**GRASSCUTTER farming as a lucrative business in African. By TUNDE ONILEOLA**

\*What Is Grasscutter Farming About?\*

Grasscutter farming is the rearing grasscutters both for domestic and commercial use. Originally, grasscutters were not grown on farmlands. They were usually hunted down, caught, and then sold to buyers. But the inherent discomfort in hunting these rodents gave rise to the practice of rearing grasscutters.

\*Business Opportunities In Grasscutter Farming Around The World\*

With about 80,000 tons of grasscutter meat consumed annually in Nigeria, only 0.2 % of these lot are domesticated grasscutters. Here are two core opportunities in grasscutter farming:

\*1). Source Of Meat:\*

Grasscutters are a great source of meat for many households in sub-saharan Africa. The nutritious and scarce nature of their meats doesn’t just serve as a source of protein to compliment Africa’s popular starch dinners, but also makes people place high values on them, thus raising their costs in the market.

Since grasscutter meats are not regular market commodities that can be spotted easily, their scarcity drives their prices high; especially in Latin America and Asia, where grasscutter meat if available, are highly favoured over most types of meats, due to its high protein, low fat, and low cholesterol content.

This makes the market demand for the grasscutter meats utimately far exceed its supply.

\*2). Medical Purposes:\*

Grasscutters have medicinal advantages, because of their pancreas which t for hypertensive patients.

**\*Benefits Of Grasscutter Farming\***

1). Source Of Income And Employment.

2). Great Source Of Protein.

3). Cheaper to run than poultry, fish, or pig farming.

4). Medicinal Uses.

5). Feeding Them Is Extremely Cheap (can be grass only).

6). Can be reared at home.

7). They sell for great prices.

8). More Demand Than Available Supply.

9). They Can Be Pets.

\*The Suitable Species For Grasscutter Farming\*

\*1). Thryonomys Swinderianus (T.S): \*

The Thryonomys Swinderianus, also called the Greater Cane Rat, are the most popular types of grasscutters reared in West Africa, especially Nigeria and Ghana. They are usually large and weigh an average of 8.6kg per animal. These grasscutters are of two strains. The smaller strains are found in the forest zone, while the largerer strains are usually found in the savannah zones and are lighter in colour.

They live in small groups led by a male, make nests from grasses or burrow underground, are nocturnal, and can live for more than four years. They belong to a small family of the African hystricognath rodents.

\*2). Thryonomys Gregorianus (T.G.):\*

The Thryonomys Gregorianus, also known as the Lesser Cane Rat, are a species of rodents in the family Thryonomyidae. These grasscutters are smaller than the Thryonomys Swinderianus, and usually weigh about 7.5 kg. They are mostly found and reared in Central and East African countries like Cameroon, Chad, Congo, and the likes.

These grasscutters usually have bristle-like coarse hair that lies flat against their body. They have small ears almost hidden in their furs, long feet with functioning toes, strong claws, and bare palms. Their backs and sides are usually yellowish or greyish-white, and their tails have few bristles, scales, is brown above, and white below.

Their males are mostly larger than their females.

\*How To Setup Your Grasscutter Farm\*

\*1). Grasscutter Cage Or Pen:\*

The grasscutter pen or house has to be built to be adequately spacious. In setting it up, you must separate the region they sleep from the region they carry out any other form of activity. This is especially important because grasscutters hate to sleep where they feed.

When placing grasscutters in their pens, you should ensure that each colony would be about 1 male to 4 to 6 females. Two fully grown males cannot live together, and would fight till one is dead. But by placing a colony of 1 male to about 4 females in a cage, you can be assured that they’d live peacefully and have a rich reproduction rate.

In constructing your grasscutter cages, ensure it adheres to a close dimension of 180cm in length, 60cm in width, and 45cm in height. They should all contain separate grasscutter colonies, and be built in such a way that the temperature remains stable at all times. The cage should also keep the colonies secure from potential pests like snakes, soldier ants, and humans. You can ensure ants have no access by pouring engine oils around their pens, and surrounding areas; especially during the rainy season.

\*2). Choosing A Breed:\*

In choosing the grasscutter breed you want to rear, it’s important you select one that’s most demanded in your country, or that is accepted in the regions you intend to ship out to. The Thryonomys Swinderianus for instance are most popular in West Africa, while the Thryonomys Gregorianus are most popular in Central and East Africa.

Once you’ve determined what breed you intend to rear, you can purchase 4 healthy females and 1 large and healthy male for a start to make one colony. The healthy state of your grasscutters is crucial to aid rapid reproduction. Since fertility is the most important thing in rearing animals, make sure you can purchase the most healthy grasscutters you can find.

If you’re working with a very large budget, you can purchase a lot of colonies to start-off with.

\*3). Feeding The Grasscutters:\*

Feeding your grasscutters is a lot cheaper than any other farm animal. Since they’re herbivorous animals, the bulk of their diet lies majorly on grass. The most common grasses they’re fed with are Napier grass or Elephant grass. They could also be fed Congo grass, Guinea grass, groundnut, maize, cassava, sweet potato, rice, legumes, plantain, paw paw, pineapple, roots of oil & coconut palms, and most importantly, sugar cane.

By constantly feeding your grasscutters with rich (healthy) meals at all intervals, they can gain weight quickly and reach market size within a short time.

The cane rats usually prefer to drink liquid with artificial tastes, e.g palm wine (which is largely why they destroy oil palm plantations). In a privately grown setting, they can be fed water that has little additives in it.

For grasscutters in the weaning stage, they can stay with their mothers between four to eight weeks. But when they’re in the wild or moving together as a family, they can all be with their mothers for up to four months. By the time they’re about seven to eight months old, they can be separated from their mothers and placed with the mature opposite sex, for mating to occur.

The male grasscutters reach their mating stage at the age of seven months, while the females reaching their mating stage when they’re about eight months old. The mating period should last for 140 days, and should be restarted with different males if after 160 days, the female grasscutters show no signs of pregnancy.

Grasscutters are generally great for rearing because of their fast reproduction rate which begins about seven months after birth, and can be about 4 to 10 babies per reproduction cycle, which usually happens two times in a year. With their market price going for as high as 7,000 Naira for each, 10 females could give birth to 200 grasscutters in a year, which would amount to about ₦1,400,000.

\*Challenges Of Grasscutter Farming\*

The major challenges of grasscutter are the technicalities involved in running a grasscutter farm and also the danger of pests and diseases.

\*Conclusion\*

Grasscutter farming is one of the often overlooked agribusinesses that turn in high revenues. With only about o.2% grown domestically out of about 80,000 tonnes of grasscutters consumed yearly in Nigeria, the opportunities for scale exceeds most farmers’ expectations.

If you’re unsure of an agribusiness to venture into, and you want something odourless, less expensive to run, and still highly profitable, grasscutter farming is a great bet for you.

GRASSCUTTER PRODUCTION
INTRODUCTION:
Grasscutter (Thryonomis Swinderianus) also known as cane rat or cutting grass belongs to the family of rodent. Its farming is relatively new in Nigeria but not in other parts of West Africa like Ghana, Republic of Benin etc and other countries in Central Africa. Grasscutter farming in Nigeria is gradually becoming popular especially with more people seeking alternative sources of “safe protein” for health reasons. Also, the quest for “bush meat” by the elites has helped in no small way in promoting this farming enterprise. In this study, we shall try to examine and highlight basic tips for a successful venture in grasscutter farming.

BREEDS:
Two major breeds have been identified. The Black Race (Thryonomis Swinderianus) and the Brown Race (Thryonomis Agregoraianus).

The Black Race:
The characteristics of the Black Race are: - (1) Dark brownish fur; (2) Highly productive (4 -11/litter). It is not too big in size (about 6kg max).

The Brown Race:
The brown race has the following characteristics: (1) Light brownish in colour; (2) Not highly productive about six in litter size and not more and Very big in size about 8kg at maturity.

DOMESTICATION SYSTEM
Grasscutter can be domesticated by Intensive or Semi-extensive systems.

1. Intensive System:
The animal under this system is kept confined in a cage or any other form of captivity. It solely depends on the farmer for livelihood. The farmer provides feed and general management of the animal. One major advantage here is that the farmer can monitor the progress of the animal and will be able to respond quickly when needed.
2. Semi-Extensive System:
An area or portion of land is fenced with block or wire mesh in a semi free-range arrangement. The animal under this system has access to the natural environment within certain limit. The farmer can plant wide range of beneficial grasses within the area for use by the animals. The grasses will also provide cover for the animals. Under this system however, the farmer has no direct access to the animals. Breeding here cannot be manipulated by the farmer.
3. Semi-Intensive or Semi-Extensive:
It is a combination of the intensive and the extensive systems. There is a house and also an outside within a given limit. A hut is provided within an area that is fenced. Grasses are planted for the animals in addition to supplemental feeding.
Advantage:
The farmer is not required all the time.
Disadvantages:
They may be exposed to reptiles, predators or ants.
Check is very difficult. The animals are prone to hazards. Evidence has shown that Intensive System is the best approach for sustainable grasscutter production.

THE IDEAL LOCATION FOR A GRASSCUTTER FARM:
Grasscutter farm cannot be sited just anywhere. Places to avoided are:-

Noisy Areas: That is, near places like airports, factory, busy roads, market and any of such places. Uncontrolled noise causes stress to the animals leading to unproductiveness.

Cemetery: This is to prevent the animal from having contact through sharing of feed with wild rats that may have fed on decomposing bodies buried in the cemetery. If this happens, the animal may be exposed to possible LASA FEVER attack.

Water Logged Areas: Don’t site your grasscutter farm in water-logged area. They do not do well when exposed to damp areas. It could even lead to their death. It will also be easy for them to contact pneumonia, which kills grasscutter easily. Even when the house is raised, humidity may set in and water could easily seep through the floor of the house which will always make the floor wet.

OTHER FACTORS TO CONSIDER
Closeness to source of feed: Site your farm near the source of primary feed of the animal. This will reduce the cost of feeding the animals.

Social belief: Some animals are taboos in some areas. Site your farm where grasscutter is not a taboo to avoid problems.

Market: if there is no market, then going into grasscutter farming is useless. Locate your farm close to viable market for easy disposal of stock.

Closeness to farmer’s residence: Closeness to your farm will allow for close monitoring and proper management. Early or late attention is possible when the farmer lives close.

Availability of labour: Site your farm where there is availability of all kinds of labour. The farmer alone cannot do everything.

Technical Know-how: It is important for any livestock farmer to have basic knowledge of livestock management. This will enable him to monitor the operations of his employees and evaluate their performances. The farmer will be highly respected if his employees understand that he is conversant with the job they are doing.

IDENTIFICATION OF SEX:
All male rodents are called “Buck”. The female is called “Doe”. Two major ways of identification exists:

　　　　Through the shape of the head.
The male has an oval or broad shape
The female head is sharp, pointed or elongated

The Ano-Genital Distance: the space or gap between the anus and its sex organ.

Male: There is a clear demarcation between the anus and the sex organ. About an inch.

Female: There is no clear demarcation between the anus and the sex organ. They are clamped together.

HANDLING:
Unlike every other farm animals, grasscutter is not just handled anyhow. For easy handling, follow the tips below:-

Handle at the middle of the tail. Do not handle at either end of the tail to avoid pulling off or cutting off of the tail. Hold with the head facing down

At the vertebrae (waist) if the animal is very large, support with the tail.

The forelegs: grab firmly from the back above where the forelegs are. When done correctly, your finger should be able to cross over and rest very well beneath the armpit of the forelegs. Turn it up and check whatever you want. To know whether you are holding it firmly, you can blow air on its face. If you are, despite its struggle, you can still go on holding it. If not, it can easily free itself from your grip.

FEED:
The grasscutter feed is divided into two types:

Primary feed or basal feed (foliage)

Secondary feed or artificial feed

Primary Feed:
This consists of the following:
i. Elephant grass - pennisetum purpurem
ii. Guinea grass - panucum maximum
Fresh maize stalk and cobs
Sugar cane
Pineapple leaves/crown
Cassava stem and tubers
Yam and potato tubers
Pawpaw fruit
Unripe tomatoes
Cucumber etc

Please remove the seed of any fruit before feeding them. And don’t feed with overripe fruits.

Secondary Feed:
They will need only about 50 -100g/day/animal. The major consideration for any form of animal feed is the nutritional requirement of that animal.

NUTRITIONAL REQUIREMENT OF GRASSCUTTER:
- Crude protein - 12 – 14%
- Digestible Energy - 2300 – 2500 kcal
- Crude Cellulose - 8 – 10%
- Calcium - 0.5 – 1%
- Phosphorus - 0.3 – 0.5%

Grasscutter is fed 3 times a day with primary feed in the morning and evening while the secondary feed is given in the afternoon.

When properly fed, the expected average daily weight gain (ADWG) is between 9 – 10g.

NB:
Grasscutter does not require much water. The grasses used as primary feed contains water. However, when you feed the animal with wet grass after the rain, harvest the grass a day before and allow them to dry a bit. Don’t feed grass that is not mature.

HYGIENE MANAGEMENT:
This requires routine cleaning on daily basis in the morning before anything else.

At least once a week, mix Izal with water and sprinkle on the cage. It may touch the animals but you must allow the cage to dry before feeding.

Constructing a “dip” at the entrance of the farm house with disinfectant always there.

NB
A colony of grasscutter is made up of one male and four females. The male has a separate cage until the time of mating. Two mature males cannot stay in the same cage.

REPRODUCTION:
The reproductive age of grasscutter is 7 – 8 months for both sexes. On attainment of 8 months, an exercise called selection is carried out.

SELECTION
Not all the grasscutters are used for reproduction. The ones to be used are selected based on certain consideration as enumerated below.

MALE:
The male must be docile.
Must have normal growth rate.
or should have been at least 2.5kg at 8 months.
Must have equal sizes of testicle.

FEMALE:
The female must have at least two pairs of teat.
Must have normal growth rate or attain at least 2kg at 8 months
PREPARING THE MALE FOR COPULATION:
The males to be used for reproduction are prepared for this purpose beginning from their third month of birth. This exercise of preparing them for copulation is called stimulation. This has to do with the massaging of the genital organ and the neck with a view to arousing its sexual consciousness. This exercise continues until the male grasscutter attain full reproductive age i.e. 8 months.

COPULATION:
In grasscutter domestication, the mating ratio is 1:4 (one male to four females) the five animals are kept together in a special apartment called the breeding cage for minimum period of one month and maximum of two months. At the end of two months, gestation test is carried out to ascertain the condition of the female and if found “in” i.e. pregnant, the male is removed from the breeding cage. The male has to be removed because continuous mating with already gestating females could lead to abortion and other birth abnormalities.

GESTATION TEST:
This exercise is carried out with white cotton bud. The cotton bud is inserted into the clitoris of the female with a gentle twist. The cotton bud is thereafter brought out of the clitoris. If the cotton bud has brown or blood stained colour, it indicates Positive. If the cotton bud shows grayish white colour, it indicates Negative. Start counting gestation period from the day the male is introduced into the female. The heat period in grasscutter is both natural and induced by the presence of the male.

GESTATION PERIOD:
The grasscutter gestation period is five months or approximately 152 days and the litter size is between 4- 11 kids depending on the specie. The lactation period is forty-five days. At the end of forty-five days, the kids are weaned. The grasscutter weights between 118 – 140g at birth or an average of 129g.

At weaning, it weights between 500 – 700g. The mother grasscutter could be re-mated after fifteen days of weaning the kids or approximately two months after paturation.

DISEASES:
The grasscutter is a very strong animal that is highly resistant to disease. However, diseases can occasionally arise as a result of certain action or inaction of the farmer. Some of the commonest grasscutter diseases include.

Coccidiosis:
This could be caused by lack of hygiene. Some of the symptoms of this disease include loss of hair/fur, loss of appetite, general weakness, loss of weight etc. This disease could be treated using Emericid or Amproleum powder in the following order: 1g in 1 litre of water for 5 days (Oral Administration).

Diarrhea:
This is another disease commonly associated with grasscutter. This disease occurs when the animals are fed with pre-matured grass, (forage) or wet grass. Diarrhea can also arise when the animals are fed with artificial feed (Concentrate) before forage. The animal infected with Diarrhea passes watery feaces. This disease can be treated with wood ash or grinded charcoal applied to the artificial feed or in water.

Pneumonia:
Pneumonia is a disease of the lung and respiratory tract. The major cause of this disease is cold. Infected animals usually have difficulties in breathing owing to the blockage of its respiratory tract.

Animals suffering from this disease also have abdominal protrusion, loss of appetite and drastic decline in weight. Treatment of this disease can be achieved using wide spectrum anti-biotics particularly Oxytetrecycline (Intra Muscular) administered at 0.5ml per day subject to a minimum of 3 days.

Abscess/Bloat:
This is caused by untreated injuries and the symptom is swelling of some parts of the body in the form of balls. This is treated by incision with blade and ordinary healing agent as well as administration of broad spectrum antibiotics.

Dental Infection:
This is caused by too many sweet things and feeding without hard food. The symptom is grey teeth and exaggerated development of teeth. The first thing is to suppress the cause and the affected teeth, cut down or isolate the affected animal and use as meat.

THE ECONOMIC IMPORTANCE OF GRASSCUTTER:
Grasscutter ranked among the livestock that has immense economic potentials.

It is a well-known fact that there is an insatiable demand for grasscutter meat particularly in the African sub-region. The meat provides a veritable source of animal protein for the human body development. Empirical analysis has shown that grasscutter meat contains a high percentage of protein than any other livestock in the mammal and rodent family.

From the above scenario, it is evident that much income could be generated from the sale of grasscutter since it is generally accepted and widely consumed by the generality of the people.

The fur/skin of the grasscutter is a ready raw material for the making of various kinds of hard brushes and foot mats.

It has also been established that farm yard manure which could be generated from grasscutter waste/faeces is a necessary ingredient for soil fertilization and crops development. It has been particularly proven to be effective for the production of grains and cereal crops as well as exotic vegetable

For any enquiries and best stock at cheaper price.........

Address

Onileola close, behind Western International hotel, Ede. Ede South LGA. Osun State

08053171430
08038455190 WhatsApp
09034301023

onileolafarms@gmail.com