

Poultry House: A scope for Farmers and Entrepreneurs

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Ideally, poultry should choose an environment; whether to be indoors or outdoors. Attention to ventilation, temperature, lighting, and litter conditions is needed. Additional good management practices include rodent control with a minimum of toxic materials. Alternative poultry production is often on a small scale, with portable houses. Production may be certified organic. Special practices may be needed compared to conventional poultry production. Alternative poultry production is a way to boost farm income and add fertility or diversity to a farm, while providing specialty poultry products to consumers as a part of sustainable agriculture. A lot of information is available on environmental control in conventional poultry production. This publication, however, focuses on alternative production, for which information is less available. Nonetheless, some practices apply to both alternative and conventional production.

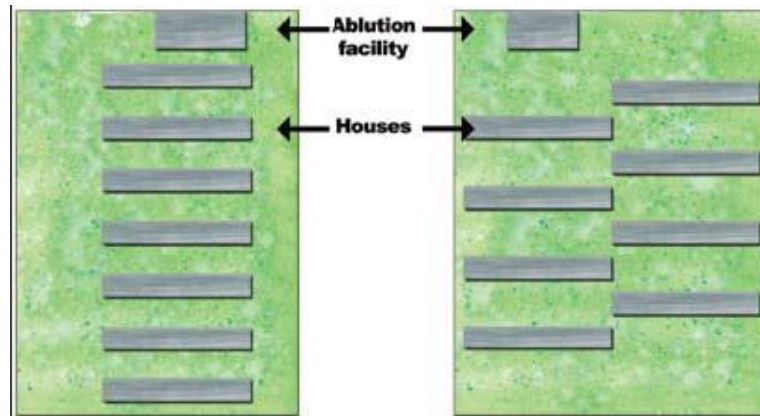
How to start a Poultry Farm

To construct your poultry housing, you have to follow the following steps:

- ✓ You have to do a layout of the terrain where you are going to construct the houses.
- ✓ You must obtain a house plan.
- ✓ You must calculate the cost of the material that you will use.
- ✓ You must prepare the site.
- ✓ You must dig the foundations.
- ✓ Start to build.



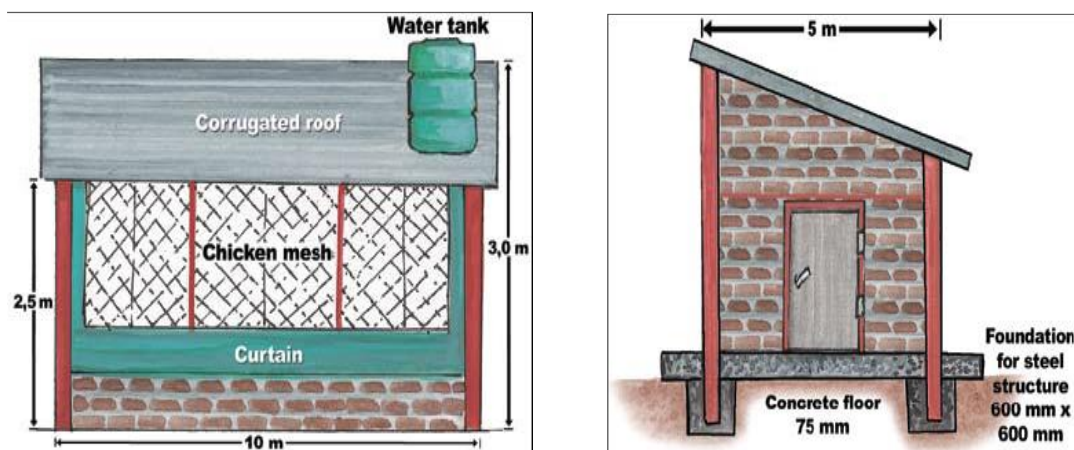
First you need a layout of the terrain, on the farm where you are going to construct the houses. If you are going to construct more than one house, the area available will indicate to you what type of layout you will use for the construction of your houses. Here is an example of different layouts for the construction of chicken houses on the farm.



After you decide on the layout, you have to start preparing the terrain by removing any obstructions and preparing the ground to start building the houses. Now you need a plan of the house.

You will find that there are many types of houses plans available for the rearing of broilers as well as for the production of eggs. Many plans will comply with the needs of the chickens and will ensure the best production. You can use these plans or you can change them to suit your farm or area. You should contact an expert regarding the building plans.

Here is an example of a **sketch plan** for a broiler house where you can rear 500 broilers. The example shows the broiler house from the side and front.



Calculate the material:

You must calculate the cost of the following material that you will need:

- ✓ The number of steel beams for the structures.
- ✓ The number and lengths of corrugated iron sheets.
- ✓ The curtains.
- ✓ Water tank.

- ✓ Pipes.
- ✓ Electric cables and accessories.
- ✓ Number of bricks (single wall 55 bricks /m², double wall 110 bricks /m², cement mix 1 m³ sand + 5 bags of cement).
- ✓ Concrete for floor (1 m³ sand + 1 m³ stone + 6 bags cement)
- ✓ Foundation (single wall 450 x 230 mm: double wall 600 x 230 mm: concrete mix 1 m³ sand + 1 m³ stone + 6 bags cement).
- ✓ Rolls of chicken mesh.
- ✓ Any other items necessary to complete the house.

Order the material

Prepare the site

The site must be prepared by taking out all the vegetation and level the ground where the house will be built. Accurately measure out the foundations of the building and steel structures.

Digging the foundations

Start to dig out the foundations that were measured out.

Start to build

Now you are ready to build the house according to the plan.

How to Design a Poultry House

If the poultry house construction process feels quite intimidating to you, don't start stressing because you are not alone. Many chicken farmers feel the exact same way but when you search out a good poultry house construction guide to help you. It is more than possible to build a successful poultry house at a greatly reduced cost. Designing a poultry house can present unique challenges over the simple chicken coop because "poultry" is a designation for several types of birds that have different space requirements. Ducks, geese, quail, and chickens are some of the fowl that are raised in a poultry house. Because the physical layout and design of a poultry house can take on many different shapes, let's take a look at the basic requirements and leave the final design up to your own imagination.

Instructions

Step 1

Determine how many and what kinds of poultry you are planning on housing. This will need to be as specific as possible so you can determine the size of the house and the run as accurately as possible.

Step 2

Calculate the square footage needed inside the poultry house based on the numbers you determined in step 1. Small chicken breeds and other small poultry such as quail require an average of *1 square foot per bird* in the house. Larger chicken breeds and birds require an average of *2 square feet per bird*. Larger fowl such as ducks and geese can require up to *6 square feet per bird* in the house for each bird to be comfortable in its new nesting environment.



Also consider ventilation in the interior design of the coop with screened-off vents facing the south or east side of the house.

Step 3

Calculate the square footage needed outside the house in the run. A run is an area outside of the poultry house that is enclosed but allows the poultry freedom to go outside, get fresh air, sunshine and dig around in the dirt. Just as the poultry house requires a certain square footage based on its occupants, so does the run. Small birds and breeds require *8 to 10 square feet of outdoor space per bird* while larger birds and breeds can require as much as *20 to 25 square feet of outdoor space per bird*.

Step 4

Use your current geographic features as much as possible when designing your poultry house. In other words, take advantage of fence lines, old sheds or other structures that might be useful when you are coming up with the design for your new feathered friends. By utilizing existing structures and features you can save on the final materials cost when finally building your poultry house.

Step 5

Keep in mind other requirements such as location of food and water supplies. Each bird will also require her own nesting box inside the poultry house, so remember to include that in your plans as well. It is a good thing to plan ahead in the design of your fowl's new home but keep in mind that there is no right or wrong way to design a poultry house as long as you provide the basics for your birds in space, ventilation and access to the good old outdoors. The sky is the limit and the final design approval is up to you.

Step 6

Decide on which materials you will use to build your poultry house. You can use outside sheds and other buildings and modify them for your purpose or you can build a house from scratch. You can use simple materials and even recycled lumber. After all the birds won't mind. You can use metal, plastic or wood siding. You can roof the house with traditional composite shingles or tin. The outside run is best caged in with chicken wire. However, you must heavily secure the area around the base against outside intruders. You can use hardware cloth to strengthen the base of the run area as well as cover any ventilation openings in the poultry house itself.

Daily Management

- Clean and fill the waterers.
- Don't fill feeders more than half full. Stir and level the feed. Keep feeders level with backs of chickens.
- Stir litter if needed. Remove any wet litter and replace with dry.



- Check the ventilation.
- Remove sick birds.
- Keep good records.

Types of Poultry Houses

Depending upon the material used in the construction of floors, the poultry houses can be broadly classified as follows:

1. Wire floored poultry houses.
2. Deep litter poultry houses
3. Cage houses

Wire floored poultry houses

- Wire floored houses make use of 12-14 gauge expanded metal or welded wire mesh for making their floors.
- The floor is placed about 45 cm above the ground level having a rising slope of 15 percent.
- The floor of the nest may be made of either wooden or hard cloth with 12.15 percent towards the central service alley of the house.
- The overall dimensions of the house of 400 birds may be 23x5.5 having a service alley of 1.8-meter width in the middle of the house.

Deep litter poultry houses

- The birds live on the floor on the floor, which is covered with a suitable litter of about 15 to 20 cm depth.
- Floor area of 0.36 sq. meter per bird is usually provided.
- Small shed (2.4x2.4 m) can accommodate about 16 birds.

Cage houses

- The dimensions of a cage to house one bird may be 0.6x0.2x0.45 m.
- The cages are placed at a height between 75 and 90 cm from the floor.

Some producers provide outdoor access or harvested forage during brooding. Finely chopped grass or pieces of turf may help chicks become accustomed to digesting forage and the microbes they encounter outside; sand or small grit should be provided to help their gizzards grind fibrous feed. Three-week-old chicks are still at risk from cold temperature when placed on pasture. They should have access to a warm place. Many producers use the insulated hover popularized by Plamondon in the field with older chicks. Even if only heated by the body warmth of the chicks, it can help protect chicks. The traditional time to move birds out to pasture is when they are well feathered. Fast-growing broilers usually leave the brooder at three weeks. Layer chicks are slower-growing and may need heat until four to five weeks, depending on weather.

Conclusion

In addition to outdoor access, an appropriate indoor environment is important for birds in alternative poultry production. Attention to good ventilation, proper lighting, litter and air quality will



help maintain performance while providing good welfare.

