

# FACULTY OF AGRICULTURE AND ANIMAL SCIENCES

C Box 236. Tororo, Lloand

nait: info@adm.busitema.ac.up

RESEA

UTF

www.busitema.ac.ug

Gen: +256 - 45 444 8838 Fax: +256 - 45 4436517

NGETTA OBALOS

04

AND DEV

ARAPAI CAMPUS AN INDUSTRIAL TRAINING REPORT CARRIED OUT AT NATIONAL AGRICULTURAL RESEARCH ORGANISATION NGETTA ZARDI IN LIRA CITY FROM 28<sup>TH</sup> FEB TO 22<sup>ND</sup> APRIL, 2022.



NAME: ONENCAN JUNIOR REG NO: BU/UP/2019/2465 STUDENT NO: 1900402465 COURSE CODE: DCP 2108. YEAR OF STUDY:TWO. CONTACT: 0781440089/0755519602 EMAIL: <u>onenrwoth.junior@gmail.com</u>

A REPORT SUBMITED TO THE FACULTY OF AGRICULTURE AND ANIMAL SCIENCES IN PARTIAL FULFILMENT OF REQUIREMENT FOR THE AWARD OF DIPLOMA IN CROP PRODUCTION AND MANAGEMENT IN BUSITEMA UNIVERSITY ARAPAI CAMPUS.

DATE OF SUBMISSION. 05/05/2020

### **DECLARATION.**

I **ONENCAN JUNIOR** do declare that this report is original and was compiled after industrial training carried out at Ngetta Zonal Agricultural Research Development Institute and has never been presented to any student and institute or university for the Award of diploma in crop production and management.

## APPROVAL.

1

This industrial training report was carried out at Ngetta Zonal Agriculture Research And Development Institute located in lira city.

Students Name: .	ONEN CAN	JUNIOR
Date	105/2022	
Sign	D	

## **Field supervisors**

Name	OKELLO HOD	ACE			
Date	ast 05, 2022	<u>ر</u>			
Sign	Alatte : 60	1		THE ARY	
	1		BUSITEMA UNI	VERSITY LIBRARY	
Academic supervisor	r.		ACCESS NO.	AA2073	
Name Musol	oa. Andrew				
Date Oslos	12022				
Sign Rula					

#### DEDICATION.

I would like to dedicate this report that I have written to my mother Mrs. ADOKWUN BEATRICE, my father Mr. THIWE RONALD, my brothers and sisters and not forgetting my uncle DR KUMAKECH ALFRED for his scientific guidance and parental support and guidance accorded to me during the training while at the institute.

Secondly I would like to dedicate it to all the staffs of Busitema University Arapai Campus who impacted me with the theoretical knowledge that I was able to transform into

Lastly, special dedication goes to the following friends, WAROM ROGERS, JOSEPH.

01

#### ACKNOWLEDGEMENT.

With great pleasure, I would like to send my sincere gratitude to my parents and my uncle for their financial contributions towards the training and to all staffs of Busitema University Arapai Campus especially MR MUSOBA ANDREW who my academic supervisors and others who materially helped me in one way or another to produce this report. More thanks goes to the Administration of Ngetta Zonal Agricultural Research And Development Institute, the Director, field supervisor Mr okello Horace, Farm manager, and all attendants in various department at the institute who generously contributed towards the success of my industrial training.

À

# TABLE OF CONTENT

DECLARATION
DEDICATION
ACKNOWLEDGEMENTIII
TABLE OF CONTENT
LISTS OF ABBREVIATIONS.
LIST OF TABLES AND FIGURES,
ABSTRACT
CHAPTER ONE:
I.1 LOCATION
1.2 HISTORICAL BACKGROUND
1.3 THE OBJECTIVES OF THE TRAINNING
1.4 FUTURE PLANS AND NEEDS
1.5 ORGANISATION STRUCTURE
CHAPTER TWO4
2.0 DESCRIPTION OF THE SECTIONS
2.1 AGRO FORESTRY
2.1.1 Activities carried out under the sections
2.1.2 Pests and disease identification and management
2.1.3 General control measures includes
2.2 MANGO AND CITRUS GERMPLASM
2.2.1 Citrus
2.2.2 CONTROLS OF PESTS AND DISEASE IN CITRUS
2.2.3 THE TABLE SHOWING CITRUS AND MANGOES PEST AND DISEASES
2.3 DIARY UNITS
2.3.TBreeds of dairy cow
2.3.2 Methods of milking
2.3.3 However the following management practices were carried out
2.4 GOAT UNIT
2.4.1 Limitations of the animal production in Uganda7
2.4.2 Importance of keeping animal production
2.4.3 Systems of rearing animal
2.4.4 Facilities and animal handlings
2.4.5 Animal feeds

2.4.6 Animal management practices	8
2.4.7 Types of Dewormer	
2.4.8 Types of acaricides	
2.5 HORTICULTURE.	
2.5.1 BRANCHES.	9
2.5.2 SEED BED MANAGEMENT	9
2.6 ADAPTIVE RESEARCH.	.9
2.6.1 Pigeon pea planting	
2.6.2 Upland rice planting.	
2.7 AQUACULTURE SECTION.	
2.7.2 Types of fish reared in the section.	
2.7.3 Importance of growing fish in the p	ond
2.7.4 Factors to consider before afarmer	decide to build apond
2.7.5 Nutrient availability	
2.7.6 Fish food	
2.7.7 Fish hygiene and diseases	
2.7.8 Causes of diseases in fish ponds	
2.7.9 General treatment	
CHAPTER THREE	
3.1 skilled gained from the trainning	
-	fainning,
	réer plans,
	ies and classroom knowledge
	USION



## LISTS OF ABBREVIATIONS.

NAADS. National Agricultural Advisory Services.

ZARDI. Zonal Agricultural Research Development Institute.

BUAC. Busitema University Arapai Campus.

DFI. District Farm Insitute.

NARO. National Agricultural Rsearch Organisation.

NaFORRI. National forestry Research Resource Institute.

DAP. Diploma in Animal Production.

DCP. Diploma in Crop Production.

CGA. Certificate in General Agriculture.

GDP. Gross Domestic profit.

CBOS. Cotton Based Organisation.

GDP. Gross Domestic Product.

BG. Background.

-M

## LIST OF TABLES AND FIGURES.

Service Service

ŝ

ł

1

Table 1: shows some of the diseases and pests of mangoes and citrus fruit trees	6
Table 2: shows the work plan for the training13	5-16
Figure 1: Shows the spraying of dairy cattle against ecto parasites	.20

61

#### ABSTRACT

This report is all about an industrial training that was carried out at NGETTA ZARDI which is located in lira district from the date of 28<sup>th</sup> feb upto 22<sup>nd</sup> april 2022.

The report covers areas of the historical background of the institute, location of the place which is located 3 miles along lira-kitgum road and its objectives of the training student on good agronomic practices and management and its future plans of expanding on animal production and needs for the institute as more is detailed in chapter 1 of the report

The report also has all the various sections and activities in the institute that we were attended to by various supervisors and some few farm workers during our being, for the internship like dairy section which we were able to deworm, spray against ecto parasites ,horticulture which we were able to identified some of the disease like nematodes etc and others as detailed in **chapter 2** of the report.

The report also embraced on areas like skilled gained from the training like how to deworm, graft, bud during the training responsibility undertaken during the training like spraying ,watering, cleaning of the dairy sections etc influence of the activity to the future plans, correlation between the attachment activities and classroom knowledge,challenges faced during the training like too much sunshine ,distance to the institute, old structures which are in not working condition and finally some of the suggested solution to some of the challenges that we had like renovation of old structures, provision of accommodation to cover challenges of distance as detailed all in **chapter of 3** of the report.

Then the last chapter of this report contains the recommendations on what should be done to overcome some of the limitations, conclusion, work plan of the report as detailed in **chapter 4**, appendices and finally the references.

#### CHAPTER ONE:

#### 1.1 LOCATION.

Ngetta zonal Agricultural Research and development Institute is located 3miles on lira-kitgumroad, the one located on the outskirt of kitgum.

The main station has land area of about 221 hectare (550) acres, while the satellite has land area of 70.8hectares (115) acres. The main campus is 117On of equator and 320, 56E the elevation is 1180m above sea level. The climate of the institute is tropical which means annual temperature (30,40°c) the lowest temperature (33-39°c) in Feb.

Rainfall at institute is bimodal, with first rain falling from March to June.

The second rain falls from august to November, the mean annual rainfall is 1305mm, and the vegetation is savannah grassland with scattered trees and shrubs. The soil are sandy loams and topography is flat to gentle slopes. The topography and the soil characteristics which makes the institute suitable for the use of mechanized cultivation.

#### **1.2 HISTORICAL BACKGROUND.**

The historical information about Ngetta ZARDI is very scanty, however inscription on some building suggested that construction at the Ngetta ZARDI, formerly District Farm Institute (1964-2006) and Agricultural Research and Development Centre (1999-2006).it started in 1930s and it was research Centre for cotton under the Serere research station.

During the past world war (2) period the Centre was used as settlement and re-orientation site for war veterans on the 50s, the colonial government gave it to the development of agriculture for the purpose of teaching farmers around the centres on better farming practices. After independence, the government upgraded it into a DFI under the ministry of agriculture and served lango district in 1999, its ownership and management was transferred to NARO with the coming of inforce of the NAROs ACT 2005, NARDC became a ZARDI with the main campus at Ngetta in Iira and satellite station located.

1