

Gender and Benefit Sharing in Participatory Forest Management (PFM): The case of Mt. Elgon and Cherangany Hills Forest Ecosystems-Kenya.

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ABSTRACT

Participatory Forest Management can be defined as a structured collaboration between governments, commercial and non-commercial users of forests, interested organizations, and community groups, and other stakeholders, to achieve shared objectives related to the sustainable use of a forest resource (GOK, 2007). Schreckenber *et al.* (2006) indicated that majority of countries in Africa and Asia promotes participation of rural communities in the management and utilization of natural forests and woodlands as a way of enhancing their livelihoods and safeguarding forest resources. According to the Kenya Forest Act 2016 members of Community Forest Associations (CFAs) develop participatory management plans and sign management agreements with the government before participating in forest management activities (GOK, 2016).

Although the CFAs are meant to benefit from participating in forest management and include all their members, a majority of the associations have failed to involve women equally in decision making. This is attributed to the low number of women in membership and positions of leadership. This results in unequal and inefficient management of the resources. The net result is a situation where benefit sharing is very much pro the male gender (Agrawal, 2001).

The research reported in this paper was carried out in the Mt.Elgon and Cherangany Hills forest ecosystems among ten Community Forest Associations (CFAs) from the two forest ecosystems. Twenty households were selected from every CFA out of which ten women were interviewed using structured questionnaires. In addition, focus group discussions were held with five local opinion holders from the communities using prepared guiding questions.

Results from the study show that PFM has the potential of enhancing local level gender specific livelihoods. This can be done by involving women in non- destructive income generating activities. This potential is however curtailed by poor local level community governance structures which discriminate against women. The paper recommends a strategic reorganization

of local level community governance structures which will not only support sustainable provision of ecosystem services but will also spur livelihoods at household level while targeting women.

Key words: Gender; livelihoods; sustainable development; forest ecosystem; and, community.

INTRODUCTION

Participatory forest management (PFM) is a forest management tool where key stakeholders enter into mutually enforceable agreements that define the respective roles, responsibilities, benefits and authority in the management of defined forest resources (Matiku, 2011). The tool involves mobilizing of local people for group action in managing specific forest area adjacent to their settlement in order to ensure socio-economic development of community and reduce pressure on forests. This involves sharing responsibilities and benefits according to a well-defined and mutually agreed on set of rules and regulations. The agreed rules and regulations are planned, implemented, maintained and monitored by the village institutions (Ongugo et.al, 2009).

The main objective of PFM is to ensure a wider local ownership of forests and support to forest conservation. Provision of non-forest alternative sources of income, and legitimate participation in forest management are important components of sustainable natural resource management strategies across East Africa. Laws and policies exist that allow collaborative natural resources management with respect to forests which is documented in the Kenya Forest act 2005 (Matiku, 2009). This objective is realized through the Community Forest Associations (CFAs) which are constituted mostly with members adjacent to the forest. However the Forest Act does not bring out clearly how the benefits are shared with respect to gender. Apparently, this omission in the Act has not been addressed in the now one enacted in 2016.

Development scholars and practitioners have long viewed participation as an important element that allows marginalized groups including women, the youth and poor people to influence institutions and decisions that affect their lives (Mayoux, 1995). In the forestry sector participation has been viewed as a way of improving forest governance, promoting sustainable

use and management of forests while at the same time, enhancing livelihood benefits and opportunities. Whether women's participation in forest management facilitates sustainable use or improves livelihoods is still debatable and even contested. The factors that determine women's participation are important because forestry reforms in many developing countries explicitly aim at improving the participation of marginalized groups in decision making processes including forest management.

Women's roles and household responsibilities make them more heavily dependent on forests to meet their daily subsistence needs. Their participation in decision making has been shown to reduce the level of conflicts as new rules for access will take into account their particular needs and their activities will less likely be criminalized or viewed as infractions (Agarwal, 2001; Martin and Lemon, 2001). Agrawal and Chhatre (2006) found that increased involvement of women in forest management improves control of illegal activities. At the group level, higher proportions of women in forest user groups decreases the incidence of conflict in user groups (Mwangi et al., 2011) because women have a tendency to cooperate in other domains/spheres of their lives and build strong norms of solidarity than men (Westermann et al., 2005).

Objectives of the study

Overall

To contribute to gender equality in the implementation of Participatory Forest Management for improved forest governance and livelihood enhancement.

Specific

To identify the role of women in PFM

To find out how benefits are shared among men and women in PFM

To identify the effects of gender inequality in the implementation of PFM and make recommendations for ensuring more equitable benefit sharing

METHODOLOGY

Study areas

Mt. Elgon Forest Ecosystem

Mount Elgon forest ecosystem covers an area of 236,505ha on the Kenyan side and overlaps with Trans-Nzoia and Bungoma Counties (KWS 2011). It was gazetted in 1932 (Ongugo et al, 2001). It is one of Kenya's five "Water Towers" (Synnot, 1968), supporting a huge population (van Heist, 1994). It holds a high percentage of forest resources crucial to local community's livelihoods (van Heist, 1994). Major products contributing to the community's socio-economy are firewood, poles or timber, vines, water and fodder (Scott, 1994).

In addition, Mt. Elgon hosts the headwaters of the Nzoia River which provides hydrological services to a range of economic sectors including irrigated agriculture with an estimated watershed population of over 1.5 in Kenya's Western region, but when excessive also threatens the lives and livelihoods of thousands of people due to flooding (Nyacha et al, 2005), fig 1 bellow.

Cherangany Hills Forest Ecosystem

Spatially, the location is defined by 35° 26'' East and 1°16'' North at an altitude range of between 2000 and 3365m above sea level. Cherangany Hills forest ecosystem comprise of twelve forest blocks, cutting across three Counties of Trans-Nzoia, Elgeyo- Marakwet and West Pokot, on the Western ridge of the Great Rift Valley. It covers an area of 120,000 ha, forming the upper catchment of Nzoia, Kerio and Turkwel rivers (KFWG & DRSRS 2004). The watershed not only underpins livelihoods of communities within Lakes Victoria and Turkana Basins, but stretches its significance to national and global capacity. However, this ecosystem has never been an exemption to anthropogenic disturbances of land use pressure, demographic characteristics and even climate change (Cherangany Hills Forest Ecosystem Strategic Management plan 2015). The least affected forests are those on the Cherangany hills with only 174.3 hectares deforested. However this loss is occurring in indigenous forest cover (KFWG & DRSRS 2004). Because it encloses human settlements, Cherangany Hills exhibit very close relation with human activities and provides a good case of understanding benefit acquisition and sharing among CFA groups (fig 1) bellow.

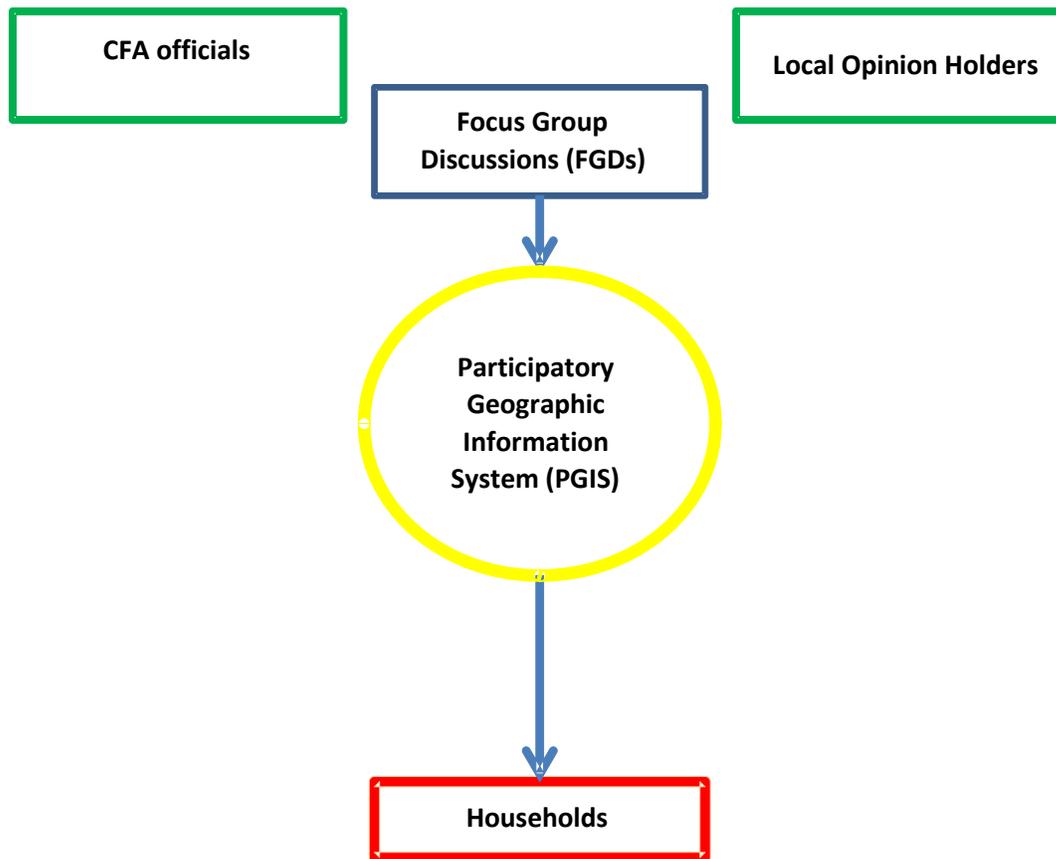


Figure 2: Conceptual framework for summarized methodology

Data Collection

Participatory Geographical Information System (PGIS)

Household samples were generated at the village level using Participatory Geographic Information System per forest station or block. Households that were selected are those whose members belong to CFAs. As part of the survey, qualitative and quantitative information was obtained from the community leaders, foresters and household heads using the social research methods such as household questionnaires, focus group discussions and key informant interviews. The questionnaires were used to identify the link between gender and benefit sharing. Photographs 1 and 2 below show an interactive method of PGIS where CFA officials and local

elders selected the households in Lelan and Suam settlements in Cherangany hills and Mt.Elgon respectively.



Photo 1: Participatory mapping activity in Lelan, Cherengany



Photo 2: Participatory Mapping activity in Suam, Mt. Elgon

Questionnaire administration and Management of Data sets

A household questionnaire was formulated to show the roles of the women in CFAs, their participation leadership roles they have taken up and how gender especially women is linked with livelihood improvement. A questionnaire containing guiding questions was also formulated to get the opinion of CFA officials and the local elders regarding women participation in PFM, their responsibilities and how gender is linked to benefit sharing in an aim to improve livelihoods and forest governance.

Focus Group Discussions (FDGs)

Focus Group Discussions were conducted with five local opinion leaders which included CFA officials and elders who are members of the CFA members. The FGD constituted of 3 women and two men. In every focus group discussion conducted the community members gave information on the constitution of women in the CFAs, their responsibilities and decision making roles in the association. Importantly the FGD discussed the benefits they get from PFM and how these benefits are shared with respect to gender.

Key Informant interviews (Guiding Questions)

Key informants were interviewed using guiding questions. CFA officials, village elders who are members of the CFA and Kenya Forest service guard were interviewed to give their opinions on gender and benefit sharing.

Data Analysis

Household questionnaires were cleaned and coded and analyzed using Statistical Package for Social Sciences (SPSS V.21). Results were presented using charts, graphs and frequency tables according to the two ecosystems.

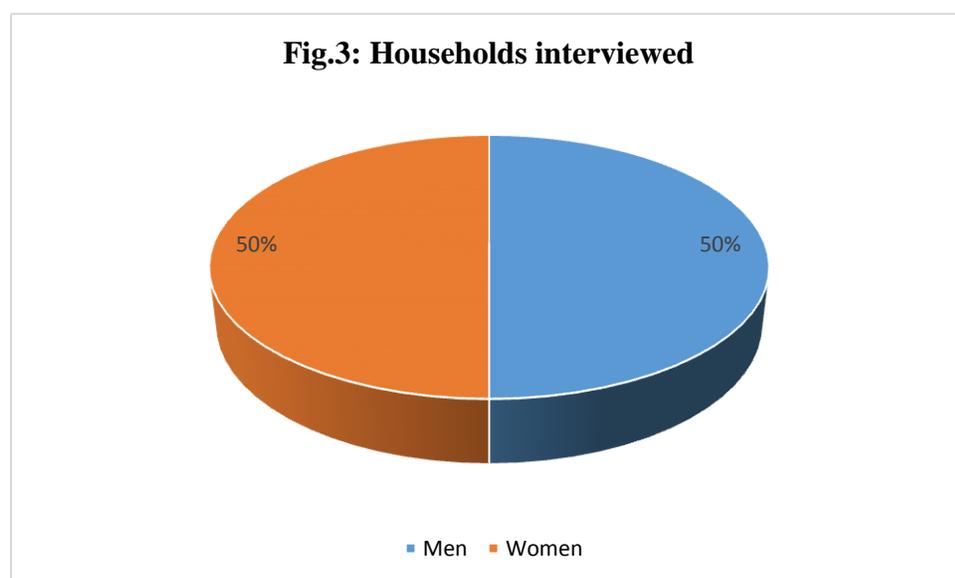
RESULTS

Household Information

Mt. Elgon Forest Ecosystem

Gender and participation in PFM

Of the 200 households that were interviewed, 50% of the respondents were female, while 50% were male. This gave a good representation of both the men and the women in the membership of the households and CFAs (fig 3).



Gender in CFA Membership and Management

The officials in CFAs mainly consist of the Chairperson, Secretary and the Treasurer, in some cases; these officials have assistants and make be supported by an Organizing Secretary. In most of the CFAs in ecosystems, 1/3 of the officials are females thereby conforming to the Kenya Constitution 2010 which requires that in every committee, one third of the officials must be females. However in community's indigenous communities such as the Ogieks in Mt. Elgon and the Sengwers in Cherangany Hills, this is not the case since they still hold to their cultural norms

which do not believe that a woman should hold a position in the community institutions such as CFAs. Where women participation is allowed, the number of members who are women in these associations is more than that of men showing signs of gender equity. Table 1) below shows representation of CFA officials in different CFAs.

Table 1: Representation of CFA officials by gender

CFA	Chairperson	Secretary	Treasure
Kaberwa	Male	Female	Male
Kaboywo	Male	Male	Female
Cheptais	Male	Female	Female
Kimothon	Male	Male	Female
Saboti/Sosio	Male	Male	Female
Kiptogot	Male	Male	Male
Suam	Male	Male	Female
Sekedu	Male	Female	Male

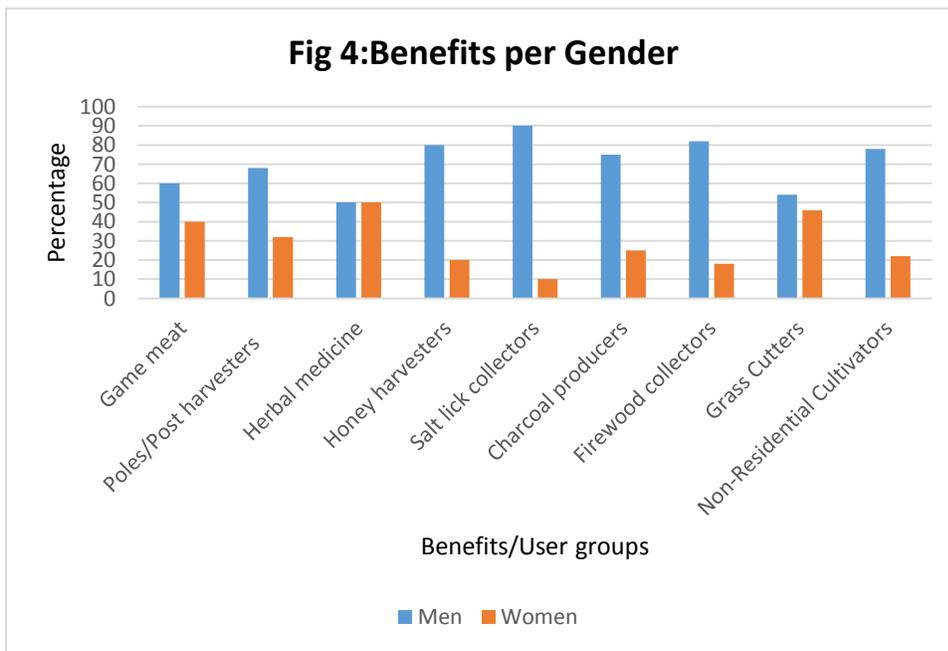
As shown in the table above the chairman position is owned by men. This is because the communities still believe that a man should own the highest position in a society due to the African culture. However most communities are beginning to embrace the fact that women can take up leadership positions.

Gender and Benefits

Participatory Forest Management has a number of benefits that the adjacent communities get. The benefits can be derived from minor and major forest products including wood and non-wood products. Of the two, CFAs benefit mainly from minor forest products since most of the management agreements exclude extraction of major forest products such as logs for timber production and poles for power transmission. In terms of gender, while men mostly benefit from wood products, women benefit mainly from minor forest products. Listed below are some of the minor benefits to the user groups in both Mt. Elgon and Cherangany Hills forest ecosystems:

- Game meat
- Poles/Post harvesters
- Herbal medicine
- Honey harvesters
- Salt lick collectors
- Charcoal producers
- Firewood collectors
- Grass Cutters
- Non-Residential Cultivators

Women benefit more from the minor forest products like firewood, grass, salt, herbal medicine which are used by them to keep their households going. Commercial products like charcoal and posts/poles benefit men than women because charcoal producers and pole harvesters are mostly men who sell the products for income generation (fig 4).



Gender and Agroforestry

Agroforestry is one of the activities for livelihood improvement in PFM systems. Agroforestry practices contribute to forest conservation by reducing the number of trees cut for firewood

(KEFRI, 2017). 91% of the households said that they have trees on their farms which they use for firewood. The tree species grown on the farms in both Mt.Elgon and Cherangany Hills forest ecosystems include Eucalyptus, Grevillea, Cyprus and Pine. Most of the tree species are exotics introduced into the area because they are fast growing (KEFRI, 2017) and have higher productivity than the indigenous ones. Eucalyptus is mainly grown for commercial purposes in households that own woodlots. Over 80% of the households grow trees within their farms for household use. Most of the trees are harvested for firewood and poles for construction. Women benefit more from the trees on the farms since they are the ones responsible for the management of the household resources such as firewood for cooking. The availability of firewood from the family farms has reduced the number of hours women use to collect firewood from the forests. Men on the other hand benefit more from the commercial trees like the eucalyptus since they sell the logs and posts for income generation to sustain their families. This is also attributed to the fact that most (75%) are households are headed by men.

Conclusion and Recommendation

The above discussion has highlighted the gender disparities which exist in PFM practices in the Mt. Elgon and Cherangany Hills ecosystems of Kenya. This can be observed in other parts of the country and the region where PFM is practiced (Ongugo, et.al. 2017 and Sunderland and Pottinger, 2015). Instituting change in CFAs has proven to be difficult despite the fact that such local institutions were introduced to bring equity and in the forest sector and thereby ensure livelihoods enhancement and forest sustainability.

Apart from the CFAs which are encouraged by the forest sector managers, the most successful institution which promotes women participation and gender equity in households is formation or strengthening existing women's groups. Mabsout and Van Staveren (2010) in their study of 24 ethnic groups from Ethiopia conclude that policies for social change should best focus on change at group level. Agarwal, 1994 and 2010) has recommended that legislation on gender equity can help but is generally insufficient to address disparities in benefit sharing from different natural resource related activities.

Based on the results from this study and long term observations in the field, fundamental changes in society, particularly in developing countries study require attention of policy makers. These

include perception on gender roles, inadequate disaggregation of gender studies and the traditionally accepted societally allocated gender roles.

Benefits should accrue equally to the two gender in society and should not be based on the importance of the resource to the household. Women should benefit from extraction of major forest products just as men should also benefit from minor forest products since all the benefits are enjoyed in equal measure in the households. There should also be a paradigm shift where men seem to take a larger share of commercially important products such as timber for construction and poles for electrical power transmission.

Finally, sustainable forest management can therefore be achieved through re-orienting forestry profession, and making its institutions more responsive to changing societal needs. These changes include recognizing forest adjacent communities as key stakeholders, empowering institutions responsible for forest governance (KFS), and advocacy groups, improving quality and relevance of forestry education and training, setting forestry research and extension agenda to address dynamic changes of societal needs. The changes should be accompanied by forest information and benefit sharing amongst stakeholders to guide evolution of sound forestry practices to achieve desired management goals.

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