
MSc student Stanley Sharaunga (Agronomics, UKZN) studies the values rural households attach to forest resources

April 2012, University of KwaZulu-Natal



This study has been motivated by the fact that difficulties have continued to be encountered in sustaining community-based forest management (CBFM) programs in many rural communities of South Africa. The main problem affecting the sustainability of CBFM programs is the limited participation of households in such initiatives. The low household participation in CBFM programs have been attributed to the fact that the values households in most South African rural areas attach to forests are poorly understood for appropriate policy recommendations regarding CBFM programs. Thus, this case study sought to improve this understanding by examining the values households in KwaSobabili, New Reserve B and Gudwini communities of KwaZulu-Natal attach to forest resources and the factors influencing their participation in CBFM programs.

To identify the values that households in KwaSobabili, New Reserve B and Gudwini rural communities attach to forest resources (value orientations), 25 forest functions identified from several former studies by Bengston et al (1999), Geldenhuys (1999), Ngcobo (2002), Owen et al (2009), and SCI-SLM preliminary survey (2010) were compiled. The household head was asked to rate the importance of each of the 25 forest products and services on a five point Likert scale. To obtain quantitative measures of the values households attach to forests resources (forest value orientations) as well as to extract the dominant forest products and services that influenced such valuation, Principal Component Analysis (PCA) was used. To establish how the different socio-economic and institutional factors influence the values households attach to forest resources, Ordinary Least Squares (OLS) regression was used. The composite indices generated from PCA (proxies for the values households attach to forest resources) were used as dependent variables to identify the underlying relationships between these composite indices representing the values and other socio-economic and institutional factors.

To determine whether the values households attach to forest resources (composite indexes from PCA) socio-economic and institutional factors influence the households' position on participation in CBFM in KwaSobabili, New Reserve B and Gudwini rural communities, the MNL model was used. In this study, the decision to participate was indicated by the household's position/status on participation in CBFM. Thus, in this study, the position of the household on participation (participation status) in CBFM, a categorical variable; 1 = Already participating; 2 = not yet participating but willing to join; 3 = not willing to join the CBFM), was the dependent variable. Household head's characteristics (*i.e.*, age, gender, marital and employment status, level of formal education, level of environmental awareness) and household characteristics (*i.e.*, size, income, dependence on forest resources, proximity to forests and amount of firewood collected

by the household every week) were some of the socio-economic independent variables. Clarity of CBFM rules, source of CBFM control and presence of CBFM conflicts were some of the institutional variables used in the MNL model.

Results showed that, although most recent studies have noted a shift of public values towards bio-centric/non-commodity forest value orientation, for less affluent households such as those found in rural South Africa, anthropocentric values dominate. Moreover, anthropocentric and cultural/moral/spiritual values households attach to forest resources influence the decision whether or not to participate in CBFM. Other socio-economic factors such as gender, household size, high levels of income, total amount of social grants, perception of forest degradation, access to electricity, and distance to the forests also influenced the household's decision to participate in CBFM. It was concluded that the three communities predominantly attached anthropocentric values to forests because they less affluent and households emphasise that the forest and its resources create an income and provide a livelihood, above all other things.

The study recommended that, since poorer societies have more materialistic orientation towards forests, CBFM programs should target poverty alleviation/income generation as the central theme to enhance participation in CBFM. Moreover, policy makers are advised to determine the dominant forest value orientations of communities for appropriate policy recommendations on sustainable CBFM. It was also recommended that policy makers on CBFM should consider the 'full' values households attach to forests not just market-oriented forest values when recommending policies to foster participation in CBFM. Other recommendations are:

- Valuation of forest resources for policy recommendations regarding CBFM should be based on the local community's point of view;
- Government extension services and Non-governmental organisations development activities need to embrace CBFM and provide external support (e.g., education and awareness). This can broaden the participation base and ensure the sustainability of CBFM programs.