

Gendered Barriers to Participating in a Payment for Ecosystem Services Project in Githambara Micro-Catchment, Upper-Tana, Kenya

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Introduction

International Non-Governmental Organizations have popularized payment for ecosystem services (PES) because of their potential to simultaneously achieve rural development and ecological conservation goals (GEF Secretariat 2014). Despite their rapid diffusion, there is insufficient assessment of their potential implications for social and economic stratification (Redford and Adams 2009). Indeed, there is growing evidence that PES may reproduce or even exacerbate existing inequalities in social development and resource access (Kosoy and Corbera 2010, Porras 2010). However, the gender dimensions of PES impacts has been the focus of little scholarship, despite concerns about women's exclusion from participating (e.g., Kariuki and Birner 2016) or their inclusion in ways that reduce their decision-making power within the household (e.g., Schwartz 2017). This research uses a feminist political ecology lens to add to this small but growing body of work through an examination of how the PES program implementation influences gendered equity in access and outcomes of the associated sustainable land management (SLM) practices.

Research Objective

The objective of this research is to investigate the gendered barriers to equitable access of the sustainable land management practices associated with NWF.

Methods

This presentation highlights preliminary results from field research completed in December 2017 in Githambara micro-catchment (Figure 2). Data collection included participant observation, two single gender community meetings, individual interviews in twenty-four households, and several farm tours. In each household the main male and main female decision maker was interviewed. In female headed households only the female household head was interviewed. Twenty-two women and twenty men were interviewed in total.

In addition, three extension officers involved in implementing the NWF were included as research partners. In addition to participating in data collection, the three were interviewed in three focus group discussions.

Barriers - Men

- Lack of technical knowledge on how to construct the water pan and terraces despite the assistance provided
- Some men prefer to be the key decision makers on water pan site location – delays ensue when women are asked to make the decision by implementers
- Alcoholism limits the involvement of some men



A poorly constructed terrace

Recommendations

- Many barriers can be addressed by scaling up (to include community level efforts) of ongoing farm level efforts. For example, SLM begins with a farm plan that farmers can follow even when there is a delay in delivery of the tools they need. Scaling this up to include a micro-catchment plan may address barriers connected to conflicting priorities and lack of technical knowledge.
- Faster delivery of tools and services that support SLM practices so that farmers don't reverse their decisions to participate in some practices (water pan), or delay completion of others (terraces). Underlying reasons for current delays need to be examined and addressed.
- Riparian management should begin where the farmers are and slowly progress to where NWF wants them to be.
- Implementers should follow up with farmers to support the progress they make and address persistent challenges.

Upper Tana in Context

The Tana is the longest river in Kenya, covering an area of approximately 17,000 km² and with a population of about 5.3 million. Figure 1 shows the extent of the Upper Tana Basin. The Upper Tana serves the most agriculturally productive region in Kenya, provides half of the total hydroelectric power used in the country and 90% of water used in Nairobi, a city of over 3 million people. The Nairobi Water Fund (NWF) engages major downstream water users - principally large private sector companies - to contribute to a fund that supports SLM activities among small-scale farming households in the upstream farming zones (TNC 2015). NWF is the first of its kind in Africa and is, therefore, an important model for other watersheds on the continent.

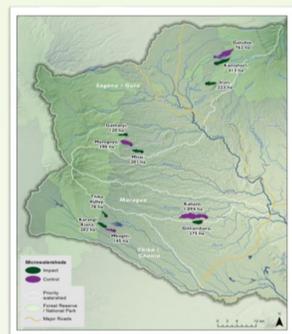


Figure 2: Githambara Micro-Catchment Location (Source: TNC 2015)



Individual interview

Barriers - Women

- Land access limits viability of some SLM practices (e.g. water pan)
- Financial constraints – this was discussed in connection to hiring labor for water pan construction
- Long waits for napier grass (for grass strips) and tree saplings (for agro-forestry) delivery. Some women went outside the project to find napier grass.
- Conflicting priorities between local farmers and the NWF. Riparian management involves creating a buffer zone of vegetation adjacent to the tributaries of the Upper Tana. This vegetation excludes agriculture, which is the land use that women prefer in this zone "because there is water there".



Lack of completion of SLM despite observed benefits



Benefits of scaling up

SLM Adoption Rates

Table 1 below shows the sustainable land management practices that have been promoted in Githambara and their rates of adoption. Overall, men and women see the benefits of the SLM and are eager to adopt them. There is a preference for practices the people have previous experience with such as terraces, grass strips and agro-forestry. It is important to note that adopting a practice does not mean that a farmer has completely implemented it – for example, they may be required to dig seven terraces but have only dug two. Our results explain what is holding farmers back.

Table 1: Adoption rates for sustainable land management practices

Intervention	Percent of land parcels
Terraces	100
Grass strips	92
Agro-forestry	76
Water pans	40
Riparian management	28

Barriers – Men and Women

- Misunderstanding of the goals of NWF – confusion between water "harvesting" and water "storage".
- Long waits for water pan liners
- High labor requirements for the prescribed sustainable land management practices



Water pan (outside Githambara site).

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Roadside gully erosion

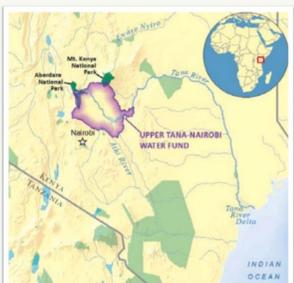


Figure 1: Upper Tana Location (Source: TNC 2015)