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**BUSITEMA UNIVERSITY ARAPAI CAMPUS**  
**FACULTY OF AGRICULTURE AND ANIMAL SCIENCES**  
**REPORT FOR INDUSTRIAL TRAINING CARRIED OUT AT ABI-ZONAL**  
**AGRICULTURAL RESEARCH AND DEVELOPMENT INSITITUTE.**

**IRACCA BEATRICE MILLION**

**COURSE NAME: DIPLOMA IN CROP PRODUCTION AND MANAGEMENT.**

**REGISTRATION NUMBER: BU/UP/2020/2596**

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**INDUSTRIAL TRAINING REPORT SUBMITTED TO DEPARTMENT OF**  
**AGRIBUSINESS AND EXTENSION IN PARTIAL FULFILMENT OF THE**  
**REQUIRMENT FOR THE AWARD OF DIPLOMA IN CROP PRDUCTION AND**  
**MANAGEMENT**



28<sup>th</sup> FEB- 06MAY 2022

**DATE OF SUBMISSION: 18/05/2022.....**

## DEDICATION

This Industrial Training Report is dedicated to my beloved Daddy MILLION BARTHOLOMEO for his financial support invested in me as my studies are concerned. I really thank my father for the great care he has shown to me throughout my life time. May the Almighty God bless you and all my family members abundantly.

## ACKNOWLEDGEMENT

In great honor, I would like to thank almighty Father for his love, care and protection towards my life and for making me achieve my dream of being agricultural manager in future. On other hand I also thank my parents for the great support upon my studies and the communities at large for their advice.

Furthermore, my thanks goes to the administration and staffs of Busitema University Arapai Campus for giving me directives, skills and knowledge towards my studies. May almighty Father give them longer life and bless all the lectures abundantly for the great job they have done upon my life.

Lastly, my thanks goes to the director, human resource manager, my supervisor and all the staffs of Abi- ZARDI. May God bless you all!



**DECLARATION**

OS

I, Ms, **Iracaa Beatrice Million** declared that this industrial training report was combined based on my own effort not any other person and has not been submitted for any academic award of diploma in any institution of learning and this is the only copy I have produce.

Signature: Iracaa .....

Date: 10/05/2022 .....

**Iracaa Beatrice Million**

**APPROVAL**

This industrial training attachment report is submitted with the approval of;

**Mr. Moja Sisto**

Field supervisor

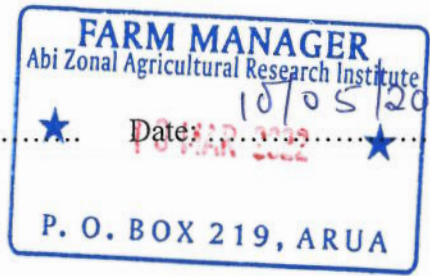
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**Dr. John Walakira K PhD**

The Director of Research

NARO Abi ZARDI

Signature:  ..... Date: 10/05/2022



**Dr. Charles Andiku**

Academic Supervisor

Signature: .....  ..... Date: .....

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## LIST OF TABLES AND FIGURES

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### Tables

Table 1: Common Pasture at Abi ZARDI.....15

Table 2; Common Legume at Abi ZARDI .....16

Table 3: Common Types of Fish Species Reared in West Nile Agro Ecological Zone .....20

Table 4: Crop Pest and Diseases management guide.....26

Table 5: Differences between Potatoes the varieties.....29

Table 6: Tentative WORK PLAN for the industrial training program for the period of 10 weeks at Abi ZARDI .....39

### Figures

Figure 1: Organizational Structure of Abi ZARDI .....3

Figure 2: Satellite Map of Current Land Use.....4

Figure 3: Manual chopping of forage(left)and chopping forage using chopper (right) .....40

Figure 4: Animal welfare Management spraying (left) and dehorning (right) .....41

## TABLE OF CONTENT

DEDICATION .....	i
ACKNOWLEDGEMENT .....	ii
DECLARATION .....	iii
APPROVAL .....	iv
LIST OF TABLES AND FIGURES .....	v
TABLE OF CONTENT .....	vi
ACRONYMS .....	vii
ABSTRACT .....	viii
CHAPTER ONE .....	1
1.0 Introduction .....	1
CHAPTER TWO .....	5
2.0 ACTIVITIES UNDERTAKEN AND EXPRIENCES ATTAINED DURING INDUSTRIAL TRAINING .....	5
2, 1.0 Animal Resource Research Program .....	5
<b>2.1.1 Apiculture Unit</b> .....	5
<b>2.1.2 Livestock Unit</b> .....	10
<b>2.1.3 Aquaculture Unit</b> .....	18
2.2.0 Crop Science and Natural Resources Management Program .....	23
<b>2.2.1 Crop Entomology</b> .....	23
<b>2.2.2 Post Harvesting Handling</b> .....	26
<b>2.2.3 Crop Agronomy</b> .....	27
<b>2.2.4 Soil Science</b> .....	32
CHAPTER THREE .....	36
CHAPTER FOUR .....	38
4.0 CONCLUSIONS AND RECOMMENDATIONS .....	38
APPENDICES .....	39

## ACRONYMS

ARDC	Agricultural Research and Development Centre
C M	Cassava Mosaic
C RRD	Cassava Root Rot Disease
CBB	Cassava Bacterial Blight
CMD	Cassava Mosaic Disease
DFI	District Farm Institute
DFI	District Farm Institute
E .g	for example
E I L	Economic Injury Level
I.e.	That is to say
I.T	Industrial Training
IPM	Integrated Pest Management
IPM	Integrated Pest Management
NARO	National Agricultural Research Organization
NARO	National Agriculture Research Organization
NASE	Namulonge Sere nut
NSD	Napier Stunt Disease
Sign	Signature
WNAEZ	West Nile Agro Ecological Zone
ZARDI	Zonal Agricultural Research and Development Institute

01



## ABSTRACT

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The field attachment was designed by Busitema University Arapai campus student for completing their first academic year.

The ten weeks of my field attachment was carried out at Abi Zonal Agricultural Research and Development Institute (Abi -ZARDI) in Arua city, which is under NARO, serving the twelve districts of west Nile region.

The main objective of the attachment were to ensure that I attained practical skills, knowledge and experience in the diverse fields of Agriculture and finally compile and produce at the end a report that would be presented as part of requirements for the award of a Diploma in crop production and management .

While at the institute, we carried out a number of activities under three research programs namely; Crops and natural resource research program, Livestock and fisheries program and technology promotion and outreach program.

During the course of the internship, various activities were carried out in different units amongst others include; Animal disease identification, diagnosis and treatment, ear tagging, identification of pastures, data collection, deworming and dehorning, Spraying of cattle, Field setting, Identification of different pests and diseases in the field.

Apiculture units, we learnt identification of bees, identification of bee hives, hive inspection, bee equipments and management practices.

Under aquaculture unit, we discussed fish farming, identification of fish species, introduction to pond construction and designing, record keeping and management at fish pond.

The biggest challenge was the prolong drought which affected some of the activities more especially under crop agronomy as it was normally done during rainy season

The institute should adapt simple water harvesting technology especially rain water harvest from roofs of many house blocks within the institute

## CHAPTER ONE

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### 1.0 Introduction

The field attachment was designed by Busitema University Arapai campus student for completing their first academic year. It is aimed at building their capacity in practical skills relating to their area of specialization. It is a requirement for award of Diploma in agriculture. I was attached for my field training at ABI Zonal Agricultural Research and Development Institute (ZARDI). The training started from 28<sup>th</sup> Feb- 6<sup>th</sup> May 2022.

#### **The Specific Objectives of the Field Attachment are to: -**

- a) Enable students get hands-on/real-life experience they are expected to work in when they graduate
- b) Provide an opportunity for students to apply the principles and techniques theoretically learnt into real-life problem solving situations
- c) Provide an opportunity for students and academic staff to interact with key stakeholders and potential employers and thus appreciate the field situations that will also generate information for curricula review and improvement
- d) Develop students' understanding of work ethics, employment demands, responsibilities and opportunities
- e) Enhance and strengthen linkages between Busitema University and various stakeholders

#### **Historical Background of Abi ZARDI**

Abi Zonal Agricultural Research and Development Institute (Abi ZARDI) is a semi-autonomous Public Agricultural Research Institute (PARI) in Uganda established by National Agricultural Research act of 2005 headed by a Director of Research operating under national Agricultural Research System (NARS) a component of NARO.

#### **Location**

The institute is located in west Nile region of Uganda in Arua City, Ayivu East Division ,8km away from Arua town along Rhino Camp-Road at border junction of 3 Wards of Ewadri, Ombokoro and Egara respectively. Meanwhile in terms of Cell, in the south East is Adroyi, Oboopi West in the North West, Yabiavoko in West, and Oluodri Trading Centre in the South.