

# How to start a poultry farm (Part 4)

In the previous edition of *Ubisi Mail* we looked at what a healthy environment for chickens looks like. In this edition we take a closer look at the role that temperature plays in a comfortable environment for chickens.

A comfortable environment is all the conditions that influence the existence, growth and welfare of the chickens. These conditions are:

- Temperature
- Air composition
- Airflow
- Feed and drinking space (floor space)
- Sanitation.

## Temperature

The temperature (hot or cold) will play a big role in how fast the chicken grows and how much it eats during the rearing process of broilers and pullets. Temperature can also play a major role in the production of eggs. There are three ways to produce heat in poultry houses:



### 1. Heat produced by chickens

The amount of heat produced by chickens will depend on:

- **The breed of chicken:** For example, broiler breeders are bigger than most layers.
- **Sex of the bird:** Heat produced by hens is much higher than heat produced by cocks.
- **Age of the bird:** The older the bird gets, the more the body mass increases. Therefore it will produce more heat. This is a very important aspect in the rearing of broilers.
- **Caloric value of feed:** If the caloric value of the feed is high, the chicken will produce more heat.
- **Activity of the bird:** If the chickens are very active, they will use their energy to run around and will not transfer this energy into the meat.
- **Light intensity:** If the light is too bright, especially in broilers, it will lead to an increase in activity.

### 2. Heat entering the house through the roof and walls

In South Africa the amount of heat that enters or exits the house, is mostly through the roof. The heat that will enter the house will depend on the:

- Size of the house
- Type of construction and materials used
- Position of the house in respect of the sun (for example north-facing).

### 3. Artificial heating

Heat produced by means of artificial heating, will depend on the type of heating equipment and method that you will use to increase or decrease the temperature in the house. **UM**