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Women Challenges in Accessing Natural Resources: Creating Innovations for Education Opportunities

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Abstract: In many developing countries, there are challenges facing women when it comes to accessing natural resources. This study investigated Challenges facing women in accessing natural resources in Dodoma rural areas, Tanzania. The study was guided by three objectives which were: identifying challenges hindering rural women's access to natural resources in Mpwapwa district, identifying challenges that hamper rural women from gaining opportunities over education and finding out useful innovative for natural resources towards education opportunities. The study used a sample size of 30 respondents and was done qualitatively with the use of simple statistical applications. The data were collected through interviews, observations and focus group discussion. The findings revealed that many rural women are often financially dependent on men or do not have access to natural resources. With regard to land access, for instance often women are main users, providers and managers of land yet men have a greater role than women in making decision in what is inadequacy hinders women participation in education. Trainings to gender inequality, less women involvement in natural resource management, building self-esteem and self confidence were found to be useful innovative strategies. The study recommends that government authorities and other stakeholders should create sensitization programs of gender equality on accessing and control over natural resources.

Keywords: Natural resources, Gender equality, Innovative strategies

1. Introduction

Women play an important role in natural resource activities. Resources such as land, water, forests and minerals are very important and closely linked to women's daily activities. Women largely depend on the land for the sustenance at household level yet in many societies, through customary difficulties, they suffer from land dispossession. This denies rural women the privileges to enjoy life compared to their male counterparts. Gender and traditional practices make it more difficult for women than for men in accessing natural resources. Probably, this is due to the fact that gender identity and role are set of behaviours that are learned from the environment (Bandura, 1989 and Mertens, 1998).

In this study, the concept of gender refers to the social attributes and opportunities associated with being women and men as well as girls and boys, and the relations between women and those between men (UN Women, 2001). Social learning theory is considered important to explain behaviours between genders. The theory asserts that the main way that gender behaviours are learned is through the process of observational learning (Bandura, 1989).

Gender attributes, opportunities and relationships are socially constructed and are learned through socialization processes. On the other hand, natural resources refer to all living and non-living endowment of the earth. However, traditional usage confines the term to naturally occurring resources and systems that are useful to humans. Some examples of natural resources are forests, wildlife, land and water, as well as a variety of minerals. Bishop (2019) shows that harmful traditional practices create gender inequalities which contribute to poor access to natural resources for many women within their household.

Traditional Practices, values and norms restrict opportunities to women, youth and children to participate in decision-making processes over the available resources Consequently, women especially in rural areas are rarely involved in issues which would influence their participation in the available resources at the household level.likewise, their specific needs and aspirations are not taken into account (Bishop, 2019; Oxfam, 2017; UN Women. 2017 & Plan International, 2017).

Women constitute about 52% of the rural population in Tanzania (Matinda, 2010). Thus, women are the main food producers (URT, 2007). For instance, many patriarchal families in Tanzania tend to exclude women from land and natural resources ownership. Through that way, they negatively affect women in terms of planning, implementing and monitoring of development resources. Thus, the alleviation of poverty and sustainable use of natural resources can only be achieved by giving access and ownership of such resources to women as well.

National Strategy for Growth and Reduction of Poverty (NSGRP) is a national organizing framework that focuses on poverty in Tanzania. It is a top priority agenda on the country's Development Vision 2025. The vision agenda aims at high and shared growth, high quality livelihood, peace, stability and unity, good governance, high quality education and international competitiveness. This particular strategy is committed to the Millennium Development Goals (MDGs), as internationally agreed targets for reducing poverty, hunger, diseases, illiteracy and discrimination against women by 2025. But much needs to be done in terms of gender mainstreaming and equality.

Women have been facing challenges when it comes to domestic ownership and effective participation of family members in accessing natural resources for social and economic development. To many poor rural farmers in Mpwapwa, especially women, nature sustains society because they use natural resources found in the location to feed their families. This sustainability is crucial to them, especially when they have to equally sustain their livelihoods through these resources between the genders. Thus when natural resources policies advocate for protection without any form of utilizing resources where rural women are normally ignored, they become the greatest victims of such policies, particularly in accessing the natural resources.

The income of people in Mpwapwa depends very much on natural resources not only because the methods of agriculture and livestock raising in the plains are mostly traditional, but agriculture, livestock, bee keeping and vegetation are interlinked subsystems of the total area production and livelihood system monitored by local government at some levels. Rangelands, for example are grassland producing a variety of goods including agricultural activities through soil conservation.

Besides this, rangelands in the grassland and forests have many different values in terms of economic, cultural, social and environmental activities. Mpwapwa local communities depend greatly on forest and rangeland resources for their livelihood, and a majority of rural households have access to these resources, but they lack access and control over the natural resources in terms of equal opportunities between the genders.

Land is an important natural resource of security against poverty across many countries in world. However, unequal rights to land put women at a disadvantage and establish gender inequality in the research area. Gender has become a critical issue in women's land rights due to the fact that there is direct relationship between accessing land resources, having secured land rights, achieving food security and overcoming basic needs. A study by SOFA (2011) reveals that women produce more than 80% of the food in Africa, yet they own only 1% of the land. Therefore, improving women's access to land control is crucial to socio-economic development in Africa.

Given this gender inequality, therefore an integrated approach to access of natural resources for women should take into consideration equal natural resources production, distribution and consumption. Therefore, equal access to natural resource will increase efficiency and agricultural productivity in developing countries where agriculture accounts for a large share of gross domestic product and where large productivity gaps still exist particularly in the research area. Rapid increases in yields are deemed feasible, particularly where productivity gaps are high.

Despite the fact that women in rural areas play a key role in the development of communities, yet they represent the poorest and the disadvantaged groups to natural resources in most communities. Despite various initiatives that have been taken to reduce poverty in rural areas of Tanzania, not much has been done for rural Mpwapwa women. The context of knowledge information in Mpwawa is of great interest since little is known on challenges facing women in their access to natural resources.

The haphazard activity of agriculture and animal keeping in the name of development has contributed greatly to women's inability to live in harmony with the environment thereby adding to their resource challenges. This research therefore, explored the challenges facing women in this district. In that regard, the study will contribute to limited empirical evidence on interaction between women and natural resources and the challenges which they face thus coming up with useful innovations for natural resources and education opportunities.

2. Literature Review

Previous studies found different patterns women face to access natural resources. For instance, when natural resources are scarce in rural areas, the lives of most families in developing countries are severely affected. On this Women Watch (2013), found that the effect of natural resource scarcity on the livelihood increases the labour burden on women and negatively affects them on education opportunities. This creates gender based inequalities, as a result; women are limited become limited in terms of access to assets, which has implications for natural resources management. In many households, discriminatory customary and traditional practices in developing counties restrict women' in terms of accessing the products brought about by natural resources.

There are a number of studies showing challenges women face in accessing natural resources, including production and consumption of resources invariably through gender based inequalities. Examples include Mekonnen (1999) in Ethiopia; Cooke (1998) in Nepal; Heltberg et al. (2000) and Vant' Veld et al. (2006) in India; Palmer and MacGregor (2009) in Namibia; Martiniello G. (2015) in Tanzania and FAO (2016). In Africa, natural resource management customarily cuts across, forests, land, and water systems but is especially prevalent in the dry lands ecosystems, which cover 71% and more than 40% are residence of the region's population in Eastern and Southern Africa region. Pastoralism for example, the predominant culture and natural resources management system in dry lands, is considered a challenge by most communities, and development programmes by governments such as urbanization, sedentary agriculture, and private ranching are promoted by the countries' bid to modernize it as useful strategy for accessing natural resource management for the most vulnerable between the genders (FAO 2016).

Therefore, this study argues that there is a need to find useful innovation to sustain and improve customary, collective access to natural resource management that will support women given the changes and reforms that have currently been made to achieve its outcomes. The contemporary context in the region is that the customary and statutory regimes go beyond each other thus leading to a coexistence of cultural practices, colonially imposed rules, formal and informal legal rules and religion all coming together to interfere with various rights pertaining to women. Most importantly, governments should provide a very plausible structure to achieve inclusive participation for the most vulnerable, and enhance their opportunity to share in terms of the benefits of natural resources and minimize the risks and negative impacts on them (FAO 2016).

3. Methodology

3.1 Research Design

This study was an observational and descriptive. The following procedure was adopted for studying attitudes between genders and their natural resources. Descriptive survey design was appropriate for finding natural resources concepts as it gives a great deal of accurate information. It also enables a researcher to gather data at a particular point in time and use it to describe the nature of the existing conditions (Cohen, Manion & Morrizon, 2000). The sample size was 45 including 25 women, 10 men 5 elders and 5 local leaders. Purposive sampling was used to allow the researcher to get the required information as per research objectives. In addition, the study employed simple random sampling to select women.

3.2 Area of Study

The study was carried out in Mpwapwa District. The area is one of the seven districts of the Dodoma region in Tanzania. The area was selected due to the fact that it is the largest district and oldest in the region, consisting of multi-ethnic groups. The main ethnic groups in the district are Wagogo, Wahehe and Wakaguru. Land is a major natural resource in the Mpwapwa villages and is used primarily for farming and grazing. Farming is more pronounced in all villages than in town centres of Mpwapwa within the district. All these drew an attention to the researcher to explore challenges on the accesses of natural resources between the genders.

3.3 Data Collection

Primary and secondary data were used to get information. Primary data were obtained from a total of 45 respondents who were purposively selected. Selfprepared interview from women, men and children and focus group discussions were conducted to get primary data. The interview criterion was that the person interviewed from each village should have permanently resided in that area for the past one year.

In the interview, participants responded to the questions that addressed the following particulars: challenges hindering rural women from accessing natural resources identify challenges that hamper rural women from getting opportunities for education and useful strategies for innovations of natural resources towards education opportunities. In addition, FGDs were used to confirm the data generated from other sources. Secondary data were obtained from governing authorities, literature review, library, and browsing the Internet.

4. Results and Discussion

The results of this qualitative descriptive study both confirmed the previous research findings. The discussion is made in three subsections guided by the research objectives. The researcher asked respondents to provide their views and experiences on women issues in line with their access to natural resources.

4.1 Challenges facing women in accessing natural resources

In this subheading the research sought to establish whether there were challenges facing women in accessing natural resources. Through interviews and focus group discussions (FGD) with 6 members, consisting of genders, women-headed households and male-headed households were asked to mention the challenges facing women in accessing natural resources. Table 1 gives a brief summary of the responses.

Factors	N =40	%
Traditional practices	36	90
Participation in decision making	30	75
Empowerment	27	67.5

Table 1: Challenges facing women in accessing natural resources

Table 1 show that 36 (90%) of the respondents agreed that traditional practices were the greatest challenges facing women in accessing natural resources. However, some participants showed that the traditional practices were not viewed as part of the challenges facing women. It was noted that traditions such as inheritance and ownership of resources, which favour men more than women, should be addressed by governing authorities through sensitizing gender equality and income redistribution.

Other challenges including participation in decision making 30(75%) and empowerment 26(67.5%)

respectively were found to be interconnected and closely linked to traditional practices. Through FGDs it was revealed that land was mainly acquired through traditional structure of inheritance, borrowing or being given by male household heads of a family and sometime given by village government. This finding echoes the study by Mhache (2012) which confirmed that women cannot inherit the land and if they inherit, they are not given the land of the same size as men.

For many rural women the binding traditional practices still impinge their access to natural resources. This implies that lack of women's economic activities is not simply a women's issue, it is a development challenge which must be addressed, because long traditions of natural resources in Africa need to be replaced. According to social learning theory, traditional practices are the result of imitated behaviours people have observed and evidence of a growing gender gap. They may do this regardless of whether the behaviour is gender appropriate or not but there are a number of processes that make it more likely that a child will reproduce the behaviour that its society deems appropriate for its sex (Bandura, 1989).

Although the Village land Act allocates decision-making powers over village lands to the entire population in the villages of Tanzania through the village assembly, most actors involved in natural resource governance at household level and community at large are still males. This complicates the access to and benefitting from the natural resources as it still gives men a competitive edge against women.

4.2 Challenges that hamper rural women from getting opportunities to education

Through FGDs and interviews, respondents were asked to describe challenges hampering rural women from

getting opportunities for education. It was evident that access to natural resources and livelihoods were more complex than it had previously been taken into account. The link between them remains critical, sometimes even more complex. Through FGDs, the findings revealed empirical evidence that land and forests are primary sources of natural resources. Consequently, agricultural production is essential to maintain household life and its well being where women and men enjoy the same privileges in terms of access and use of natural resources which in the process, will give women more chance for formal education opportunities

However, it was noted that when there were poor harvests coupled with scarce natural resources which were identified as problems in this district, three areas were observed to hamper women from getting opportunities to education. These included: i) Women were more likely to be kept at home for reasons of safety and also as a need to fill in the gap of males' labour on the farm and at home when men and boys leave home to participate in far away labours ii) Girls in rural areas were less likely than boys to attend school iii) women and girls were found to lack confidence and effectively participation in various activities the result of which made it difficult for them to succeed in what they were doing. Regarding this, some women clearly indicated that:

Male headed families in rural areas cherish traditional beliefs that regard men as more important than women. Related to this practice is notion that women especially unmarried girls are not members of the family rather members of other families after they marry (Field data, July, 2019).

On their part, men participants pointed out that:

When we are planning to spend the products of key resources like land and cattle our custom states that women cannot benefit anything from them. Even when a woman gets cows from marriage of her daughters, the decision to sell them should be sought from her husband or from another male relative. However, it is better to use family resources to support boys' education because by doing so we are sure to get returns for what we had invested. But if you use family resources to educate girls you will lose them rather it is her husband's family that will benefit from her being educated once she marries (Field data, July, 2019).

From the findings, it is noted that traditional attitudes and practices in societies restrict the movement of women, which affects their access to education. It has also been noted that in some cultures boys and girls are not supposed to interact outside the home and family. This situation is worse for women, particularly girls as they are confined at home while boys their counterparts, go to school. This observation mirrors the results of Watch (2013), Horrell and Krishnan (2007) and Nielsen et al. (2012), who found that, in general, male-headed households are better off than female-headed households.

However, eeducation is often of poor quality in rural areas and secondary schools and colleges found in rural centres are usually located far from many rural communities. It has been noted that rural women's access to educational centres is challenged by distance and time availability due to domestic workloads and traditional practices that impinge upon women's chances and access to get education. Again, costs associated with getting education are a barrier for poor households and, when funds are limited, boys are often

Figure: Women Participation in Household Activities

favoured (Bishop, 2019; Oxfam, 2017). The head of household may be reluctant to invest in their women's access to education if such women are married (Plan International, 2017 & UN Women. 2017).

In Mpwapwa district, it was observed that although the role of women in livestock production was, at least equal to that of men, their contribution has remained underestimated, undervalued and widely ignored. The following figure portrays a brief picture.



Source: Field data (July, 2019)

The picture in the figure depicts major areas of gender roles, access and control over natural resources. These include:

- i. Dairy production
- ii. Women have access to resources
- iii. Livestock management

It was observed that feeding, cleaning and milking of dairy animals were done by women. Most of the activities pertaining to livestock management are traditionally considered as the responsibility of women. The participation of the other groups like children and men to dairy farming activities was low and found to be of the total labour for most of the activities. However, regardless of these activities, women had significantly less access to household resources which negatively affected their productivity and their income earning potential. This may be due to lack of education, unequal property rights and exclusion in decision making which need to be addressed. Many of the concerns and constraints on women's education are rooted in gender based inequalities (Bishop, 2019). This is due to the fact that women's roles traditionally defined as they are perceived as mothers, brides, carers and household labourers (UN Women. 2017.) On the same regard, Slavchevska et al. (2016) assert that changing these attitudes and behaviours is one of the greatest challenges facing women in their bid to get education.

4.3 Useful strategies for innovations of natural resources towards education opportunities

The current study intended to explore the usefulness of making innovation of natural resources for education opportunities. From the collected data, this research coded responses on the views of the respondents regarding the suggestions they gave on the useful strategies. After tallying up respondents' responses, the results were summarized as shown in Table 2.

Factors	N =30	%
Enhance formal education, and entrepreneurship skills		93.3
Women should be represented on matters pertaining natura	25	83.3
resource management		
Building self-esteem and self confidence		66.7

Table 2: Innovations strategies for natural resources management

As the findings in Table 2 reveal, majority of the respondents 28 (93.3%) agreed that enhancing formal education, and entrepreneurship skills was the most effective innovation strategy for natural resources management. This could be interpreted that sensitization to the needs of the most disadvantaged groups of women and training them to address unmet needs from their available natural resources was considered important. As a result through this innovative strategy, women will be encouraged to initiate income generating activities to empower them so that they stop being vulnerable to all kinds of resources exploitation.

FGDs held in the study villages identified different natural resources found in Mpwapwa districts. These included natural resources like land, water, forests and livestock. Respondents reported differences between men and women in responsibilities regarding resource management at household level. For example, the interviewed heads of households reported that in most cases, women owned chicken and ducks, and they were as well as eggs from those chickens and they were free to sell them while men owned the products of land such as crops which they sold and bought livestock. As the findings reveal, the income obtained from selling resources emanating from the land is controlled by men and is seen their economic domain

The results suggest that discrimination through resource ownership, sharing and consumption should be removed. Respondents in the research area25 (83.3%) revealed that representation of women in natural resource management and building self-esteem and self confidence 20(66.7%) were other innovative strategies for natural resources management. The study went a step further to see how natural resources could provide education especially for women. The findings show that high self-esteem fosters confidence that one's actions will lead to good outcomes.

Natural resources impact the lives of women. Noticeable impacts include self-esteem, self confidence, decision making power, improved livelihood, economic empowerment, entrepreneurial success, good health and education development (Samweli, 2014 & IFAD, 2011). Social learning theory proves that when these observable impacts are learnt from early childhood socialization, attention to gender differences in property rights can improve natural resources use, environmental sustainability, equity and empowerment of the resource users (Mertens, 1998).

During the interviews respondents explained how they got the land they were using to grow crops and how such resources could produce education opportunities. The evidence revealed through FGD that land was mainly acquired through traditional coordination. As a result, women found themselves with limited rights. To address this problem, some respondents suggested how women would better benefit from natural resources. The following respondents' opinions were highlighted:

Improving women's education attainment would potentially have a very large impact on their natural resource productivity.

Through education, Female farmers have been seen a key model in improving agricultural productivity through education. Therefore, more access to education for women should be given as it has positive impact on productivity and access to natural resource management.

On the part of the government, the following interventions were suggested:

One, the government should initiate policy development and implementation of women's education in natural resources management

Second, it should target the most vulnerable women, especially female-headed households through alternative forms of education about natural resources and their productivity benefit.

Third, it should establish mechanisms in districts for strengthening and coordinating women's activities and carrying out of plans for training on livelihood skills.

Fourth, it should design and evaluate strategies that aim to mitigate gender related challenges to equitable resources development, thus transforming traditional systems in ways that release the potential of poor women and men to better contribute to and benefit from natural resource management and sharing.

Studies have demonstrated consistently that women education has significance to the life chances of their

children (Rossi A, and Yianna, L., 2008; Samweli, 2014) and a woman who is educated has more control over her productive life (Women Watch, 2013). Slavchevska et al., (2016) put that, in order to educate women, there is a need to address cultural norms that often restrict their activities and decision making at household level, as well as get access to available natural resources as things that will make women succeed in addressing gender imbalance (UN Women. 2017 & Bishop, 2019).

5. Conclusion and Recommendations

Data from this study have shown that most challenges that women face are the result of traditional practices over access to natural resources which therefore create gender inequalities. Again, traditional attitudes and practices in societies restrict women's movements, which affect their access to education opportunities. Limited education hinders and limits women's access to natural resources including production of maize, cassava, sunflowers, groundnuts and beans as main crops grown in the study area. Likewise, selling honey as forest product as well as selling and buying livestock products have largely remained men's domain due to limited chances to or exposure of women to formal education.

Furthermore, the findings revealed that education is the determining factor at all levels which are key to access of natural resources management. To address most of the challenges highlighted, the study recommends that the government organs and other stakeholders should enhance education, entrepreneurship skills; give equal representation between men and women on natural resource management. Women's selfesteem and self confidence as a disadvantaged group should be enhanced as one of the strategies to address challenges pertaining to natural resource management.

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