

**SOCIO-ECONOMIC ANALYSIS OF BEEKEEPING AND THE EFFECTS OF
DIFFERENT TECHNOLOGIES ON HONEY YIELDS IN LIRA AND ADJUMANI
DISTRICTS, UGANDA**

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Abstract

Beekeeping industry is an important source of income for many rural households in Uganda. In Lira and Adjumani districts several organizations are promoting commercial beekeeping but it is not clear whether the interventions are producing the desired outcomes. Limited information is available on beekeeping technologies and the profitability of the beekeeping enterprise. The objectives of this study were to (i) assess the socio-economics of beekeepers and identify the existing beekeeping technologies (ii) evaluate honeybee colony productivity in the different beehive types and (iii) assess the profitability of the beekeeping activity in Lira and Adjumani districts. A total of 123 beekeeper from the two districts were randomly selected and interviewed. Field observations were used to collect data on selected variables from 16 apiaries. Descriptive statistics, logistic regressions, and profitability analysis were used to analyze the data. For beekeepers in Lira and Adjumani, honey was second most important source of income after crop and livestock production. Traditional hive was the predominant hive type that was used, others being Kenya top bar hive and Langstroth hive. Beekeepers who received training owned significantly more Kenya to bar hives compared to those who did not. They also used better management practices and improved equipment. The level of income was correlated to the

colonization methods, honey processing and use of protective wear. In addition, experience of the beekeepers was significant in predicting use of protective wear. For both districts, beekeeping was a profitable enterprise, honey yields and returns and investment from Kenya top bar hives were significantly higher than from traditional hives. Realized annual net profit (per hive) was Ugx. 157,386 in Lira and Ugx. 129,094 in Adjumani. The annual return of investment was Ugx. 5.1 and Ugx 4.5 in Lira and Adjumani districts respectively. Colony productivity in Kenya top bar hives was positively associated with training in Beekeeping. Experience and household size. On the other hand, colony productivity in traditional hives was positively associated with beekeeper's experience. The major challenges the beekeepers faced in the study districts included: high cost of beekeeping equipment, pests and predators, inadequate knowledge and skills, low honey yield, inadequate extension services, inadequate market information, high transport costs and low prices. Hence, it is recommended that Kenya to bar hive should be promoted and the beekeepers empowered with relevant skills to increase on the honey productivity and profitability in Lira and Adjumani districts.