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**INDUSTRIAL TRAINING REPORT CARRIED OUT ON CROP PRODUCTION AND
MANAGEMENT AT NATIONAL SEMI-ARID RESOURCES RESEARCH INSTITUTE**

NaSARRI, SERERE DISTRICT

FROM 28TH FEBRUARY TO 22ND APRIL 2022

COMPLIED BY

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PROGRAM: DIPLOMA IN CROP PRODUCTION AND MANAGEMENT (DCP)

COURSE NAME: INDUSTRIAL TRAINING

COURSE CODE: DCP 1208

YEAR OF STUDY: FIRST YEAR

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**TO BE SUBMITTED TO BUSITEMA UNIVERSITY ARAPAI CAMPUS UNDER THE
DEPARTMENT OF AGRICULTURE BUSINESS AND EXTENSION FOR PRODUCTION AND
MANAGEMENT FOR PARTIAL FULFILLMENT OF THE AWARD OF DIPLOMA
IN CROP PRODUCTION**

DATE OF SUBMISSION

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DECLARATION

I **ACHAM NORAH** declare that this field work report is entirely my original piece of work, first of its kind to be submitted to Busitema University and it has never been submitted to any university or any institution of higher learning for an award of diploma, degree or any other qualification.

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APPROVAL

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Signature.....

Date.....

DEDICATION

I dedicate this report to my beloved parents Mr. IKOJAT MICHEAL, Mrs. ASEKENYE BETTY, for their support both financially and morally, not forgetting my brothers and sisters for their hope and all my friends especially ATIKUN TIMOTHY and LOGOSE BRIDGET GIFT.



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LIST OF ABBREVIATIONS

BPA: Bukalasi Pedigree Albar

BUAC: Busitema University Arapai Campus

DCP: Diploma in Crop Production and Management

E.g: Example Given

IT: Industrial Training

NARO: National Agricultural Research Organization

NaSARRI: National Semi-Arid Resource Research Institute

PARI: Public Agricultural Research Institute

RCD: Randomized Complete Design

REG-NO: Registration Number

Rep: Replicates

SAARI: Serere Agriculture and Animal Research Institute

SATU: Serere Albar Type Uganda

YMD: Yellow Mosaic Disease

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ABSTRACT

This industrial training report was carried out at National Semi-Arid Resources Research Institute (NaSARRI), Serere located 21km south west of Soroti from 28th February to 22nd April 2022. In this training, I was attached to 5 departments which include; dry land cereals program (finger millet, sorghum and pearl millet), dry land legumes (cow pea, pigeon pea and green gram), cotton program, oil crops (groundnuts, simsim and sunflower) and farm management (horticulture, metrology animal traction etc.) The main objective of the training was to equip students with basic of practical skills while relating to the theoretical knowledge learnt in class into practical work. The source of information was obtained from field assistants while in the field and through reading text books containing relevant information, visual observation in the field and interaction with other intern students. This report comprises of four chapters which include; chapter one containing background, location, mission, vision and mandate, objectives and organizational structure. Chapter two contains the activities that I carried which included post-harvest data collection on plot weighing, grain weighing in sorghum, emasculation, crossing in the screen house, pests and disease identification. Pasture management and preservation and field marking. Chapter three contains the skills and qualification, responsibilities, challenges, the influence of the training to the future career and correlation of the attachment with classroom knowledge. Chapter four contains the conclusions and recommendations. The following skills were gained during my I.T; use of a digital weighing scale, seed counter, emasculation and selfing in order to avoid contamination of the variety and maintain the genes of the variety land marking to enable row planting and correct plant population. However, some of the challenges faced were shortage of clean drinking water and laboratory equipment, weather disruption like too much sunshine which hindered the practical to be carried out effectively. In conclusion, the IT was educative and it equipped me with practical skills and knowledge which further made it more efficient. I would like the administration NaSARRI to provide equipment to the entire five departments to ease the practical work.

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CHAPTER ONE

1.0 INTRODUCTION

The National Semi-Arid Resources Research Institute (NaSARRI) is one of the sixteen Public Agricultural Research Institutes (PARIS) established by the National Agricultural Research Organization (NARO) parliamentary Act of 2005 (www.nasarri.go.ug).

It falls under the category of the National Agricultural Research Institutes (NARIS) which carries out and manages the agricultural research of a strategic nature and national importance. NaSARRI conducts applied and adaptive research in agriculture in the experimental station for ox-cultivation technology that was designed to support and uplift cotton production in Teso and for the training of the staff from the department of agriculture by NaSARRI had made a foundation and considerable progress since its creation but all this progress would have not been if it was not because of the support from the government and several donors.

1.1 BACKGROUND OF NaSARRI

Agricultural research at NaSARRI was started in the year 1920 by colonial government. It was initially called Serere Agriculture and Animal production Research Institute (SAARI) for semi-arid tropics on crop and then changed to NaSARRI with the support from the government of Uganda and several donors especially world bank which provides the major funding.

1.2 LOCATION OF NaSARRI

The National Semi-Arid Resources Research Institute (NaSARRI) P.O, BOX 56 Soroti Uganda is located 21km south west of Soroti town, Serere district, olio sub-county, Igola parish.

1.3 THE VISION

To be a market leader in generation and dissemination of appropriate crop technologies for sustainable development in semi-arid regions of Uganda

1.4 THE MISSION

To generate, package appropriate agricultural production technologies and information for improved management and sustainable integrated crop and natural resource management in semi-arid areas in partnership with other stakeholders.

1.5 WHY NaSARRI WAS STARTED

To increase the quality, quantity and availability of technologies, methods and policy advice for effective and profitable agriculture while increasing food security and natural resources sustainability.

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