



Tropentag 2019, Kassel, Germany
September 18-20, 2019

Conference on International Research on Food Security, Natural Resource
Management and Rural Development
organised by the Universities of Kassel and Goettingen, Germany

Participatory Forest Management in West Usambara-Tanzania: What Is the Community Perception of Success?

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Introduction

The participatory programs have been central to natural resources management, notably forests, in many resource-rich countries in the past three decades (Berkes, 2010). The countries such as Tanzania, Indonesia, India and Nepal, for example, have internalised the participatory approaches in which the communities participate in the forest resources management (Agrawal and Gupta, 2005; Adhikari et al., 2007; Blomley and Iddi, 2009; Lestari et al., 2015). In essence, the participatory approach is the devolution strategy where resource management is brought closer to the community as a result of the challenges identified in the centralised management (Gurney et al., 2016).

In Tanzania, the community participation, which gained momentum in 1990s, bases on participatory forest management (PFM) framework. The PFM recognises two types of community participation (institutional regimes). The first one involves the communities as co-managers in state-owned forest known as Joint Forest Management (JFM), while in the other; Community Based Forest Management (CBFM), communities are complete owners of the resource (Pailler et al., 2015; Gross-Camp, 2017). The JFM legalisation bases on the contractual agreement known as Joint Management Agreement (JMAs) signed between the villagers through the village chairman, and the state through the district forest manager, or in the local government through district executive director (Mbwambo et al., 2012; MNRT, 2013). On the other hand, the CBFM arrangement has to take place in the formally recognised village land (MNRT, 2007; Blomley and Iddi, 2009).

Despite the challenges, Tanzania is among the countries considered as champion in the participatory programs and often cited as a case of success in Africa (Mustalahti and Rakotonarivo, 2014; McLain and Lawry, 2015). Notwithstanding the importance and benefits of the forest to the local population (Strauch et al., 2016), and almost two decades of participatory programs, the perceived performance of the program by the communities in achieving the intended goals such as the community benefits and the resource well-being is not well understood in Tanzania. The lack of insight limits the gauging of the outcome of the participation program to improve community welfare and forest condition. Though the actual increase in number and areas of forest under the participatory program is reported (Wily and Dewees, 2001; Blomley and Iddi, 2009); it is not clear if this increase eventually benefits the communities and resource condition. The few available studies (Pailler et al., 2015; Persha and Meshack, 2015; Gross-Camp, 2017) have assessed the intended outcome of the PFM on local people livelihoods, without consideration of the actual processes towards achieving those livelihoods. As a result, little is understood about the incentives for communities' participation, and this gap may hinder the development of informed policies.

This paper, therefore, aims at assessing the communities' perceived performance of the participatory program in engaging villagers in participation in forest management in West Usambara considering the main goals stipulated by the PFM. The two research questions were asked; (i) Are there perceived differences in levels of participation between communities engaged in a joint state-community and community-managed forest, and what reasons explain the difference? (ii) What are the factors explaining the variation in participation intensity? As the hypothesis, the study intends to test whether communities around the state and community forest perceive different benefits flow from the forest; if true, then the community perceiving higher benefits would have a higher motivation in forest activities participation.

To achieve the study purpose, three objectives were considered; (a) to compare level of participation between institutional regimes based on participation components; (b) to rank the communities benefits and management activities; (c) to develop the participation index to categorise households in participation intensity and analyse factors influencing the intensity of participation.

Material and Methods

The study collected data from 159 households distributed across the Sunga and Goka (79 households) around state forest (JFM) and Viti and Kibaoni (80 households) around community forest (CBFM). The two villages, Sunga and Goka, surrounds the Shagayu Forest reserve, a state-owned forest with an area of 7830 hectares (Mbwambo et al., 2012). The difference between Sunga and Goka is the location relative to the main road with the Sunga households near the roadside, while Goka is located in the interior. The other two villages, Viti and Kibaoni surround the Chambogo Forest reserve, which is about 605 hectares (Haruyama and Toko, 2005). The factor analysis based on the principal component factors were aggregated, and the mean level of participation of each component was compared between JFM and CBFM to gauge the overall community participation in state and community regimes. From the PCA, each factor component was then operationalised as dependent variables which entered regression (OLS) to assess the factors influencing the participation in each of them (Chhetri et al., 2013). The Pebble Distribution Method (PDM) (Shiel et al., 2002) ranked the benefits accessed and activities done, and variation between villages in state and community-managed forests.

Results and Discussion

The participation components summarised from factor analysis indicate a variety of perceived participation between households around the joint state-community and community-managed households.

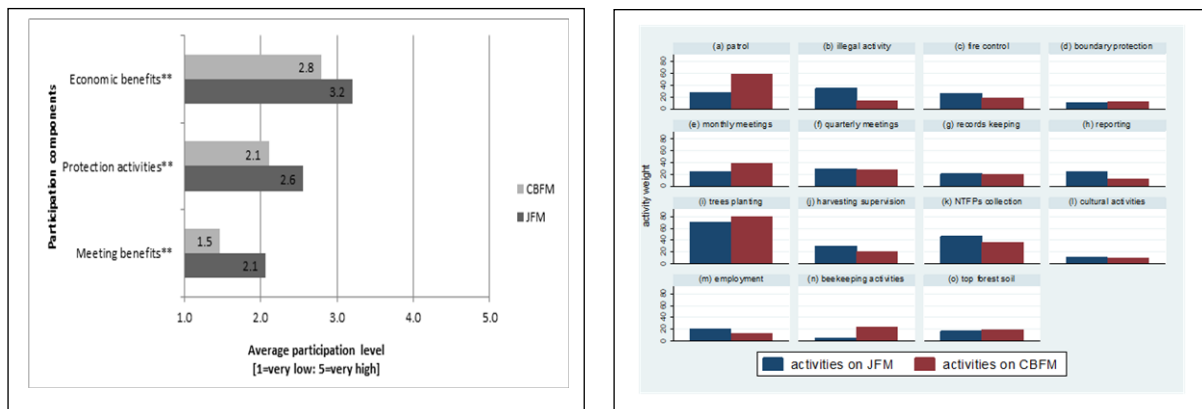


Figure 1: The average participation components scores (left) and ranking of the activities of the villagers (right)

The mean scores (Figure 1 (left)) indicated the significant perceived difference in economic ($p=0.003$), protection ($p=0.012$) and meeting benefits ($p=0.0001$), with higher scores for villagers around state-community jointly managed forest. The economic incentive was rated the most important component for the villagers' participation, followed by forest protection activities while meeting attendance had the lowest score. Further, regarding the benefits and management activities ranking by the villagers indicated that forest patrol was mostly supported while boundary protection ranked the least (Figure 1 (right)).

Table 1: Factors influencing the participation intensity

VARIABLES	Participation intensity
Training (1= yes)	0.144 (0.0343)***
Trust on NGOs (1=high confidence)	0.196 (0.0328)***
Institution regime (1= JFM)	0.104 (0.0306)***
Constant	0.0871(0.0914)
Observations	159
Adjusted R-squared	0.439

*** $p<0.01$, ** $p<0.05$, * $p<0.1$; standard errors in parentheses

The findings are rather surprising as they differ from the general understanding that complete ownership of the forest would attract more community participation due to sense of resource ownership, among other factors. The reason for the discrepancy could be due to different requirement following introduction of the participation concepts. The forest devolved for the community management was more degraded and needed more investment in terms of the regeneration, but also changing the community mind-set to understand their role as managers and forest owners. The overall participation intensity is influenced by the training in natural resources management activities, the experience

people had with the NGOs operating in the area which built their trust, and location favouring the households in the state-community managed forest (Table 1).

Conclusions and Outlook

The study indicated the variation of the perceived participation in the forest activities between households around the joint state-community and community-managed forest. Therefore, raising awareness and improving communication with villagers, fulfilling promises for the communities related to forest benefits and provide more forest linked benefits interventions can improve the situation in West Usambara. The participation should be seen as long-time evolution strategy aimed to empower the communities rather than a project phase undertaking which use the communities only to fulfil the instrumental role. This study implies the importance of considering the community views as important stakeholders in formulating participatory policy which consider community interest, their empowerment and resource sustainability.

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