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**A REPORT OF INDUSTRIAL TRAINING CONDUCTED AT NaSARRI UNDER GRAIN
LEGUMES PROGRAM AND CASSAVA**

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**TO BE SUBMITTED TO THE FACULTY OF AGRICULTURE AND ANIMAL
SCIENCES, DEPARTMENT OF AGRIBUSSINESS AND RURAL SUSTAINABLE
DEVELOPMENT, BUSITEMA UNIVERSITY ARAPAI CAMPUS FOR PARTIAL
AWARD OF DIPLOMA IN CROP PRODUCTION AND MANAGEMENT**

AUGUST 2016




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DECLARATION

I Agero Sarah do declare that the information contained in this report was collected and compiled by me in the department of Dry land legumes program at NaSARRI during my industrial training and no part of it has been submitted to any universities for the award of diploma in crop production and management.


Signature.....  Date..... 15th / 08 / 2016

Approved by

Supervisor

Signature.....  Date: 15.08.2016


Director

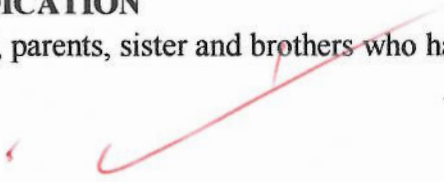
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DEDICATION

I dedicate this report to my beloved husband, parents, sister and brothers who have worked hand in hand with me during my training



ACKNOWLEDGMENT

First and foremost, I thank the almighty God for having kept me during my training.

Secondly, I thank BUAC for letting me undergo the training.

Thirdly, I thank NaSARRI administration for accepting me to conduct my training in the Institute.

Fourthly, I thank my supervisor Mr. Okwang Dodah and field assistants and fellow students in dry land legumes for the guidance and Good Corporation.

Finally I thank my husband and parents for supporting me during my training.

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LIST OF ABBREVIATIONS

NARO-National Agricultural Research Organization

NaSARRI-National Semi Arid Resources Research Institute

NaLIRRI-National Livestock Resources Research Institute

NaCRRI-National Crop Resources Research Institute

NaFORRI-National Forest Resources Research Institute

NaFIRRI-National Fisheries Resources Research Institute

NaRL-National Research Laboratories

ZARDI-Zonal Agricultural Research and Development Institute

MAAIF-Ministry of Agricultural Animal Industry and Fisheries

NARS-National Agricultural Research System

BUAC-Busitema University Arapai Campus

Ha-hectare

KG-kilogram

EG-for example

GMO-Genetically Modified Organisms

DCP-Diploma in crop production and management

REG NO-Registration number

Completed

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ABSTRACT

This industrial training was done by Ms. Agero Sarah Reg no BU/UP/2015/923 a student pursuing a diploma in crop production and management at Busitema University Arapai campus and did my training from Serere district under NaSARRI

Industrial training is usually done to make the student apply the skills taught in class related to his/her course and gain experience in field work and conditions as well as challenges available and how to manage them

During the collection of data obtained in this report in Grain legumes program and cassava at NaSARRI, I was able to interact with field assistants, gain guidance from my supervisor during his demonstration therefore actively participating in the activities myself

The data collected from this report is mainly from Grain legumes and cassava e.g. agronomy, pathology, entomology and breeding and I was able to participate in the following activities; field marking, planting of Grain legumes at recommended spacing, pest scouting, Inoculation of green grams so as to know which variety has high percentage of fixing nitrogen to the soil, taking measurements of Grain legumes on pod weight, length and number of seeds per pod, tagging of crossed plants, stand count [determination of plant population], scoring scab disease severity and incidence on cowpeas, data collection on the plant height, number of branches and pendacles, mulching, thinning and harvesting of grain legumes. However, there were some challenges I met and they include; drought and long distance

I therefore recommend that the following should be done; the research does water harvesting and in dry months, they can use in the dry season to irrigate the crops, provide nearby accommodation to the students.

The main purpose of these training is to ascertain the student with relevance of class room theoretical knowledge in the field and practice it fully before being exposed out to serve the community.

CHAPTER ONE

1.0 INTRODUCTION

National Semi-Arid Resources Research Institute (NaSARRI) is one of the National Research Institute under National Agricultural Research Organization (NARO) and the others include, National Livestock Resources Research Institute (NaLIRRI), National Crop Resources Research Institute (NaCRRI), National Fisheries Resources Research Institute (NaFIRRI), National Forestry Resources Research Institute (NaFORRI), National Resources Laboratories (NaRL) etc. It is located in the eastern Agro ecological zone, in Serere district and covers over 1,700 acres of land and it is 27 km south of Soroti town

They carry out nuclei research mandated for the country and they research on crops, livestock, fisheries and forestry at national level.

There are Zonal Agricultural Research and Development Institutes (ZARDIs) conduct adaptive research at Zonal level and they includes; Ngetta in Lira for Northern, Nabuin in Nakapiripirit for Karamoja and Teso, Mukono in mukono for central, Bulindi in masindi for north western, Mbarara in mbarara for western, Kachwekano in kabale for south western, Rwebitaba in Nakaseke for central

1.1 Background

NaSARRI was started in the early 1920s and was established as an experimental station for ox cultivation technologies to support cotton production and it is under MAAIF. The institute was then renamed NaSARRI with mandate to carry research for semi-Arid crops in 2005 after NARS reform currently, it carries research on ground nuts ,simsim ,sunflower, cowpeas ,pigeon pea, green grams, finger millet, pearl millet, sorghum and cotton.

1.2 Vision

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