**3.0 MATERIAL AND METHODS**

**3.1 Description of the study area** This Business project will be conducted at Wazo hill located at Kinondoni, Dar es Salaam in eastern zone of Tanzania. It is located at longitude of 39°,10’ ,21” E and latitude of 6°40’2” south the climate type Tropical savannah, wet weather condition.

**3.2 Experimental project design**  Total of 4000 broiler chicks will be randomly allocated in 4 groups in growing and finishing stage. Each block will have 1000 chicken.

**3.3Experimetal unit and management**

4000-day old chicks will be purchased from Inter-chick hatcheries or any legalized company, preparation procedures such cleanliness, fumigation, covering using magazines and boxes and brooder making. Brooder will have the following qualities optimum ambient temperature (32-35°C). On the first week recommended brooding temperature is 35°C and on the second week recommended brooding temperature is 32°C The system of production will be deep litter system. On arrival of day-old chicks, they are going to be fed with glucose for acquiring energy, then broiler chicks are provided with antibiotics for a first 7 days, starter will be provided for the first 14 days followed by grower ration up to 28th day.

*Table 1***: Summary of feeds**

|  |  |
| --- | --- |
| **TIME** | **COMMERCIAL DIET** |
| **1St week** | Broiler starter |
| **2nd week** | Broiler starter |
| **3rd week** | Broiler grower |
| **4th week** | Broiler grower |

Vaccination regime will be considered including Newcastle vaccine on the first and third week and infectious bursal disease vaccine on second and fourth week. On arrival of the chicks, initial weights of broiler chickens will be measured and recorded. Chickens will be randomly assigned to the experimental units prepared and then some important managerial activities such routine cleanliness, providing with them glucose and feeding for each corresponding group.

*Table 2*: **summary of vaccination regime**

|  |  |  |
| --- | --- | --- |
| **Vaccination type** | **Means of administration** | **Time** |
| Marek | Spraying after hatching | Day old chicks |
| Newcastle | Orally | 7 day |
| Gumboro | Orally | 14 day |
| Newcastle | Orally | 21 day |
| Gumboro | Orally | 28 day |

**AREA (**m2) **AND** **NUMBER OF BROILERS CALCULATION**

For one block

13.4m length

10.23m width

Area = 136.68 m2 since (1m2 = 10 chicken in average)

Hence, 136.68\*10= 1366 bird (broiler)

Since, there are 4 block, = 4\*1366 = 5464 broilers

8-12 for 1 square metre (10 for average chicken)

I feeder = 10 chicken

1 drinker = 20 chicken

Layers 5-8 (1 square metre)

Sasso, 4-5 (6) (1 square metre)

**BUDGET**

*Table 4*: Summary of feed ingredients

|  |  |  |
| --- | --- | --- |
| Item | Number (s) | Amount in Tsh |
| Day old chicks | 4000 chicks @2000 |  |
| Transport |  |  |
| Feeders | 250 feeders @6000 |  |
| Drinkers | 250 drinkers @5000 |  |
| Broiler premix |  |  |
| Brooder |  |  |
| Bulb |  |  |
| Vaccine |  |  |
| News paper |  |  |
| Glucose |  |  |
| Wood shavings |  |  |
| **Total** |  |  |

**SUMMARY**

**In the Poultry (Broiler) section, we recommend each block to be divided into 4 parts.**

**In the Calculation of Area in square metre, which is 136.68 square metre. Hence about 5450 Chicks can be accomodated with those 4 blocks.**

**But, we advice to start the production with 4000 broiler chicks. In which every Block will accomodate 1000 broiler chicks and within the Block, each will be partiotioned into 4 groups (250 each)..**

**Consider the table below**

|  |  |  |
| --- | --- | --- |
| **BLOCK** | **Number of Broilers** | **Partition ( Each Block will be divied into 4 groups** |
| **1** | **1000** | **250, 250, 250, 250** |
| **2** | **1000** | **250, 250, 250, 250** |
| **3** | **1000** | **250, 250, 250, 250** |
| **4** | **1000** | **250, 250, 250, 250** |

**COMMENTS**

* **Water source**
* **Waster disposal systems**
* **Alternative source of power example generator, solar panels.**
* **Security**