



35110645
60

**BUSITEMA UNIVERSITY
FACULTY OF AGRICULTURE AND ANIMAL SCIENCES**

**A REPORT ON INDUSTRIAL TRAINING CARRIED OUT IN NARO NABUIN-ZONAL
AGRICULTURAL RESEARCH AND DEVELOPMENT INSTITUTE
IN LORENGEDWAT SUB -COUNTY, NABILATUK DISTRICT.**



BY

**NAME: OMAGORO GRACIOUS
REG. NO: BU/UP/ 2019/2171**

PROGRAMME: CERTIFICATE IN GENERAL AGRICULTURE

COURSE NAME: INDUSTRIAL TRAINING

COURSE CODE: 2109 1209

**INTERNSHIP REPORT SUBMITTED TO NARO NABUIN-ZARDI AND BUSITEMA
UNIVERSITY ARAPAI CAMPUS DEPARTMENT OF AGRIBUSSINESS AND
EXTENTION IN PARTIAL FULLFILLMENT OF THE AWARD OF BACHELOR OF
AGRIBUSINESS AND EXTENSION**

Duration of training: 28TH FEB- 30TH MAY 2022

DECLARATION

I Omagoro Gracious declare that this report has not been produced in line with the activities I was carrying out at NARO NABUIN ZARDI Agricultural Research and Development Institute (NABUIN ZARDI) under Departments of Natural resources, crops and Livestock and this report has not been handed over to any institution for award.

The activities which were carried out were witnessed, supervised and approved by the supervisor from the training institute and my availability conformed by my academic supervisor from Busitema University Arapai Campus.

NAME: OMAGORO GRACIOUS

SIGN: 

DATE: 17th/5/2022



DEDICATION

I dedicate this research internship report to my father Mr. OMAGORO RICHARD, my mother Mrs. OMAGORO HARRIET and my big sister SHALOM OMAGORO with an endless appreciation, love and encouragements they gave me which made my internship to be successful.

I also forward my great gratitude to my University, Academic supervisor Mr_OJUU DAVID for his time, love and support that they had towards my success.

Lastly my endlessly appreciation goes to the Director of Nabuin ZARDI Dr. Okullo Paul, Mr. Kayongo Samuel, Mr. Moses Ndugwa, Mr. Gilbert Mutudo, Mr. Egayu George, Dr. Boma Paul, MrIkilai Emmanuel, Mrs. Nimarjoyce and other staff members of NARO Nabuin for their love, time, support and encouragement they offered that enabled me to complete my internship successfully. May God bless them.




APPROVAL

This internship report has been made under the supervision and guidance of the persons mentioned below;

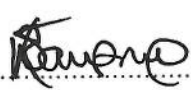
University supervisor

Mr OJuu David.

Signature.....  Date..... 15/05/2022

Field supervisor

~~Dr~~ Kayongo Samuel

Signature.....  Date..... 17/5/22

Director of Nbuin ZARDI

Name; Okullo paul

PP Signature..... 

Date..... 17/05/2022



2.2.3.1	Materials used in conducting a postmortem.....	13
2.2.3.2	Procedure adopted in conducting a postmortem	13
2.2.3.3	Procedures	13
2.3	Study three: DEVELOPMENT OF A BIO - PESTICIDE FOR INTAGRATED PEST MANAGEMENT.....	15
2.3.2	Objectives of a bio pesticide formulation	16
2.3.3	Methodology of bio pesticide formulation	16
2.3.3.1	Steps Adopted While Preparing Bio – Pesticides:.....	16
2.3.4	Advantages Of Bio – Pesticides:	17
2.3.5	Disadvantages Of Bio-Pesticide:	17
2.3.6	Challenges Faced While Collecting And Making Bio-Pesticides:.....	17
Study four.	THE MEAT INSPECTION	18
2.4.1	Introduction to meat inspection	18
2.4.2	Objectives of meat inspection.....	18
2.4.3	Methodology on meat inspection	18
2.4.3.1	Inspectors examine the following	18
2.4.3.3	Challenges	20
2.5	Study five ; ESTABLISHMENT AND MANAGEMENT OF NURSERY IN NABUIN ZONAL AGRICULTURE RESEARCH AND DEVELOPMENT INSTITUTE	21
2.5.1	Introduction to nursery bed establishment and management	21
2.5.2	Objectives of a nursery bed	21
2.5.3	Methodology of nursery bed preparation and management.....	22
2.5.3.2	Factors to consider when preparing a nursery bed.....	22
2.5.3.3	Materials used for nursery bed preparation	23
2.5.3.4	Qualities of a good nursery bed	23
	Challenges in nursery bed	24
2.6	Study six ANIMAL TRACTION	24
2.6.1	Introduction to animal traction.....	24
2.6.2	Factors that were considered when selecting animals for traction.....	24
2.6.3.1	Materials used for animal traction.....	25
2.6.3.2	Objectives of animal traction	25
2.6.3.3	Procedures of restraining.....	25
2.7	Study seven AGE AND WEIGHT ESTIMATION OF CATTLE	25

2.7.2 Objectives of age estimation and weight estimation	25
2.7.3 Methodology of age determination	26
2.7.3.2 WEIGHT ESTIMATION OF CALVES	26
2.7.3.3 Introduction	26
2.7.3.4 Methodology.....	26
2.7.3.5 Procedures of weighing.....	27
2.8 Study eight COMPOST MAKING IN NATIONAL ZONAL AGRICULTURE RESEARCH	27
2.8.2 Objectives of compost manure	27
2.8.3 Methodology of compost making	27
2.8.3.1 Procedures of compost making.....	27
2.8.3.2 Materials used for compost making.....	28
2.8.4 Disadvantages of compost manure.....	28
2.9 Study nine EXPERIMENTAL DESIGN.....	28
2.9.2 Objectives of experimental design.....	28
2.9.2.1 Materials used for experimental designs.....	29
2.9.2. Methodology of experimental design.....	29
2.10 STUDY TEN: THE PROFILING OF TICKS IN CATTLE IN KARAMOJA REGION.....	30
2.Introduction.....	30
Objectives	30
2.11. STUDY 11: THE GASTRO INTESTINAL PARASITES CONTROL IN KARAMOJA.....	31
2.11.2. Introduction	31
Objectives of gastro intestinal parasites control.....	31
Methodology	32
CLASSIFICATION OF GASTRO INTESTINAL PARASITES	33
Results	34
CHAPTER THREE.....	35
CHAPTER FOUR	36
Appendices	37
TRAINING WORK PLAN FOR INTERN STUDENTS, 2022.....	39

ACKNOWLEDGEMENT

I wish to forward my great thanks to Busitema University Arapai Campus faculty of Agriculture and Animal Sciences under the leadership of Mr. Ojuu David In Charge of internship that enabled me succeed.

I would like also to give my sincere gratitude to the internship research supervisor Mr. OJUJU DAVID who supervised me, guided me, and also sacrificed his time for me succeed, thank you very much.

I humbly extend my appreciation to the staff of Nabuin Zonal Agriculture Research and Development Institution (ZARDI) under the leadership of the Director Dr. Okullo Paul, all other staffs and trading supervisor of Nabuin ZARDI in their different offices for giving me a chance to learn from different unities like crops, Natural resources, and Livestock departments and also special thanks go to my fellow student's.

CHAPTER ONE

1.0 Back ground information on NARO

The National Agricultural Research Organization (NARO) is a public institution established by an act of parliament enacted on 21 November 2005. It is an agency of the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF) with the mandate to coordinate and oversee all aspects of public funded Agricultural research in Uganda (NARSA Act, 2005). It undertakes research in all aspects of agriculture including crops, livestock, Fisheries, forestry, agro--machinery, Natural resources and socio-- economics. The research body's enactment was initially enshrined in the National Agricultural Research Act 1992 which was subsequently replaced by the National Agricultural Research System Act 2005. MARO'S journey started in 1992; founded to strategically respond to the growing difficulties of food insecurity and poverty across the country. This is because emerging challenges such as climatic change, pests and diseases had started taking root, adversely affecting food production, nutrition and household incomes.

1.1 Governance (NARO Council)

NARO comprise 16 public Agricultural Research Institutes (PARIs). It is overseen by a Governing council whose composition is drawn from government of Uganda, Uganda National Farmers federation, Scientists, Private sector and public Agricultural Research Institutes. The Governing council is the supreme organ overseeing and ensuring that good corporate Governance practices are upheld in the National Agricultural Research Organization. It is supported by a secretariat in the execution of it's roles. The secretariat is overseen by the Director General who is assisted by this role by two (2) Deputy Director Generals; Deputy Director Generals - Research coordination and Deputy Director General - Agricultural Technology promotion, Director for corporate Services, Director Finance and Accounts, Director Human Resources and Head of Intern Audit; as shown in the figure below;