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Empirical Analysis of Honey Productivity among Local Beekeepers in Sanga, Kaduna State Nigeria

Onuwa G.C[1*].

[1]Department of Agricultural Extension and Management, Federal College of Forestry, Jos, Nigeria.

*Corresponding author: Onuwa G.C.; Email: onuwag@gmail.com; Tel: 08035606473

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Abstract

Beekeeping is a sustainable form of agriculture that supplements rural income and nutrition requirements; however, gross underutilization and inadequate exploitation of bee keeping potentials persists. Productivity analysis is an important consideration in measuring firm efficiency or performance. This study therefore estimates profitability and honey productivity among local beekeepers in Sanga, Kaduna state, Nigeria. Primary data collected via random sampling were evaluated using descriptive statistics, farm budget model and Total Factor Productivity (TFP) index. The study revealed that net farm income of honey production was ₦19,900/hive; percentage profit margin and benefit-cost ratio were 48.5% and 0.94 respectively. Furthermore, 66% of the beekeepers were sub-optimally productive as their TFP indices were below the optimal scale; attributable to sub-efficient input mix and cost of production inputs. The major constraints of honey production in the study area were cost of modern technology (92%), inadequate capital (74%), inadequate extension support (66%), poor access to credit (50%), climate factors (42%), shortage of forage plants (38%) and lack of incentives /training (26%). Forage improvement, input supply and subsidy, improved funding, incentives, interventions, extension support and access to agricultural credit for local beekeepers are strongly recommended.

Keywords: Apiculture, beekeepers, constraints, honey, profitability, total factor productivity

1.0 INTRODUCTION

Apiculture (Honey production) presents an untapped natural resource that will help diversify farm household income and alleviate rural poverty. Apiculture can also be referred to as the art and science of beekeeping; it comprises collection and bee management, bee forage and crop pollination, wax and honey production) in either small or large scale. Beekeeping for honey production is a profitable agricultural enterprise. It is an important foreign exchange earner for those that export honey and bee wax. Following the production trends, China is the number one honey exporter in the world, selling $246,550,000 (12% of total natural honey exports in the world) closely followed by Argentina with $212,637,000 (10.3%) and New Zealand at third with $139,316,000 accounting for 6.8% of total natural honey exports in the world (Ayansola, 2012). The experiences of apiculturist in developed economies show that commercial apiculture is a money spinner. However, beekeeping as a commercial venture is still largely unexplored in Nigeria, and the country meets most of its domestic demand for honey by importation from producer countries and locally from small scale beekeepers (Ayansola, 2012). There is a growing consumption of honey and other bee products because of its high nutritional and medicinal value (https://www.fao.org/3/w0076E/w0076e10.htm). With the current growth in domestic consumption of honey in most part of the country; apicultural enterprise and demand for its products is bound to increase. It could provide food, nutritional, and livelihood security for smallholders in ecologically sustainable systems. Apiculture can be practiced as a hobby, a part time or fulltime occupation. At times depending on how it is practiced, it could be seen

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