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Farmers' perceptions of pollinators' importance in coffee production in Uganda

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ABSTRACT

Coffee (*Coffea canephora*) is the principal cash crop and the country's largest agricultural foreign revenue earner in Uganda. Previous surveys confirmed that coffee grown in central Uganda was largely depending on bee pollination to set fruit set. Despite its high contribution to the economics of agricultural sector in Uganda and despite its great dependency to bees for fruit set, it is not clear if small-scale farmers are aware of the importance of managing farm-landscapes for pollination services conservation to increase coffee yield. The aim of this study was to assess farmers' perceptions and knowledge of the importance of pollinators and pollination services conservation for coffee production enhancement. The main hypothesis was that small-scale coffee growers were not aware of the relevance of pollination services for coffee production. Farmers' surveys were conducted in coffee-banana farming systems in central Uganda. It was found in this study that more than 90% of interviewed farmers were not aware of the role played by bees in coffee yield increase. Farmers were not willing to manage their lands to protect pollination services, particularly because they considered pollination service as an unsolicited "free service", or as a "public good". Farmers were not aware of the role of semi-natural habitats serving as reservoir (hiding points) for pollinators in the surrounding of coffee fields. However, they were aware of some ecosystem services delivered in the coffee-banana farming system such as planting shading trees. Only 3.3% of respondents believed that placing beehives in coffee farms could increase the yield. The study recommended the increase of the awareness of small-scale coffee growers on the importance of pollinators to increase coffee production. It is recommended that future management of pollination services are built on improving farmers' indigenous knowledge and on adequate understanding of the ecology of the local pollinator species. There is a need to broadly scale-up best field, habitat and landscape management strategies and practices that are friendly to coffee pollinators in rural landscapes of Uganda

KEYWORDS

Coffee Production; Ecosystem Services Delivered in Farmlands; Pollinating Services; Farmers' Perceptions of POLLINATORS; Pollinators Conservation; Pollinator-Friendly Farming practices; Uganda

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