

TECHNICAL SHEET

Improvement of the performance and production techniques of local breed of hens and guinea fowls

Production of local chickens (PRADEL-KIYOKO ARZIKI, 2020)

Poultry farming is one of the livestock sectors that contributes to the improvement of household food security, especially in rural areas. It provides significant cash income to a large segment of the population, particularly women and young people. Two livestock production systems coexist, including traditional and modern poultry farming.

Traditional poultry farming accounts for approximately 98% of the total number of animals, all species combined. This traditional system, known as family or backyard farming, is more oriented towards the production of poultry meat and guinea fowl eggs. This type of poultry farming is characterized by, among other things

- precarious housing for the animals
- Insufficient feed both in quality and quantity;
- High poultry mortality due to difficulties in accessing local animal health services;
- Difficulties in accessing financing.

Local chicken farming system (PRADEL-KIYOKO ARZIKI, 2020)

This is a semi-intensive floor-based farming system, whose main product is local broiler chicken. The laying hens have a backyard and a coop equipped with feeders and drinkers. The required densities for this type of breeding are 8 hens per m² and 50 chicks per m².

The poultry is fed on a basis of local resources and compound feed consisting of cereals, agro-industrial by-products and CMV (vitaminized mineral complex).

The rearing is carried out over a period of 12 months, with a 6-day chick production cycle (15 days of laying and 21 days of brooding) and 6 months of fattening for cockerels and pullets. The culling will take place after the 12 months of production. The production is mainly intended for sale and rarely for self-consumption during the holidays.

Breed exploited for chicken breeding (PRADEL-KIYOKO ARZIKI, 2020)

- The breeding hens and the breeding cock are of local breed "kolonto" and aged from 5 to 6 months. This breed is characterized by its large size, longevity, hardiness and productivity in laying and meat.
- The hens are known to be good layers and chick breeders.

Improvement of local chicken farming

To improve his breeding, the breeder must provide for his breeding:

- A well ventilated shelter for the chickens according to his means. Always use cheap local materials such as bamboo, wood, reed, thatch or clay bricks. Preferably, the shelter should be elevated to protect the chickens from predators. It is advisable to install perches inside the shelter.
- Install feeding points (feeders) and drinking points with clean water (drinkers) in the shelter;
- Provide a balanced diet for the animals (red millet, corn, fish meal, roasted soybeans, etc.). In addition to these foods, it is advisable to regularly give them fresh vegetables (moringa leaf, leucaena, etc...);
- A robust cock for about 10 hens;
- Select hens that brood well and raise their chicks well;
- Provide small areas for the hens to lay their eggs;
- Separate the young chicks from the adults, so that they can feed themselves and grow up well;
- To have an incubator, if possible solar or oil;
- To have baskets or baskets used as hatcheries or as shelter for the chicks. The basket can be easily moved. They should be spacious so that the chicks can move around without the mother hen stepping on them and also to ensure good ventilation;
- Reserve space for a small feeder and waterer for the chicks;
- Daily observation: every day, the breeder must take some time to observe his flock. This is what will allow him to know if there is a health problem or not.
- Make sure there is a supply of vaccines and medicines to deworm and treat the birds if necessary;
- Kill or sell non-productive birds, such as cockerels and old hens that have stopped laying;
- Keeping a well-maintained record to keep track of your accounts.

Advantages for the consumer of local chickens

The improved traditional breeding of local chickens has several advantages and the consumption of organic chickens protects the consumer from antibiotic residues, bacteria and fats harmful to health. Hence the need to improve the breeding techniques while keeping its originality as it is done in several African countries.

Characteristics of the technology

Crossbreeding of the local chicken breed with the broiler strain. The first offspring (F1) will be distributed to farmers in rural areas. Crossbreeding will continue on station to better evaluate the performance of the crossbreds. The same process will be followed for guinea fowl. Breeders have been trained on improved breeding techniques.

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