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FIELD ATTACHMENT REPORT CARRIED OUT FROM 28th /02/2022/ TO 06 /05/2022 IN PAKWACH DISTRICT AT PANYANGO SUB COUNTY LOCAL GOVERNMENT

COMPILED BY:

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FIELD ATTACHMENT REPORT TO BE SUBMITTED TO THE DEPARTMENT OF AGRI-BUSINESS AND EXTENSION OF BUSITEMA UNIVERSITY FOR PARTIAL FULLFILEMENT FOR THE AWARD OF CERTIFICATE IN GENERAL AGRICULTURE

ACADEMIC YEAR: 2019/2020

SUBMISSION DATE 18. 05. 2022

DECLARATION

I LAKISA EDMOND here by declares that this industrial training report is the original copy of my own work and carried out in Panyango sub county ,Pakwach district written by me and has not been submitted by any one for the award of certificate in any institution of learning.

Name: LAKISA ESM	OND
Date. 13. 05. 2022	Signature
	PANYANGO SUBCOUNTY
Field supervisor	AGRICULTURAL OFFICER
Panyango Sub County	SIGN *

Name: OKURMU EDI	MONS EDCAL GOVERNMENT
	signature

Acade	emic	supe	ervisor

Name	
Date	Signature

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DEDICATION

I dedicate this report to my lovely parents OPIO LAKISA and AYERANGO CHRISTINE. for their great support in paying my tuition and for advising me which has made me to reach this level ,and not forgetting my brothers ,,sisters , relatives ,and friends who have advised me and enable me to accomplished my training successfully. May almighty GOD bless you and rewards you abundantly AMEN.

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ACKNOWLEDGEMENT

I would wish to acknowledged in a special way Panyango sub county local government administration for having given me this knowledge and skills that exposed me to the general knowledge in agriculture yielding me very vital knowledge in several subjects A state of the sta

I would also like to appreciate all the staff of Panyango sub county local government for the great support and assistance rendered to me in all ways during the training for funding the training which we hope will go a long way to enable me to access knowledge and skills.

I would like to thank in a special way my beloved field supervisor of crop who is also an Agricultural Officer of Panyango sub county MR.OKURMU EDMOND, and not forgetting my fellow colleagues who were working with me in both crop and animal section MR. PIKWO JAMES who is assistant veterinary officer Panyango sub county.

Lastly I would like to thank my parents and my friend OKWAIRWOTH WILBERFORCE for their support that they gave to me during the period of my industrial training that may the lord bless you.

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LIST OF ABBREVIATION

B.U.A.C:	Busitema University-Arapai campus
DCP;	Diploma in Crop Production and management
DAP:	Diploma in Animal Production
CGA:	Certificate in General Agriculture
Dr:	Doctor
S/C:	Sub County
É.G:	for example
REG:	Registration

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FIGURES

Figure: 1 Showing the structure of Panyango Sub County.

Figure 2 : Shows photos of farmers visited during the farm visit.

Figure 3: Shows training of farmers on planting of cassava using the right method

Figure 4: Shows Internet vaccinating animal

Figure 5: Shows internee establishing cassava demonstration field with farmer group members at Panyango sub county

ABSTRACT

The field attachment was carried out at Panyango sub-county Local Government, Jonam county in Pakwach District with its headquarter located at Padoch Parish 5km from Pakwach town.

During the industrial training under crop section where I specialized, I carried out various activities that included; conducting cassava demonstration at Pakia parish Panyango Sub County

trained farmers on Tomato production and management and post-harvest handling ,Supervision of Andibo small scale irrigation demonstration site, Input distribution under operation wealth creation programme, Data compilation on operation and wealth creation, Farm visits conducted, Control of mango fruit flies in mango orchard, Training of farmers on climate smart agriculture, Training of farmers on post-harvest management of watermelon and tomato, Training of extension workers by National Drug Authority, Preparation of nursery bed at Andibo primary school, Surveillance of crop pests and diseases, Sky training on life skills by Vijana corps.

I also gained skills and knowledge in crop production and animal production while for the training, I learnt and gained both practically and theoretically knowledge and skills that has enhanced what I studied in classroom.

CHAPTER ONE

1.1 Introduction

Industrial training refers to the work experience that is relevant to the academic and professional development of a student before graduation. It is usually compulsory module for all students at the end of first year at university and tertiary institutions.

It is a program which aims to provide supervised practical training with aspect in specified time frame. This training can be carried out either in government organization or in private section.

1.2 Location

This study was conducted in Panyango Sub-County which is located in Pakwach District – West Nile Sub region of Uganda between latitude $2^{0}28$ N and longitude $31^{0}25$ O E (*Travel journals net*, 5th/March, 2012). The Sub –County is bordered by Pakwach Town Council in the South, Amuru District in the East, Alwi Sub – County in the West and Wadelai Sub – County in the North.

Its management is currently under the Local Government and the administrative structure is as stipulated in the Local Government Act of 1997.

The human population density of Panyango is 28,666 persons (UBOS, 2014).

1.3 Vision

To transformed community of Panyango sub county from a peasant to modern and prosperous one within 30 years.

1.4 Mission

To deliver social services to the community for sustainable socio-economic prosperity to improve standard of living

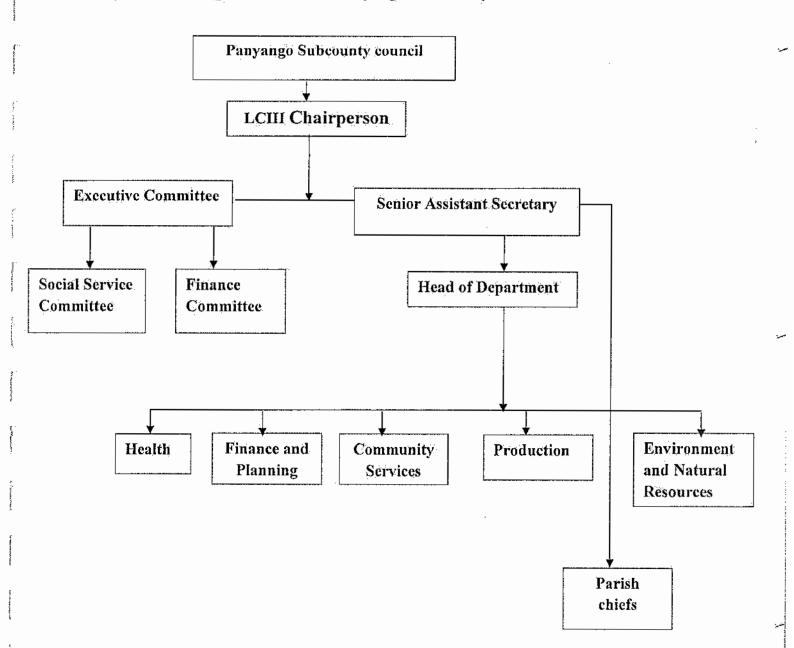
1.5 Core Values.

Excellence, relevance, innovations, professionalism, ethics and integrity, equity, internationalization and respect for diversity.

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1.6 THE STRUCTURE OF PANYANGO SUB COUNTY

Figure: 1 Showing the structure of Panyango Sub County.



CHAPTER TWO:

2:1 DESCRIPTION OF ATTACHMENT.

This industrial training was conducted at Panyango sub county Local Government Pakwach District with the department of Production under the supervision of Agricultural Officer. During the attachment, a number of activities were conducted as described below.

2.1.1 Conducting cassava demonstration at Pakia parish Panyango sub county

1 Cassava demonstration field was established at the above location in 1 acre of land. The varieties planted included; NAROCASS 1, NASE 19 and the local variety. The host farmer group is called Kwolonyo consisting of 15 members with 3 Male and 12 Female. These varieties were planted at a spacing of 1Mx 1M.

The purpose of the demonstration is to influence adoption of the different technologies by farmers.

2.1.2 Tomato production and management and post harvest handling training.

This activity was conducted at Andibo small scale demonstration farm where farmers were guided on agronomy of tomatoes. A total of 32 farmers were trained on the agronomy of tomatoes.

This was intend to impart knowledge and skills in tomato farmers in order to maintain the quality of tomato produced.

Farmers were also guided on proper post-harvest handling practices which included; timely harvesting, sorting, grading and packaging.

2.1.3 Supervision of Andibo small scale irrigation demonstration site.

During this supervision support visit, activities carried out at the irrigation scheme included the following;

- General cleaning of the green house, to enable provide hygiene and to destroy the breathing place of pests and diseases that affect crop production.
- Uprooting the dry tomato plants, to improve on the quality of crop planted in the green house and eliminate pathogens.

- Weeding of the green house, is to limit or remove the weeds which compete with crops for nutrients.
- Fixing of drip irrigation pipes to enable crops receive required amount of water needed for their growth

2.1.4 Input distribution under operation wealth creation programme

During the period of the attachment, the Sub county received crop inputs under operation wealth creation programme and the inputs received were cassava cutting and mango seedlings.

A total of 155 bags of cassava NAROCAS 1 variety was distributed to 25 farmers and 756 mango seedlings (Tommy Atkins and Kent varieties) given to 14 farmers respectively.

Before the distribution of the above inputs at the Sub county headquarters, farmers were trained on how to plant the two crop types by the Agricultural Officer and the internee. The topics trained on include the following;

Field marking of mango garden

These was done to get the recommended plant spacing and plant population, and these was done by the use of the string, tape measure and pegs to make straight lines with the help of a phythogorus theory with measurements of 3mx4mx5m

Digging of holes

The holes were dug at the depth and width of 60cmx60cm respectively using hand hoes. The top most soil is then mixed with organic manure in the ratio of 1:3 and backfilled in the holes awaiting transplanting of the seedlings.

Transplanting of the mango seedlings

Seedlings of the height of 45cm or at knee height are transplanted in the dug holes at a spacing of 10metres by 10 metres in order to have adequate spaces to limit competition by the plants for resources.

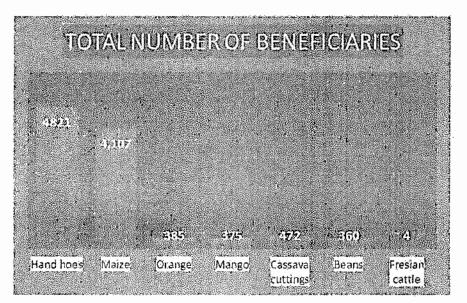
Gap filling

Gap filling is done in the seed bed once the plant planted has died due to natural factors or destruction by pests. Gap filling is necessary to ensure the field has required plant population within the area.

These was done to replace those that had dried up to obtain recommended plant population.

2.1.5 Data compilation on operation and wealth creation

This was done to know the number of farmer per parish and also to ease project planning in a specific parish. The data has been compiled on hand hoes, beans, Friesian cattle, , maize seeds, cassava cuttings, orange and mango seedlings distributed under operation wealth creation (OWC) program. Below is the graphical presentation of the data compiled



SUMMARY OF BENEFICIARIES BY INPUT TYPE

2.1.6: Farm visits conducted

This is an extension approach for disseminating agricultural extension services to farmers. During the attachment, this extension approach was used to reach out to farmers on farm and a total of 36 farmers were reached and advised These farmers were from all the seven parishes of Panyango sub county that is Andibo, Pacego, Padoch, Pakia, Pamitu, Pacer and Punivuga parishes. Farmers visited were engaged in different enterprises which include the following; cassava, maize, sesame, ground nuts, cowpeas, cotton, citrus and mango.

Findings

All the 36 farmers visited were found faced with challenges of pests and diseases in their farming situation. The common pests and diseases observed include: aphids on citrus and ground nuts, mealy bugs on cassava, fruit fly on mango, white flies on cassava and Fall army worm on maize Diseases include cassava brown streak disease, cassava root rot disease, leaf rust on citrus.

Advice offered

Farmers were then advised accordingly on the control options such as ensuring early planting of crops, timely weeding, burning crop residues, use of clean planting materials, use of pests and disease tolerant varieties and spraying using recommended chemicals. Above all, they were advised to employ integrated pests and diseases management in their farming situation for better field management.

2.1.7 Control of mango fruit flies in mango orchard

About 98% of farmers in Panyango Sub County predominantly rely on crop farming as a means of earning livelihood. In addition to that, 40% of the population are fruit farmers who grow them in order to supplement their diet and earn some income from the sales (Pakwach District report, 2017). The dominant fruit tree found in most of the households is mangoes followed by oranges.

There has been serious complaints by majority of the fruit farmers about the damage of their mango fruits by fruit fly infestation and as a result, they continued to incur a lot of losses. *Bactrocera invadens* species are the predominant species of the fruit flies that are causing major threat to the farmers.

Fruit fly pest *Bactrocera invadens* have been the most dominant and serious fruit fly pests species on fruit orchards in Panyango Sub County Pakwach District. They ruthlessly attack mango fruits with several host crops like oranges, watermelon, guava and others to mention but a few and cause significant economic losses to farmers in the Sub County due to their low income status that makes them even unable to aquire the necessary equipment for controlling the pest like the fly traps.

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Pheromone traps was used during the attachment in the orchards to control the population of the fruit fly pest in addition to other management practices such as maintaining hygiene within the orchards, timely harvesting, and destroying infected and affected fruits.

2.1.8 Training of farmers on climate smart agriculture

A total of 105 farmers organized in farmer field schools were trained on climate smart agricultural technologies of watermelon and rice. The climate smart practices emphasized on included; establishment of contour trenches, mulching and use of clean planting materials.

2.1.9 Training of farmers on post-harvest management of watermelon and tomato.

This training was conducted at the sub county headquarters together with Kilimotrust a consultant working with the Local Government. Areas of focus included; sorting, grading, packaging and storage.

2.1.10 Training of extension workers by National Drug Authority

This training was conducted on 25,03,2022 at the sub county headquarters. Major objective of the trainings was to equip the stakeholders on knowledge of safe use of veterinary drugs within community.

2.1.11Preparation of nursery bed at Andibo primary school

1 Nursery bed for tomato and African eggplant was established at the above location. Parent group members consisting of 60 members are to manage the nursery until transplanting of the crops is done.

2.1.12 Surveillance of crop pests and diseases

Surveillance on crop pests and diseases was carried out during the period of reporting in order to understand the status of the different pests and diseases within the sub county so that control measures are sought to avoid their adverse effects on farmers crop yields.

2.1.13 Vaccination of animals within the community

We vaccinated both poultry, goats and cows within community of Panyango Subcounty.

The table below shows the status of different pests and diseases within Panyango Sub County

Pest/Disease	Crops attacked	Area covered	Prevalence	Severity	Spread
Mealy bugs	Oranges and pawpaw	1 Acre	Low	Moderate	Slow
Orange dog caterpillars	Oranges	03Acres	Low	High	Fast
Aphids	Oranges	02Acres	Low	Moderate	Slow
White flies	Cassava	4 Acres	Low	Moderate	Slow
Fruit fly	Mangoes	4 Acres	Moderate	Moderate	Fast
Tomato early and late blight diseases	Tomatoes	0.25 Acre	Low	High	Fast
Cassava brown streak Disease	Cassava	3 Acres	Fligh	High	Fast

Actions taken

Farmers in Panyango continued to be frustrated by the above pests and diseases which are causing economic losses to them. However, farmers are being advised on prevention and control measures like use of disease free planting materials, uprooting and burning diseased plants, planting resistant crop varieties, use of both organic and inorganic chemicals to spray against the pests and diseases, use of manure to increase organic matter content of their soil, burying affected fruits and also gave pheromone traps to some mango farmers in order to control the fruit fly pest on mangoes.

Further, the incidence of cassava brown streak diseases is reducing due to the advice being given to farmers. With the high prevalence of white flies which has infested a good acreages of cassava, there is still fear that the disease may continue to spread but farmers are minimizing the spread by utilizing the advice on prevention and control measures being offered to them by the agricultural officer.

2.1.14 Other activities conducted

Sky training on life skills by Vijana corps

Table 6 shows the training programme for the activity

Date	Topic	Resources used
Monday	Human dignity	Paper
		Marker pen
Tuesday	Human growth and	paper
	development	Marker pen
Wednesday	Personal hygiene	Paper
	Sexually transmitted diseases	Marker pen
Thursday	True friendship and love	Paper
	Fertility awareness	Markër pen
Friday	Traditions culture	Paper
	Drugs and substance abuse	Marker pen

CHAPTER THREE

IMPACT OF ATTACHMENT

3.1 Lesson learnt and skills

Communication skills, this has been achieved through associating with the fellow students and workers within the institution.

- I gained skills on how to identify pest and diseases of different crops and their control measures.
- I also gained skill in facilitating meetings.
- I gained skills on how to diagnosed different animal diseases
- I got a skill on pasture management and improvement.
- Banana management skill was also gained.
- ✤ I gained skills on how to treat animal.

3.2 Responsibility performed during IT

Responsibilities undertaken in the field include:

- Mobilization of farmers for meetings.
- Mobilization of farmers for input distribution.
- Training of farmers on agronomy and post-harvest handling of horticultural crops.
- Conducted strategic sprays against crop pests and diseases in farmers crop fields within the community.
- Conducted method demonstration with cassava and mango farmers..
- Conducted surveillance of crop pests and diseases.
- Collected data on operation wealth creation programme.
- Vaccination of both poultry and animal.

Visiting farm animals within the community

3.3 Influence of the field attachment to my future career

The field experience has influenced my future career by ensuring that I reorient the theory learnt during my study times to practical since much of the extension services being offered to farmers within community are practical in nature. In addition, the field attachment has built my capacity to learn how to think but not what to think in solving community challenges. This has greatly enhance confidence in me to facilitate any meeting with community which is the target audience for extension service delivery.

3.4 Correlation of the attachment to my classroom knowledge.

- The attachment also correlates with the classroom knowledge basically because most of the activities we had at the time of lectures have been done practically during the industrial training
- Working relationship with other staff was indeed very perfect and interaction was always freely which resulted in to transfer of knowledge and skills, free access to offices hence making it a successful activity during the period of the attachment.
- I was also able to note that the different skills I was taught in the class on writing reports were the ones I used when writing reports while at the Institution of attachment.

3.5 Challenges faced during the attachment

Some of the challenges faced during the attachment include the following

- Unfavorable weather conditions during field activities affected demonstration establishment.
- There was a problem of long distances from home to sub county hence leading to poor time management.
- Inadequate funds to facilitate my welfare especially feeding while for the attachment with the Institution.

CHAPTER FOUR

CONCLUSION AND RECOMMENDATION

4.1 Conclusion

I therefore conclude that industrial training should continue so that the internee can gain more skills and knowledge which correlates with the theoretical exposure while in classroom. Through the industrial training, I was able to gain skills like ; spraying crops against pest and diseases, planting of crops using recommended spacing, right planting method for fruit trees like mango.

Therefore, for all the above, am now proud to have acquired enough knowledge for my level, and my being at Panyango sub county has earned me a reward and stimulation towards learning progress.

4.2. Recommendations.

I would like to recommend that the following areas should be observed and if possible be corrected within the shortest time possible so as to make the learning efficient.

- Farmers should continue to be guided by sub county extension officers on planting crop varieties that are early maturing and drought tolerant inorder to mitigate the effect of climate change that affects crop production.
- Internship should always be done at Institutions which are within reach of the student in order to reduce on distance of travel by the students.
- The sub county that is Panyango sub county should incorporate some budget to support internees during the period they expect to receive them so that it supports their welfare during the period of the internship.

APPENDICES

Appendix I. WORK PLAN

. N	WK	ACTIVITIES	OBJECTIVES	VENUE	DATE	TIME	RESPONSI BLE PERSON	TARGE TED PERSO N
	1st	Conducting Farmers visits	To enable the provision of advisory services	All parishes	28.2.22 04.3.2.22	9:00am	AO, İnternee	Farmers
	2nd	Data compilation on Operation wealth creation	To know the number of farmers per each parishes	All parishes	07.3.22 11.3.22	9:00am	AO, Internee	Farmers
	3rd	Training farmers on agronomy of different crop technologies	To enable improve on the management of crop production and mango tree planting	All parishes	14.3.22 18.3,22	9:00am.	AO, Internee	Farmers
	4th	Meeting farmers who planted tomatoes at andibo	To ensure that they know processing and post harvest handling	All parishes	21.3.22 25.3,22	9:00am	AO, Internee	Farmers

	irrigation site						
5th	Training farmers on smart agriculture	To improve on the management of crop production and tree as well	All	28.3.22 01.4.22	9:00am	AO, Internee	Farmers
6th	Visiting kitchen garden and teaching farmers on how to carry out rotation	To improve on the soil yield	All parishes	04.4.22 08.4.22	9:00am	AO, Internee	Farmers
7th	Sensitizing, Demonstrating and Monitoring on how to spray, space, plant and watering the crop in the farmers field	To enable improve on the crop production and the quality of the produce	Ail parishes	11.4.22	9:00am	AO; Internée	Farmers
8th	Monitoring of planted crop such as cassava, tomato and mango in the farmers field	To ensure proper management and increase crop yield	All parishes	18.4.22 22.4.22	9:00am	AO, Internée	Farmers

PHOTOS SHOWING SOME OF THE ACTIVITIES CARRIED OUT DURING INDUSTRIAL TRAINING

Figure 2 : Shows photos of farmers visited during the farm visit.



Figure 3: Shows training of farmers on planting of cassava using the right method



Figure 4: Shows Internee vaccinating animal



Figure 5: shows internee establishing cassava demonstration field with farmer group members at Panyango sub county

