



2014 AWARD Fellow

**Rosalina Mahanzule**



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Position	Research Assistant
Institution	Institute of Agricultural Research of Mozambique (IIAM)
Country	Mozambique
MSc	Forestry Economics and Policy, Federal University of Paraná, Brazil, 2013
Mentor	Esperança Rosita Chamba, Researcher and Head of Cooperation, IIAM
Research Area	Assessment of agricultural programs in order to develop research projects and provide technical assistance on the socio-economic aspects of development.

Rosalina Mahanzule was drawn to forestry research because of her interest in the welfare of rural communities. "Forests are a key source of wood, food, fuel, medicine, and other resources for millions of people," she says. "To maintain them sustainably, you have to ensure the participation of local communities in their management and conservation."

During her undergraduate studies in forest engineering, Mahanzule learned about issues affecting forest ecology and management. Her BSc thesis considered some of the factors contributing to the environmental degradation of forested areas and their relationship with local livelihoods. Upon graduation, she obtained a position at the Socio-Economic Research Center at IIAM, where she was introduced to the socio-economic analysis of agricultural research issues.

The experience fostered Mahanzule's interest in agricultural economics, which she pursued during her MSc studies at the Federal University of Paraná in Curitiba, Brazil. Though very rewarding, the two-year program required great personal sacrifice, as she had to leave behind her husband and young children in Mozambique.

Mahanzule remained connected to Mozambique through her master's thesis research, which involved an assessment of the dynamics and economic competitiveness of the country's forestry sector. The results indicated that Mozambique is not benefiting from the export potential of its forest products, which are being sold as low-value raw material.

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"People are selling cut trees, with no added value, so the prices are very low," explains Mahanzule. "Mozambique is losing both its forests and potential export income, as well as a means of reducing poverty, because it doesn't have the processing technology to create higher-value products for export." She notes that 94 percent of the wood is going to China, where it is processed into products with added value, such as frames, furniture, or building materials that command high prices and generate income.

Based on her research, Mahanzule suggests that the government needs to invest in reforestation and tree farming, along with processing technology to increase jobs, reduce poverty, and raise the value of exported wood products. She proposes the need for laws to ensure that high-grade wood is not sold as unprocessed material. She also recommends tighter policy regulations and controls on forest resource products internally, along with a focus on increasing their value and competitiveness externally to create greater demand from more countries.

Currently, Mahanzule is analyzing Mozambique's charcoal value chain, including the sector's producers, traders, and consumers. Charcoal is a cash product and a major source of deforestation in Mozambique. The charcoal producers, who are almost exclusively men, use a traditional technology that involves burning large amounts of wood for small quantities of charcoal. The few cases of women producers involve women who are heads of households. More efficient technologies exist but need to be introduced and adopted by the producers.

Women appear further along the value chain, engaged in selling the charcoal. "Efforts to introduce improved technologies and increase the sector's productivity must take into account the gender dynamics and impacts," notes Mahanzule. She has analyzed gender differences in plant and tree use in Mozambique's national reserve in Niassa province, to understand and weigh the differences between variations in preferences and in the species that men and women consider as being important.

Going forward, Mahanzule wants to pursue a PhD, coordinate research projects in Africa, and collaborate more widely with other researchers. As an AWARD Fellow, she expects to increase her networks, visibility, and opportunities to share ideas, while strengthening her research skills.

"Agricultural research requires new ways of thinking," she says. "There's a strong role for social scientists to complement biophysical research and ensure that advances and priorities reflect the importance of various commodities, agro-ecologies, and their potential for poverty reduction."