of the activity and means of production. In a context where patriarchal structures and social norms limit women’s access and ownership of key assets (including land), by transferring productive assets to women and ensuring that these are in her name (rather than her husband’s), Green Livelihoods could play an important role in catalysing change and contributing to women’s enhanced agency.

Self-efficacy represents capacity to make choices and take control. The catalytic role that green livelihoods can play in disrupting social norms and bringing about social change was seen in a number of areas as described in section 4.2. Those could potentially be leveraged to strengthen women's agency. In order to do this, barriers to change need to be worked with and women provided the space and support to develop their power within to achieve stronger agency. This portion of the puzzle could be added to strengthen the partners interventions.

To achieve agency a space for reflection and introspection is required. It enables humans (and women) to identify and analyse the challenges they face and to reflect on the means and ways of overcoming them. This is the inner part of the purple circle. The intimate part. What some call the intra-personnal skills.

Figure 9: The "missing purple"



With the heavy workload and endless domestic tasks facing women in the communities studied, it was found that they had surprisingly little time or place to make space for this type of reflection and self-awareness, and unlike men, who enjoyed more free time to meet with friends and engage in conversation and social interaction, women rarely had this opportunity. Yet, where women were brought together through Green Livelihood interventions, in some (but not all cases), new opportunities opened up for them to come together to engage in this kind of reflection. This was seen particularly in the case of the village savings groups, where women met, ostensibly to make small savings, and yet for many women the main value of this group was not just the financial opportunity, but the social one to meet with other women in a safe space, to converse, share ideas and plan together for the future. The challenge remains (as with the question of leadership and decision-making) how to maximise this opportunity and create more spaces for reflection and self-awareness within the projects, as well as how to translate these from the sphere of the project to the public space in a way that empowers women and gives them more voice and decision-making power in their communities.

In some cases, the research process itself, where women were brought together to reflect and discuss on the challenges they face and the opportunities for change was a first step in opening up new spaces for self-awareness and introspection. Considering how such opportunities could be integrated into the intervention, or into the monitoring, evaluation and learning processes around these interventions could be a valuable way of maximising their impact on women's agency.

There were two very visible barriers to this in the research: the lack of mobility and of voice for women.

5.1 The challenge of mobility

One of the focus areas of the research was to understand the different way that women and men use their time and the spaces within their communities. Through community mapping and participatory drawing exercises in focus group discussions, we were shown how men spend their days moving between a wide range of different spaces, with some time in their home, some time on their farmland (machamba), but an equal amount of time spent in public spaces (either for social reasons, for economic purposes, or to join committees and meetings).

The picture for women was very different, with their activities generally limited to two spaces – the home and the "machamba" – where they fulfil a role of domestic tasks, with other movement around their community usually linked to tasks linked to water and firewood collection, rather than social activities or participation in public spaces. There is an expectation that all the domestic related work is her responsibility and there is not one men who said they would carry the water for instance or attend to the babies. The possibility of her leaving the community either to trade, or buy goods or for a training was a real concern. The main fears the men expressed was that they may not come back to him, while he had already spent a lot of money to be able to marry her. So how would he be able to let her go?

For many women, their participation in project activities was the first time they had access to new spaces (sometimes in conservation areas, sometimes in public spaces) as well as the social contacts and networks these spaces brought about.

In some cases, the ability to access these new spaces and have the freedom to participate in new activities required a negotiation process with their husbands, which in itself laid the path for further negotiation and freedoms in the future. In cases where the green livelihoods required participation in training (sometimes in a different area, requiring travel to urban centres or other villages), or access to new markets, women overcame a range of mobility barriers (linked to distance, lack of infrastructure, costs, but also social norms) that marked a significant step forward in enhancing their agency, with restricted mobility being one of the major barriers to women's empowerment in both rural and urban areas.

5.2 The challenge of having a voice (and being heard) in the domestic and the public spheres

Having a voice, being able to be heard, or from the men perspective hearing the voice of the women appeared as one of the main issues or successes depending on the perspective. Women who were able to express what they wanted to do with the additional income, or that were asked their opinion since they have joined the projects considered this an achievement. Men were either very concerned about her speaking out – and making him look like a fool. Or were happy to be able to discuss the matter with their wife(s). Having a voice that is heard is powerful.

> *"Se isso acontecer vão dizer que a mulher deu medicamento." [em ref. A se existia homem que ajudava]*

What was less clear from the research was the extent to which this increased voice, agency and decision-making power within the domestic sphere translated into changes in the public sphere, with regard to women's role in their communities or participation in local governance structures. Although some Green Livelihoods interventions had provided new opportunities for women to take on leadership roles within these activities, this was often due to the fact that these interventions provided a female only 'safe space', but these opportunities did not seem to have led to the same women taking on leadership in the traditionally male-dominated patriarchal governance structures in their communities.

Box 6:
Honey production – A social norms disruptor

Hunting honey seems to be an activity almost as old as (wo)men. In Mozambique honey has always been considered a male sector and practised by the poorest and more marginalised men within the community. This seems to be mainly due to the nature of honey production that required the hunter to climb trees where the bees could be found (often at night while they slept) and smoke them out to be able to collect the honey. Interviewees in this research project explained that the word "apicultor" is seen as an insult, indicating the social norms around this activity. Until the last decade there were few women beekeepers in Mozambique. Women were not allowed to be apiarists and were unable to climb trees in capulanas. Social norms are based around a series of beliefs that this could bring negative impacts to the women, the community and the environment.

When development projects started investing in honey value chains in the 2000s and the inclusion of women became a requirement there was an obligation to include women as participants. In Mozambique managing this shift was a challenge in itself. Today the projects visited count about 50% of women, creating a level of social disruption in the communities involved. Honey production interventions have been able to create new opportunities for women to demonstrate what they can do and have provided them with access to new technologies (modern hives) and the knowledge and skills that came with this. Finally, women became not only the owner of an asset but became breadwinners too.

> "Now I can say I am proud to be an apiarist but it took me a long time to say it. Still today some people don't believe I have managed to not be poor anymore because of beekeeking. They think I have done black magic."

Working to strengthen those will not happened without resistance. Whilst many of the Green Livelihood interventions targeted women and focused their communications, outreach and training work on women, the question of how to integrate men and how to ensure that the rest of the community is supportive of the interventions is absolutely critical. For gender equality and women's economic empowerment to be achieved, men and boys need to be involved and to become advocates for change. In some cases it appeared that women were participating in projects in spite of their husbands' distrust rather than with his blessing and support, and that in some ways this limited the potential positive impacts the intervention could have. In several communities, female participants within the projects spoke of resentment or distrust from other women, sometimes based on the assumption that by being economically active and independent the female participants of the projects were either abandoning their domestic duties or showing a lack of respect for their husbands.

> *"Lá na minha comunidade as pessoas falam muito mal dizendo que sou uma mulher que passeia muito e que não paro em casa, sou a única da aldeia que saio para vir ao grupo, as outras ficam lá, não saem, seus maridos não permitem."*

These kinds of attitudes illustrate the prevalence of social norms around men's 'ownership' of women (rooted in the traditions around bride price – lobolo – and the fact that husbands purchase their wives for marriage) and the fact that women are therefore obliged to ask permission with regard to their mobility and any activities they wish to engage in outside of the domestic sphere. In such an environment, promoting women's voice and power is extremely challenging.

Bringing about social change requires the understanding and support of key change makers and influencers within the community. For other community members, and in particular husbands, to be more supportive of interventions and women's participation within these, better communication and outreach work needs to be done and more thought put into how to involve the wider community within activities and ensure that they also see the positive impacts they can have, not just for the women involved but for the community and environment more generally. There is a risk that men (in particular the husbands of participants) may feel threatened and their masculinity undermined by their wives suddenly finding themselves in a position where they may be earning more than their husband. To overcome these fears and threats, work needs to be done not only to inform the men of the projects' objectives and engage them as much as possible within conservation projects, but also to address the patriarchal social norms which underpin these perceptions around masculinity and male breadwinners and which hold women back from engaging in profitable income-generating activities.

5.3 Working with local knowledge and realities

Promoting change involves understanding and grounding any intervention within the constraints and realities of the particular community and culture of the area to define what is possible. This granular knowledge and attention to context is essential, defying any idea that a 'one size fits all' approach to women's economic empowerment is possible and pointing at the importance of basing any intervention on robust social analysis.

During the research it was found that the difference between communities, at time a few kilometres away can be stark. Working without that close understanding is like walking blind.

6 Key lessons

> "The most lucrative and sustainable green livelihoods were those that generated income through cash crops."

6.1 Women's economic empowerment and agency requires reliable and decent livelihoods regardless of being "green"

One of the objectives of this research project was to analyse the extent to which Green Livelihoods can empower women and have the potential to enhance their agency, by improving their access to and management of natural resources. Yet, the key findings revealed that what matters most is the question of whether women have access to decent work with a reliable income, rather than whether or not this income came from a 'green' activity. There is nothing inherently empowering about green livelihoods, nor are they providing any type of 'silver bullet' for women's economic empowerment. Rather, as with non-green livelihoods, only in cases where women are able to access sustained and reliable income is there an opportunity for empowerment.

In many ways, women in Mozambique have been engaging in 'Green Livelihoods' for generations, sustainably managing natural resources, and yet failing to benefit economically from this activity or from their close relationship with nature. For interventions to change this, a focus is needed not only on successfully integrating women into value chains, linking them to markets (to ensure a reliable source of income) and ensuring that they have the capacity to engage in these value chains and have the capacity to use the income they generate through a focus on empowerment and agency.

Thus, for green livelihoods to bring about meaningful change in women's lives, it is critical to focus on the intersectionality between conservation and women's economic empowerment, building on the lessons from both sectors and identifying how these two areas can be brought together to create new economic opportunities for women to take on a more active role as agents of change and leaders in resource management and conservation.

6.2 Green livelihoods in conservation areas will only be sustainable where they deliver tangible gains for participants

There is an inherent tension within the concept of green livelihoods in conservation areas, in cases where people's livelihoods (and their access to and use of natural resources) is often restricted due to where they live and where there may even be significant disadvantages when wildlife from the conservation areas starts to encroach on agricultural land and communities. Whilst conservation areas are globally perceived as public goods and positive contributions to their natural environment, this is not always the case for local populations who do not stand to benefit from the environmental gains, and for whom the costs of living nearby may exceed the benefits (particularly in cases where human-wildlife conflicts exist).

In order to create green livelihoods that are both attractive to local populations and sustainable both for the people engaged and for the wider environment, it's important that these livelihoods deliver tangible and practical gains for those involved. In contexts of poverty and resource shortages, it cannot be expected for local populations to sacrifice their immediate wellbeing and basic needs in the interest of longer-term environmental or conservation outcomes, and it is essential to identify 'win-win' opportunities that have the potential to both generate sustainable incomes and contribute to environmental outcomes. Ideally, green livelihoods can provide opportunities that use natural resources in a more sustainable way and that also provide environmental education and information on new techniques for resource management that can replace traditional practices that may have been harmful to the environment (for example charcoal production or slash and burn agriculture), thereby increasing communities' engagement with environmental protection and conservation. green livelihoods interventions promoting production of piri-piri and of honey are interesting examples here, with both products generating income for local communities (due to a reliable market) but also contributing to environmental benefits and protection for the local community due to the role that beehives and piri-piri can play in deterring elephants.

Until these opportunities and win-win livelihoods are identified and local communities see a clear advantage in participating in conservation activities and sustainable natural resource management that brings them tangible benefits (whether economic, social or with regard to their own safety), it will continue to be challenging to promote changes in attitudes regarding the environment and conservation, meaning that conservation areas will have to continue to rely on law enforcement, and the use of rangers, fencing and anti-poaching teams to control their areas and protect natural resources. Not only is this approach costly, but is also risks driving a highly masculinised violent approach that can damage community relations and lead to a violence spiral that benefits neither the Conservation area nor the local community (WWF 2021).

Of course, green livelihoods can also be implemented in non-conservation areas, where it may be easier to achieve success given that there may be fewer constraints and less of the tensions described above, particularly around resource use and human wildlife conflict. As this research project focused particularly on conservation areas in Mozambique, however, it is important to highlight these constraints and challenges.

6.3 Importance of drawing on local knowledge to co-create green livelihood interventions

The research found that, while some livelihood opportunities may have been more economically viable and successful for women than others, there is no single solution or answer to what works for women's economic empowerment, and that the most critical factor is to build on local knowledge, experience and practices and ground any new interventions in local realities and within the parameters of what is possible and acceptable in the local community. While this does not necessarily mean that interventions need to build on activities that women are already doing (as indeed, some of the most successful green livelihoods were those that introduced new products – such as piri-piri – or introduced new techniques enabling women to participate in activities they would not have done before – such as honey production or aquaculture), it is nonetheless important to ground these activities in local realities and ensure any new activities build on the cultural, social and natural knowledge.

The opportunities and challenges around green livelihoods are specific to each location and require a tailored response that is co-created with local communities and builds on their own local knowledge, experience and aspirations. For example, the development of new technology for honey production using a new design of beehives was achieved with the active engagement of men within the community and with discussions to encourage women to participate in this activity. This intervention has helped challenge the belief that honey production was primarily a man's activity. This example helps to demonstrate the importance of a participatory process that draws on local knowledge for addressing specifically identified constraints and which is embedded and owned by the local community so that it can be sustained even after the project intervention ends.

6.4 Successful green livelihood interventions take time and investment

Establishing green livelihoods activities that have the potential to promote women's agency and empowerment is not short-term objective that can be achieved through a 3 to five year intervention, but is a long term process that requires time, resources, understanding and the commitment not only from the conservation partner involved, but also from both men and women within the community. Ensuring the sustainability of these interventions also requires substantial investment, not least in setting up the activity (and providing the skills and assets necessary), but also in establishing connections with markets and identifying key partners along the value chain that can step in and take up the role initially played by the conservation partner.

Expecting a green livelihoods activity to become financially viable and socially sustainable in a short period of time is not realistic, just as expecting women's lives to change and to see economic empowerment and agency in a short period is also unlikely. For this reason, any investments and interventions around green livelihoods need to be designed with a long-term strategy that involves continuous investment, skills development and work with the local community. Having continued access to the market and ensuring that the value chain is financially viable is a key factor determining both the sustainability and resilience of the green livelihood intervention and its ability to generate a dependable income beyond the life of the project intervention.

6.5 Providing access to income, assets and new skills hold the potential to disrupt social norms and promote systemic change

Green livelihood interventions that provide women with access to income, assets and new skills can play a critical role in catalysing change and providing new opportunities for women to exercise agency, but for this to take place, they need to take account of local realities, power dynamics, social norms and patriarchal structures and to actively address these through the intervention, working with local communities (including with local leaders and with men and boys) to bring about systemic change and to provide a more enabling environment for women to exercise their full potential.

Bringing about this change cannot be achieved simply through the creation of improved economic opportunities, but also requires active attention to the other structural factors and negative social norms that hold women back and constrain their decision-making power and agency within their households and communities. One way in which those interventions were challenging and disrupting these negative social norms was by demonstrating that women could take on new roles and engage in new activities that had not previously been accepted within their communities due to narrow perceptions around what women can and cannot do. The example of honey production enabled women to enter traditionally male-dominated sectors, whilst in other Conservation Areas the creation of savings groups (which enabled women to take on more active roles in financial management and savings within their households and communities) was challenging the perception of women as being powerless or confined to the domestic sphere, as they took on new roles as financial agents and economic operators.

In addition to challenging traditional gender roles and perceptions around what women can and cannot do, green livelihoods were also seen to play an important role in catalysing change by promoting collective action and strengthening women's negotiating power and ability to challenge negative social norms. By bringing women together around certain resource-based activities, green livelihoods not only enhanced women's ability to earn an income, but are also important for strengthening women's social capital through the creation of new relationships, networks and group membership, which can build their confidence and knowledge and catalyse collective action for change.

In the context of highly patriarchal structures of Mozambique, where women in rural areas may have had limited opportunities for income generation, decision-making or leadership in the past, and where men within the community (particularly husbands) may feel challenged and contest this change, engaging with men and boys can make the process smoother and diminish the resistance to change. Only by building trust and understanding with men and boys in the communities and ensuring that they support and feel part of the positive changes that are happening and become advocates for women's participation and empowerment, can the opportunities of the green livelihoods interventions be leveraged to bring about systemic change.

6.6 Importance of more gender-sensitive design, implementation and monitoring and evaluation to provide better data for decision making

Whilst there has been good progress in recent years in including women into conservation activities and green livelihoods and increasingly, conservation partners are becoming aware of the importance of gender equality in their work, there is still a lot of learning to be done in designing, implementing and learning from gender-sensitive interventions in this sector, ensuring that these go beyond inclusion to become actively gender responsive.

As the research findings show, including women is a first step but not enough to bring about transformative change. It is also essential to bring a gender lens and robust gender analysis into the design of the intervention, actively engaging and consulting with a range of voices (both women and men) within the community to understand and address power dynamics and inequalities and ensure that the intervention is addressing both the practical and strategic needs of women and men. This is important to ensure that the intervention is really addressing the underlying structures and processes that are constraining women and to ensure that it is not perpetuating inequalities in any way.

Designing gender sensitive monitoring and evaluation systems is also of critical importance in order to be able to measure the change that is happening, and to capture the transformative changes that the programme aims to bring about (including developing innovative ways of measuring enhanced agency in women). This can be achieved not only be ensuring that all programme data is disaggregated by sex (as well as by age and disability) but also by designing a Monitoring Evaluation and Learning (MEL) system that is rooted in a theory of change that clearly sets out the relationship between the activities being implemented and the outcomes that are desired. By measuring the right things (and ensuring sex disaggregation across the board), the results of the intervention for both women and men can be made more visible, and learning and evidence can be generated that can help to strengthen its impact on gender equality as well as to contribute to the design of other interventions in different contexts.

6.7 Enhancing women's agency has the potential to leverage the environmental and social impacts of green livelihoods

A growing body of evidence has shown that empowering women and girls and promoting their involvement and engagement in natural resource management has positive environmental outcomes (Al Azarwi 2014). Studies of community forest groups in India and Nepal has clearly shown that the engagement of women in decision-making and forest management led to better conservation outcomes, higher levels of cooperation as well improved knowledge and understanding of plant species, forest products and sustainable extraction methods (Agarwal, 2009, 2010)

Our brief fieldwork in the five conservation areas in Mozambique did not allow us enough time to evidence the extent to which women's engagement in green livelihoods has led to improved environmental outcomes, and we believe that further research is needed to explore the extent to which empowering women and giving them new opportunities for leadership and agency within their communities (and ecosystems) has the potential for transformative change and positive social and environmental incomes.

In order to achieve this leverage, however, and to ensure that women's power, negotiating ability and capacity to manage, and to influence others on, resource management it is critical that interventions explicitly address the question of agency. This can be done in a number of ways, either working at household level, building women's capacity to negotiate with household members, including husbands. It can also be done within the value chain, by building women's agency and ability to negotiate with buyers and actors in the value chain.

6.8 Value of bundled approaches to promote women's agency and empowerment through green livelihoods

Conservation partners are doing an excellent job at identifying the environmental and natural resource challenges and opportunities in the areas they work in, and are actively creating new opportunities for both women and men to earn new sources of income and contribute to conservation outcomes. This brief research project found that providing skills and income for women enables small changes for the women participants – and a little bit more so when they also have an asset. It leads to some tangible improvements in their living conditions, which does not mean empowerment and enhanced agency, nor does it automatically turn them into 'eco-warriors' who become advocates for their local environment and start to promote behaviour change in their households and communities.

We believe those interventions can be more transformative for the women if accompanied by an additional component focused on strengthening their agency. of the women. It may also be possible to leverage the projects impact in terms of the environment. This can be best achieved by creating partnerships and bringing together conservation actors, private sector partners and development organisations (like MUVA) that can combine their different skills sets and areas of expertise, to learn from one another and to maximise both social and environmental outcomes, thereby leading to more sustainable development for all.

The conservation partners with whom we engaged were all on a learning by doing journey and it is recommended that they now engage with the lessons and experience of the "gender and WEE sector" and actors such as MUVA and the feminist political ecology (J.D. Lau 2020) to help advance gender equity in conservation through attention to power dynamics, intersectionality, and subjectivity. The direction is already set in motion, but through stronger partnerships and shared learning the process can be enhanced, the impact achieved a bit faster, and the barriers overcome.

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