Tropentag, September 17-19, 2018, Ghent

"Global food security and food safety:
The role of universities"

Smallholder Farmers, Support Organisations, their Linkages and Influence on Woodlots Development in Mufindi District - Tanzania

Eckhard Auch[1], Yonica Ngaga[2]

[1] *Technische Universität Dresden, International Forestry and Forest Products: Tropical Forestry, Germany*
[2] *Sokoine University of Agriculture, College of Forestry, Wildlife and Tourism,*

Abstract

Woodlots have become the most important investment among smallholders in the southern highlands of Tanzania, including Mufindi district. Meanwhile, smallholder woodlots are major source of wood supply contributing to narrow the supply gap which in 2015 was reported to be 19.5 Mil. m^3 per year, where the main wood consumption sectors being construction and energy for heating purposes. However, the development of smallholder woodlots has been triggered by different support organisations. Despite these progresses, limited studies exist about smallholder woodlots, supporting organisations and their linkages. Therefore, our study specifically explored the smallholder's motivations, knowledge base and challenges to woodlots farming; assessed woodlot tree species, products and performance; analysed the linkages of woodlot farmers with support organisations and evaluated how these organisations have influenced the woodlots performance. This is crucial for determining future sustainability of these woodlots in the study area. Both survey and case study approaches were used to collect data. Mufindi district was purposively selected because of advanced smallholder tree growing. Then, three villages Igowole, Mninga and Nundwe were selected as case studies. A total of 72 tree grower households, 24 from each village were randomly selected and an in-depth interview conducted. During in-depth interviews with households and group discussion with tree grower associations, a total of 18 actors that link with woodlot farmers were identified and interviewed. For determining the woodlot performance, one woodlot from each selected household was assessed by rapid appraisal (RA). Moreover, the study examined if there is a significant difference or not in woodlots performance between organised and non-organised farmers, and between organised farmers with different support programs. From the linkage data, social network was analyzed. From which, important nodes that the woodlot farmers are linked to, were determined. These linkages were compared with woodlots performance assessment data to determine their influence. In additional to contributing to wood supply, woodlots provide resilience to farmers in terms of droughts, pests and diseases which lead to low crop yields. Trees improve soil fertility; wood products have stable prices and constant market. Thus, properly managed woodlots can contribute to increased farmers income and improved food security.

Keywords: Mufindi district, rapid appraisal, smallholder, social network analysis, support organisations, woodlot

Contact Address: Eckhard Auch, Technische Universität Dresden, International Forestry and Forest Products: Tropical Forestry, Pienner Straße 7, 01737 Tharandt, Germany, e-mail: eckhard.auch@tu-dresden.de