



Does Matrilineality Reduce Gender Inequality in Environmental and Social Impact Assessment (ESIA) Public Participation? Some Evidence from Malawi

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Abstract

This paper reports on Environmental and Social Impact Assessment (ESIA) public participation in Malawi with a focus on the role of women from matrilineal and patrilineal marriage systems. Six rural ESIA projects are explored of which three are in areas of patrilineal and three are in areas of matrilineal systems. Participation space was found to be consistently dominated by men, with no obvious differences between both systems. The key reasons are likely to be lower educational and social status of women in rural areas throughout the country. This is associated with a number of challenges, including chronic poverty and food insecurity. Affirmative action is needed to achieve a better representation of women in ESIA processes.

Keywords Gender · matrilineal · patrilineal · public participation · ESIA

Introduction

Key aims of environmental impact assessment (EIA) are to minimize negative environmental impacts and to enhance positive outcomes that are potentially connected with development projects. Importantly, environmental impacts tend to affect different groups of people differently and some are more affected than others. Gender is one important dividing line where men, women, as well as young people (boys and girls; GoM, 2015) have been observed to experience differential effects (Leuenberger et al., 2021; Hill et al., 2021). Positive impacts of development projects usually include those that are of an economic nature, including e.g. employment opportunities, in particular for unskilled labor (Dagiliute and Juozapaitiene

2018). However, there is evidence from developing countries (e.g. Ghana, Cambodia, Vietnam, Zambia and Tanzania) and from within indigenous communities elsewhere (e.g. British Columbia; see Adusah-Karikari, 2015; Knoblauch et al. 2018; Peletz and Hanna 2019; Leuenberger et al. 2021; Hill et al. 2021) that women do not experience the same benefits as men. Importantly, compensation for negative environmental impacts has been found to be higher for men than for women (Knoblauch et al. 2018; Leuenberger et al. 2021). Furthermore, negative environmental and other impacts from development, such as depletion of water resources, soil degradation, air pollution, social disruption, domestic and sexual violence, are experienced more by women (Sweetman and Ezpeleta 2017; Pradhan 2018 Kimotho and Ogol 2021; and Leuenberger et al. 2021, Hill et al. 2021).

Women become more vulnerable to poverty when being denied opportunities to earn income from development and escape from poverty (Hickey and Du Toit 2013). In this context, a lack of opportunities to participate means their needs are likely to be overlooked, perpetuating poverty (Cornwall 2002). This is worse with female-headed households (Heydari Barardehi and Abdollah Milani 2022). Also, the young who have to live with the long-term consequences of proposed development (Fischer et al. 2019) should be adequately represented in development planning.

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In EIA, public participation (PP) provides a platform which enables communities to raise concerns over environmental and socio-economic issues associated with development (Morrison-Saunders and Early 2008; O’Faircheallaigh 2010; Nadeem and Fischer 2011; Lwesyasibale and Fischer 2023). Through PP, information is provided to potentially affected communities on the likely impacts of development (Palerm 2000; Wood 2003; André et al. 2006; Sainath and Rajan 2015). Likewise, communities are co-generators of information. They should consequently be provided with adequate information and be enabled to raise their concerns, aiding in the decision-making process. Those affected have a significant stake in providing information because they have knowledge and experience regarding relevant environmental and social impacts that could affect them (Morrison-Saunders and Early 2008; Simpson and Basta 2018). In this context, gender is approached differently by different authors. Some look at the division of roles, access to resources, power relations, rights and decision-making (Anyanwu and Augustine 2013; Mayer and Barnard 2015). Others investigate LGBTQI+ and gender diverse people next to traditional male and female categories (Götzmann and Bainton 2021).

Differential participation patterns connected with gender can be assessed using gender analysis (Peletz and Hanna 2019). In this context, it has been observed that women’s participation spaces in decision-making processes and in EIA are smaller than those of men (Pattajoshi et al. 2020; Aucamp et al. 2023). Women usually experience developmental inequalities because of intersecting constraints emanating from gender inequalities, education, lack of economic independence and ethnicity (Graef et al. 2018; Simpson and Basta 2018). There are also religious traditions that do not encourage female participation. On the other hand, some scholars have also argued that religious activities, such going to church, contributes to building social capital, thus enhancing public skills. Those communities are more likely to participate in community meetings (Sarkisian 2012).

Accessibility of the venue of public participation is considered a critical element for ensuring ease of access by participants, which can lead to adequate involvement (Biset 2013). Venues are required to be conveniently accessible so that maximum attendance and the free exchange of views are encouraged (Nadeem and Fischer 2011; Aucamp, et al. 2023).

A lower status is conferred to women in decision-making in many parts of the world (Kanu et al. 2018). This is a result of patriarchic social systems which favor men to hold supreme power and authority in areas such as politics, economics and family structure (Johri 2023). Social systems thus accelerate gender inequality in these areas.

Family lineage defines societal traditions and norms with regards to gender status. Family lineage has differentiated effects on participation levels of women in PP (Alesina et al. 2013; Robinson and Gottlieb 2021; Nguyen et al. 2021; Hill et al. 2021). This has an important impact on the ability of women to contribute to public participation exercises. In this context, Robinson and Gottlieb (2021) suggested that there were differences between societies dominated by patrilineal and matrilineal systems, with negative effects on women being more noticeable in the former (Nguyen et al. 2021). In such societies, including in many African countries, women are often considered to be unwelcome participants (Robinson and Gottlieb 2021). Here, discrimination against women is not only normal, but there are also often legal biases (Hill et al. 2021). On the other hand, in matrilineal systems, women’s status, and associated with that, their welfare and control increase. This is associated with greater participation space given to women in decision making (Alesina et al. 2013; Gottlieb and Robinson 2016; Robinson and Gottlieb 2021).

There is currently little evidence for the extent to which matrilineal systems reduce the gender gap. It is in this context that this paper reports on parts of a PhD study on gender differences in EIA public participation in Malawi. Various factors are considered, including e.g. level of education and age of participants. These intersectional factors have been included because they help to understand the drivers of vulnerability of women in participation (Pattajoshi et al. 2020; Leuenberger et al. 2021; Mukherjee et al. 2021).

The authors of this paper recognize that the concept of gender also includes LGBTQI+ and gender diverse people. However, the focus of the paper is on traditional male / female divides with respect to men, women, as well as (following the Malawian constitution) boys and girls.

Family Lineage and Gender

In patrilineal societies, a family’s / community’s lineage is defined through the male line (Lowes 2020). A wife lives with the husband’s parents while in marriage, and a bride price which is known as a dowry is mostly paid (Jaya-chandran 2015). Additionally, inheritance is passed on to the children of male members only of the family (Lowes 2020).

There are several challenges that women face in patrilineal systems. In a patrilineal marriage system, husbands exert influence and power and are the primary decision-makers (Mtika and Doctor 2002). In these systems, women are frequently considered to be inferior to men (Graef et al. 2018). An example of an African patrilineal society is the Dodoma region in Tanzania, where the position of women

in participation and decision making was said to be minimal when there were mixed-gender focus group discussions on development (Aziz et al. 2011; Mnimbo et al. 2017). These challenges of male dominance have said to frequently result in unsustainable and unjust outcomes (Kurian 2000), such as a narrow focus on negative impacts that greatly affect women in the domain of economic, social and cultural issues (Graef et al. 2018), leading to low economic opportunities, limited access to education and violence against women (Sikweyiya et al. 2020).

Matrilineal systems come in two forms. The first is when a couple lives in the home of the wife alongside her relations such as her mother, siblings and their children (*chikamwini*), which is known as an uxorilocal settlement (Davison 1997; Schneider and Gough 1961). The second is when a couple stays in the husband's home (*chitengwa*), which is known as a virilocal (or patrilocal) settlement (Djurfeldt et al. 2018). Irrespective of the type of matrilineality, a matrilineal marriage system has been observed to increase a woman's welfare and relative control by increasing access to resources such as land ownership (Alesina et al. 2013; Gottlieb and Robinson 2016; Robinson and Gottlieb 2021). Comparing the two matrilineal systems, women have more rights and control in uxorilocal systems in terms of decision-making, especially on land issues (Djurfeldt et al. 2018). On the other hand, Phiri (1983) observed that the uxorilocal system discourages husbands from investing in improving the land allocated to their family. This consequently becomes a barrier to the developmental progression of men.

Patrilineal and Matrilineal Systems in Malawi

The research underlying this paper was conducted in Malawi because of the existence of both, patrilineal and matrilineal systems in the country. Here, whilst 25% of the rural population is patrilineal, 75% is associated with a matrilineal group (Gottlieb; Robinson 2016). The matrilineal system is found in the Central Region while the Northern Region has a patrilineal system. In the Southern Region both, matrilineal and patrilineal systems are in place (Mtika and Doctor 2002; Berge et al. 2014; Zeze 2015).

Three districts of rural areas of Mzimba in the Northern region, Lilongwe in the Central region and Chikwawa districts in the Southern Region were selected for examining the impact of the differing marriage systems on public participation. Rural projects were selected because of the homogeneity of the population. In urban areas in Malawi, communities are heterogeneous and traditional gender dividing lines are only partly still in place.

Globally, there is no known research study on the impact of differing lineage systems on gender participation

in EIA. Whilst the focus of this paper is on Malawi, the underlying approach can be adapted for use in other countries, in particular those with similar contexts in the developing world.

Context

Malawi has developed various policies and laws with respect to gender in order to conform to international gender frameworks such as United Nations Sustainable Development Goals (SDGs) and the Beijing Declaration and Platform for Action. These include the National Gender Policy of 2015 (GoM 2015), the Gender Equality Act of 2013 (GoM 2013), National Youth Policy (NYP) of 2013 (GoM 2013) and the Malawi Vision 63 (NPC 2020).

Gender issues are mainstreamed into Malawian EIA (here implemented as environmental and social impact assessment; ESIA) guidelines (GoM 1997). These state that women, boys and girls should not be sidelined because they are the major resource users and managers. Furthermore, Malawian gender policy defines gender as “socially constructed roles and relationships, responsibilities, attitudes, behaviors, values, status and privileges that society ascribes to men, women, boys and girls on a given culture or location” (GoM, p9. 2015). Since the definition of gender in Malawi includes boys and girls, this study also included the aspect of youth in PP. In Malawi, policy defines youth as persons aged 10–35 years (GoM 2013) and adults as people aged between 35 and less than 65 while the elderly are older than 65 (NSO 2019). Youth comprises two thirds of the population (NSO 2019).

Across the three regions introduced above (Northern, Central and Southern), there are over 16 ethnic groups (Kayira et al. 2019). The main ones are Chewa, Yao, Lomwe and Mang'anja, Ngoni, Sena, Tonga and Tumbuka (Mtika and Doctor 2002; Zeze 2015). Although all ethnic groups can be found in almost all regions, each ethnic group is associated with a particular region of the country. For example, the Chewa, the largest ethnic group in Malawi, are predominantly found in the Central Region and are matrilineal, while the majority of the Ngoni and Tumbuka are patrilineal. They are found in the Northern Region. The Sena and Mang'anja are mainly found in the Southern Region and are both, matrilineal as well as patrilineal (Mtika and Doctor 2002; Berge et al. 2014; Zeze 2015).

The Role of Educational Achievement in Public Participation

In many developing countries, illiteracy rates are high because of underdeveloped educational systems. Power

relations significantly contribute to education gender disparities amongst others. This limited access to education for girls, which is made worse by early marriages. Unequal treatment based on gender limits some individuals to pursue their interests (Kennedy et al, 2020). Eventually, power dynamics do perpetuate a cycle of inequality limiting girls on their desired education and limiting overall development. This is a particular problem for rural communities that are often vulnerable to educational disadvantage (Agrawal 2014; Zhang 2015). Challenges include long distances that school children have to travel, inferior learning conditions, and less home support for academic work, as well as fewer and lower-quality resources (Agrawal 2014; Zhang 2017). This is not just a problem in Africa, but elsewhere, too, e.g. in India, Pakistan and Bangladesh, where Agrawal (2014) observed a low educational attainment in rural areas.

In Malawi, a considerable number of people have not attained an educational level higher than primary school. This is important for EIA public participation, as educational achievement is associated with effective engagement (Fitzpatrick and Sinclair 2003; Zuhair and Kurian 2016; Lwesya-Sibale and Fischer 2023), in particular when it comes to the understanding of technical ESIA information. In addition, education is associated with empowerment of those that are disadvantaged (NSO 2020).

The National Statistics Office (NSO) categorizes attainment of the education system into four levels (see Table 1). The first one is primary school Leaving Certificate (PSLC) which is offered after finishing primary school. The Junior Certificate (JCE) is offered in secondary school after the first 2 years there. The Malawi School Certificate of Education (MSCE) is the highest certificate in public secondary school and it is attained after finishing 4 years in secondary school.

Table 1 Highest education certificates attained by population in Malawi in percentage

Background Characteristic	None	PSLC	JCE	MSCE	Tertiary	Total
Malawi	80.7	8.8	4.8	4.5	1.2	100
Place of Residence						
Rural	85.2	7.8	3.8	2.7	0.5	100
Urban	56.7	13.8	10.4	13.7	5.4	100
Region						
Northern	70.7	14.2	7.1	6.3	1.7	100
Central	82.0	7.9	4.7	4.2	1.2	100
Southern	82.5	8.0	4.2	4.1	1.1	100
Sex						
Female	83.2	8.6	4.2	3.1	0.8	100
Male	78	8.9	5.4	5.9	1.7	100

PSLCE Primary School Leaving Certificate

JCE Junior Certificate

MSCE Malawi School Certificate of Education

In Malawi, overall there are high illiteracy rates with 83% and 78% of women and men, respectively, who do not possess any certificate. This is a result of many factors including cultural practices that prefer boys over girls, consequently leading to limited access for a girl to attend education (Kennedy et al., 2020). Additionally, there are cultural barriers such as early marriages whereby young girls are forced into marry at an early age eventually limiting their access to higher education (Subramanian, 2024).

In Malawi, literacy is defined as the ability to read and write in any language (NSO, 2020), which thus includes vernacular languages. Higher literacy rates in the Northern region are associated with the influence of the early missionaries who settled in the North and who introduced education (Kalinga, 1998). More people have higher educational achievement in the northern region, followed by the central region and last the southern region. Whilst a high proportion of the population (80.7%) have no educational certificate, the majority of these people still meet the national standard for literacy.

Being able to read in English is a challenge. Soon after the multi-party elections in 1994, it became government policy that pupils in classes 1–4 should be taught in their native languages. Because of this, proficiency in reading and writing in English dramatically declined in the country. Milner et al. (2001) assessed the level of reading achievement for grade 6 and found that 99.4% of students did not reach the desired reading level in English. Other similar studies also found that learners' achievement in literacy was very low, particularly in English (Chimombo, et al., 2006). This means that the reported levels of literacy (73%) do not indicate proficiency in reading English, which remains the language used in official documents, including ESIA reports.

Methodology

As stated earlier, this paper reports on parts of a PhD research, conducted at the University of Liverpool's Environmental Assessment and Management Research Centre (UK) between 2017 and 2021. EIA public participation was investigated in the 3 Malawian districts of Mzimba, Lilongwe and Chikwawa. These are located in the country's three regions: Northern region (patrilineal) Central Region (matrilineal) and Southern region (both, matrilineal and patrilineal). The following six rural projects were considered and were selected randomly from these districts:

- Mzimba rural

1. Timber factory in TA Kampingo Sibande;
2. Quarry mining in the Traditional Authority (TA) Mtwalo

Table 2 Number of registered PP meeting participants and those approached and interviewed

Region	project	Registered	Communicated	Participated
Mzimba	A timber factory in TA Kampingo Sibande (2.5 ha)	37	10	4
	Quarry mining in TA Mtwalo (50 ha)	36	10	8
Chikwawa	Solar Energy in TA Makhuwira (1.01 ha)	14	10	10
	Irrigation in TA, Kasisi (98 ha)	22	11	11
Lilongwe	Quarry mining in TA Mazengera (6.8 ha)	40	10	9
	Quarry mining in TA Kabudula (10 ha)	13	10	10
Total			61	52

- Lilongwe rural
 3. Quarry mining in TA Mazengera
 4. Quarry mining in TA Kabudula
- Chikwawa rural
 5. Irrigation scheme in TA Kasisi
 6. Solar energy project in TA Makhuwira

Ethical approval for the PhD research was obtained from the University of Liverpool and the local research ethics committee in Malawi. Consent was sought from participants in the study and consent forms were provided which outlined the confidentiality and anonymity of their responses. In order to comply with ethical standards, projects are only associated with geographical locations and not with specific names.

There were PP lists in the ESIA reports from the six projects. The number of people listed varied between 13 and 40 participants in ESIA PPs. An average of 10 participants were selected randomly from each project for interview by the researcher. In order to ascertain whether the participants who appeared in the report really participated in the ESIA process, participants were asked whether they had participated in the ESIA consultation meetings or not. The responses are presented in Table 2. It was found that only 52 took part while 9 of those listed said they did not. The worst example was a timber project with 6 invented names out of 10 participants. The project is located at a trading centre which is along the primary M1 road of the country where the community is diverse because of the urban nature of the location as a result of many economic activities. The subsequent analysis and interpretation is based on the responses of 52 ESIA PP participants.

The following questions were asked to solicit the information from the 52 listed individuals:

- What is your ethnic background?
- What is your family lineage?
- What is your gender?

What is your religion?

What type of household do you live in? (male, female if female, widow, separated, divorced or husband living away)?

What is your highest level of education?

What languages do you speak?

Did you contribute something to the PP meeting for the x project?

If not, why did you not contribute?

What are the major impacts of the projects?

How are you impacted by the project?

What are the short term and long term negative and positive impacts of the project?

Where was the meeting held?

Additionally, 6 consultants who prepared the ESIA reports were also interviewed and the following questions were asked:

Who did you invite?

Was there any deliberate inclusion of women and youth?

How were communities notified?

Where were the meetings held?

What languages were used?

Responses were analyzed quantitatively, using the statistical package Stata 16. Qualitative data were analyzed with NVivo 12. After recorded information was transcribed, data files were uploaded into NVivo software. Data were then coded, using the themes developed from the interview guide. The themes were then analyzed to assess the perception of the participants.

Results

Results of this study are presented in three parts. First the status of women and men participating in projects in patrilineal and matrilineal systems is established. Then factors that contribute to the extent of participation of women are identified. Finally, the impact of the level of participation in the decision making process is identified.

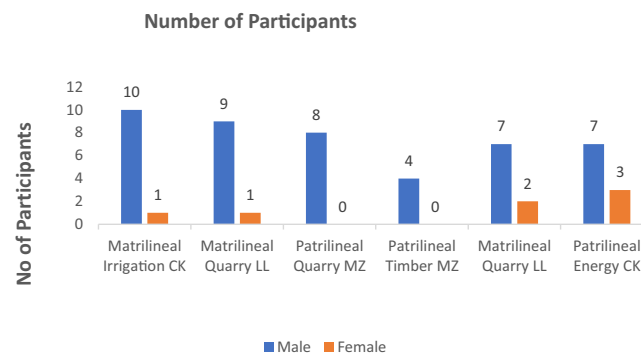


Fig. 1 Participation of males and females per project. CK Chikwawa, LL Lilongwe, MZ Mzimba

Participation of Men and Women by Project

Generally speaking, women participation was very minimal with only 7 females out of 52 total participants participating, as is shown in Table 3. Figure 1 further disaggregates participants per project.

As shown in Fig. 1, the participation of women was very low, ranging between zero and three participants per project. When enquired from the consultant as to why there was such minor representation of females, three consultants reported that there was no specific mentioning of women in the TORs while two consultants reported that they could not determine who would come to the meetings since it was the responsibility of the chief to invite members for public participation meetings. Consequently, consultants were just informing the chiefs that they required people who were affected and it was up to the chiefs to determine the participants.

The two projects with no female participation were from Mzimba district which is a Ngoni tribe patrilineal system. It was further reported that in patrilineal systems, women are particularly seriously disadvantaged. They are traditionally treated as “property”. In this context, one of the government officials working in Ngoni district remarked during an interview that: “A property cannot own another property”. Results are intriguing because whilst matrilineal systems could have been expected to result in higher female participation rates, in practice they also had low female representation. However, the ESIA from the patrilineal system of Sena tribe in Chikwawa had three female members present. This is possibly because in this district, both patrilineal and matrilineal marriage systems are present which might have resulted into intermarriages between the two lineages. This is unlike the situation in Mzimba where the district is patrilineal only. Overall though, in all ESIA PP, men clearly outnumbered women (see Table 3).

Table 4 shows participation by family descent system. Of seven women, four were married, and three represented female headed households. There is no statistically

Table 3 Participants of the study segregated by gender

Type of Location	Yes		No	
	Male	Female	Male	Female
Rural	45 (87%)	7 (13%)	9	0
Total	61			

Table 4 Participation along family descent system

Family Descent	Male	Female	Total
Patrilineal	18	3	21
Matrilineal	27	4	31
Total	45	7	52

Table 5 Age group of participants

Age group	Male	Female	Total
Youth (>10 to <35)	8	2	10 (19%)
Adults (>35 to <65)	32	3	35 (67%)
Elderly >65	5	2	7 (14%)
Total	45	7	52 (100%)

significant difference between patrilineal and matrilineal districts. While women could have been expected to be highly represented in the matrilineal systems in Mang'anja tribe in Chikwawa and the Chewa tribe in Lilongwe and therefore attendance during PP meetings should have been high, in the three matrilineal cases (Mwalija, Sajiwa and Nsense) women were equally underrepresented.

When enquiring as to how men are enabled to attend PP meetings, it was noted by one of the respondents that the “chief does notify the household, consequently it is up to the household to decide who should attend”.

The study also disintegrated the participants by age (see Table 5). It was found that youth participants were

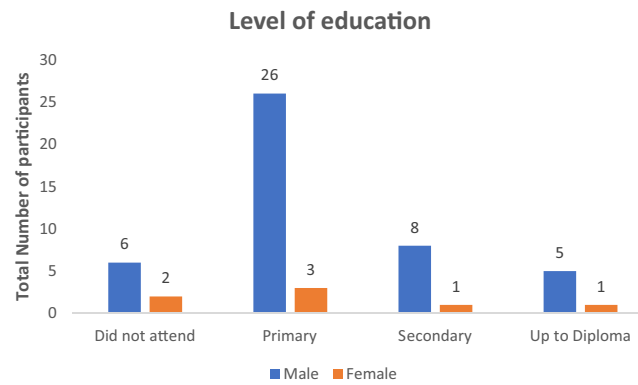


Fig. 2 Level of educational achievement for registered participants

underrepresented in ESIA PP, as the young only represented 19% of all participants.

Factors Affecting Men and Women Participation

Notification levels

Both, consultants and participants confirmed that meetings were not publicly advertised and that participants were notified by their respective chiefs as per traditional notification method in rural areas. The chiefs were being informed by the consultants and developers on the need of consulting the public. All consultants indicated that there was no special notification or deliberate inclusion of females and the youth. Both, participants and consultants reported that there were no language barriers as meetings were conducted in local languages.

Educational levels

Figure 2 shows educational achievement of participants. The majority (irrespective of gender) only attended up to primary school level. Out of seven women, only one attained up to a Diploma. This participant was a government official working in rural areas in the field of Agriculture and in the context of Malawi these are known as extension workers¹.

Participants' highest education level was set against their ability to contribute to the meeting. In this context, an ability to contribute was the ability of a participant to actively participate in the meeting. Results show that the two female members who had at least attained secondary school education were able to participate during the meetings. This implies that the higher the education qualification, the more likely participants were to contribute during

Table 6 Gender and type of Religion

Type of Religion	Male	Female
Christianity	38 (84%)	6 (85.7%)
Tradition	4 (8.9%)	1 (14.3%)
No religion	3 (6.7%)	0
Islam	0	0
Total	45 (100%)	7 (100%)

the meetings. The woman with a diploma was from a patrilineal system while the secondary school attendant was from a matrilineal system. Both were extension workers.

Women who had never gone to school and those who had attended only primary school were not able to contribute. This is unlike their male counterparts who were able to contribute despite a lack of education. More participants with the highest educational achievements came from patrilineal systems and no one from any patrilineal system had never gone to school (the six listed in Fig. 2 were all from matrilineal systems).

Both, consultants and communities reported that public participation meetings were held within the project site for all six projects.

Religion

The study also assessed the type of religion for each participant and Table 6 shows the outcome. The majority of participants were Christians irrespective of gender with over 80% of participants. There were no female participant without any religion.

The impact of the level of participation in the decision-making process

Both, positive and negative impacts of the six projects affected those who were living within the vicinity of the

¹ Extension workers in the context of Malawi are frontline workers working with the communities at local level

projects. During interviews, both male and female participants reported that one of the major positive impacts resulting from all projects was employment. However, both, men and women reported that employment favored men because of the nature of the jobs. It was mostly unskilled manual labor which was hired during construction phases.

Local communities were found to mainly benefit from employment opportunities during construction and operational phases. However, during interviews, women were concerned that the nature of their jobs mainly favored men as it was manual labor which was required. One of the participants stated “*Ife okazi amati tilibe mphamvu zogwirira ntchitoyo*” meaning; “it is claimed that women do not have enough energy to work on labor intensive jobs”.

On the other hand, the major negative impacts emanating from these projects was loss of land. In this context, it was reported that especially women were not gaining much from the projects but instead the projects were compounding poverty levels. For example, after losing nearby gardens, women reported that they had to walk long distances to cultivate in more remote gardens after the nearby land had been sold; in the evening, they were also expected to prepare food for the family. In addition, after harvesting produce, it was reported that the husband who was the decision maker when offering land to developers (during PP) usually resurfaced to make decisions on the money raised from selling the produce. Some also reported that they did not receive any compensation to buy alternative land despite being promised to be compensated.

Some women complained that their husbands received compensation but spent all the money on drinking. Others claimed that their husbands were involved in promiscuous activities, while still others claimed that they used money for other urgent matters like school fees. Only a few said they had bought land but very far from their homes which is forcing them to farm less than before. Communities from Chikwawa complained that the only idle land was located in flooded areas which cannot be utilized because of a lack of adaptive capacities to utilize those areas. And when asked where they were currently cultivating, some responded that they were renting gardens while others responded that their farming land size had dramatically reduced as a result of the projects, hence their source of livelihood has been compromised.

Discussion

The investigation into whether matrilineality reduces gender inequality in Environmental and Social Impact Assessment (ESIA) public participation has revealed several governance issues. Firstly, women representation in matrilineal society contradicts the existing literature that matrilineality

enhances decision making space for women in ESIA processes. What is confirmed is that women are marginalized in patrilineality societies as they are considered inferior to men while the latter are the primary decision-makers (Mtika and Doctor 2002; Graef et al., 2018). This limited representation of women irrespective of family lineage is an unexpected finding because traditionally, in matrilineal societies women are believed to pose stronger authority than men.

The inadequate representation of women limits the consideration of specific concerns that affect women. Additionally, restricting participation of women in ESIA processes is denying them the possibility to present their needs and demonstrate their vulnerability to negative impacts of projects.

ESIA PP processes in Malawi can therefore be said not to be gender sensitive and consequently fail to provide an appropriate platform for women. This results in a continuation and exacerbation of social exclusion and inequalities which eventually intensifies the vulnerability of women. Low female participation in these patrilineal PP projects mirrors findings from other countries such as in Vietnam where low female participation was equally low in patrilineal systems (Nguyen et al., 2021).

Notification of PP meetings was conducted through the chiefs. Men as heads of household then routinely attend meetings because they are associated with economic gains. It is therefore believed that non-participation of married women is minimal due to the assumed shared benefits within the family between husband and wife (Maliro, 2021). However, as described in the paper, two female participants reported that the benefits of money raised by the household head did not benefit them. This suggests that money realized by men is not redistributed to the rest of the family (Hanna and Karlan, 2017). Additionally, the prevalence of intra-household dynamics leads women to be subjected to increased household conflicts arising from economic dependence on men. The lack of female participation eventually results in an exacerbation of poverty. These observations are intriguing due to the presence of female-headed households who are affected.

In this paper, it has been demonstrated that some intersectional factors such as education had a positive correlation with participation while other factors such as religion and venue didn't have any impact. Although meetings were conducted within the project site, this did not translate into any increased participation of women.

Education is a significant catalyst for public participation. Even though most chiefs have not attained higher qualifications more than the primary school certificate (USAID, 2018), the few female participants that were identified were all selected by the chiefs because they were either chiefs or had some educational attainment. Education is therefore paramount for women to be considered in

decision making processes. These findings are in line with Madimbo (2016) and Chifungo (2023) that in low income countries, educational qualifications uplift women's status and help them in the realm of decision-making space. Educational achievement is therefore critical in being able to participate (Yang 2008; Chigbu 2019; Maliro 2021).

With respect to ESIA reports, since they demand technical proficiency, the importance of education needs to be emphasized. Educational achievement has implications for participation in ESIA because associated reports are technical in nature and therefore require technical capacity (Anuar and Saruwono, 2018). Besides, all meetings were conducted in local languages, implying that every participant had understood the content. However, ESIA reports are not translated into local languages, nor are they presented in simple or visual ways that would enable local illiterate people to understand them (Zuhair and Kurian, 2016).

Education is important for breaking down barriers even in the most rigid cultures, where “women are [are perceived as] merely a property” (see quotation above). Women who have gone to school have risen above being merely a “cultural property”. For instance, currently, there are female Members of Parliament from Mzimba district. In addition, the current speaker of Parliament is also a woman and the head of Anti-Corruption Bureau is a woman as well. Education therefore opens up opportunities for women at the highest levels, defying the cultural limits set for women. Education is thus key to address the gap of low female participation in the EIA process (Madimbo, 2016). The right to education should therefore be emphasized as it serves as a catalyst to public participation of ESIA processes and the overall general inclusivity in decision making.

Additionally, chiefs notifying participants appear to be inhibiting women participation. Chiefs are gate keepers of communities (Lwesya-Sibale and Fischer, 2023), this consequently implies that no consultant or developer can access communities without their knowledge and permission. The selection of participants and consequently the level of female participation in ESIA PP is therefore dependent on the chiefs. Communities are only able to participate with the approval of the chiefs, since the cultural role of these chiefs is to mobilize them (Lwesya-Sibale and Fischer, 2023). They have dominant roles in society (Chiweza, 2021). Therefore, in areas across the globe where chiefs are used for notifying participants, this can be problematic for gender equality. Chiefs should therefore be sensitized on the role of balanced representation and for a balanced uptake of views.

This paper has also unveiled that the positive impacts emanating from projects are primarily benefiting men. Negative impacts, though, are mostly experienced by women. These projects are therefore reinforcing existing gender inequality. This imbalance is perpetuating economic

gender inequality, thereby exacerbating levels of poverty and vulnerability of women, while exposing them to more financial dependence and exploitation.

Women tend to be impacted more by environmental impacts such as loss of land from developmental projects and yet they are entrusted with productive roles. This results in weakened livelihoods which limits women to support themselves in areas of food security and economic empowerment. These findings confirm the ‘triple burden’ of production, reproduction and community management as a sign of super-exploitation of women (Federici 2018; Götzmann and Bainton 2021). The non-participation of women is mostly felt by female headed households because of their vulnerability to poverty as a result of the added burden of family responsibilities.

Finally, the youth remain a marginalized group in the ESIA process. Neglecting the youth is particularly problematic because long-term environmental impacts affect future generations in particular. In Malawi, the youth makes up two thirds of the national population (NSO, 2019). Their marginalization is compounded with the fact that young people are culturally constrained by being forbidden to speak in the presence of adults and leaders (Lwesya-Sibale, 2022). Also, in Malawi, since most young people have been turned into demographic burdens (Retief et al. 2016), it is ironic that they are denied participation in development that can positively influence employment opportunities and that potentially have other related positive impacts.

Effects from development are both, short and long-term, and it is the current young generations that will particularly suffer from the long-term effects. This “intergenerational exclusion and inequality” concurs with and confirms with the views of Fischer et al. (2019), who argue that, in the interest of intergenerational equity, there is a specific requirement to consult the younger generation, as they have to live with long-term consequences of proposed developments. Future generations should be able to inherit high-quality environmental resources (Retief et al. 2013).

The exclusion of women and the youth is a major setback for ESIA processes in Malawi (see also Lahiri-Dutt and Ahmad 2011; Hill, Madden et al., 2017). They are an obvious expression of gender injustice when over 50% of the population are women and 80% are the young (NSO, 2019).

Conclusions

In this paper, the authors have illustrated that in developing countries like Malawi, women remain underrepresented in ESIA public participation, despite a policy and legal framework which supports them. This is irrespective of family lineage where according to the existing professional literature, higher participation of women should be expected in

matrilineal systems. In six examined rural projects women were found to be equally locked out of the participation space in ESIA projects in both, matrilineal and patrilineal systems. Low participation of women limits diversity of opinion in the decision-making process.

Education as well as social status in society are positively correlated with participation irrespective of family lineage. With respect to education, women with higher education and social status are able to break down cultural barriers to participate in the ESIA processes in rural areas. It is therefore prudent for governments to prioritize the education sector. Already at a young age, girls should obtain the necessary education to enable penetration into the decision-making space. The cultural tradition of chiefs notifying participants favours men as they are culturally the heads of households.

Youth were equally underrepresented despite being the majority of the population in Malawi. This is a particular problem, as it is them who are likely to suffer from short and long-term negative impacts of proposed projects, as they have to live with the long-term consequences of the proposed development. However, women and youth are the prime recipients of negative impacts. Positive outcomes such as employment especially during construction mainly benefit men as it is mostly unskilled manual labor which is sought. On the other hand, the major impact of land loss mainly affects women because they are providers of food for the family. Therefore, developmental projects that exclude women accelerate poverty of women and youth.

There should be better inclusion of women and youth in ESIA processes and gender disintegrated data should be presented in the lists of ESIA PP participation. Affirmative action to include women and youth should be specified in the TORs of ESIA. This inclusive representation of all participants is important as it ensures that the decision-making process reflects the concerns of the most vulnerable, especially those that would otherwise be overlooked. However, in areas with strong patriarchal cultures such as the ngoni in Mzimba where there was no female participation, implementation of gender inclusion will be an uphill task unless other intersectional factors such as education are addressed. Gender experts should therefore be included in the ESIA study teams.

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