

Layer Chicken

Layer poultry farming means raising egg laying poultry birds for the purpose of commercial egg production. Layer chickens are such a special species of hens, which need to be raised from when they are one day old. They start laying eggs commercially from 18-19 weeks of age. They remain laying eggs continuously till their 72-78 weeks of age. They can produce about one kg of eggs by consuming about 2.25 kg of food during their egg laying period. For the purpose of producing hybrid eggs layer, consider the various characteristics of cock and hen before breeding. There are various types of highly egg productive layer breeds available throughout the world.

Layer Breeds:

According to the nature and color of egg, layer hens are of two types. Short description of these two types are listed below.

- **White Egg Laying Hens:** This type of hens are comparatively smaller in size. Relatively eat less food, and the color of egg shell is white. Isa White, Lehman White, Nikchik, Bab Cock BV-300, Havard White, Hi Sex White, Sever White, Hi line White, Bovanch White etc. are some popular white egg laying chickens.
- **Brown Egg Laying Hens:** Brown egg laying hens are relatively larger in size. They eat more foods, compared to white egg layers. Lay bigger eggs than other laying breeds. Egg shell is brown colored. There are many types of brown layer available. Among those Isa Brown, Hi Sex Brown, Sever 579, Lehman Brown, Hi Line Brown, Bab Cock BV-380, Gold Line, Bablona Tetro, Bablona Harko, Havard Brown etc. are very suitable for commercial layer poultry farming.

Layer Hen Selection:

You have to keep in mind some essential information before selecting the layer hens for your poultry farming business. You have to select those breeds which are suitable for your layer poultry farming business and can produce well in your area. Read below for selecting proper breeds for your business.

- For commercial eggs production, you have to chose highly productive laying hens correctly.
- All type of hens do not produce equal number of eggs.
- The chosen breeds must have to have good production capability.
- If your chosen breed contain the desired characteristic and have a reputation for egg production, then that breed is suitable for your business.
- Always purchase healthy chicks from a famous and popular hatchery. You can see their catalog before purchasing.

Keeping Chicks for Layer Poultry Farming:

During the first weeks after birth, many chicks do not want to drink water due to transporting them from one place to another. So you have to make adequate water drinking systems in their brooder house, and you have to train them for drinking water. Mix 5% glucose with water, so that they can easily get energy. Provide them any types of high quality multivitamin.

Vaccination and it's Importance for Layer Poultry Farming:

Vaccination program is a must for chicks for keeping them free from all types of diseases. The main advantage of poultry vaccination are listed below.

- Timely vaccination makes disease resistance power in the body of chick.
- Help to keep the hen free from infective poultry diseases.
- Disease prevalence will be less.
- Mortality rate will reduce.
- And low mortality rate = more production = more profit.

There are many types of poultry vaccines are available for layer hens. Marex, Ranikheth, Gamboro, Bruchaities, Bosonto, Salmonela etc. are used for layer chickens.

Before Vaccination of Layer Poultry:

You have to maintain some rules before vaccination.

- Hold the chickens very carefully.
- Vaccinate the chickens without any strain.
- There is no need to vaccinate the ill hen.
- Wash the vaccination equipments with hot boiled water
- Do the vaccination program in cold weather condition.
- Preventive vaccine is always applicable to healthy bird. Never vaccinate an infected bird.

Keeping Growing Chicks:

You have to maintain the suggestion listed below for keeping growing layer chickens.

- You have to provide the growing chicks special care until they reach 4-5 weeks of age.
- After brooding serve them good quality pellet feed. It will make good results in the future. They will produce egg highly. High quality pellet will make the chickens healthy and increase their body weight.
- So it is very important to provide them quality pellet feed during growing period.

Egg Production for Layer Poultry Farming:

Egg production from a Layer Poultry Farming depends on the care and farm management. If you take good care of your birds and manage them properly, then the production and profit will be high.

- Withing the first 20 weeks of age, about 5% of hens start laying eggs.
- About 10% birds start laying at their 21 weeks of age.
- When they reach 26 to 30 weeks of age, they produce highly. Although, it may be different depending on their strain.
- After laying a maximum number of eggs, they usually stop laying for a few days.
- And after this period, their egg production might reduces slowly.
- Egg laying rate and size of eggs increases gradually.
- The hens grow till their 40 weeks of age.

- Weight and size of eggs increases till their 50 weeks of age.

Method and Importance of Lip Cutting:

Cutting the lip of laying hens is very important. The main benefits are listed below.

- Lip cutting help to reduce mutual fights.
- It help to prevent food waste.
- You have to cut your chick's lip at their age of 8 to 10 days.
- Cut the lip of growing chicken at their 8 to 12 weeks of age.
- Cut the lip of chicks 0.2 cm from their nose.
- Cut 0.45 cm in case of growing chickens.
- Cut the both upper and lower lips.
- Don't cut the both lip together. Cut one after another.
- Use block chick trimming machine to cut the lips.

Don't cut their lip two days after or before vaccination, after or before using some medicines like sulfur. Don't cut the lip if the hen in a strain, and during adverse weather conditions and if the hen start laying eggs.

Serve the chicken water mixed with vitamin "K" three days before cutting lips. Wash the lip cutting instrument with [Viraclean](#). Test the edge and temperature of blade. You have to be careful, and don't damage their eyes and tongue. Choose cold weather for cutting their lips. Lip cutting process should be observed by an experienced technician. After cutting lips, serve them water in a deep pot. Provide them some extra energy enriched feed.

Feeding for Layer Poultry Farming:

There are many companies available throughout the world, which are producing commercial feed and feed supplements for layer chickens. You can buy feed from your local market or make the feed at your own house. You have to be sure that the feed and feed supplements you bought are enriched with essential food value.

[Protein, Vitamins and Mineral](#) are very important for laying hens which is affecting the quality of eggs, layer poultry fertility and layer bird's health

- Provide 2% of [calcium](#) for two weeks after their birth.
- If you notice they are not gaining expected weight, then you have to serve starter feed for eight weeks.
- Serve feed two or three times in a day till their 18 weeks of age.
- Demand of feed increase very fast when the birds start laying.
- Serve them layer poultry feed according to their age and weights.
- Don't decrease the amount of feed while laying (even if their weight increase).

Water Management for Layer Poultry Farming:

Chickens health depend on the supply of pure, clean and fresh drinking water. You have to provide adequate water according to the demand of your laying hens. For purifying the water. Determine a suitable place to keep the water pot inside the poultry house. Supply cold water during summer season and hot weather, and slightly hot water in cold weather or winter season.

In accordance with the age and species of chickens, food providing can control the weights of chicken. Use sufficient calcium, phosphorus, vitamins, amino acid and other mineral substance in their food. If you follow the methods mentioned above, then you can make better profit from your layer poultry farming business.

Layer Farm Sequence:

A standard procedure is followed for the Layer Farm Sequence. This procedure starts when female chicks are raised into pullets for commercial egg production. This stage is called 'rearing', and there are several common rearing systems. Some farms raise layer chicks on a litter floor in a shed similar to a meat chicken shed. Other pullets are either finished off or reared entirely in wire-floored cages.

Brooding for Layer Poultry Farming:(Day-old to 6 weeks):

When a hen sits still for a prolonged period without eating or drinking normally, she is said to be 'broody'. This is a normal process during which the hen stops producing eggs in order to incubate a nest full of eggs. When the eggs hatch the hen then cares for the chicks by keeping them warm and finding feed and water for them. Modern strains of chicken have been selected not to go broody so that more eggs are laid over a period of time.

When rearing chicks commercially the aim is to do the same thing as the hen. The stage of life when chicks need some additional heat is called the brooding stage. It lasts up to six weeks, depending on the temperature of the environment until the chicks can control their body temperature themselves. From day-old they usually receive chick starter feed which aims to ensure they have plenty of protein (19%) and energy for body growth.

Growing Layer Birds (6 to 20 weeks):

Once chicks can control their body temperature they still need to be protected from climate extremes. At this stage they receive pullet grower feed which is less expensive and contains only 15% to 17% protein and 7% less energy than the starter feed.

Beak trimming and some vaccinations are done during the grower stage to prepare the birds for their adult life as laying hens. Anything that limits growth at this time can affect their ability to lay well. However, excessive feeding at this time can be harmful, again leading to poor production.

Restriction to feed supply to birds during growing stops them from growing at a fast rate and results in both feed savings and increased egg production when the birds mature. Careful weekly weighing of the birds is essential to restrict body weight and work out how even the flock is growing. Breeding companies recommend what weight birds should be at each age.

Moving the Layer Birds:

Pullets are usually moved into their laying quarters, at 16-18 weeks of age, before they reach sexual maturity. This ensures that they are settled in before egg production begins. Handling birds at any time must be done with care to avoid injury. As pullets mature into laying hens they are fed a layer ration designed to enable them to perform best.

Adult Layer Birds (20 to/up to 78 weeks):

Adult hens are the real workers of the industry. For best performance they need to be fed carefully and kept in a house at 21-28°C. This means that hen houses are designed to keep as near as possible to this temperature year round. The hens are checked regularly to monitor their health and medicines may be administered as needed. Tinted egg strains usually require less feed (105g feed/hen/day) than brown egg strains (120g feed/hen/day).

The quality of feed provided to hens may be varied for the level of production. Hens can need more nutrients just before and during their peak production than at other times. This is called phase feeding. It can be economical to adjust rations for such high demand periods.

Egg Collecting and Grading:

Mechanical collection of eggs is common in modern layer farms. It takes about 26 hours for each egg to develop and each hen lays an egg a little later each day. This is not an exact thing and most eggs are laid in the morning. Eggs should be collected regularly and transferred from the hen house to an egg room where they are graded or checked for weight and for damaged shells. A sample of eggs is often broken open to check internal quality. Eggs are packed into cartons for 12 eggs or trays of 30 eggs for sale. Prices vary with egg size, so eggs must be separated on the basis of egg weight. This is done automatically by a machine called an egg grader.