

P.O. Ber. 135 Tome Counts (m +156 - 15 144 88 H Fix -255 - 8346/EV feel of labels to a co

ana posteca n or





A REPORT OF INDUSTRIAL TRAINING CARRIED OUT AT BUGINYANYA ZONAL AGRICULTURAL RESEARCH AND DEVELOPMENT INSTITUTE (BUGIZARDI) MASIRA SUB-COUNTY BULAMBULI DISTRICT.

P.O BOX 1356 MBALE

directorbugizardi@ rocket .com

TEL:0712281478

DATE OF REPORT: 28TH FEBRUARY, 2022 TO 6TH MAY, 2022

COMPLIED BY:

NAME: NAMBOZO JOSEPHINE

REGESTRATION NUMBER: BU/UP/2019/2733

TEL: 0756147608

EMAIL: nambozojosephine4@gmail.com

YEAR OF STUDY: YEAR TWO

COURSE CODE: 1208

TO BE SUBMITTED TO THE DEPARTMENT OF AGRIBUSINESS AND EXTENSION FOR THE PARTIALFULFILLMENT OF AN AWARD OF A DIPLOMA IN CROP PRODUCTION AND MANAGEMENT AT BUSITEMA UNIVERSITY, ARAPAI CAMPUS.

SUBMISSION DATE: MAY, 2022

DECLARATION

I NAMBOZO JOSEPHINE, hereby declare that this report is mine and it has never received any academic credit from any other institution, the findings presented in this report is due to my active participation and research that I carried out while at Buginyanya zonal agricultural research and development institute in Bulambuli district.

APPROVED BY:

Field Supervisor

Name: MR ETIANG JOSEPH

Sign:

Academic Supervisor (University)

Name: MR WASIKE JOHN,

Sign

Date

i

DEDICATION

I dedicate this report to my beloved parents Mr. Gidudu Muboolo, Mrs. Muduwa Beatrice for always standing for me in all financial difficulties and advise throughout this academic struggle and making me comfortable at school. Also, to my dear Uncle Mr. Minoki Moses, Sister Muduwa Alice, Brother Saasa Sam, for always giving me courage and support in my study.

May the Almighty God bless you Abundantly.



ACKNOWLEDGEMENT

I owe a debt of gratitude that cannot be measured to my parents who tirelessly laid my foundation and provided financial support during the training.

Then, I extend my sincere thanks to the administration of Buginyanya zonal agricultural research and development institute for accepting me to carry my internship from there.

Also, my special thanks go to the Director, Human resource, the farm manager, all the field supervisors and without forgetting the casual workers who gave me their knowledge and skills using their experiences.

I deeply extend my sincerer gratitude to my academic supervisor for their knowledge rendered to me before the training which inspired my education but also my fellow internees who gave me company in working as a team, as this boosted my ability in gaining more skills.

Also, I appreciate the effort of all the lecturers of Arapai campus in both Crop and Animal Department for their knowledge and skills they imparted in me beyond my expectations that may the Almighty God Bless you. Finally, I would like to thank the almighty God for his intensive care in terms of good health that he granted to me. This gave me intellectual advantage which enabled me to explore heights during the training.

LIST OF ABBREVIATION

BugiZARDI:

Buginyanya Zonal Agricultural and Development Institute

NAADS

National Agricultural Advisory Services

HR:

Human Resource

B.C.RS

Buginyanya coffee research station

NARO

National agricultural research organization

USEAZ

Uganda south eastern Agro ecological zone

CBD

Coffee Berry Disease

IPM

Integrated pest management

DOR

Director of Research

NPK:

Nitrogen phosphorus potassium

DAP:

Di-ammonium phosphate

DSP:

Double super phosphate

CLR:

Coffee Leaf Rust

Masl:

Meters above sea level

Table of Contents

DECLARATIONi
DEDICATIONii
ACKNOWLEDGEMENTiii
LIST OF ABBREVIATIONiv
LIST OF TABLESviii
LIST OF FIGURESix
LIST OF APPENDICESx
ABSRACTxi
1.0. CHAPTER ONE
1.0 Introduction
1.1 Location
1.2 Historical Back Ground
1.3 Objectives of Buginyanya Coffee Research Station (BCRS)2
1.4 Mission of BugiZARDL2
1.5 Vision of BugiZARDL2
1.6 Goal2
1.7 Mandate
1.8 Enterprises at BugiZARDI.
(i) Buginyanya station (Highland altitude)2
(ii) Bulegeni station (Mid altitude)3
(iii) Ikulwe station (low land altitude)
1.9 Organogram of BugiZARDI3
2.0 CHAPTER TWO: DESCIPTION OF ATTACHMENT4
2.2 Familiarization phase4
2.3 Mentoring
2.4 Work place5
2.5 Cooperation.
2.6 Description of work stations.

2.7.0 ARABICA COFFEE PROUCTION5
2.7. 1 Ecological requirements of Arabica coffee
2.7.2 NURSERY MANAGEMENT
2.7.3 AGRONOMIC PRACTICES OF ARABICA COFFEE7
2.7.4 Diseases of coffee, symptoms and their control
2.8.0 BANANA PRODUCTION.
2.8.1 ECOLOGICAL REQUIREMENTS
2,8.2 AGRONOMIC PRACTICES
2.9.0 WHEAT PRODUCTION14
2.9.1 ECOLOGICAL REQUIREMENTS14
2.3.2 AGRONOMIC PRACTICES14
2.9.3 pests of wheat and their control
2.10.0 METEROLOGY15
2.10.1 TYPES OF WEATHER INSTRUMENTS
2.10.2 Climatology
2.10.3 WEATHER FORECASTING
2.11.0 PRODUCTION OF HASS AVOCADO19
2.11.1 Reasons why Hass avocado is promoted?19
2.11.2 Ecological requirements of Hass avocado
2.11.3 Agronomic practices of Hass avocado
2.11.4 PESTS AND DISEASES
2.12.0 FIELD PEAS
2.12.1 AGRONOMIC PRACTICES21
2.12.2 Diseases of field peas
2.13.0 AQUACULTURE22
2.13.1 Classification of aquaculture systems
2.13.2 Considerations for the selection of farmed fish species23
2.13.3 General management practices of fish on a farm
2.14.0 APPLE PRODUCTION.

2.14.1 Ecological requirements.	24
2.14.2 AGRONOMIC PRACTICES	24
3.0 CHAPTER THREE: IMPACT OF ATTACHMENT	27
3.1 Skills gained during my internship	27
3.2 Responsibilities undertaken during the internship period	27
3.3 Influence of internship on my career plan	27
3.4 Correlation of the attachment with classroom knowledge	27
4.0 CHAPTER FOUR: CONCLUSIONS AND RECOMMENDATIONS	28
4.1 Conclusion.	28
4.2 Recommendation	28
APPENDICES	29
Appendix 1: Showing the work plan followed during the Industrial Training	29
Appendix 2: Photos showing field activities	32
DEFEDENCES	3.3

LIST OF TABLES

Table 1: Showing the organization of high land program at BugiZARDI	4
Table 2: Showing the varieties of Arabica coffee, their characteristics and spacing	6
Table 3: Showing pest of coffee, symptoms and control.	9
Table 4: Showing varieties of banana and their categories	11
Table 5: Showing Pests of banana	13
Table 6: Showing Diseases of banana and their control	13
Table 7: Showing diseases of field peas	22

ABSRACT

It is a must for students at Busitema University to carryout industrial training after two semesters of study.

Industrial training is module carried out to help students to be exposed to practical skills which involves visiting Agricultural institutes both public and private organizations such as research stations, sugar estates and animal farms. The main objective of the study was to boost theoretical knowledge and skills learnt in class with hands on practical skills and applied knowledge. It always takes period of two months.

The study was carried out under the following activities;

Visiting the organization to seek acceptance.

Preparation of the industrial training by meeting with the supervisors to give us details on how we shall carry out the training and orientation.

Conducting the training in various enterprises.

The key objective of this training is to enable us apply the theory learnt in class and put it in practice, get more knowledge in the field so as to know how to work with the community, to know challenges faced outside.

The major enterprises we dealt with were;

Coffee, banana, wheat, Meteorology, field peas, aquaculture and apples.

The training was successfully done, the supervisors were friendly and were free to give us all the skills we needed. Through the organization it has the challenges but it is prospering. The major challenges were unfavorable weather with too much rainfall leading to poor road network and this can be solved through government support in organizing them so as to ease transportation of crop produce. Also, there was lack of enough equipment and tools to be used in the field such as secateurs, wheel barrows hoes, pangas, pruning saw, watering cans, knapsack sprayers which delayed our work in field and so I request the research organization to have more of them to ease work in the field.

1.0. CHAPTER ONE

1.0 Introduction

Industrial training is module which is conducted outside lecture room or out of university it is essential because it gives students a chance to participate fully in practical aspects which enhance their skills and knowledge. This field work report was carried out at Buginyanya zonal Agricultural Research and Development institute (Bugi ZARDI) located in Masiira sub county Bulambuli district. Pursuant to implementation of the NARS Act 2005 BugiZARDI was operationalized with effect from 1st July 2008.

1.1 Location.

Buginyanya Zonal Agricultural Research and Development Institute (BugiZARDI) is located in Masira sub-county in Bulambuli District in Eastern Uganda at 2,980masl. Pursuant to the implementation of the NARS Act 2005, BugiZARDI was operationalized w.e.f. 1st July 2008. The Institute is composed of Buginyanya as the main station, Bulegeni and Ikulwe as satellite station. BugiZARDI spearheads Agricultural Research and Development work in Uganda's South Eastern Agroecological Zone (U'SEAES) that administratively comprises of Bukwa, Kween, Kapchorwa, Bulambuli, Sironko, Mbale, Bududa, Manafwa, Budaka, Kibuku, Pallisa, Tororo, Busia, Namayingo, Butaleja, Iganga, Bugiri, Namutumba, Mayuge, Jinja, Kamuli, Buyende, Kaliro and Luuka Districts.

1.2 Historical Back Ground.

The Institute was established in 1969 by the Ministry of Agriculture, Cooperatives and marketing as a Coffee Research Station known as Buginyanya Coffee Research Station

(BCRS). It was established as part of the coffee unit at Kawanda to centralize research on Arabica coffee under the research division of the Ministry of Agriculture.

Before the establishment of Buginyanya station, trials especially Entomology and Pathology were being conducted at farmers' level and variety trials centers (VTCs) well distributed across the district. These were; Chema, Kyeminy, Kapchorwa, Busulani, Buginyanya, Bulaago, Bugusege, Bukigai, Bududa and Buwabwala. The system proved difficult and expensive for effective management for government. It was decided to centralize research

Programs on Arabica coffee under the research division of the ministry of Agriculture for closer and efficient supervision.