

Gender Assessment

FP024: Empower to Adapt: Creating Climate-Change Resilient Livelihoods through Community-Based Natural Resource Management in Namibia

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GREEN
CLIMATE
FUND

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ACRONYMS USED

AAA	Affirmative Action (Employment) Act
AGM	Annual General meeting
CBNRM	Community Based Natural Resource Management
CBO	Community Based Organizations
CBS	Central Beaurer of Statistics
EDA	Enhanced Direct Access
GBV	Gender Base Violence
GCF	Green Climate Fund
GSCs	Gender Sectoral Committees
LAC	Legal Assistance Center
M&E	Monitoring and Evaluation
MAWF	Ministry of Agriculture, Water and Forestry
MET	Ministry of Environment and Tourism
MGECW	Ministry of Gender Equality and Child Welfare
NAC	Namibia Agricultural Cense
NACSO	Namibia Association of CBNRM Support Organisation
NDP	National Development Plan
NGOs	Non-Governmental Organisation
NRM	Natural Resource Management
NSA	Namibia Statistics Agency
UNDP	United Nation Development Program

1 EXECUTIVE SUMMARY

This report highlights gender specific challenges relating to gender roles within the Community Based Natural Resource Management (CBNRM) Programme in Namibia. It outlines women's involvement in the society and the current state of the women's movement within the CBNRM Programme. The report presents opportunities for promoting gender equality relating to the above-mentioned area of intervention for the project entitled Empower to Adapt: Creating Climate-Change Resilient Livelihoods through Community-Based Natural Resource Management in Namibia that is planned to be submitted to the Green Climate Fund (GCF). It concludes with specific recommendations for the above project to mainstream implementation of gender related awareness and equality activities through the work of the Empower to Adapt Project.

With women and vulnerable groups naturally more involved in sustainable utilization of natural resources is a strategy for gender and social integration by itself – by strengthening the capacity, negotiation skills and bargaining power of producers organized in groups one increases the opportunities and benefits for women and disadvantaged groups. Furthermore, 'bringing the value chain to the village' by setting up organised groups and organizing procurement at village level is an effective strategy for solving major gender-based constraints such as the lack of mobility, and limited access to markets, information and linkages. All in all local value chains help to reduce the dependency of otherwise isolated women and marginalized communities on middle men and local traders by offering opportunities for more favorable market engagement.

Qualitative and participatory research approaches revealed the gender imbalance in access and ownership of land as well as control and decision-making over natural resources. The CBNRM programme aimed at improving the capacity of women to promote active participation in Natural Resource Management (NRM). An external 'gender expert' provided advice during early stages of CBNRM programme and this strengthened mainstreaming of gender in the programme. As a result, women rights to use resources have been linked with responsibilities to maintain and use those rights in a sustainable manner. However, the assessment till identified gender gaps within CBNRM and the findings include:

- Within the CBNRM network, women actively participate in the labor market, civic organizations and community development, while they take most of the responsibility over household chores, it limits their influence in terms of decision making.
- Women's community leadership is greatly recognized, but there is a gap to transform it into participation.
- A large part of the Namibian population within CBNRM areas is plagued by poverty and unemployment. Women tend to experience harsher conditions and face higher barriers to overcoming such problems because of structural gender inequality. The situation greatly varies between different ethnics.
- Gender expertise and training is dispersed among governmental institutions, academia and Non-Governmental Organisations (NGOs). Nevertheless,

individuals with gender expertise or training are still a minority among regional, local authorities, Community Based Organisations (CBOs).

- There is a gap in terms of gender integration in citizenship participation between the different regions in Namibia. Identified good practitioners can lead and train their peers in specific workshops.
- Past CBNRM interventions have mainstreamed gender in their project designs, however they are few aspects that were not considered such as gender based budgeting, and gender sensitive technologies.

2 INTRODUCTION

2.1 Background

According to Namibia's Gender Policy, stark gender differences can be found in each of the focal areas for this project. For example, in rural Namibia, 44% of households are female-headed; these households more likely to be poor or severely poor. Women are the primary users of environmental resources. In most rural communities, women and girls constitutes 75% of the workforce fetching water and collecting firewood, while women's participation in the wage labour force is lower than that of men, at 49%-60%, and at 47% in the non-agricultural wage sector. While Namibia has made strides in girls education, with high enrolment figures of girls at primary and secondary education levels, women are still underrepresented in vocational colleges; women do, however, have a higher literacy rate than men. Women continue to be underrepresented at most levels of decision making in both public and private sector.

Twenty-nine percent of young women are living with HIV/AIDS, compare to 8% for young men. Some consequences of HIV and AIDS include the domestic burdens of women and girls as they have to provide home-based care for those who are ill and for orphans in the households. The Empower to Adapt: Creating Climate-Change Resilient Livelihoods through Community-Based Natural Resource Management in Namibia Project aims to reduce vulnerability of Namibian rural people, especially women and girls through increasing resilience, diversify livelihoods and creating natural resource based enterprises in rural areas.

Although many gender gaps have narrowed over the past two decades in Namibia, substantial inequalities remain across all sectors, particularly in low-income families and among disadvantaged groups. Under the gender policy, the Environmental Investment Fund of Namibia investments are aimed at three overarching outcomes. These outcomes, which are especially important for people who are marginalized or excluded due to ethnicity, gender identity, sexual orientation, lack of income, disability or other factors, reflect the gamut of activities that the Fund undertakes across multiple sectors and fields:

- Reduce gender disparities in access to, control over and benefit from natural resources, wealth, opportunities and services economic, social, political, and cultural;
- Reduce gender based discrimination and improve participation of women in sustainable development processes;
- Promote financing for gender results, and
- Increase capability of women to realize their rights, determine their life outcomes, and influence decision-making process.

CBNRM is regarded as having high potential for promoting sustainable development, enhancing rural livelihoods, improving conservation efforts, and helping to reduce inequality and vulnerability of the poor. To date, conservancies and community forests have proved to be one of the most socially sensitive and proactive models of rural

development in Namibia, and women have participated actively in their development and management. In the CBNRM institutions targeted by the project, there are more than 200,000 members. It is estimated that close 7,000 of these would enjoy the direct benefits of the project through increased income opportunities, full time and part time employment, while about 16,000 will receive indirect benefits through safeguarding ecological functions and ecosystem services. According to Namibia's CBNRM Report- a review of progress and challenges in 2013, women are often the majority at meetings, 37% of conservancy committee members were women, 27% of conservancy employees were female, the finances of 62% of conservancies were managed by women, and for the first time five conservancies were chaired by women. This project can be expected to contribute further empowerment of women and girls.

2.2 Basis for Assessment

The GCF and the Environmental Investment Fund of Namibia Gender Policies are the basis of this assessment supported by national gender statutes, regional and international gender protocols. The goal of the Fund's gender policy is to contribute to better health for both women and men, through health research, policies and programmes which give due attention to gender considerations and promote equity and equality between women and men. The Fund will analyze and address gender issues in planning, implementation, monitoring and evaluation of policies, programmes, projects and research in order to achieve the following objectives:

- Increase coverage, effectiveness and efficiency of interventions;
- Promote equity and equality between women and men, throughout the life course, and ensure that interventions do not promote inequitable gender roles relations;
- Provide qualitative and quantitative information on the influence of gender on sustainable development; and
- Support projects on how to undertake gender-responsive planning and implementation

2.3 Objectives of the Assessment

The overall objective of gender assessment is to mainstream gender into the project, which will be achieved through several activities. Understanding of the practices in the project area is the basis for gender mainstreaming, which was obtained from the field visit conducted during the project development phase. The specific objectives of field survey mission are:

- To collect basic information on labor division by gender, assess gender impacts of climate change, and identify gender roles in climate change adaptation;
- To identify the gender training needs for climate change adaptation with specific focus on crop farming.

2.4 Methodology

Desk research was undertaken to assess gender mainstreaming initiatives and challenges that are faced by the CBNRM Programme. This was complimented by ground verification during the stakeholder's consultations and field visits that were undertaken in compilation of the proposal package for this project. Focus group discussions were an important source of mostly qualitative information, and helped to understand many of the issues on the ground. Focus group discussions were prepared in advance, although changes in topics may occur depending on the responses of the groups. Focus groups consisted of either men or women only, to allow open discussions and compare the sentiments of the different genders. Additionally, in some areas we had discussions with mixed gender groups, and used the responses of men to probe reactions of women and vice-versa. Initially we proposed to compare responses of young versus older focus groups as well, but this never materialized, as the groups encountered were relatively small, and could not clearly be segregated by age. Instead we use the variety of the group to probe responses from other sub-groups of participants. The focus group discussions provided some quantitative data as well by asking targeted questions that participants could respond to with a show of hand.

A number of issues around gender and social integration were not fully known or understood and needed more in-depth investigation. The main research questions existed with regard to natural resource management, climate change vulnerability, and focused around the following (inter-related) topics:

1. **Participation.** Is everybody (men/women, young/old, different ethnic groups) free to participate and benefit from harvesting natural resource use?
2. **Household cooperation.** Do people generally work alone or together as a household to market their natural products? If they work together, how is the work shared? Who gets the income in the hand? How is the income shared? If the income is used for common goals, who decides on household priorities?
3. **Control over income.** Do people have full control over the income they earn from they nature based enterprise? Does the control depend on the role in the household one has?
4. **Participation of children.** Do children participate and/or benefit from natural resources? If so, in what ways?
5. **Livelihoods.** How important is natural resources in view of livelihoods, climate change, poverty reduction?

2.5 Project Overview

The project is expected to directly benefit more than 15,000 women and men¹ in the CBNRM areas through the support to diversified climate-resilient livelihood options. An area of more than 7 million hectares will be under improved and effective management, which contributes to both increased climate change resilience and to greenhouse gas emission reduction, indirectly benefitting more than 60,000 inhabitants of the CBNRM

¹ Note that this is lower than the sum of the figures provided in paragraph 15, since some overlap between the beneficiaries of the different grant investment areas is expected. See the attached Excel spreadsheet for more detail.

areas. The overall objective of the proposed project is therefore to **‘Empower Rural Communities of the Namibian CBNRM Network to Respond to Climate Change in Terms of Awareness, Adaptive Capacity and Low-Carbon Development’**. This will be achieved through two complementary project components:

2.5.1 Component I: Capacity Building and Community Support

Component I Objective: ‘Build and Strengthen the Institutional Foundation for Effective and Sustainable Community-Led Local Climate Action in the CBNRM Network’. Component I of the project will build and strengthen the institutional foundation for effective and sustainable community-led local climate action in the CBNRM network. Activities under this component do not necessarily relate directly to climate change actions but that applies to the entire CBNRM network and need to be addressed to ensure the effective implementation of the proposed interventions and to enhance the achievement of the envisaged impacts under project component II. Component I activities fall under the following sub-components:

1. *Climate change awareness creation*

A minimum of 80 CBNRM CBOs will be targeted through awareness materials and dedicated training in order to raise their awareness towards climate change and share information on possible adaptation measures

2. *Local-level climate monitoring*

A climate monitoring system tailor-made for CBNRM CBOs will be developed and implemented across the CBNRM network. A minimum of 30 CBNRM CBOs is expected to adopt the climate monitoring system. This will allow both CBNRM communities as well as external support organizations to strengthen planning and adapt their activities and interventions accordingly.

3. *Strengthening CBNRM governance*

Good governance creates the basis for effective resource management, benefit capture and distribution and is essential for successful implementation of community-based projects as provided under component II. Governance in 30 CBNRM CBOs will be strengthened through this sub-component.

4. *Capacity building for community-led initiatives*

Community-led initiatives to address climate issues are going to require capacity-building of a new set of skills that these CBOs have not yet had the opportunity to develop. Not only will the CBOs be engaging in new aspects of environmental management – climate change adaptation measures – but they will also be required to identify appropriate interventions and develop and submit corresponding proposals under component II. This sub-component will provide training and technical support to CBOs based on a prior assessment of specific needs.

2.5.2 Component II: Grant Facility for Resilient CBNRM Livelihoods in Namibia

Component II Objective: Empower Rural CBNRM Communities through Direct Access to Climate Finance for Increased CBNRM Livelihoods Resilience and Low-Carbon Rural Development. Component II comprises a grant facility for resilient CBNRM livelihoods

through self-determined local climate change adaptation initiatives. It will serve exclusively for direct access by legally recognized CBOs operating within the ambit of the national CBNRM program and seeking to implement community-level activities which have a strong climate change adaptation impact potential. The grant facility will be fully aligned with GCF investment criteria while allowing for maximum responsiveness to national and, particularly, local priorities in the following three grant investment areas:

1. *Climate Resilient Agriculture*

A minimum of 6 grants under this investment area will benefit more than 11,000 direct and 26,000 indirect beneficiaries by addressing the direct and indirect impacts of climate change on agricultural production. Possible grant projects will focus on responses that feature shifts towards innovative resilient farming techniques such as conservation/climate-smart agriculture, as well as technological improvements.

2. *Climate Resilient Infrastructure*

A minimum of 15 grants under this investment area will benefit more than 2,000 direct and 3,600 indirect beneficiaries by addressing the climate change vulnerability of settlements, the people living in those settlements and the infrastructure on which they depend. Possible grant projects will focus on infrastructure adaptation, renewable energy technology and water saving measures.

3. *Ecosystem Based Adaptation*

A minimum of 12 grants under this investment area will benefit more than 7,000 direct and 60,000 indirect beneficiaries by enhancing resilience and maintain ecological functions and services of ecosystems at the landscape scale. Examples include improvement of connectivity of CBNRM areas, re-integrated natural resource management for wildlife and forest resources, fire management interventions, forest inventories, introduction of wildlife in its former range, restoration of degraded wetlands or forests or unproductive ecosystems.

2.6 CBNRM Overview

CBNRM in Namibia aims to link conservation objectives with those of rural development and poverty alleviation. CBNRM is considered to contribute to the Namibia's National Development Plan (NDP) objectives of poverty eradication; employment creation; economic empowerment and enhanced environmental and ecological sustainability as outlined in Article 95(l) of the constitution of Namibia, Namibia's Vision 2030 and NDP4. The legislation enabling the implementation of CBNRM is fragmented and embedded in the legislative frameworks of various government ministries. The legislation most relevant to this study is Nature Conservation Amendment Act of 1996 and the Forestry Act of 2002. The CBNRM legal entities as established by the Ministry of Environment and Tourism (MET), and Ministry of Agriculture, Water and Forestry (MAWF) are commonly known as communal conservancies and community forests (CFs).

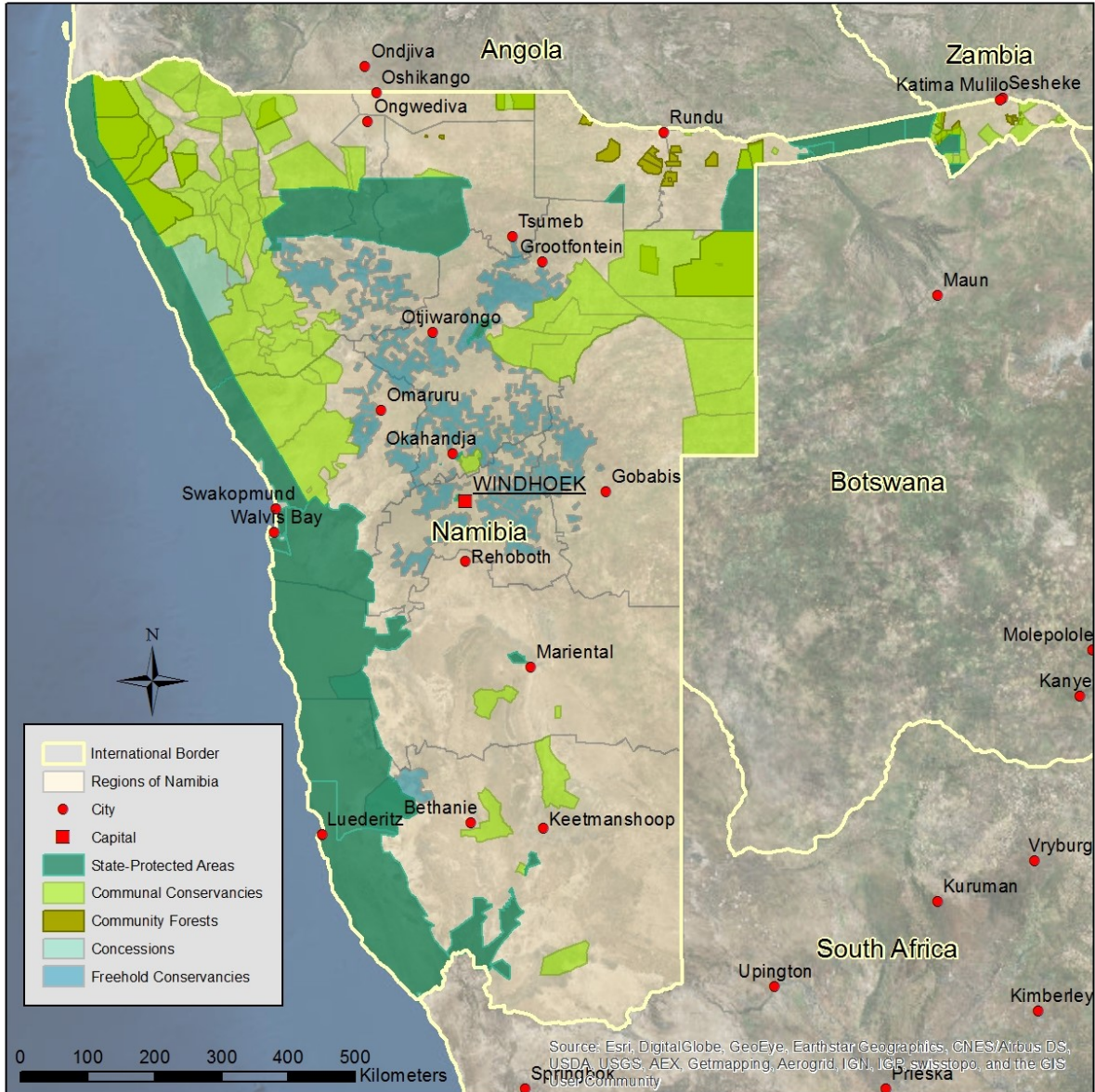


Figure 1; CBNRM Areas of Namibia

Today, 82 Communal Conservancies are active in rural Namibia, managing more than 160,000 km² of communal land that is home to more than 234,000 people (some 10% of Namibia's total population). Almost half of the communal land in Namibia, or 19.4% of the country's total land area, is covered by Communal Conservancies. In addition, a total of 32 registered Community Forests cover more than 30,000 km², or almost 4% of Namibia's land area. There is a 90% geographical overlap between Communal Conservancies and Community Forests.

2.6.1 CBNRM and gender mainstreaming

There has been a broad increase in the number of women participating in CBNRM governance. This is likely to have a beneficial impact on the overall position of women in rural areas. Progress on gender issues is linked to cultural norms. The community conservation movement embraces a broad spectrum of cultures, and different traditional values have various implications for gender balance. Community conservation creates a great variety of less measurable benefits such as strengthening a common identity and giving communities a collective voice, increasing the participation of women in decision-making, supporting initiatives to combat HIV/AIDS, creating a sense of community pride and ownership over resources, and increasing community awareness of issues. Through CBNRM, communities are recognised as the rightful custodians of natural resources. Community conservation strengthens local level democracy, creates awareness of business and sustainability issues, opens opportunities for entrepreneurship and generally diversifies livelihoods, thereby reducing people's economic and social vulnerability, especially in the face of climate change.

The increased capacity of rural communities to govern themselves and take control of their resources is a major success of community conservation. Previously disenfranchised Namibians are making financial decisions, voting for office bearers and engaging with private sector partners, local and regional authorities and central government. Positions of responsibility are being filled in the tourism and hunting industries, and in a range of conservation roles. The provision of student bursaries from CBNRM income seeks to further increase the range of skills available to rural communities.

3 LITERATURE REVIEW

Gender is generally described as socially constructed, culturally variable roles that women and men play in their daily lives (Meena, 1992); this refers to expectations which society has on men and women based on their sexes (Ipinge & Williams, 2000). The concept of gender also refers to opportunities associated with being a man or a woman and the interactions and social relations between men and women (UNDP, 2009). Gender relations are socially constructed power relations between men and women in a given society (Watson, 2006; Ipinge, Phiri & Njabili, 2000) and they determine the different benefits that men and women can derive from natural resources (Watson, 2006). Van den Pol (2010) defined culture as “meaning or knowledge that human beings need to function in a certain situation: such as knowledge of language, habits, rituals, opinions, values and norms”. Keesing (1974) distinguishes between “culture as an ideational system and culture as an integrated adaptive socio-cultural system”. Keesing further argued that as an ideational system, culture is ultimately in the head of a collective mind and it only refers to perceptions, beliefs, norms and values. Culture in this context can be used to explain social practices and the interrelation between ideas and practices (Pahl-Wostl et al., 2008) in rural Namibia.

The recognition that vulnerability and response to climate change impacts between men and women is not the same has led to the conceptualisation of gender dimensions in climate change discourse and research. Impacts of climate change are not gender neutral (Angula, 2010). Gender roles are socially constructed and have created inequality between men and women. The different roles that women and men play in societies and households are exposed to climate risks in different ways (Speranza, 2011). This differentiates vulnerability of women and men to impacts of climate change. Men and women are also vulnerable to climate change because of their dependency on natural resources.

Women and men’s differential access to social and economic resources is one of the key aspects of gender inequality. Gender inequality is manifested in the roles and resources that are determined by legal setup, cultural norms, societal practices, societal beliefs and opinions as well as power and decision-making in households and communities. Women and men have differentiated social roles and responsibilities, as well as differentiated relationships with environmental resources and ecosystem services. This explains why concepts of gender differentiated impacts and gender differentiated vulnerabilities and adaptation strategies are linked to gender, culture and climate change (Babugura, 2010; Angula, 2010).

Gender-based vulnerabilities have taken dominance in climate change adaptation and disasters risk management studies. Several authors (Gilau, Dayo, Abraham and Mundia, 2011; Angula) have established that socio-political and cultural factors cause gender-differentiated vulnerabilities to climate change. Furthermore, climate change impacts affect women’s and men’s livelihoods and cultures (Sakurai et al., 2011), thereby intensifying already existing gender inequalities. Subsistence agricultural production is central to Namibian communities’ livelihoods. Subsistence agricultural practices have

also shaped different cultures that exist in contemporary Namibia. However, agriculture is one of the sectors most vulnerable to impacts of climate change in Namibia. Therefore, the Namibian government exerts more efforts on developing adaptation strategies in the agricultural sector in order to enhance the resilience of local communities. This reflects the importance of examining causes of vulnerability as well as differentiated impacts on women and men in Namibia. This is imperative for understanding and formulation of adaptation strategies in order to respond effectively to impacts of climate change and related risks. This paper examines gender differentiated impacts and vulnerability to climate change in Namibia. The paper further highlights how culture influences gender inequalities and the associated implications¹for climate change vulnerability among different ethnic communities of Namibia.

Vulnerability studies from Namibia and Southern Africa (Angula, 2010; Babugura 2010; Khurtoum, 2010) suggest that the poor, women, the elderly and children are more vulnerable to impacts of climate change. Women and men in Namibia are affected differently by climate change. Their coping and adaptive capacities to respond to impacts of climate related risks are also different. The social vulnerability posed by climate change hinders progress in addressing gender inequalities and women empowerment in Namibia (Angula 2010; Gilau *et al.*, 2011). A review of literature revealed that the gender and climate change nexus is a crucial aspect requiring understanding at all levels. It has been proven that people generally experience climate change differently as “developing countries have economic constraints and cultural norms that restrict women’s access to paid employment meaning that their livelihoods are particularly dependent on climate-sensitive sectors, such as subsistence agriculture or water collection” (Skinner, 2011, p. 2; Gilau *et al.*, 2011). Brody, Demetriades, and Esplen (2008, p. 4) also found the discrepancy in gender and climate change as proven: “Men and women play complementary roles in guaranteeing food security”, but, “statutory and customary laws often restrict women’s property and land rights and make it difficult for them to access credit and agricultural extension services.”

CBNRM policy documents and conservation literature concludes that CBNRM has enhanced conservation benefit distribution by 1) making game meat available to conservancy members (Bandyopadhyay 2009; Scanlon & Kull 2009; NACSO 2008), 2) creating income-generating opportunities in conservancies (NACSO 2012; Bandyopadhyay 2009; Scanlon & Kull 2009; Shapi 2003; Long 2002; Murphy & Mulonga 2002), 3) providing cash to conservancies and individuals (Bandyopadhyay 2009; Scanlon & Kull 2009; NACSO 2008; Shapi 2003; Long 2002; Murphy & Mulonga 2002b), 4) providing skills training (NACSO 2012B; Bandyopadhyay 2009; Long 2002), 5) improving natural resource management in such a way that enhances the livelihoods of conservancy members (Long 2002), and 6) increasing awareness and prevention of HIV/AIDS in conservancies (NACSO 2008). Personal communication (2009) with conservancy members in the Caprivi and CBNRM-affiliated nongovernmental organizations confirmed that the aforementioned benefits are perceived to come from CBNRM.

Similarly conservation literature and CBNRM policy documents concludes that CBNRM has enhanced conservation decision-making opportunities for local residents. The Namibia Association of CBNRM Support Organisations (NACSO), a consortium of fifteen nongovernmental organizations (NGOs) and the University of Namibia who work together to support CBNRM, states that CBNRM has three core elements, one of which is to be “an empowerment and capacity building programme. It encourages and assists communities and their local institutions to develop the skills and experience to sustainably develop and proactively pilot their own futures” (NACSO 2012). NACSO (2008:7) also makes the claim that CBNRM “...enable (es) local residents in communal areas to take management decisions themselves about the way they use their natural resources”. Conservancy committees and annual general meetings (AGMs) are mechanisms through which CBNRM enables community members to exercise power over how natural resources are used and benefits distributed. AGMs are open to all conservancy members and provide an opportunity for them to elect committee members and, in some cases, paid conservancy positions (Scanlon & Kull 2009; NACSO 2008).

4 GENDER POLICIES AND INSTITUTIONAL FRAMEWORK

4.1 Gender Policies

Namibia has a comprehensive legal framework in support of gender equity and human rights. The Namibian Constitution is one of the few constitutions in the world that uses gender-neutral language throughout. Several constitutional provisions outline the GRN's commitment to equal opportunity. The Constitution guarantees "equal and inalienable rights" to all citizens "regardless of race, color, ethnic origin, sex, religion, creed or social or economic status" (Article 10). It singles out women as having "traditionally suffered special discrimination," arguing that "they need to be encouraged and enabled to play a full, equal and effective role in the political, social, economic and cultural life of the nation" (Article 23(3)). To achieve these changes, it offers that legislation should be enacted to "ensure equality of opportunity for women, to enable them to participate fully in all spheres of Namibian society" (Article 95(a)).

An impressive list of gender-sensitive legislation and policies also support measures for gender equity and provide a formal recourse for justice. They include the: Labor Act (1992); Affirmative Action Employment Act (1998); Decentralization Policy (1997); Communal Land Reform Act (2002); Combating Domestic Violence Act (2003); Maintenance Act (2003); Married Persons Equality Act (1996); Labor Act (2007); and Children's Status Act (2006).

The Namibia Vision 2030 also identifies a policy framework for long-term national development, and includes in its objectives to mainstream gender in development, as well as to ensure that women and men are given equal opportunities to exercise their skills in all aspects of life. The Vision 2030 includes mechanisms for monitoring and evaluating progress with regard to gender issues and recommends involving traditional authorities in gender sensitive programmes; addressing misconceptions on gender and discourses that reflect gendered ideologies; implementing gender policies and programmes; undertaking gender analysis of data; and capacity building for gender research.

4.2 Institutional Framework

The government has established several institutions to address gender issues and developed a system within those institutions for addressing gender inequalities. Relevant government mechanisms include:

- Ministry of Gender Equality and Child Welfare (MGECW)
- Gender Sectoral Committees (GSCs)
- Gender Focal Points within all ministries
- National Gender Mainstreaming Task Force (a collaboration of stakeholders)
- Gender Management Team (high level management from ministries and parastatals as well as NGOs) – (suggested but not instituted)

Currently the MGECW is the lead organisation for coordinating national gender initiatives and the National Gender Machinery (NGM), although supported by other stakeholders. The structure of the MGECW is designed to develop and coordinate gender programmes; constitute Gender Sectoral Committees; coordinate international affairs and multi-bilateral relations; facilitate gender research; and contribute to gender sensitive and/or gender-related legislation. In addition, the National Coordination Division within the MGECW coordinates nationwide gender activities through regional offices and Gender Sectoral Committees. The MGECW has also appointed an overall Development Planner for all Gender Sectoral Committees to make them more efficient in coordination efforts. The main divisions of the MGECW address three issues: (i) gender issues; (ii) children's issues; and (iii) community development. Within the MGECW the sections dealing with women's issues are the National Coordination, GSCs, Training Programme Development, Ministerial, International Affairs, and Research and Legislation.

4.3 Legal Framework

At independence thirteen laws are said to have favoured men over women. Many of these laws have been changed, but not without resistance at all levels of society - from lawmakers to community members. The Married Person's Equality Act, which grants husbands and wives equal rights in civil marriages, caused heated debate also among parliamentarians, with many male members being opposed. Customary law even though it should be subordinated to constitutional provisions which outlaw gender discrimination, still cause gender-based discrimination because it is still used, particularly in the context of traditional courts in rural areas. There are several government initiatives such as the **Customary Law Bill**, which recognize customary marriages and harmonize civil and customary laws.

In line with the Constitution the Affirmative Action (Employment) Act (AAA) (1998) focuses on previously disadvantaged groups, including women. The Act identifies affirmative action as a set of measures to ensure that all Namibians have equal employment opportunities and are equitably represented in the workforce. The Maintenance Act (2003) provides that both parents have a legal duty to maintain their children, regardless of whether the children were born inside or outside of a marriage and whether or not parents are subject to any other customary laws which may not recognise a parents' liability to the child.

4.4 Stakeholders for Policy, Institutional and Legal Frameworks

A range of NGOs in Namibia work on various aspects of gender equity. Many began gender-related activities after independence when NGOs generally became more established and proliferated. Fifty NGOs, including women's NGOs formed in 1991 a national umbrella organisation, the Namibian Non-Governmental Organizations' Forum (NANGOF). Women's organisations themselves tried over the years to form a national umbrella but never succeeded to form one that included all organisations. This has remained a weakness of the women's movement and has constrained coordination also

with the government. There are dozens of small NGOs, but the more important NGOs active in gender equity number perhaps 20.

The major NGO engaged in the legal reform process is the Legal Assistance Centre (LAC), which has drafted gender-related laws and participated in dialogue between stakeholders and communities on gender-related legal reform. LAC's stated objective is to protect the human rights of all Namibians through (i) litigation and advice; (ii) education and training; and (iii) research and advocacy. LAC conducts legal research and makes policy recommendations relating to human rights issues including women's and children's rights. Various units at the University of Namibia have conducted research on gender-related topics such as gender-based violence and customary law upon which legal reforms have been based. In 1999/2000 the Gender Training and Research Programme conducted research on rights to property and inheritance, which has been used to inform policymakers working on reforming inheritance law.

5 SOCIO ECONOMIC ASSESSMENT

5.1 Agriculture

The total population within the agricultural households for the communal sector was 907 715 of which 417 566 (46.0%) were male and 490 149 (54.0%) were female (NSA, 2015). The result indicates that Hardap, //Karas, Erongo and Omaheke regions had the highest differences between the males and females population in the range of 15 to 28 percent as compared to the national difference of eight percent. The highest number of agricultural household population for both sexes was recorded in Omusati region (243,619) with Khomas region recording the lowest number of agricultural household figures for both sexes at 259. The distribution of paid employees in the agricultural households in the communal areas in the country by sex and region shows that the total number of reported paid employees in the agricultural households was 100 414, which comprises of 51 419 (51.2%) males and 48 995 (48.8%) females. The table also indicates that Kavango East region recorded the highest percentage of paid female employees with 72.1 percent followed by Kavango West region with 51.1 percent. NAC 2013/14 present that in Zambezi the agricultural households' members that are involved in paid work constitute of 66% of male and 34% female engaged as paid employees.

The female population in the agricultural households is in the majority in some of the economic activities such as Agricultural services (51.2%), Manufacturing (56.5%) as well as in Wholesale and retail trade industries (56.1%). Otherwise, the male population dominated the Hunting, trapping, game propagation; Forestry, logging and related service; Fishing, aquaculture and related service activities, as well as in Hotels and restaurant activities.

5.2 Household Source of Income

The Namibia Agricultural Cense in all communal and semi-urban areas in Namibia, in 2013/14 and revealed that, the female population in the agricultural households is in the majority in some of the economic activities such as Agricultural services (51.2%), Manufacturing (56.5%) as well as in Wholesale and retail trade industries (56.1%). Otherwise, the male population dominated the Hunting, trapping, game propagation; Forestry, logging and related service; Fishing, aquaculture and related service activities, as well as in Hotels and restaurant activities. Furthermore, other income sources of the agricultural households' population by the sex shows that the majority of the females derived extra income from economic production (51.9%), external remittances (52.9%) as well as from old age pension grants (55.7). In contrast, the male population was dominant in deriving extra income from paid employment (59.3%), from investment income (53.0%), pension income (53.8%), internal remittances)(52.7%), veteran social grants (56.2%) and Social grants (53.6%).

The total agricultural households members involved in agricultural activities were 609 211 of which 452 283 were permanent workers while 156 928 were temporary workers. Of

the total adult males and females engaged in agricultural work, 71.7 percent of males and 78.9 percent of females were permanently engaged in agricultural activity. The majority of boys and girls in the agricultural households who are engaged in the agricultural work were permanently engaged (69.5 % for boys and 71.4 % for girls).

5.3 Women Headed Households

Variability and climate change understandably varies among specific regions and socio-economic groups in Namibia, in the sense that those with the least capacity to adapt are generally the most vulnerable to the impacts of climate variability and change. In turn this depends in great part on which resources are available to a given group, individual or region. Livelihood vulnerability to climate change is acute in the Zambezi, Kavango East and West, Omusati, Ohangwena, Oshana, Kunene, Otjozondjupa and Omaheke regions. In these regions, the regional and household livelihood system is based on subsistence production on communal land, i.e. on small crop plots that surround people's homesteads, whilst livestock is largely grazed on open access common pastures and woodlands (Mendelsohn, 2006).

These female-headed households, which represent about a fifth of total households, also have a significantly higher overall incidence of extreme poverty. Women in Namibia tend to have unequal access to resources and control over resources particularly in rural areas (lipinge et al., 2000). This makes women more vulnerable to poverty. Climate change exacerbates these existing social problems. Gender equality including fairness, just and equitable access to all resources, is an important priority in Namibia's National Development Strategy. The strategy acknowledges that gender issues have not been adequately addressed in most of the major government strategies. The specific vulnerability of women in Namibia is notable in a number of areas. For example, almost half of the severely food insecure households are headed by a woman, as well as one third of the moderately food insecure. Orphans are more common in female-headed households compared to male headed households (NSA, 2013). Orphanhood is more prevalent in rural areas than in urban areas with 14 percent of urban households having orphans compared to 29 percent of rural households.

5.4 Gender Inequality

The disparities in income, employment, and access to resources with regards to gender in Namibia are equally clear. Unemployment amongst women is higher in both rural and urban areas (52.8% and 35.7%) compared to men (41% and 25.8%). Of the economically inactive section of the Namibian population, 14.9% are classified as homemakers, with women accounting for the vast majority (CBS, 2008). Women are the bulk of caregivers, yet are considerably under-represented in the formal economy, especially the managerial level (EEC 2011). Female-headed households, which are some 40% of the total, have a per capita income of N\$ 7 528, in contrast to male-headed households with a per capita income of N\$ 12 248. These figures point to a large number of single mothers and to the continued economic marginalization of women in Namibian society (CBS, 2006). The Agricultural Survey of 2010 shows that in all regions female-headed households own

fewer head of cattle per household than male-headed households, primarily due to customs which view cattle as a 'man's property' and hinders women's accumulation of cattle as a form of wealth. With the exception of the Zambezi, female-headed households also own fewer goats, chickens and donkeys. In addition, women who live within male-headed households are typically not able to own livestock in their own right. This limited access to livestock means that women lack access to the benefits of ownership, including access to meat, income from the sale of meat/animals, dung for fertiliser, and draught power. The lack of draught power for ploughing also means those female-headed households usually have lower yield and smaller cultivated areas.

5.5 Gender Analysis by Sector

5.5.1 Labor Input

In most conservancies and community forest areas, female household heads are more likely to work full-time on the holding, while male household heads are more likely to work part-time, seasonally or casually on the holding. The total agricultural households members involved in agricultural activities were 609 211 of which 452 283 were permanent workers while 156 928 were temporary workers (NSA, 2014). Of the total adult males and females engaged in agricultural work, 71.7 percent of males and 78.9 percent of females were permanently engaged in agricultural activity. The majority of boys and girls in the agricultural households who are engaged in the agricultural work were permanently engaged (69.5 % for boys and 71.4 % for girls). The total number of reported paid employees in the agricultural households was 100 414, which comprises of 51 419 (51.2%) males and 48 995 (48.8%) females. Animal husbandry is almost exclusively a male domain, although herding small stock is sometimes done by women (16%) and feeding livestock has a 50/50 gender division of labour. While adult men are primarily responsible for animal husbandry tasks, boys and senior men may also participate. Adult men account for almost half of the work force for herding large stock, while the distribution along age and sex lines is a little more egalitarian with regard to small stock, with boys (23%) more likely to be herders than girls (7%).

5.5.2 Education Sector

Namibia has made progress since independence in making education accessible to all. The Net Enrolment Rate (NER) for learners in primary school increased between 1992 and 2010 from 89% to 98.7% (94.4% girls versus 92.7% boys). Youth literacy rate has slightly increased to 95 percent up from 93 in 2003/04. In this age group literacy is slightly higher for females than for males with the figures being 96 and 94 percent, respectively. The urban/rural divide is again visible, with 98 percent of the urban population aged 15 to 24 years being literate compared to 93 percent in the rural areas. In Kunene, Omaheke and Otjozondjupa regions, 25, 22 and 15 percent respectively of the population aged 15 to 24 are not literate.

The NER for grades 1 - 10 is higher for girls age 7 – 16 than for boys of the same age group (94.2% versus 91.8%), with girls age 14-18 having a NER of 52.4% versus 43.9%

for their male counterparts. Girls had higher promotion rates in the lower grades of the secondary level, while boys do better from Grade 7 through Grade 11, meaning that boys (56.2%) are more likely than girls (42%) to pass from junior secondary to senior secondary school levels. This is caused by the higher number of girls who leave school due to pressures at home and teenage pregnancy.

5.5.3 Water Sector

Data indicate that 92% of all households in 2010 (80% rural and 98.4% urban) had access to clean potable water for drinking and cooking, compared to only 65% of households in 1991 (NSA, 2014). Over half of households have water piped into their homes (considered to be reliable, safe and adequate), but 78% of these households are situated in formal urban areas, while rural households use communal taps (33.3%), safe boreholes (10.6%) and rivers, dams or water canals (10.6%). Given that female-headed households are more likely to be found in the rural areas, it can be surmised that they will also be less likely to have access to potable water. In urban areas female-headed households are less likely than male-headed households to have piped water inside the house (20.8% versus 33.7%), while for rural areas female-headed households are more likely to use free public water taps (27.7% versus 16.8%) and boreholes (9.8% versus 5.4%).

While most households have access to potable water, the data do not represent distances people must travel to access these supplies. Approximately one-third of rural households live more than 500 metres from their water source, with an additional 12.7% living a kilometre away and 15% living more than one kilometre away. These data indicate a substantial outlay in household energy (usually by women or girls) in time and distance for the collection of water. Although it would seem intuitive that development projects aimed at the provision of water points might decrease water collection times, in fact, this can cause an increase in household water consumption, which actually increases time spent on such tasks.

5.5.4 Energy Sector

Most energy sources consumed at the household level are either electricity or 'traditional fuels' such as wood, charcoal and animal waste, with about 60% of Namibians using traditional fuel sources (NSA, 2012). The Namibian Census indicates that 52% of all households in 2010 (9.5% rural and 67.6% urban) used electricity for lighting, compared to 24% of households in 1991. However, 23.9% of urban households use candles for lighting, while rural households are more likely to use candles (41.5%), wood (21.8%) and paraffin (21.1%) for lighting their homes. The Levels of Living Survey (NSA, 2012) indicates that female-headed households are more likely than male-headed households to cook without electricity (64% versus 58%) and they are also more likely to light without electricity (66% versus 57%). These energy consumption patterns suggest that female-headed households are located in rural areas/informal settlement where access to electricity is low and/or either have lower incomes and/or different priorities for expenditures. In addition the heavy reliance on wood in the rural areas for energy

consumption means that the most likely persons to be affected by woodland depletion, which results in longer time spans and distances needed to be covered to collect firewood, are women.

5.6 Poverty Levels

Poverty eradication remains an overarching government priority. Government's main target is to reduce the proportion of severely poor individuals to below 10% by the year 2017. Currently, about 29.0% of the Namibian population lives below the poverty line while about 15.0% are severely poor (NSA, 2012). The poverty gap, which estimates the consumption shortfall relative to the poverty line, is estimated at 8.8%. Poverty levels are highest in Kavango and lowest in Erongo at 55.2% and 7.1%, respectively and are highest in rural areas where more than one third (37.4%) of the population are poor compared to 15% in urban areas. Furthermore, poverty is highest among women, subsistence farmers, pensioners, those with no formal education and those who speak Khoisan and Rukavango as their main language. On average, poverty has declined in almost all regions except in Khomas and Caprivi regions which showed an increase.

Although only 15% of the population is severely poor, more than one third of the population in Kavango (East and West) and Zambezi regions are severely poor while the rate is at 22% in both Oshikoto and Otjozondjupa (NSA, 2012). The Kavango regions accounts for about 31% of the severely poor people in Namibia. Oshikoto and Zambezi accounts for about 7.8% and 4.9% of the population with prevalence rates for severely poor individuals of 21.8% and 35.2%, respectively and thus contributes about 11% to the total number of severely poor individuals. By implication as per the population dynamics, there are more females living below the poverty lines than man in targeted areas of the project.

6 GENDER ANALYSIS WITHIN CBNRM

6.1 Introduction

Women in Namibia are the primary users of environmental resources. In most rural communities women and girls collect an estimated 75% of water and firewood. The emergence and growth of the CBNRM movement brought many benefits to communities, including transforming rural livelihoods, accelerating the recovery of wildlife, and increasing the involvement of women in tourism and natural resource management. Conservancies are now the second largest employers of Namibians, and women's participation in decision-making and employment is considered a model for other sectors. Women now make up an average of about 35% of conservancy committee members, including three committee chairs and the majority of conservancy treasurers.⁹⁴ Conservancies represent a unique example of rural democracy that may be unprecedented elsewhere in Namibia. Each conservancy member has the opportunity to vote for committee members (or vote out those people they observe as not performing). Each member also has an opportunity to contribute to the constitution that governs operation of the conservancy.

Based on 2012 data, the percentage of female management committee members ranged from 0% (in Ehirovipuka Conservancies) to a high of 67% (in Otjimboyo Conservancy). More than 50% of conservancy members are women, resulting in women receiving an equal or greater share when membership dividends are distributed by a conservancy.⁹⁶ Women are also taking advantage of many of the employment opportunities stemming from ecotourism and conservancies, including services related to lodging and catering for tourists, and craft manufacturing and sales. WWF estimates that women are recipients of at least 3,000 of the part-time jobs documented (e.g., thatching grass harvesting and handicrafts production) and more than 50% of the full-time jobs created (e.g., lodge staff, conservancy staff).

6.2 Gender Challenges Within CBNRM

6.2.1 Access and Control of Resources within CBNRM

Access to and control over resources is heavily influenced by gender. Women have little access to scientific and technological information and facilities and are mainly dependent on simple traditional technologies such as the labour-intensive mortar and pestle, grinding stones, sun drying, wood fuel, hoes and axes that are widespread in cattle areas. The more efficient, simple and environmentally friendly technologies such as hammer mills, oil presses, biomass and oxen technology has not been introduced to them (Muhato, 2003). In general, men in the rural households and in particular male headed households, own and control more than women with regards to cattle, wells, money, and crop fields, while in general women have more ownership over mahangu fields (NPC: Regional Poverty Profile-Kunene, 2006). For example if a woman buys a cow it only belongs to her when it is inside the household premises, as all cattle belong to the men when outside the household. The same principle also applies to ownership and control

of goats and donkeys. With regards to control and access to cattle, goats, and moneys, men own and control most. Of interest is the fact that if the wife wants to do anything extra-ordinary with regards the resources she owns, she still has to consult her husband.

Furthermore, it was identified that women within CBNRM has access to natural resources such as indigenous products of which some supports craft making to generate income. However, they do not have much control on their incomes as man dictate on expenditures and prioritisation. For female-headed households involved in natural resource use, it was identified that the eldest son or brother makes all major decisions in a female- headed household. This makes women and girls more vulnerable to social challenges as their decision-making roles are not profound.

6.2.2 Decision Making Powers

Female- headed household is traditionally regarded as insignificant and ranked very low in the community; the belief is that men should head a proper household. The assessment results in the CBNRM institutions within the Oshana region found that women and men are equally represented in water point committee, conservancy committees, drought relief committees and constituency development committees. Although the representation of women on these committees has improved, it is reported that the traditional based roles as discussed above still exist. Women have still unequal access to information and resources and are under- represented in decision- making.

Women and youth are generally marginalised in the decision-making processes at both community and household levels. Decision-making powers usually belong to the men; Women are regarded as dependents and are therefore required to follow decisions and directions by the man. Although many decisions are made in consultation with women, the men have the power to overrule a woman decision. In essence this implies that women and those households which are headed by women are vulnerable and can easily fall into poverty because in reality they own nothing and have no decision making power.

Table 1: Gender differentiated decision-making in climate change at local and household level (Angula, 2010)

Men	Women	Causes of vulnerability
<ul style="list-style-type: none"> • Decisions and interests regarding allocation of re-sources required for responding to climate change risks. • Decisions regarding severe risks posed by drought, floods, pest outbreaks and other related cli- mate change disasters. • Men are making overall decisions at household level. 	<ul style="list-style-type: none"> • Immediate decisions and interests regarding coping that would ensure food security. • Women are making decisions on a daily basis regarding household maintenance, food security and parenting. 	<ul style="list-style-type: none"> • A lack of women’s voice reduces a gender balanced decision-making process in community-based climate change adaptation programmes. • Unequal access to information and knowledge limit the potential of majority of women and marginalised men in the Namibian society to participate in local level decision-making. • The majority of women are affected by social exclusion in Namibia. This has contributed significantly to inferiority complex and lack of

		motivation among Namibian women to take up leadership roles in their communities or households
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6.2.3 Asset Ownership

Generally, asset ownership is strongly related to culture in Namibia. The culture also has a strong bearing on the roles and responsibilities of men and women. Men are first and foremost responsible for herding livestock, ensuring that it has water, fetches it from the grazing areas, milks, takes care of it when it is sick, takes it from the kraal and back. Ploughing is also found to be one of men’s major responsibilities.

Across cultural groups in Namibia, women are seen as subordinate to men, who must make the major contributions to their communities. Women are primary providers of necessary food and crops for the household, they still carry the main responsibility for maintaining households, families and communities, which includes fetching water and firewood, pounding mahangu, preparing food, cleaning the house, washing dishes and clothes. Women are socialized to be obedient, tend to the household and take care of children. Women also produce cash crops for the market and earn a household income. Women do basketry, process marula nuts and oil, rear chicken, pigs or goats to increase income (Angula 2010). Women constitute the majority of those engaged in subsistence farming (Lendelvo, 2008) and provide more than 90% of the labour for agricultural production (Muhato, 2003).

6.2.4 Sexual division of labor

In Katope Community Forest, a smaller focus group discussion was held with eight men and five women. The harvesters reported that the village was far from the harvesting area, and the majority of harvesters consisted of men, because not all women feel comfortable to camp out in the bush. For all participants, except the shop owner, the income from Devil’s Claw was their main and often only source of cash income. Similar to the other village, the participants reported that they harvest and process individually and keep and spend the money themselves. As the primary users and managers of natural resources (being typically responsible for fetching water and wood and bringing it to the house, for example), women becomes more vulnerable in the absence of infrastructure to facilitate their activities as well as gender sensitive working environment. This forces women not to be active in the area of natural resource management as a result loosing out on essential economic activities. Economic empowerment for women is one of the largest contributing factors that can exacerbate women’s vulnerabilities.

6.2.5 Lack of education and access to information

The percentage of women with poor or no education is higher in Namibia and teenage pregnancies and school dropouts worsen the situation. In most of the rural households of Namibia, especially the poor ones, priority is still placed on boys’ education rather than

girls', and girls are thus likely to be the first ones pulled out of school when resources are short. As a result, girls typically receive fewer years of education than boys. Without education, women are at a disadvantage, as they have less access to crucial information and fewer means to interpret that information. This can affect their ability to understand and to act on information concerning climate risks and adaptation measures. This was evident in the conservancies residing in the Kunene region, which is the poorest region in Namibia. In Kunene region, limited educational opportunities make it more difficult for women to gain formal, paid employment, further reinforcing their subordination relative to men.

Table 2: Gender differentiated access to information, financial resources and assets (Angula, 2010)

Men	Women	Causes of vulnerability
<ul style="list-style-type: none"> • Men are more interested in world events and news, thereby enhancing their access to information. • Men possess more technical skills that are required to acquire employment in the formal market. • More men have access to credits and markets in the project areas. • Men, compared to women, have access to productive land and rangelands. • More men than women own crop fields 	<ul style="list-style-type: none"> • Women lack skills, information and access to resources required to diversify livelihood strategies. • Men and women have unequal access to credits and markets that would enhance their capacities. Nevertheless, due to cultural-political factors, women in communal areas are not empowered to access the credits and markets available. • Women have limited control over assets and resources that may build their resilience. 	<ul style="list-style-type: none"> • Due to the fact that men have more access to information, the majority of communal women receive delayed “early warning information” regarding rain-fall forecast - a key aspect to subsistence farming in Namibia. • Women reported that lack of access to markets and credits reduces their adaptive capacity. This is crucial because they also reported that women are first to adapt. • Although, the Namibian government has eradicated the practice of land grabbing in Namibia, women tend to settle on less productive and low-lying lands that are prone to drought and flooding.

Cultural norms and values in Namibia are influenced by modern multi-cultural independent Namibia’s lifestyle. Consequently, Namibia is progressing well with regards to gender equality and women empowerment. Opportunities exist for women to take ownership of their own development, thereby reducing gender inequalities in Namibia. Access to information and acquisition of technical skills increases the capacity of men and women to diversify their livelihoods, to migrate in search of employment, and enhances their ability to balance the vulnerability to impacts of climate variability and change. However, this paper concludes that climate change impacts are not gender neutral; men and women vulnerability to climate change is not the same; and their adaptive capacity are differentiated.

6.3 Potential Impacts of Climate Change on Women within CBNRM

The majority of CBNRM income is directly linked to natural resource utilization. The impact of climate change undermines the investments and potential ecosystem services and goods that CBNRM provides to support livelihoods of more than 200,000 Namibians (mostly women) who depend on natural resource use for their survival. The Vulnerability and Adaptation Assessment of Namibia (MET, 2008) identifies CBNRM as an important Programme that offers an opportunity for communities to diversify their livelihood options. At the same time, these local level institutions provide an opportunity to integrate adaptation to climate while responding to other environmental or socio-economic changes.

The wellbeing and livelihoods of women and girls in such areas generally dependent on natural resource use is at risk as they have limited livelihood options and employment opportunities, face high levels of poverty, are exposed to high levels of HIV/AIDS, and are affected by limited institutional capacity and weak resource governance. These factors combine to make women more vulnerable. In terms of extreme weather conditions, women tend to work more to secure household livelihoods and subsistence needs. In a country like Namibia where drought and flood impacts are cyclical, this commonly leaves women with little time to access training and education, develop skills or earn income; all resources and capacities needed to lessen their vulnerability to natural disasters. This limited mobility, i.e. being tied to the household, places women disproportionately at risk to climate induced natural disasters. Overall, expressed is that climate change has distinctive gender dimensions in the sense that women and children are more exposed to its consequences, and that they have less influence over decisions related to climate change adaptation.

Table 3: Potential climate changes and their effects on women

Climate Change Effects	Potential Risks	Examples	Potential Effect on Women
Direct	Increased drought and Water shortage	Loss of income from agricultural activities resulting in multiple vulnerabilities	Women and girls in developing countries are often the primary collectors, users and managers of water. Decreases in water availability will jeopardize their families' livelihoods, increase their workloads, and may have secondary effects such as lower school enrollment figures for girls or less opportunity for women to engage in income-generating activities.
	Increased extreme weather events	Greater intensity and quantity of hurricanes, floods and heat waves	It is proven in literature that natural disasters (and their subsequent impact) kill more women than men on average or kill women at an earlier age than men.
Indirect	Increased epidemics	Climate variability played a critical role in malaria epidemics and waterborne diseases in the Zambezi and Kunene Region	Women have less access to medical services than men, and their workloads increase when they have to spend more time caring for the sick. Poorer households affected by HIV/AIDS have fewer resources to adapt to the effects of climate change. Adopting new strategies for crop production or mobilizing livestock is harder for female-headed and infected households.
	Loss of species	By 2050, climate change could result in a species extinction rate from 18-35%.	Women may often rely on crop diversity to accommodate climatic variability, but permanent temperature change will reduce agro-biodiversity and traditional medicine options, potentially affecting food security and health.

	Decreased crop production	In Namibia, crop production is expected to decline 20-50% in response to extreme El Niño-like conditions.	Rural women in particular are responsible for half of the world's food production and produce between 60-80% of the food in most developing countries. In Namibia, the share of women affected by climate-related crop changes could range is estimated at 56%.
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6.4 Women Vulnerability to Climate Change

Climate change is not happening in isolation, but is coinciding with many other trends and stresses on livelihoods, including economic liberalization, globalization, population growth, geopolitical conflict, and unpredictable government policies. As stated above, women are vulnerable not because of natural weakness (i.e., because of their sex), but rather because of the socially and culturally constructed roles ascribed to them as women (i.e., because of their gender). Given the severity of gender inequality, particularly in the developing existing patterns of gender disadvantage (UNDP, 2007). Several factors will exacerbate this:

6.5 Gender Vulnerability to Disasters

As well as bringing about incremental change in temperature and precipitation, climate change is projected to change the frequency and magnitude of hazardous weather events, such as tropical cyclones and hurricanes. A substantial body of literature on the gendered nature of vulnerability to past hazards and disasters illuminates how women and men are differently affected. When disasters occur, more women die than men, which reflects women's social exclusion: they are less able than men to run, often have not learned to swim, and have behavioral restrictions that limit their mobility in the face of risk (not least of which is the fact that their voices often do not carry as much weight as men's in their households). On the other hand, some post-disaster analysis has shown that men suffer higher mortality rates because they take more risks trying to save themselves and their families.

The differentiated relationship of women and men to the environment indicate that women are impacted differently and their perceptions of the impacts are different. Climate risks impacts on livelihood, health and other social aspects mainly affect rural communal areas in Namibia. The majority of women in Namibia (75%) constitute the workforce responsible for fetching water, collecting wood and crop cultivation (Republic of Namibia, 2010). Table 7 below introduces a summary of the impacts of climate change and gender dimension in Namibia.

Table 4: Climate change impacts and gender dimension profile for Namibia

Climate change impacts	Gender differentiated impacts and vulnerability to climate change
Water <ul style="list-style-type: none"> Increased water shortages associated with low rainfall 	<ul style="list-style-type: none"> Women and girls travelling distances to fetch water. Water scarcity limits development of small-scale projects. Majority of women and youth participate in local developmental projects.

events or flooding associated with above normal rainfall	<ul style="list-style-type: none"> Men migrate with livestock to areas less affected by climate change.
<p>Agriculture</p> <ul style="list-style-type: none"> Agricultural productivity decline (crop and livestock); pest outbreak destroying crops; disease and parasites affecting livestock. 	<ul style="list-style-type: none"> Women are the main subsistence producers of maize and wheat in Namibia. Productivity of maize and wheat production drops significantly during drought or flooding years in Namibia. Crop and livestock production changes could affect the gendered division of labour. The changes also affect men and women's income from crop and livestock production. Men migrate in search for better grazing opportunities or employment opportunities
<p>Environment and Forestry</p> <ul style="list-style-type: none"> Loss of biodiversity, shift in dominant vegetation types from grassy to arid and semi-arid shrubland, changes in forest cover (coupled with deforestation) 	<ul style="list-style-type: none"> Shortage of fuel wood during floods affects cooking and heating in households, traditionally a woman's responsibility. Women are expected to contribute unpaid labour to soil conservation and re-forestation efforts.
<p>Fisheries</p> <ul style="list-style-type: none"> Access to inland fisheries resources compromised during floods in northeast Namibia; increased fish prices due to declining fish stocks. 	<ul style="list-style-type: none"> Opportunities for women to engage in subsistence fishing during floods. Reduced fish species used by women for domestic consumption. Majority of women losing jobs in fishing processing industry.

6.6 Gender Mainstreaming as a Necessity

In the same way that gendered roles lead to differences in vulnerability between men and women, they also create opportunities for adaptation. Women are not just victims of adverse climate effects due to their vulnerability; they are also key active agents of adaptation. This is due to their often deep understanding of their immediate environment, their experience in managing natural resources (water, forests, biodiversity and soil), and their involvement in climate sensitive work such as farming, forestry and fisheries. If there is no gendered approach toward adaptation, these differences between men and women may be overlooked, inadvertently reinforcing gender inequality and women's vulnerability to climate change relative to men.

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