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**A REPORT ON INDUSTRIAL TRAINING CARRIED OUT AT NGETTA  
ZONAL AGRICULTURAL RESEARCH AND DEVELOPMENT  
INSTITUTE (Ngetta ZARDI)-LIRA.**

**FROM; 21<sup>TH</sup> MAY TO 27<sup>TH</sup> JULY, 2018**

**COMPILED BY;**

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Forwarded  
FARM MANAGEMENT  
NGETTA ZONAL AGRICULTURAL RESEARCH  
AND DEVELOPMENT INSTITUTE  
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**AREPORT SUBMITTED TO THE FACULTY OF AGRICULTURE AND  
ANIMAL SCIENCES, BUSITEMA UNIVERSITY ARAPAI CAMPUS  
FOR PARTIAL FULFILLMENT IN AWARD OF NATIONAL  
DIPLOMA IN CROP PRODUCTION AND MANAGEMENT**

**YEAR OF SUBMISSION**

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## DECLARATION

①

I **Ejang Sarah** registration number **Bu/up/2017/1081**, hereby solemnly declare that ,this report entitled **adaptive research and experiment, goat improvement unit, horticulture unit [fruit trees nurseries],aquaculture sections, crop production section and agro forestry** was made out of my own efforts with consultations from my filed supervisor and facilitators and therefore it presents this original work which I undertook from 21<sup>st</sup> may, to 27<sup>th</sup> July 2018 at Ngetta zonal agricultural research and development institute lira.

In conclusion to the above, I declare that, this report has never been submitted by any student to any institution of learning for any academic award.

**APPROVAL.**



I hereby confirm that, the work submitted in this report is true and has done under my supervision and commitments and it has never been submitted for any academic award.

Student Signature; ..... *Sarah* .....

Students' Name; ..... *EJANG SARAH* .....

Students Registration Number; ..... *Bulup/2017/1081* .....

Field Supervisions' Signature; ..... *[Signature]* .....

Field Supervisors Name; ..... *OKELLO HORACE* .....

Title; ..... *Co-ordinator Internship Training* .....





**DEDICATION.**

I Ejang Sarah, wish to delicate this comprehensive report to my beloved parents miss Anna Akor and Mr. Akor William ,my brothers Mr. Obaa Denis and to all my sisters Pamela Okwir, miss Beatrice Acen and my beloved Mariko Silvestre whose tireless effort enabled me to successfully accomplished this noble training.

I extend my dedication to my fellow students of Busitema university Arapai campus; Mr Opio Michael, And Many Others.

Lastly to my dear lecturers' of Busitema university more especially Arapai campus and fur most to the department of agri- business and extension for their magnificent support rendered to me when at the campus

## Acknowledgement

I wish to express my gratitude to the almighty father for the gift of life, wisdom, skills health, guidance and knowledge, offered to me during my industrial training course at Ngetta Zonal Agricultural Research And Development Institute.

Furthermore ,my sincere gratitude also goes to all the staff of **Busitema University –Arapai campus** especially to the faculty of agriculture and animal sciences for having granted this wonderful opportunity for industrial training to link theories being learnt for schools and to enable us get acquainted to the practical parts.

My humble appreciation also goes to the administrators of Ngetta Zonal Agricultural Research And Development Institute for having accepted me to carry out my industrial training, which therefore, made me to gain more knowledge, experiences and enhance my skills.

Appreciation also goes to my field supervisor, Mr. Okello Horace for the tedious services, support, knowledge and skills he rendered to me tirelessly which later made my industrial training successful, may you be blessed by the almighty father.

In conclusion to the above, my truthful thanks also goes to my beloved brothers and sisters, fellow students of Busitema University Arapai Campus, in conclusion all those who contributed psychologically ,physically, financially, morality and spiritually towards my life during the of studies ,may the grace of our lord Jesus Christ, be with you all, amen.



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**LIST OF ABBREVIATION**

- DFI..... District Farm Institute
- NgeZARDI..... Ngetta Zonal Agricultural Research and Development Institute
- Demo.....Demonstration
- ZARDI.....Zonal Agricultural Research and Development Institute
- NARO.....National Agricultural Research Organization
- EAAPP.....East Africa Agricultural Productivity Project.
- ARDC .....Agricultural Research and Development Centre
- CBO<sup>s</sup>.....Community Based Organizations
- NAAD<sup>s</sup>.....National Agricultural Advisory Services.
- SSP.....Single Super Phosphate
- NGOS.....Non-Governmental Organization
- DAP.....Di Ammonia Phosphate
- NPK.....Nitrogen Potassium Phosphorous
- PMA .....Plan For Modernization of Agriculture
- WEMA.....Water Efficiency Maize





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## **ABSTRACT**

This report aims at giving a critical descriptions for the whole activities carried out at Ngetta Zonal Agricultural Research And Development Institute-lira, during my industrial training carried out from 21<sup>st</sup> may,27<sup>th</sup> july,2018

The above named institution aims at undertaking, promoting and coordinating research in all aspects of fisheries, crop production, agro-forestry and livestock improvement, therefore, below holds activities, that I physically participated and actively in, that is to say;-

Field making of various demonstration plots, preparation of nursery seed bed and it's general management practices , testing of seed germinability and viability percentage, weeding, gap filling ,stacking, Denavelling of coffee and banana plants or gardens, of maize and collection of data on WEMA maize varieties ,grafting, budding, potting, watering ,transplanting, applying fertilizers, raising of eucalyptus by means of vegetative propagation and applying of deldrin and aldrin to control eucalyptus termites from the eucalyptus mother garden.

In addition to the above, site selection, digging of the pond and its dykes, weighing, formulating feed and feeding of fish, liming, manuring and fertilizing of the pond were also done.

Moreover, feeding, watering, cleaning of the pen, Deworming, dehorning, castrating, giving of treatment, spraying animals to control external parasites, weighing, record keeping and establishing of the various pasture and lastly, identifying, diagnosing and treating of infected and diseased livestock at the institute.

### **This training helps me to:-**

Learn more of extension work through sharing ideas and interactions with farmers and amongst my fellow intern students, learn most of the appropriate ways of handling challenges, developing a smooth flow of both practical and theoretical knowledge by building confidence during extension services, and enabling me to understand work ethnics, dynamics of rural life responsibilities and challenges experiences during extension services.

### **Challenges encountered during my industrial training and its suggested solutions:-**

Few instructors and facilities to give full guidance in the field , poor time management, Long working hours which later made many student very tired, Long distances from place of residence to the institute, Language differences amongst some students and attendants in the farm and water shortage ,therefore ,more qualified skilled personnel's must be admitted, clean water points and organized time table should be provided within the different sections of the farms and moreover, institute should provide students with accommodation in order to solve challenge of long distance. Finally, the training was else beneficial as linked to my future delivery service.

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## **CHAPTER ONE**

### **1:0. INTRODUCTION:**

I hereby, submit in my industrial training report for consideration to your office carried out at ngetta zonal agricultural research and development institute to the above, the followings were then sections from which activities were carried out on; aqua-culture ,goat improvement, dairy production and management, adaptive research and experiment, agro-forestry, fruit trees and nurseries, demonstration plots and seed multiplication and mother garden [main farm].furthermore the training was practical and educative on the above sections;

### **1:2. ORIENTATION**

**Orientation** was the first activity to be conducted during our training course, we walked together under the full guidance and supervision of the field supervisor for the organization. He introduced us to various farm sections like demonstrations plots, goat's improvement unit, dairy production and management, adaptive research and experiment, aquaculture and many others.

### **1:3. LOCATION AND HISTORICAL BACKGROUND**

**1:3:1. Location** ; ngetta ZARDI located 5 kms [3miles] lira kitgum road, as a land area of about 221 hectare[550 acres],elevation of 1180 meters above sea level with tropical climate and bi-modal rainfall.

**1:3:2. Historical Background;** historical information about NgeZARDI is scanty however inscription in some buildings suggest that construction at ZARDI formally District Farm institute [1964 -1998] and agricultural research and development institute later [1999-2006] started in 1930s.it was a research centers' for cotton under serere research station. During the post-world war ii period, the center was used as a settlement and orientation sites for war veterans. After independence, the government upgraded it to a District Farm Institute [DFI] under the ministry of agriculture and it served the Lango districts. In 1999 its ownership and management was transferred to national agricultural research organization [NARO].NAR Act 2005 forced the change of name DFI to Ngetta ARDC therefore in 2007, NgettAARDC became a zonal Agricultural research and development institute.

### **1:4. PRESENT MANDATE**

NARO's strategy for 2010 -2020 places the great emphasis on developing and disseminating improved Agricultural technologies relevant to different Agro-Ecological Zones (AECS).

Accordingly, various ZARDI were established in different agro-ecological zones to specifically manage and carryout applied and adaptive research relevant to each agro-ecological zone.

NGEZARDI is thus mandated to carryout adaptive research relevant to the needs of farmers in the mid-North and Northern agro-ecological zone comprising of Amolatar, Amuru, Apac, Dokolo, Gulu, Lira, Oyam, and Pader respectively.