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



**BACHELOR OF AGRIBUSINESS (BAB)**

**A REPORT ON FARM AND COMMUNITY PRACTICE UNDERTAKEN AT NATIONAL  
SEMI ARID RESOURCES RESEARCH INSTITUTE (NaSARRI)-SERERE.**

**FROM 28<sup>TH</sup>FEBRUARY-6<sup>TH</sup> MAY, 2022**

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**THIS REPORT IS SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS  
FOR THE AWARD OF A BACHELOR OF AGRIBUSINESS OF BUSITEMA UNIVERSITY.**

**DATE OF SUBMISSION .....** 18<sup>th</sup>/05/2022

## DECLARATION

I OCEN EMMANUEL, REG NO Bu/up/2018/2852 declare to the best of my knowledge that this report has been compiled by me and it has never been submitted anywhere before, be it an institution or the university for award of any academic credential. All that is contained in the report is done by me with the support and guidance of the Almighty God.

Signature.....  .....

Date..... 18<sup>th</sup> / 05 / 2022 .....

**APPROVAL**

This is to confirm that the work presented here was done under our supervision and it is original piece from the student.

**FIELD SUPERVISOR**

Name ORUO JOHN PETER EMIDIATS

Sign [Signature]

Date 18/5/2022

**NaSARRI INTERNSHIP COORDINATOR**

Name [Signature]

Sign [Signature]

Date .....



**DIRECTOR NaSARRI**

Name ORUO JOHN EMIDIATS

Sign [Signature]

Date 18/5/2022

**ACADEMIC SUPERVISOR**

Name .....

Sign .....

Date .....



## DEDICATION

I dedicate this report to the Almighty God for giving me knowledge, skills and good health that enabled me to write this report, I also dedicate this report to my beloved parents, my Mum Ijena Joyce and my Dad Ocen Emmanuel for their financial support, care and guiding me since childhood up to now and also to all my family members and all family friends, my sponsors for their financial support and also my beloved friends Eboku Martin, Allan, Opio Douglass, Abwangu Emmanuel, Ogwaraileng Clement, and all the staff of NaSARRI and to whoever reading this report many blessings from heavenly father.

## ACKNOWLEDGEMENT

I thank the Almighty God for the gift of life and good health bestowed to me during the course of the training. May his name be glorified!

I extend sincere thanks to my parents for the support and care granted to me during the training period. May you forever be blessed?

I highly appreciate my field supervisor Mr Obuo Peter at NaSARRI for the guidance provided during the training and reporting writing. His positive criticism on the report were very useful

I appreciate the entire staff of NaSARRI for their cooperation, unbiased guidance and supervision offered during the training.

Lastly, I would like to appreciate my fellow interns for the high level of cooperation exhibited during the training period.

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## LIST OF ABBREVIATIONS

NaSARRI	:	National Semi-Arid Resource Research Institute
ICRISAT	:	International Crop Research Institute for Semi- Arid Tropics
NARO	:	National Agricultural Research Organization
MAAIF	:	Ministry of Agriculture Animal Industries and Fisheries
SAARI	:	Serere Agricultural and Animal Production Research Institute
CDO	:	Cotton Development Organization
DRC	:	Direct Resource Coordination
HRO	:	Human Resource Officer
NARI	:	Nebraska Applied Research Institute
NAADS	:	National Agricultural Advisory Services

## **LIST OF TABLES AND FIGURES**

Fig1: showing organizational structure of NaSARRI

Table 1a: showing the common ground nut diseases

b: showing common pests of ground nuts

Table 2a: showing major pests of sorghum crop

b: showing main diseases of sorghum crop

Table 3a: showing pests attacking cowpeas, damages and control measures

b: showing diseases attacking cowpeas, symptoms and control measures

Table 4a: showing the work plan

Fig2: shows students establishing a nursery bed for onions

Fig3: showing the map of NaSARRI

## ABSTRACT

This Industrial Training (IT) was conducted for 10 weeks from 28<sup>th</sup> February to 6<sup>th</sup> May 2022 at NaSARRI (National Semi-Arid Resources Research Institute) located in the Eastern Agro-ecological zone in Serere District 27 km south of Soroti City. NaSARRI is one of the 16 public Agricultural Research Institutes of the National Agricultural Research Organization (NARO) established by the National Agricultural Act 2005.

The objective of this IT was to enable students acquire practical knowledge and skills on agricultural research technologies and other crop management practices that increase crop yields and production. The industrial training was carried out in different research programmes and farm management section in a rotation i.e. farm management, dryland cereals programme, oil crops programme, dryland legumes programme and fibre crop (cotton) programme.

During field disease identification in sorghum, the following diseases; Grain mould and Anthracnose were identified using their symptoms (effects) on the heads, while in pest identification exercise, the following pests; shoot fly and stalk borer were identified using their damage on the leaves and stalks (stem). In data collection exercise, data was collected on 100 seed counting of sorghum.

Other field activities carried out included; grafting and budding mangoes and oranges and nursery bed preparation for vegetable and horticultural crops.

The skills gained included; use of symptoms and damage caused on the plant in identification of pest and diseases in sorghum, how to identify proper field for vegetables, good land preparation, good seed selection and how to plant crops at recommended spacing, timely and proper weed management, how to collect data on seed grain weight using electronic weighing scale and how to count 100 seeds using electronic seed counter.

The Industrial Training at NaSARRI was successfully done as the theoretical knowledge covered in the lecture room was practically demonstrated in the field and laboratory. There are a lot of skills a student can learn from NaSARRI that are applicable in the field situation. Therefore, I recommend that the University should send more students to NaSARRI for their industrial training

## **CHAPTER ONE**

### **INTRODUCTION AND BACKGROUND**

#### **1.0 Introduction.**

Industrial training is mandatory to all students of Busitema University. Its main objective is to equip students with practical skills and knowledge. It prepares students with practical experience in field/laboratory activities, effective communication and teamwork.

This chapter contains the objectives of the industrial training, background of the organization (NaSARRI), organization name, mission, vision, objectives, goals, research programmes, clients of the organization, guidelines and regulations for the interns and organizational structure of NaSARRI.

#### **1:1 General background of the institute**

The National Semi-Arid Resources Research Institute (NaSARRI) is one of the sixteen (16) public Agricultural Research Institute (NARI) under the National Agricultural Research Organisation (NARO). NaSARRI was started in 1920 by the British Colonial Government as an experimental station for ..... It was initially called Serere Agricultural and Animal Research Institute (SAARI) after which it was changed to NaSARRI. NaSARRI is a public research institute charged with a responsibility of generating appropriate crop, soil fertility and livestock management technologies for the farmers in the semi-arid regions of Uganda.

#### **1.2 Location**

NaSARRI is located 7km south west of Soroti city in Serere district Serere town council, Okulonyo ward, Igola cells (1, 2, and 3). It is located in the Eastern Savannah agro-ecological zone lying in the sub humid type of climate with average rainfall of about 1550mm bimodal in distribution. It covers an area of about 1710 acres (686 hectares). Address: NaSARRI p.o.box 56, Soroti, telephone: 0454463665, website: [www.nasarri.go.ug](http://www.nasarri.go.ug). Other link is [www.naro.co.ug](http://www.naro.co.ug)

#### **1.3 The vision of NaSARRI**

A market leader institution in generation and dissemination of appropriate crop technologies for sustainable development in the semi-arid regions of Uganda