

FACULTY OF AGRICULTURE AND ANIMAL SCIENCES DEPARTMENT OF ANIMAL PRODUCTION AND MANAGEMENT CONSTRAINTS AND CHALLENGES TO APICULTURE PRODUCTION IN ALEBTONG DISTRICT

BY

ETUM DENNIS

BU/UG/2018/2124

A RESEARCH DISSERTATION SUBMITTED TO THE FACULTY OF AGRICULTURE AND ANIMAL SCIENCES IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR AWARD OF THE DEGREE OF BACHELOR OF ANIMAL PRODUCTION AND MANAGEMENT OF BUSITEMA UNIVERSITY

FEBRUARY 2022



DECLARATION

I, ETUM DENNIS declare that this dissertation is my original work and has not been		
submitted to any academic institution for award of any academic qualification.		
Signature	Date	
Approved by my Supervisor:		
PROFESSOR DEO OLILA		
Signature	Date	

DEDICATION

I dedicate this work to my beloved family for their support and encouragement as well as to all those who embrace apiculture as an economic activity.

ACKNOWLEDGEMENTS

I thank the almighty God for the grace and strength accorded to me and all those who supported me.

Special appreciation and gratitude go to my supervisor, **Professor Deogracious Olila** for his invaluable academic contribution and positive critism and direction; it is through his diligent guidance that this dissertation has been shaped to its present form. I also thank him for his parental guidance throughout the production of this work; may God bless him.

Special thanks also go to the research coordinator, **Dr. Henry Matovu** for his tireless guidance throughout the process of producing this dissertation.

Let me recognize positive contributions of the directors of Viva College School, **Mr.** and **Mrs. Juma Kisaane**. It is through them that I have reached this far, may Allah reward them abundantly for producing the great minds that shape the world.

I also extend my heartfelt gratitude to the DPO of Alebtong district, **Dr. Charles Noki** for granting me permission to carry out the survey in his area.

To my fellow students, the experiences we shared have immensely shaped my perspective and understanding of apiculture.

To my research correspondents, this document would not be complete without their cooperation. I thank them all for their time and responses.

Last but not least, I thank Busitema University for giving me the opportunity to pursue this program. May you continue pursuing excellence!

TABLE OF CONTENTS

Contents

DECLARATION	i
DEDICATION	ii
ACKNOWLEDGEMENTS	iii
TABLE OF CONTENTS	iv
LIST OF FIGURES	vi
LIST OF TABLES	vii
LIST OF ABBREVIATIONS/ACRONYMS	viii
ABSTRACT	ix
CHAPTER ONE: INTRODUCTION	1
1.1 Background	1
1.2 Research problem	2
1.3 Study objectives	2
1.3.1 General objective	2
1.3.2 Specific objectives	2
1.4 Research questions	2
1.5 Significance of study	2
1.6 Justification of study	3
1.7 Scope of study	3
CHAPTER TWO: LITERATURE REVIEW	4
2.1 Introduction	4
2.2 Apiculture production in Uganda	4
2.3 Socio-economic importance of apiculture	5
2.4 Constraints and challenges to apiculture sector in Uganda	6
2.5 Beekeeping systems	10
2.5.1 Migratory beekeeping	10
2.5.2 Fixed beekeeping system	10
2.6 Types of beehives	11

W Edit with WPS Office

2.6.1 Traditional beehives	11
2.6.2 Transitional hives (top bar hives)	11
2.6.3 Modern hives	11
2.7 Husbandry practices in apiculture	11
CHAPTER THREE: MATERIALS AND METHODS	13
3.1 Research approach	13
3.2 Sampling	13
3.3 Operational design	13
3.4 Observational design	13
3.5 Statistical analysis	13
3.6 Data presentation	14
3.7 Ethical consideration	14
3.8 Environmental consideration	14
3.9 Limitations	14
CHAPTER FOUR: RESULTS	15
4.1 Part A: Bio-Data of Respondents	15
4.2 Part B: Descriptive Analysis	17
CHAPTER FIVE: DISCUSSIONS	23
6.1 Conclusions	26
6.2 Recommendations	26
REFERENCES	28
APPENDICES	
Questionnaire	
Common beehives used by farmers in Alebtong district	
Common pasts and parasites encountered	36

LIST OF FIGURES

Figure 1: Farmers experience in apiculture farming in Alebtong district17
Figure 2: Reasons for practicing apiculture by farmers in Alebtong district18
Figure 3: Husbandry practices applied by farmers in Alebtong district21
Figure 4: Constraints and challenges to apiculture production in Alebtong district22

LIST OF TABLES

Table 1: Sex of respondents	15
Table 2: Marital status of respondents	15
Table 3: Educational status of respondents	16
Table 4: Age of respondents	16
Table 5: Beekeeping systems used by farmers in Alebtong district	19
Table 6: Beehive types used by farmers in Alebtong district19	
Table 7: Colonization rates of different beehive types	20

LIST OF ABBREVIATIONS/ACRONYMS

DPO District Production Officer

KTB Kenyan Top Bar

MAAIF Ministry Of Agriculture, Animal Industry and Fisheries

FAO Food and Agricultural Organization

NGO Non-Governmental Organization

UEPB Uganda Export Promotion Board

MT Mega ton

ABSTRACT

The main objective of the study was to establish constraints and challenges to apiculture production in Alebtong district. A survey was conducted in two subcounties of Awei and Aloi town council all of which have a relatively large number of beekeepers. A total of one hundred farmers were purposely and randomly selected to respond to a standard questionnaire. Majority of respondents were male with 81% dominance over the female who make up only 19%. Majority of the respondents were married with 84% while the divorced respondents made the least percentage of 3%. 73% of respondents attained primary level of education followed by 17% in secondary. One percent did not go to school whereas only 9% of apiculture framers in the district attained tertiary education. Majority of apiculture farmers in Alebtong district fall between the age group of 35-50 years followed by adults of more than 50 years of age and 3% are respondents below 18 years. 34% of respondents had taken 4 years and above, 30% have practiced apiculture for 3 years while 9% have done apiculture for less than a year. Majority of farmers in Alebtong district practice fixed system of beekeeping with 88% of respondents while only 12% of respondents do migratory system. 80% of farmers in Alebtong district use traditional beehives, followed by transitional beehives at 20% while modern beehive usage stands at 0%. Traditional beehive type has the highest colonization rate at 96% followed by only 4% for transitional beehive type. Respondents highly practice hygiene husbandry at about 42% followed by record keeping at 16% while disease control and colony management are the least practiced husbandry at 2% and 1% respectively. Limited knowledge is the major constraint and challenge facing apiculture farming in Alebtong district at 70%. This is followed by pest and parasite infestation at 16% and disease outbreak presented as the least constraint and challenge at 1%. Appropriate prevention and control methods of pests and parasites, especially ants and birds, have to be further studied. The methods should be safe and not impose risks to the bees' physiology. Also appropriate coping mechanisms for beekeeping during drought have to be further studied which do not pose health risks to the bees.

Edit with WPS Office