

# A TECHNICAL REPORT ON STUDENT INDUSTRIAL WORK EXPERIENCE SCHEME (SIWES) HELD AT

### PLUSTUDIO CO. VENTURES

ALONG MOGAJI AREA, IWO, OSUN STATE, NIGERIA.

BY

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SUBMITTED TO

DEPARTMENT OF AGRICULTURAL TECHNOLOGY
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KWARA STATE POLYTECHNIC ILORIN KWARA STATE.

IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF NATIONAL DIPLOMA (ND) IN AGRICULTURAL TECHNOLOGY

AUGUST - NOVEMBER, 2024

#### **CERTIFICATION**

This is to certify that the report was based on SIWES experience gained by **AKINTAYO HAMMED ADEDEJI** with matric. number **ND/23/AGT/PT/0147** of Department of Agricultural Technology, Institute of Applied Science, Kwara State Polytechnic, Ilorin, Held at **PLUSTUDIO CO. VENTURES, ALONG MOGAJI AREA, IWO, OSUN STATE, NIGERIA** as Part of the requirement of the course.

#### **DEDICATION**

This Technical report is dedicated to Almighty GOD, the Author of all Knowledge and it is equally dedicated my Parent (MR. AND MRS. AKINTAYO) and all my family members for their Spiritual, Moral and Financial Support throughout the period of this programme, wishing them long life and a healthy life (Amen).

#### **ACKNOWLEDGEMENT**

I acknowledge the Highest GOD for His power and mighty work of love in my life helping me through the years of my studies.

My sincere gratitude and appreciation to my Parent (MR. AND MRS. AKINTAYO) and all my other family for their moral and financial assistance at all times.

To all my lecturer goes this gratitude creating time to impact knowledge and making understand the importance of studying.

Finally, to my SIWES coordinator who has find time to help me out during the course of the programme.

#### **PREFACE**

The writing of this report was motivated by the experience gained during my SIWES attachment PLUSTUDIO CO. VENTURES, ALONG MOGAJI AREA, IWO, OSUN STATE, NIGERIA. This report is meant to be a guideline to every student.

The purpose of writing this report is to relate the various area which I participated during the Industrial Training Attachment in my place of work. It is indeed very encouraging that all students to get acquainted with what is been done in class, so as to be familiar with what is been done in the practical field.

Finally, This Industrial Training Attachment is required for every student because it tends to backup and build the students physically, morally and educationally for the task after graduation.

#### TABLE OF CONTENT

Cover page

Certification

Dedication

Acknowledgement

Preface

Table of content

#### **CHAPTER ONE**

- 1.1 Introduction
- 1.2 Definition of SIWES
- 1.3 General Objectives of SIWES

#### **CHAPTER TWO**

- 2.1 Historical Background of ORGANIZATION
- 2.2 Organogram of ORGANIZATION

#### **CHAPTER THREE**

3.1 Technical Training Experience

#### CHAPTER FOUR

- 4.1 Relevance of experience gained to student field of study
- 4.2 Interpersonal Relationship with the Organization

#### **CHAPTER FIVE**

- 5.1 Conclusion and Recommendation
- 5.2 Personal impression about the organization
- 5.3 Suggestion and recommendation to the organization and the polytechnic concerning the SIWES programme

#### **CHAPTER ONE**

#### 1.1 INTRODUCTION

Student industrial work experience scheme (SIWES) is set for the development by the federal government for student to facilitate them with basic practical knowledge to deviate from predominant dependence on foreign experience and be self-reliable and creative through the training rendered by the organization in question

#### 1.2 DEFINATION OF SIWES

SIWES can be defined as an organized body basically to equip student with basic knowledge through industrial training

#### 1.3 AIMS AND OBJECTIVES OF SIWES

The aims and objectives of industrial training are as follows:

- It enables student to know their possible area of employment when graduated from school.
- To access students' interest and their ability in the course they have chosen.
- To expose students to modern equipment while they do not access to.
- To make student know the meaning and application of their cause of study.
- To give maximum experience to the student.
- To connect students professionally.

#### **CHAPTER TWO**

#### **BACKGROUND INFORMATION**

#### 2.1 HISTORICAL BACKGROUND OF THE ORGANIZATION

Plustudio Co. Venture is a Nigerian-based poultry farm that specializes in the production of high-quality poultry products, including eggs, chicken, and other related farming products and it is located at Mogaji Area, Iwo, Osun State, Nigeria.

#### **Products and Services**

Its offers a range of products and services, including:

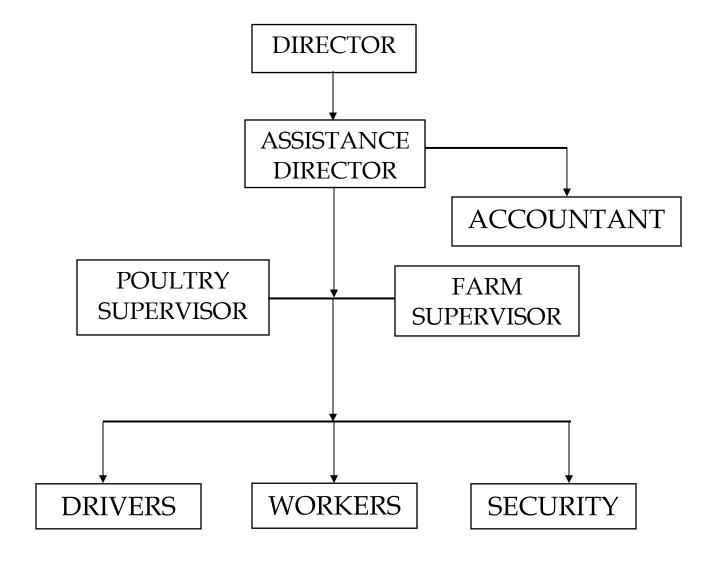
- 1. Egg Production: The farm produces high-quality eggs that are rich in protein and other essential nutrients.
- 2. Chicken Production: It raises healthy and disease-free chickens for meat production.
- 3. Poultry Feed: The farm produces its own poultry feed using high-quality ingredients.
- 4. Poultry Equipment: It also supplies poultry equipment and accessories to other farmers and poultry enthusiasts.
- 5. Farming of crops like Maize, Vegetables, Potatoes ets

#### Mission and Vision

The mission is to become a leading player in the Nigerian poultry industry, known for its commitment to quality, customer satisfaction, and sustainable farming practices.

The vision of the farm is to contribute to the growth and development of the Nigerian economy by providing high-quality poultry products, creating employment opportunities, and promoting sustainable agriculture.

#### 2.2 ORGANOGRAM OF ORGANIZATION.



#### **CHAPTER THREE**

#### TECHNICAL TRAINING EXPERIENCE

#### 3.1 INTRODUCTION TO POTATOES PLANTING

**Definition of Potato Planting** 

Potato planting refers to the process of cultivating potatoes (Solanum tuberosum) for food, seed, or other purposes.

Importance of Potato Planting

- 1. \*Food Security\*: Potatoes are a staple food crop for millions of people around the world.
- 2. \*Economic Benefits\*: Potato planting can provide income for farmers and create employment opportunities.
- 3. \*Nutritional Value\*: Potatoes are rich in nutrients, including carbohydrates, fiber, and several essential vitamins and minerals.

Types of Potatoes

- 1. \*Russet Potatoes\*: These are the most widely grown potato variety, known for their brown skin and white flesh.
- 2. \*White Potatoes\*: These potatoes have a white skin and white flesh, and are often used for boiling, mashing, and roasting.
- 3. \*Red Potatoes\*: These potatoes have a red skin and white flesh, and are often used for boiling, grilling, and roasting.
- 4. \*Yukon Gold Potatoes\*: These potatoes have a yellow skin and yellow flesh, and are often used for boiling, mashing, and roasting.

Steps Involved in Potato Planting

1. \*Seed Selection\*: Selecting high-quality potato seeds that are suitable for the local climate and soil conditions.

- 2. \*Soil Preparation\*: Preparing the soil by loosening it to a depth of 8-10 inches and adding organic matter such as compost or manure.
- 3. \*Planting\*: Planting the potato seeds 2-4 inches deep and 12-18 inches apart, depending on the variety.
- 4. \*Hilling\*: Adding soil or mulch around the base of the plants as they grow, to encourage tuber formation.
- 5. \*Irrigation\*: Providing adequate moisture to the plants, either through rainfall or irrigation.
- 6. \*Pest and Disease Management\*: Controlling pests and diseases that can damage the plants, such as aphids, Colorado potato beetles, and late blight. Benefits of Potato Planting
- 1. \*High Yield\*: Potatoes can produce high yields, making them a profitable crop for farmers.
- 2. \*Easy to Grow\*: Potatoes are relatively easy to grow, making them a great crop for beginners.
- 3. \*Versatile\*: Potatoes can be grown in a variety of conditions and can be used in many different dishes.
- 4. \*Nutritious\*: Potatoes are rich in nutrients, making them a great addition to a healthy diet.

#### Challenges Facing Potato Planting

- 1. \*Diseases\*: Potatoes are susceptible to diseases such as late blight, scab, and blackleg.
- 2. \*Pests\*: Potatoes are susceptible to pests such as aphids, Colorado potato beetles, and wireworms.

- 3. \*Weather Conditions\*: Potatoes are sensitive to weather conditions such as drought, flooding, and extreme temperatures.
- 4. \*Soil Conditions\*: Potatoes require well-draining, loose soil to grow, which can be a challenge in areas with heavy clay or rocky soils.

#### 3.2 INTRODUCTION TO POULTRY PRODUCTION

#### POULTRY PRODUCTION (LAYERS)

Poultry are kept for the production of egg and meat. Poultry are kept in most areas of the world and provide an acceptable form of animal protein to most people throughout the world. During the last decade, many production developing countries have adopted intensive poultry production in order to meet the demand for thus form of animal protein. Intensively kept poultry is seen as a way of rapidly increasing animal protein supplies for rapidly increasing urban populations. Poultry are able to adopt to most areas of the world, are relatively low priced, reproduce rapidly, and have a high rate of productivity. Poultry in the industrial system are housed in confinement with the aim of creating optimal conditions of temperature and lighting, and in order to manipulate day-length to maximize production.

#### **LAYERS**

Layers are efficient egg producers, breeds used for egg production in the industrial production system are almost entirely based on the White Leghorn and Rhode Island Red. Selection and crossbreeding techniques have resulted in productive laying producing 15-19kg of eggs per year. In layer production, sometimes 2 phases of production are recognized;

1. Growing wing phase up to approximately 140 days

#### 2. Productive phase from 140-560 days.

The larva volume of waste cause soil, water and air pollution. Most effects are caused by the transfer from manure of Nitrogen (N) phosphorus (P) and heavy metals (ZN and CD). Emissions from manure arise in the chicken houses, during strong, after application on soils or when manure is simply disposed of. The extent of emissions depend on the systems adopted for housing and for manure management.

#### POULTRY FARMING EQUIPMENT AND THEIR USES

☐ FEEDER:- Feeders are equipment used in feeding poultry birds. Th
food is deposited in the feeder and the birds feed from it. The amount of
feeders provided for a poultry farm should be according to amount of bird
available. It is important that you always keep the feeders clean to ensur
the health safety of the birds.
☐ HEATERS OR BROODERS:- It is essential that the temperature of th
poultry farm be regulated especially during cold weather. The heater of
brooder is an equipment used in regulating and increasing he temperatur
of the poultry farm. These helps to keep the birds warm when the weather
is cold.
☐ INCUBATOR:- This is an instrument used in hatching eggs. Egg
hatchery with an incubator with an incubator can be described as a mean
of hatching of eggs in an unnatural way. These means can be employed
when there are many eggs to be hatched.
☐ CHICKS BOX:- The chick box is an equipment where the poultry bird
are kept for egg laying. It has a roll away egg tray attached to it so that when

eggs are layed, they roll away and the bird will not trample on the eggs. The
particular equipment help in preventing egg damage.
☐ FLY TRAY:- Fly trap is an equipment used in controlling the number
of flies around a poultry farm. It helps to poultry farmer produce the
number of flies in the poultry.
□ POULTRY PLUCKER RUBBER FINGER:- This is an equipment
applied to chicken dressing machine. These rubber fingers are fixed to the
bot-tom and side plate of the dressing machine in order to provide many
dressed chicken in a short period.
☐ EGG TRA:- This is an equipments used in setting the eggs. Just like
the name, it is a tray-like equipment where the eggs are place for sampling.
□ POULTRY INCUBATOR CONTROLLER:- Poultry incubator
controller is an equipment used for controlling the incubator and timer
counter. It displays the temperature and humidity condition of the
incubator.
□ VENTILATION FAN:- The ventilation fan is an equipments used for
ensuring maximum ventilation and timer counter. It display the temperature
and humidity condition of the incubator.
□ LAYING NEST:- Laying nest is another equipment that help the birds
for laying of eggs. One of the advantages of this equipment is that it
increases the egg productivity of the poultry birds.
☐ EGG SCALE:- This is an equipment used in weighing the weight of the
eggs. It helps the poultry farmer know the eggs that are fertile enough for
hatching because it is assumed that an underweight egg does not have what
it takes to form a chick.

□ EGG WASHER:- Egg washer is an equipment that make use of
powder called the egg washer powder. Water is added into the egg then th
egg washing powder is added also. It is used for washing the eggs befor
delivery.
□ WATER POTS AND DRINKERS:- Neat water is required for growt
and digestion in poultry bird just like in human. Therefore, the drinkers ar
equipment used for supplying water to the regularly to avoid disease.
□ CAGES AND COOPS:- This poultry equipment is used for keepin
poultry birds. Coops and cages are poultry equipment suitable for sma
scale poultry farming.
□ DRESSING MACHINE:- This is an equipment used for featherin
birds after slaughter. The use of a dressing machine makes chicken dressin
easier, clean and hygienic.
Lastly, the use of protective clothing for humans is very necessary. Specia
protective clothing like hair caps, disposable sleeves, boots and cuneal ar

protective clothing like hair caps, disposable sleeves, boots and cuneal are required to avoid transfer or contamination from the birds to important to ensure that visitor disinfect their hands before touching the birds.

#### 3.3 INTRODUCTION SHEEP REARING

Definition of Sheep Rearing

Sheep rearing refers to the breeding, raising, and management of sheep for their meat, wool, and milk.

Importance of Sheep Rearing

1. \*Food Source\*: Sheep provide a significant source of protein-rich meat for human consumption.

- 2. \*Wool Production\*: Sheep are a primary source of wool, which is used to make clothing and textiles.
- 3. \*Milk Production\*: Some breeds of sheep are used for milk production, which is used to make cheese and other dairy products.
- 4. \*Economic Benefits\*: Sheep rearing can be a lucrative business, providing income for farmers and creating employment opportunities.

#### Types of Sheep

- 1. \*Merino\*: A popular breed of sheep known for its high-quality wool.
- 2. \*Rambouillet\*: A breed of sheep known for its high-quality wool and meat production.
- 3. \*Dorset\*: A breed of sheep known for its high fertility and meat production.
- 4. \*Suffolk\*: A breed of sheep known for its high-quality meat and hardiness. Sheep Rearing Operations
- 1. \*Breeding and Lambing\*: Breeding sheep and managing the lambing process.
- 2. \*Lamb Rearing\*: Raising lambs from birth to weaning.
- 3. \*Sheep Health Management\*: Monitoring and maintaining sheep health through vaccination and medication.
- 4. \*Feeding and Nutrition\*: Providing sheep with nutritious feed and water.
- 5. \*Wool and Milk Production\*: Managing wool and milk production in sheep.

#### Benefits of Sheep Rearing

1. \*High Returns\*: Sheep rearing can generate high returns on investment.

- 2. \*Job Creation\*: Sheep rearing can create employment opportunities for rural communities.
- 3. \*Improved Food Security\*: Sheep rearing can improve food security by providing a reliable source of protein-rich meat.
- 4. \*Diversified Farming\*: Sheep rearing can provide a diversified source of income for farmers.

#### Challenges Facing Sheep Rearing

- 1. \*Disease Outbreaks\*: Sheep are susceptible to diseases such as foot-and-mouth disease and pneumonia.
- 2. \*Predator Management\*: Sheep are vulnerable to predators such as coyotes and wolves.
- 3. \*Feed Costs\*: Sheep require a balanced diet, which can be expensive.
- 4. \*Market Fluctuations\*: Sheep rearing is subject to market fluctuations, which can affect profitability.

#### CHAPTER FOUR

# 4.1 RELEVANCE EXPERIENCE GAINED TO STUDENT FIELD OF STUDY

After the SIWES program I gained how to operate in farm and a bit experience on how to manage poultry and fishery in general.

Furthermore, I was introduced to other section of the organization, where I was taught how to engage to different works, such as.

- 1. I do engage into daily routine for all Sections which as follows:
  - a. Sweeping the surrounding
  - b. Washing of Bowls
  - c. Feeding of Layers
  - d. Rest
  - e. Topping of water
  - f. Checking of eggs in the Incubators
  - g. Picking of eggs
  - h. Artificial insemination
- 2. Learning of how to cleaning up the house of sheep & goats, likewise feeding & given them water.
- c. Introduction to planting of Potatoes, how to harvest them, planting of maize and to harvesting them & the instrument to be use during processing.
  d. learning the poultry farming equipment and their uses

#### 4.2 INTERPERSONAL RELATIONSHIP WITH THE

#### **ORGANIZATION**

During my stay at the **ORGANIZATION**, I enjoy every bit of it until the last hour of my departure as a SIWES student.

Starting with the Director, Board-members to all the coordinators, and my supervisor showed love and care to me like parent to his daughter.

My cordial relationship with the instructor in my section helps me a lot in the sense that, he never relent in answering my question both theoretical and practical.

#### **CHAPTER FIVE**

#### SUMMARY, CONCLUSION AND RECOMMENDATIONS

#### 5.1 CONCLUSION

Even though there was a little hardship especially when the work of the organization is pilled up on me and payment was very meager for transportation.

The SIWES program at the organization give me a wonderful and everlasting experience. The program is readily helped to bridge the gap between theoretical aspect and practical work in the industrial training.

#### 5.2 RECOMMENDATION TO THE ORGANIZATION

Since the SIWES cannot be overemphasized in all aspects in the recent times, I therefore think it is standard enough for any student of agricultural Technology to be giving opportunity after school in this organization to serve and possible employed if he/she deem it.

#### 5.3 SUGGESTION FOR IMPROVEMENT OF THE SCHEME

Base on the experience and knowledge acquired at the course of the SIWES training, I hereby give the following recommendation base on my observations;

- Proper orientation should be given to the students by the Polytechnic before they go on SIWES.
- The placement letter should be given to students early enough so as to avoid attachment in irrelevant organization.
- Institution should ensure that students are attached at relevant establishment for effective training, experience and exposure.

• Government, ITF and the Institution should ensure that students do not pay any amount of money before accepted in any organization. This organization should be sensitized on the objective of SIWES training and the need why they should not collect money before accepting students.