

ASSESSING THE INFLUENCE OF THE HONEY BEE MANAGEMENT
PRACTICES USED BY MODEL FARMERS ON HONEY PRODUCTION IN
TORORO DISTRICT

BY

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ABSTRACT.

Much as there are signs of the role played by beekeeping management practices on productivity, very little information is currently available. The purpose of this study is to assess how the bee farmers manage their colonies for honey production within Tororo district and to determine the relationship between beekeeping management practices and honey bee colony productivities. The study was carried out in the in 9 farms located in the Seven sub-counties of Paya, Kirewa, Nabiyoga, Soni, Sop Sop, Nabiyoga Town council, Mukhwana in West Budama constituency in Tororo District in Eastern Uganda. The researcher used the Questionnaire, Observation and Direct interview methods to gather Data. The results of the study showed that males are more involved in Bee keeping than females in the ratio of 7:2. Only two model farmers were knowledgeable about the honey bee diseases like American foulbrood disease, 07 model farmers were able to name a few common honey bee pests like which included the, wax moth(most common), black ants, spiders, Geckos, red ants, beetles, lizards, monitor lizards, squirrels, snakes, honey bee molds, wasps. The most Common pest was the Black ants with 5 cases and the least reported pest was the Red ant with only 2 cases.

Conclusively, the study shows that, Model bee farmers of Tororo district used cultural practices of disease and pest management. Most bee Farmers were not well informed about the pests and diseases and could not identify the diseases confronting their colonies. Model farmers of the study areas owned both Langstroth and modern bee hives. The major management challenge reported was limited knowledge on pest and disease identification and management and the least reported challenge was laziness amongst the Model farmers to inspect their colonies.

The Model Farmers interviewed were not knowledgeable in pests and disease identification by name or characteristics so, a well detailed study should be carried out to identify and classify the different pests and their species and diseases within Tororo District. The government through the ministry of Agriculture should organise more trainings on honey bee pests and diseases to equip Model farmers with this knowledge of pest and disease identification and modern management of these pests and diseases and Women should as well be encouraged to engage in bee keeping so as to ensure increased honey production.

APPROVAL

This thesis has been submitted to the graduate school with my approval as the University supervisor.

Signature.....

Date.....

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DECLARATION

I OCEN PETER, confirm that this research proposal is entirely my original work and has not been presented for any award of a degree or whatsoever in any institution of higher learning unless otherwise cited.

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OCEN PETER

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DATE.

DEDICATION

This dissertation is dedicated to my Sponsor, the RUFORUM and my Carrier mentors Madam Namusana Hellen, Dr. Andama Edward, Dr. Joseph Hokello, Mr. Kifuko Richard, and Mr. Wamboga Emma, My Step Mothers (Margaret Akello and Florence Amunyo) , Teacher, Hellen Asano Brother Simon Osika, Sister Sarah Apio, and Friends (Benson Ssenkima, Bosco Omiot, among others)for all forms of support they offered to me in the struggle to achieve my dreams at Busitema University.

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List of Abbreviations Used.

TODBEFA- Tororo District Bee Farmers Association.

NABEFA- Nabiyoga Bee Farmers Association.

KFDA- Kirewa Farmers Development Association

AFB- American Foulbrood.

EFB- European Foulbrood.

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1 CHAPTER ONE: INTRODUCTION

1.1 Background

Beekeeping (Apiculture) is the maintenance of bee colonies commonly man made in order to collect honey and other products that hive produces like; honey, bee wax, flower pollen, propolis (Lloyd, 2021).

Bee keeping contributes a lot to reduction of poverty, conservation of natural resources, and sustainable development (GDS,2009; Gidey and Mokenen, 2010; Gebremedhin et al.,2012).

According to Amulen 2019, good management and the introduction of a reliable nectar source, to off-set dry season challenges like absconding, would improve on the beekeeping productivity.

1.2 Current production of Honey.

In 2019, the global production of honey was 1.9 million tonnes and China was ranked as the leading honey producing country in the world with a production volume amounted to 444 metric tons of honey which accounts for 24% of the overall production (Shahbandeh, 2021). Other major producers include Turkey, Canada and Iran.

The African continent currently produces 10%, about (169,000 tons) of the honey (AU-IBAR, 2019) and 23% of the beeswax produced worldwide and its used for both home consumption and export (Ali & Jabeen, 2017).

The Sub-Saharan Africa has a relatively lower honey production compared to its expected capacity (Amulen et al., 2017). This low contribution has been attributed to poor management practices and insufficient impact research activities, ineffective control of pests and diseases (Amulen,2019).

In East Africa, Tanzania is the largest producer with 45,300 tonnes followed by Kenya with 7300 tonnes, then Uganda and Rwanda with just 4000 tonnes annually (USAID,2014).

In Uganda, Honey production has increased seriously which made the E.U to license it to export honey by 2005 which created immense opportunity. Unfortunately, the production potential isn't fully exploited as many Pests attack honey bees resulting into big colony losses (Kajobe,2016) and so, beekeepers harvest just 1% of the estimated 500,000 tones total potential (Amulen et al.,2017).

In Uganda, Eastern Region where Tororo is located has been noted as one of the low production Zones of Honey in the country and this production has been associated to the poor management practices (Amulen et al., 2019). This quantity is too low to meet the local national, regional and

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