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**A REPORT OF INDUSTRIAL TRAINING CONDUCTED AT NATIONAL SEMI-ARID RESOURCES RESEARCH INSTITUTE (NaSARRI) - SERERE DISTRICT**

**CONDUCTED BETWEEN 28<sup>th</sup> FEBRUARY TO 6<sup>th</sup> MAY 2022**

**SUBMITTED BY**

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**COURSE CODE: DCP 1208**

**COURSE NAME: INDUSTRIAL TRAINING**

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**SUBMITTED TO THE DEPARTMENT OF AGRIBUSINESS AND EXTENSION OF BUSITEMA UNIVERSITY - ARAPAI CAMPUS IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF A DIPLOMA IN CROP PRODUCTION AND MANAGEMENT OF BUSITEMA UNIVERSITY**

**DATE OF SUBMISSION** 17<sup>th</sup> / 05 / 2022

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## DECLARATION

I OKELLO JOEL declare that the material contained in this report is exactly of my own and has never been submitted to any institution or any university for the award of a Diploma in crop production and management or any other academic qualification.

Sign. Joel

Date. 02<sup>nd</sup> - 05 - 2022



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**APPROVAL**

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

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Name Joseph Okiring

Sign [Signature]

Date 3<sup>rd</sup>/05/2022

**2. Intern coordinator, NaSARRI**

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Date

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Date 3/5/2022

**3. Academic supervisor, BUAC**

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Sign.....

Date.....

## DEDICATION

Am dedicating this report to my lovely mother Madam Joyce and the family at large for their financial and divine support, am so glad to recognize your effort in financial support. It is my great honor to dedicate this report to you with all my heart.

God bless you all.

## ACKNOWLEDGEMENT

My sincere thanks goes to the staff of NaSARRI who guided me through all activities for the success of industrial training.

First and foremost, I would like to appreciate the Director of NaSARRI Dr. Ugen Michael for granting me that opportunity to conduct my internship from the institute, my field supervisor Mr. Okiring Joseph the farm manager at NaSARRI, Mr. Okwang Dodah the internship coordinator NaSARRI and the entire staff, program leaders, scientists, technicians and field assistants. The efforts of my internship colleagues in NaSARRI were very much appealing.

I would love to appreciate the staff of Busitema University Arapai campus for implementing industrial training as one of the core modules which help students learn hands-on skills in correlation to the class theory, enhancing their agricultural experience hence preparing them for a wide range for job market, thus effective service delivery to farmers upon the modernized agricultural technologies.

Finally, special thanks goes to my family members for their tireless support to me.

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## LIST OF ABBREVIATIONS

NaSARRI	:	National Semi-Arid Resources Research Institute
IT	:	Industrial training
OPV	:	Open pollinated varieties
DCP	:	Diploma in crop production
DAP	:	Diploma in Animal production
NARO	:	National Agricultural Research organization
SECOW	:	Serere cowpea
SESO	:	Serere sorghum
NAROSORG	:	NARO Sorghum
NAROMIL	:	NARO millet
SEREMI	:	Serere millet
SERENUT	:	Serere groundnuts
NAROGRAM	:	NARO Green gram
SESIM	:	Serere simsim
BUAC	:	Busitema University Arapai Campus



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**FIGURE 1: showing the Organization structure of NaSARRI**

**FIGURE 2: Showing the map of NaSARRI**

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## ABSTRACT

This Industrial Training (IT) was conducted for 10 weeks at NaSARRI (National Semi-Arid Resources Research Institute) located in the Eastern Agro-ecological zone in Serere District 27 km south of Soroti City from 28<sup>th</sup> February 2022 to 6<sup>th</sup> May 2022. 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 is to enable students acquire practical knowledge, skills, in monitoring and evaluation in agricultural research and other related activities. It was carried out in different programs in a rotation i.e. farm management, dry land cereals program, dry land legumes program, fiber crop program and oil crop program.

During the training at NaSARRI, various activities were carried out which included; Disease identification (Grain mold, Anthracnose) in sorghum, pest identification in sorghum (sorghum shoot fly, stalk borer) post-harvest data collection on 100 seed count of sorghum, grafting and budding in Mangoes and Oranges in Agroforestry, onion nursery bed preparation in horticulture.

### Knowledge and Skills gained

While in the field, I gained skills in identification of pests and diseases in sorghum (crop protection), agronomic practices especially in proper site selection, land preparation, seed selection and planting at recommended spacing as per needs of the plants, weed management, post-harvest data collection usually on plot weighing, grain weights, 100 seed count using the electronic weighing scales.

**Challenges.** However, few challenges were faced like; inadequate tools and equipment to be used in nursery bed establishment, some of the items were missing in some stations e.g. Camp bell stock (sun shine recorder), barometer, hygrometer, faulty automatic rain gauge and others outdated.

**Conclusion.** I therefore conclude that the IT was interesting because most of the theory aspect was put in to practical/hands-on thus new skills gained.

**Recommendation.** I recommend that some errors should be rectified by provision of adequate tools needed to be used in different stations/activities, proper allocation of students to their due respective supervisors in advance in order to avoid confusion and pilling up of students at the administration blocks, health facilities (sick bay) should be put in place at least to offer first aid to any worker/student who has sustained injuries or even sicknesses.

## CHAPTER ONE

### INTRODUCTION TO INDUSTRIAL TRAINING

#### 1.1 Introduction

This industrial training was conducted for a period of 10 Weeks at National Semi-Arid Resources Research institute (NaSARRI) Serere from 28<sup>th</sup> February 2022 to May 6<sup>th</sup> 2022. Industrial training is one of the modules incorporated in the curriculum to expose students to hands on skills in correlation to the class theory. Its main objectives are to enable students acquire practical knowledge, skills, methodology, evaluation in agricultural research and other related activities and techniques. The training was carried out in the different units and programs in a rotation manner.

#### 1.2 Background of NaSARRI

The National Semi-Arid Resources Research institute (NaSARRI) is one of the 16 Public Agricultural Research institutes (PARIs) of National Agricultural Research Organization (NARO) established by National Research Act 2005. The National Semi-Arid Resources Research institute started its operation way back in 1920. It was initially established as an experimental station for ox-cultivation which were charged to support cotton production in Teso. It as well served as a unit for training staff of Department of Agriculture.

It pioneered as research study on cotton, livestock and other animal attraction technologies to emphasize quality output under supervision of the Ministry of Agriculture. In 1992, NaSARRI was called Serere Agricultural and Animal Production Research Institute (SAARI).

#### 1.3 Location

NaSARRI is located in Eastern Agro-ecological Zone in Serere District, about 27Km south of Soroti City in Olio Sub-county, Okulonyo Parish, Igola village.