Enabling Innovation: Gender and Agroforestry in Sunyani, Ghana

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Introduction

The analysis of gender and farm forestry in Ghana has over four decades of research to support the argument that gendered relations of land, labour, capital and knowledge influence the potential of male and female farmers to engage in agroforestry practices. Research further identifies the need for fine-tuned technologies that enable women farmers to innovate, even within the limitations of existing systemic, organizational and individual capacities. In 2007, Kwame Nikum University of Science and Technology established the project entitled “Agroforestry Practices to Enhance Resource-Poor Livelihoods” (APERL) to introduce interventions that will enhance the livelihoods of people in three communities in Brong Ahafo Region – Tain, Tain West and Fiame to facilitate forest communities. The 2007 census population of these three communities is 14,970 persons living in approximately 2,635 households. The communities are located near the borders of the Tain II Forest Reserve, a government forest reserve that presently forms an area for the implementation of a national forest rehabilitation plan, based on the active participation of the communities. This program involves a modified ‘taungya’ system of forest co-management and development of viable non-timber forest products to support resource-poor communities. The farming communities, apart from benefitting from the food crops planted in the rehabilitation areas, also have a share in the tree crops they assist in developing. The overall goal of the APERL project is to enhance livelihoods of the resource-poor, many of whom are women farmers.

In 2008, a baseline study involving 849 households in the APERL project area (about 32% of the total households) area was conducted. This poster presents some of the key points regarding the on-going gender analysis of the baseline data. We focus on issues specific to land, labour, capital and knowledge as critical limiting factors affecting the potential of farmers to engage in agroforestry practices. The aim is to highlight areas of gender analysis for further investigation as the project progresses.

Methodology

A multi-level approach was used for the collection of both qualitative and quantitative data, and cross-validation of information. After an initial review of relevant secondary sources of information, two distinct steps (i.e. questionnaire administration through a structured individual farmer interview and focus group discussions) were conducted. In each community, the questionnaire was administered to a random sample of households. The total sample size across all communities was 849 households giving a confidence limit of ±3.5% at the 95% confidence level. The Statistical Package for Social Sciences (SPSS) was used to analyze data that included approximately 300 variables. Following initial data entry, a report was generated to describe the socio-economic profile and other general characteristics of the three communities (APERL, 2007). Initial data compilation was presented in a workshop involving community and district representatives to generate further discussion and identify further research questions. To date, gender analysis has involved sex-disaggregation of all demographic and production information for the households. Women made up 62% of the sample. As well, emphasis has been placed on cross-tabulations based on marital status because 37% of respondents were female and “single” (divorced, separated, unmarried or widowed). Our research questions therefore focused on how farm and forest plantation activities were affected by the absence of a male partner, as well as variations in resource access (e.g. land tenure, off-farm income, information) among female-headed households.

Key Findings and Discussion

Sex disaggregation of the data from these predominantly Christian communities (90%) indicate that sex is a significant variable with respect to education, marital status and social status. Across all communities, female headed households represent over one-third of households in the study. Gender analysis typically distinguishes between de facto and de jure head of the household in order to understand residency and decision making in the household. We noted that female-headed households (FHHs) were significant in the communities further away from the forest fringe. Results of the survey indicated that on average, 25% of respondents had no formal education. However, generational changes are evident. Among the surveyed households, only a few children of school-going age are not in school because of financial constraints. Sex disaggregation of information indicated that gender was significant overall (p<0.01) for all sources of agricultural information (government extension, NGOs, radio, non-formal education). However, marital status (single/married women) was not significant for all information sources. Radio was considered the primary source of accessible agricultural information by all farmers. Non-formal means of knowledge sharing are widely used (see the paper by C. Gibbs at this conference).

Aralable (food) crop production is the primary source of livelihood in all the three communities. Only a very small number (3%) of farmers produced only for home consumption. The main arable crops produced for sale and home consumption in the three communities are maize, cassava, plantain, okro, pepper, garden eggs, tomatoes and cocoyam. Due to lack of irrigation, processing and storage facilities in all communities, production is purely rainfed. Farmers have severe problems in marketing of farm products including access to affordable transport and price exploitation by farmgate buyers. The proportion of respondents that derive their primary income from agricultural production ranges from 87% in Ayakomaso, 71% in Dumesea and 63.2% in Fiame reflecting the peri-urban influence of Sunyani. Women and men generate additional income from livestock rearing, formal employment in public service and self-employment such as catering services, tailoring and other cottage industries. Less than 20% of respondents have savings accounts. Membership in farmers/women’s groups is also very low.

Land tenure arrangements are gendered in the project area. Men and women access all types of land, but gender accounts for specific combinations of the tenure arrangement held by a household. The study identified nine possible tenure land arrangements. Gender was a significant variable in relation to both the number and size of farmlands except in Ayakomaso, the community closest to the Tain II forest. With respect to agroforestry, the majority of the farmers report practicing a combination of more than one agroforestry technology and only a few respondents did not practice any of them. Modified taungya (mainly teak) is practiced primarily nearest to the forest reserves. Gender was not significant in relation to forest plantations suggesting that women are accessing the modified taungya system. Almost all farmers intentionally leave trees on their farms in Ayakomaso (92%), Dumesea (90%) and Fiame (90%) outside the forest reserve. Marital status was significant across all arable farms (size and number of farms) as well as, in relation to forest plantations suggesting that FHHs are facing different livelihood options than other women (married) farmers.

Concluding Remarks

Issues specific to land, labour, capital and knowledge in agroforestry in Ghana, indeed around the world, cannot be addressed without the systematic collection and analysis of sex-disaggregated data. Gender relations define and affect the potential of farmers to engage in agroforestry practices, especially in female headed households. Therefore, of specific relevance are the gender differences not just between men and women, but also among women, due to factors such as marital status, age and literacy. Agroforestry projects have an opportunity to employ gender analysis for the fine tuning of technologies in order to enable innovation, as well as meet the diverse needs of male and female farmers and their communities.

References


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