



# INDUSTRIAL TRAINING REPORT CARRIED OUT AT NASARRI (NATIONAL SEMI ARID RESOURCES RESEARCH INSTITUTE SERERE DISTRICT) UNDER CROP RESEARCH PROGRAM

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## **DECLARATION**

I hereby declare that the information in this report is original and out of my effort and is not a copy of any source and has never been submitted to any institution/ university for any award. It has been written outof my active participation and involvement in various activities at the research institute (NaSARRI).

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## **DEDICATION**

I express my deepest wonderful and excellent gratitude to my beloved and the only parents Mr. Erutu Micheal and Mrs. Ajego Dinah and all the other members of the family for being the pillars of my academic progress by laboring themselves in raising funds for my tuition. This encouraged continuity if my studies without any difficulty or interference.





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Above all I give great thanks to the almighty God for His help, guidance, care and assistance that he offered to me abundantly during the course of my industrial training and courage during my whole training period.

I would also like to extend my sincere gratitude to my major advisor (supervisor) Mr. GANG ROGGERS, for his valuable comments, suggestions and encouragement, he deserves special appreciation for the input he added on my work from the initial proposal writing, interview schedule and preparation to the final report writing.

I would also like to express my thanks to all the field technicians and administration staff of NaSARRI for permitting me to do my training till completion without any interference thus the training was completed successfully.

Finally, my appreciation goes to all my lecturers in their respective capacities for guiding me on report writing skills and also everybody I have not mentioned here but contributed to the success of my training, your all deserve my appreciation and may the almighty God bless you in all your endeavor,

MAY ALMIGTY GOD BLESS THEM ABUNDANTLY

### LIST OF ABBRIVIATIONS

NaSARRI-National Semi - Arid Resources Research Institute

NARO-National Agricultural Research Organization

ZARDIs-Zonal Agricultural Research and Development Institutes

SAARI-Screre Agricultural Animal Research Institute

NAADs-National Agricultural Advisory Development services.

NGOs-NonGovernmental Organizations

FAO-Food and Agriculture organization

MAAF-Ministry of Agriculture Animal Industry and Fisheries

**SEREMI-Serere** millet

SECOW-Serere cow pea

SEPI-Serere pigeon pea

SESO-Serere sorghum

SERENUT-Serere ground nuts

NARIs-National Agricultural Institutes

PARIs-Public Agricultural Research Institutes

NARL-National Agricultural Research Laboratories.

**BPA-**Bukalasa Pedigree Alber

IT- Industrial Training

MUK-Makerere University Kampala



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## ABSTRACT

The industrial training research report was conducted at NaSARRI for a period of 10 weeks under crop production and management in a two week rotation program under different commodity crops; that is to say Dry Land Cereals (sorghum, finger millet, pearl millet), Dry Land Legumes (cowpeas, pigeon peas, green gram), Oil Crops (simsim, sunflower, groundputs), and Fiber Crops (cotton). Data was collected using Discussions, observations, internet, library research, and consulting technical personnel. This was done to develop my skills and knowledge of decentralized functioning. Information about NaSARRI was collected, and it included its background, location, vision, mission, mandated areas, and research programs at the station, objectives, and the administrative structure. Information on the four research programs; cotton, dry land cereals, dry land legumes, and oil crops was collected. It included the agronomic practices, breeding procedures, pests, diseases, weeds and control measures, soils and environmental conditions for each of the crop commodities researched on was obtained. During the student intern period, students carried out different tasks under the industrial training and gained knowledge and skills that would help them understand what happens at an agricultural research institute. Knowledge gained, responsibilities undertaken, challenges faced, recommendations and conclusions were all documented during the internship period. The industrial training was beneficial in that I was able to gain and develop technical knowledge on crop agronomy, breeding, pathology, and entomology. Since I was allocated to all the research programs; Dry land cereals, Cotton, Dry land legumes and Oil crops. A number of skill were gained among which include, selfing, emasculation, cross pollinating crops, pests identification and control, scoring for diseases, among others.



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## **CHAPTER ONE**

#### 1.0 GENERAL INTRDUCTION.

This chapter covers the introduction which includes the back ground, location, vision, mission, benefits, partnership initiative programme and objectives of interne ship and collaborations.

## 1.1Background

The agricultural institute in Serere was started in 1920 by the colonial Government as an animal traction unit. When the NARO was launched, it was given a name as Serere Agricultural and Animal Research Institute (SAARI), later on due to the re organization of NARO the name was changed to National Semi- Arid Resources Research Institute (NaSARRI), to carry out research on the semi-arid resources crops of Uganda. This was after research done with supported by the Government of Uganda and several donors especially the World Bank which offered major funding. The institute has made considerable progress since it was introduced to date.

### 1.2 Location of NaSARRI

NaSARRI is one of the seven research institute of the national agricultural research organization (NARO). It is located in the eastern agro—ecological zone in Serere district, Olio sub-county, Igola parish kikota and about 27 km from Soroti town.

## 1.3 Vision of NaSARRI

A market leader in generation and dissemination of appropriate technologies for sustainable development in semi-arid regions.

### 1.4 mission of NaSARRI

To generate package and to disseminate appropriate agricultural production, technologies and information for improved and sustained integrated crop and natural resources management in partnership with the stakeholders.

## 1.5 Mandated areas of NaSARRI.

NaSARRI is to undertake research on crop production for semi- arid production systems in the areas of seed research, production and product management, together with animal