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**AN INDUSTRIAL TRAINING REPORT FOR THE ACTIVITIES CARRIED OUT AT  
NATIONAL SEMI ARID RESOURCES RESEARCH INSTITUTE ( NaSARRI) IN  
SERERE DISTRICT FROM 28/02/2022 TO 22/04/2022**

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PROGRAMME: DIPLOMA IN CROP PRODUCTION AND MANAGEMENT

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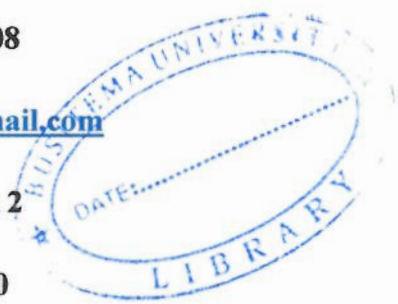
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**TO BE SUBMITTED TO THE DEPARTMENT OF AGRIBUSINESS AND EXTENSION  
OF BUSITEMA UNIVERSITY, ARAPAI CAMPUS, FACULTY OF AGRICULTURE AND  
ANIMAL SCIENCES IN PARTIAL FULLFILMENT TO THE AWARD OF A DIPLOMA  
IN CROP PRODUCTION AND MANAGEMENT.**

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DATE OF SUBMISSION.....17/05/2022.....

## DECLARATION

I **ALACU BEN** do declare that this report is entirely an original document of my industrial training experience on the activities I did at NaSARRI in Serere district and has never been submitted to any institution of higher learning/ University for the award of a diploma in crop production and management

SIGNATURE:  .....

DATE: 13<sup>th</sup> / 05 / 2022 .....

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**APPROVAL**

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## DEDICATION

I dedicate this report to the almighty God for his grace to make me complete my internship, not forgetting my parents, siblings, grandmother, and my sister for their support during my internship and to all my friends, the staff of NaSARRI and the staff of Busitema University Arapai campus, for their guidance and the knowledge they gave me that has imparted my life with good skills hands on.

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## ACKNOWLEDGEMENT

My sincere thanks go to the administration and the staff ( lecturers) of BUAC for the training, advice and guidance during the course of study, I also want to acknowledge the staff of NaSARRI especially the field technicians of different research programmes who deliberately shared with the students their skills and the knowledge during the internship and my supervisor Mr. Ocan James Roland for his guidance during the training. May the almighty God richly bless you all, Amen.

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## LIST OF ABBREVIATIONS

NaSARRI- National Semi- Arid Resources Research Institute.

SAARI- Serere Agricultural and Animal Research Institute.

BUAC- Busitema University Arapai Campus.

MTP- Medium Term Plan

NARO- National Agricultural Research Organisation.

PMA- Plan for Modernization of Agriculture.

OPV- Open Pollinated Varieties.

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## LIST OF TABLES AND FIGURES

### Tables

**Table 1:** Showing Identification of sunflower pests and their control measures.

**Table 2:** Showing Disease identification, type and their management.

**Table 3:** showing the pests of tomatoes, Identity, damage and control measures.

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## ABSTRACT

This industrial training report comprises of the cover page, preliminary pages, four chapters, appendices and references. Chapter one gives the introduction to NaSARRI, objectives of NaSARRI, NaSARRI research Programmes, vision, mission, mandate, Collaborations and the Organisational structure of NaSARRI. Chapter two contains the body of the report which includes the various activities carried out during the training in different research Programmes of NaSARRI eg in Cotton research programme which include introduction to Cotton and Cotton agronomy, selfing and crossing and pest identification, oil crops research programme activities include introduction to groundnuts, Agronomy, breeding in groundnuts, sunflower uses, types, Agronomy, pests and diseases of sunflower. Varieties of tomatoes, Agronomy, pests and diseases of tomatoes, it also contains information on pasture divisions, Agronomy, procedures of hay and silage making, mashroom production requirements, types of mashroom, benefits, including pests and diseases of mashroom, and the varieties of Sorghum, facilities in Cereals and their uses, and the pests and diseases of Sorghum. Chapter three contains the impact of the field attachment, responsibilities I under took during the training, how the industrial training will influence my future career and the correlation of the industrial training activities with the lecture room knowledge. Chapter four gives the conclusion and the recommendations of the findings in the report. It also has appendices which contain the work plan, photos and the map of NaSARRI, followed by the References

## 1.0 CHAPTER ONE

### 1.1 INTRODUCTION TO NaSARRI

National Semi Arid Resources Research Institute ( NaSARRI) formally called SAARI is one of the 17 public Agricultural Research Institutes under NARO. NARO is responsible for conducting and coordinating agricultural research in Uganda. NaSARRI is located in the Eastern agro-ecological zone in Serere district, Olio sub- county, Igola parish, 21 km south of soroti town. Agricultural research in NaSARRI was started in 1920 by the colonial government and it was initially called Serere Agricultural and Animal Research Institute after which it was changed to NaSARRI. The institute has made considerable progress since it's creation anew strategy has been developed that is the medium Term plan( MPT) through a highly participatory country plan for Modernisation of agriculture( PMA). NaSARRI is one of the agricultural Institutes which is publically founded to carry out demand driven research and promoting agricultural research.

### 1.2 Objectives of NaSARRI

- To develop improved crop Varieties which are high yielding, early maturing, tolerant to drought, pests and diseases and have high market demand.
- To generate appropriate crop, soil fertility, disease and pest management options that increase crop yields.
- To disseminate appropriate technologies and information to uptake pathways ( stakeholders) and limited number of farmer groups.

### 1.3 NaSARRI Research Programmes

To achieve it's Objectives NaSARRI is organised in to four research programmes and they include;

- 1)Fiber crop (cotton Research Programme)which undertakes research in only cotton .
- 2)Oil crops Research Programme which undertakes research in Groundnuts, Sesame, and Sunflower.
- 3) Dry land Cereals Rersearch Programme which undertakes research in Sorghum, Figuer millet, and Pearl millet,.
- 4)Dry land Legume Research Programme which undertakes research in Cowpea, Pigeonpea, and Greengram.

Note: Cross cutting units include Animal traction, soil fertility and socio- economics.