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Farmers' and academia's views"

Agroforestry adoption in the context of clean cooking in central mozambique: constraints and enabling conditions

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Abstract

Most households in Mozambique use woodfuels to meet their domestic energy demand. The annual population growth of around 3 % puts an additional pressure on remaining forest resources and land use intensification. Therefore, sustainable woodfuel supply chains are vital to meet households' woodfuel demand and to protect natural ecosystems. Agroforestry is an agro-ecological practice which, together with improved and clean cooking stoves, can potentially reduce pressures on natural forests. However, little is known on the quantification of on-farm produced fuelwood and the adoption of agroforestry systems by smallholder farmers. In this study, we assess the presence or absence of the main factors necessary for transitioning to agroforestry systems in two villages in Central Mozambique, Zambézia Province, Gurué district, namely, Lioma and Mepuagiua. We aim at understanding how farmers' intrinsic motivations, governmental regulations and prevailing social norms affect the adoption of agroforestry systems in the study area. The study assessed the adoption level of 129 farmers of three main types of agroforestry systems (agrisilvicultural, silvopastoral and agrosylvopastoral systems) including the purpose and species used. In addition, we analysed farmers' demand for agroforestry and the potential for a widespread implementation of agroforestry practices in the study area. The results suggest that agrisilvicultural is the most predominant system in the study area. Furthermore, social norms and government regulations do not restrict adoption; however the policy in place facilitates and incentives non-agro-ecological farming. Lack of finance and investment possibilities are limiting the adoption of agroforestry systems, whereas woodfuel shortages have been identified as drivers of adoption.

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