Logbook = 10.5/12 Report = 34/48





P.O. Box 236, Tonore, Upanda Sen: +256 - 45 444 8838 Fax: +256 - 45 4436517 Final: info@adm.buotema.ac.co

www.busitema.ac.ug

AN INDUSTRIAL TRAINING REPORT CARRIED OUT AT THE NATIONAL SEMI-ARID RESOURCES RESEARCH INSTITUTE (NASARRI).

Email: director nasarri@yahoo.com

FROM: 28/02/2022 TO: 6/05/2022.

THIS REPORT IS PRODUCED TO BE SUBMITTED TO THE DEPARTMENT OF AGRIBUSINESS AND EXTENSION, BUSITEMA UNIVERSITY ARAPAI CAMPUS.

COMPILED

BY

EGODU SIMON PETER,

EMAIL: egodusimonpeter@g-mail.com.jvERSI

REG.NO: BU/UP/2020/1809

FOR PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE AWARD OF DIPLOMA IN CROP PRODUCTION AND MANAGEMENT OF BUSITEMA UNIVERSITY ARAPAI CAMPUS, 2020/2021 (YEAR 1).

DATE OF SUBMITION: 23/05-/2022

6.5

### **DECLARATION:**

I, EGODU SIMON PETER, sincerely declares this report to be of my own capacity level and no statement copied from any source and information has never been submitted to any university for award.

Student Name EGODU SIMON PETER

Year; 2020/2021, 1 YEAR, Registration No: BuluP/2020/1809

Sign; FG Date; 10/05/2022, Contact; 0780481442

CLASS NO. FAA 2229

# Approved By; Field Supervisor: ALGO HADDLE 8ETT Sign; Date: 10 105 | 2002 Contact: 07744774448 Coordinator Internship: Level Sign; Date: 10 5 2022 Contact: 077234457 Financial Contact: 07824457 Sign; Date: 10 5 2022 Contact: 0782445318 Academic Supervisor: Date: 10 5 2022 Contact: 07824453318

APPROVAL

### **DEDICATION:**

(01)

I dedicate this report to my family members, all friends and relatives for their tireless support and guidance during my industrial training .May the Almighty GOD bless you all.

I highly recognize my Coordinator Internship Mr.Okwang Doda, the Academic Supervisor

Dr. Mayanja Ibrahim program supervisor for their hard work of assessing; my dear field technicians Mr. Ogwang George and his field assistants in cotton breeding department among others in various departments, for the support granted during both field and laboratory activities including data management.

### ACKNOWLEDGEMENT:

(01)

Great thanks to the Director of NaSARRI, Dr. Ugen Michael, Dean of student, academic secretary, university councilor and all my colleagues at the training for having good cooperating and mutual understanding during my time at the campus and during the Industrial training exercise

I highly want to extend my gratitude to the coordinators of my Industrial training for the support granted especially Mr. Okwang Doda, Mr.Obuo Peter among others who managed to take us through orientation exercise successfully and described to us the major programs present within the research institute. My immediate field supervisor Ms. Harriet Betty Alepo and university supervisor for having given me the maximum opportunity to conduct my training to the completion.

Most importantly my great thanks to almighty God for having guided and embraced me with good health, protection, and wisdom during this training exercise.

May the Almighty Father reword you according to your own desires.

# 02

# Contents

DECL	ARATION:	i
APPR	OVAL	ii
DEDI	CATION:	iii
ACKN	NOWLEDGEMENT:	iv
LIST	OF ABBREVIATION	vii
LIST	OF TABLES AND FIGURES:	viii
ABST	RACT:	x
1.0.	CHAPTER ONE	1
1.1.	Location and description of NaSARRI	1
1.2.	Location	1
1.3.	Mission of NaSARRI:	1
1.4.	Vision of NaSARRI:	1
1.5.	The mandate of NaSARRI:	2
1.6.	Research programmes	2
1.7.		2
1.8.	The main objectives of field attachment	2
2.0.	CHAPTER TWO	3
2.1.	DESCRIPTION OF ACTIVITIES CARRIED OUT DURING THE ATTACHMENT:	3
2.1.1.	INTRODUCTION TO OIL CROP PROGRAM	3
2.1.1.	GROUND NUTS (Arachis hypogae)	3
2.1.1.2	2. SIMSIM (sesame indicum)	4
2.1.1.	3. SUNFLOWER (Helianthus annus)	6
2.2.	FIBRE CROP.	8
2.2.1.	Cotton Plant: (Gossypium insutum);	8
2.2.1.	1. Ecological requirement of Cotton:	8
2.2.1.	2. Main activities in cotton research project:	8
2.2.1.	3. Key constrains Addressed in the project:	9
2.2.1.	4. Breeding For Variety Development And Improvement	9
2.2.1.	5. Qualities of a plant pest and disease resistant	9
2.2.1.	6. Activities carried on seed multiplication department:	9
2.2.1.	7. Methods of data collection:	10

2.3.	DRY LAND CEREAL CROPS	11
2.3.1.	Sorghum (Sorghum bicolor).	11
2.3.2	2. Finger Millet (Eleusine coracana):	12
2.4.	FARM MANAGEMENT PROGRAM	16
2.4.1.	Horticulture Section	16
2,4.2.	Green House	17
2.5.	DRY LAND LEGUME PROGRAMME	18
2.5.1.	GREEN GRAM	19
2.5.1.1	Activities carried in green gram dicipline:	19
3,0.	CHAPTER THREE	20
3.1.	Skills and knowledge gained during the industrial training:	,.,,20
3.2.	Responsibility I undertook during the industrial training;	20
3.3.	Influence of industrial training to your future carrier plans	20
3.4.	Correlation of the attachment activities with classroom knowledge:	20
3.5,	Challenges experienced during the industrial training:	21
4.0.	CHAPTER FOUR	22
4,1.	Conclusion	22
4.2,	Recommendation	22
APPE	NDICES	23
The map of NaSARRI		28
Photos of the Attachment		29
REFERENCES		30



### LIST OF ABBREVIATION

M.T.P. : Medium Term Plan.

ICEISAT: : International Crop Resource Research Institute for Semi- Arid Tropics.

F.A.O:. : Food and Agricultural Organization.

ZADI:. : Zonal Agricultural Research Department Institute.

AIRC. : International Agricultural Research Centre.

N.G.O.: Non Government Organization.

G.O.T. : Ginning Out Turn.

NaSARRI. : National Semi- Arid Resources Research Institute.

NARO. : National Agricultural Research Organization.

C.D.O. : Cotton Development Organization.

A.D.P. : Animal Draft Power

B.P.A. : Bukalasa Pedigree Alba.

C.B.; Cotton Breeding.

SAARI. : Serere Agricultural and Animal Research Institute.

I.C.M. : Integrated Crop Management.

I.P.M. : Integrated Pest Management.

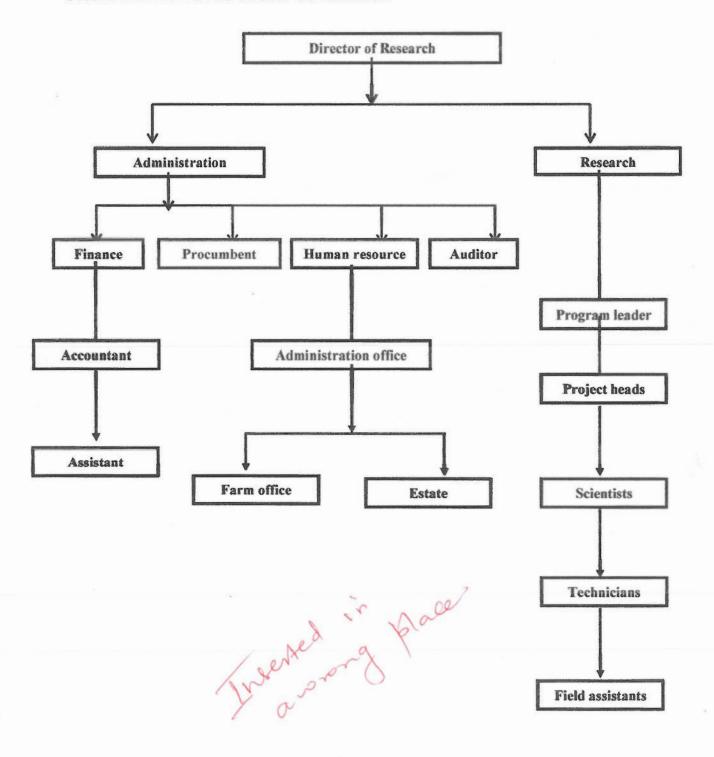
N.S.C.S. : National Seed Certification Service.



## LIST OF TABLES AND FIGURES:

Organization structure of NaSARRI	
Brief summary of data being carried in the laboratory manually	10
Sample of randomized experimental cotton field plan.2020-2021/CB/1C	10
Table 4: showing the varieties of finger millet at NaSARRI:	14
Table showing work plan per week for 7 weeks	
The map of NaSARRI	
Photos of the attachment	29

### ORGANIZATION STRUCTURE OF NaSARRI



(5/B)

### ABSTRACT:

This report gives details of my internship of 10(ten) weeks starting from 28/02/02 up .to 6th-5-2022. The research is mandated to carry out Agricultural research based on the programs like oil crops, Farm management, Cereal crops, Dry land legume crops and Cotton. However, this training involved a rotation of one (1) week @program., and was aimed at disseminating the appropriate Agricultural Technologies mainly practical to students in order to relate with theory. The rotation was conducted by each department in a program playing a role of supervision in the every discipline. During the training, I learnt and got engaged in several technical activities like data collection on plant behavioral growth, scoring of pests and diseases on plants, some of the breeding practices including selfing, emasculation, crossing, stand count and harvesting approaches including their procedures.

During internship however we encountered some challenges like most programs had already harvested so field activities were almost no there. However, the training was successful and so; I learnt a lot of field skills which boosted my knowledge attained in class room.

of Suntainstrand

### 1.0.CHAPTER ONE



### 1.1. Location and description of NaSARRI

### Background of NaSARRI.

Agricultural Research in Serere was started way back in 1920 by the colonial government as an animal traction unit. When NARO was launched it was given a name Serere Agricultural and Animal Research Institute (SAARI).

Later on due to restructuring of NARO the name was again changed to National Semi – Arid Resources Research Institute (NaSARRI) to carry out research on semi-arid region of Uganda. This was after research was done with support from the government of Uganda and several donors especially the World Bank which provided major funding. The Institute has made considerable progress since it was introduced.

NaSARRI is one of the 16 research institutes of the National Agricultural Research Organization (NARO). It is located in the eastern agro-ecological zone in Serere district which was previously under, Soroti district, at latitude 139° North longitude 33 degrees and 27° east. It is at altitude of 3.078 feet above sea level, with sandy learn soils and average annual rainfall of 1972mm and bimodal distribution type.

### 1.2. Location

NaSARRI is located in Eastern Agro-ecological Zone in Serere district, about 27 km south of Soroti Town in Olio Sub-county, Igola Parish.

### 1.3. Mission of NaSARRI:

To generate package and disseminate appropriate Agricultural production of agricultural technology and information for improved sustained integrated crops and natural resource management and partnership with other stakeholders.

### 1.4. Vision of NaSARRI:

A market leader in generation and dissemination of appropriate technologies for sustainable development.