INTRODUCTION
From time to time layers may not be performing satisfactorily. Whether the problem is high feed consumption, low egg production, small egg size, poor egg shell quality or high mortality, you must find out the causes in order to correct the problems.

HIGH FEED CONSUMPTION
Use of too much feed may be due to wastage; wrong feed type; wrong ration; or worm-infested hens.

Is Feed Being Wasted?
High feed consumption may be due to wastage caused by spillage from overfilled troughs. **Feeders should be raised above the floor to a height level with the hen’s back to prevent the hen from scratching the feed out.**

Is The Feed Type Right?
Although pellets are preferable for broilers, **layers should always have mash or crumbles.** They tend to over-eat pellets, which makes the hens fat, and low producing.

Is The Ration Correct?
**Layers with different genetic backgrounds require specially made rations to suit their laying potential and physical characteristics.** Small-bodied Leghorns need a ration with a fairly high nutrient content to make up for their small appetites. Big-bodied, brown egg layers need a ration with lower nutrient content because of their large appetites.

Are The Hens Worm-Infested?
Worm infested hens will have to eat enough for their own maintenance, egg production, and the internal parasites. To find out if the birds are worm infested, administer an anthelminthic (dewormer) to a small sample of the flock and observe their droppings for forty-eight hours. If worms are expelled, treat the whole flock with an anthelminthic.

LOW EGG PRODUCTION
Low egg production may be caused by broodiness, feed not being easily accessed, too small feed space, inadequate water or too much light.

Is The Feed Readily Accessible?
High levels of egg production will only be obtained if feed and watering equipment are uniformly distributed throughout the pen. **Hens should not have to walk more than 2.4 m (8 ft) to reach a feeding trough or a waterer.**

Is The Feeding Space Adequate?
Layers need 15 cm (6 in.) trough space per bird. Any reduction in this space leads to lower egg yields.

Is Broodiness Robbing You of Eggs?
Spot checks in the pen reveal some flocks may contain up to 30% broodies, all out of lay and failing to earn their keep. **Introduce a regular broody-breaking routine.** Check the nests each evening; remove any broodies and isolate them in well-lit, uncomfortable coops for seventy-two hours. Do not withhold feed and water during isolation or you will delay the return of production.

SMALL EGG SIZE
Small egg size may be caused by birds being allowed to mate before maturing; wrong feeding; too much heat in the laying house; improper egg storage or stale feed and water.

Did The Birds Mature Too Rapidly?
Delaying sexual maturity during rearing can increase egg size. Reducing light from 23 hours at day-old to 10 hours at the point of lay will delay the onset of production by 4 - 6 weeks. By this time the hen’s body size will be large enough to produce bigger eggs. Under-feeding during rearing and the use of a short-day light pattern can both reduce egg size.
Is The Feed Right?
Small egg size can be a symptom of protein deficiency. A high protein feed is needed to maintain a good egg size.

Is The Laying House Too Hot?
The higher the temperature, the smaller will be the eggs that are produced.
Ensure the laying house is well ventilated and cool during hot weather.

Are The Eggs Stored Correctly?
If eggs are stored at high temperatures and low levels of humidity, the liquid contents rapidly evaporate and cause weight loss.
Allow eggs to cool after collection and keep them in a room with a temperature not exceeding 18°C and a relative humidity of 70-75%.

Are The Feed And Water Stale?
Damp feed and water with feed particles ferment quickly in warm conditions. This produces substances, which can cause digestive upsets, and reduce feed to egg conversion efficiency. Clean waterers and provide fresh feed daily.

POOR EGG QUALITY
Poor egg quality may be caused by dirty or cracked eggs.

Are There Too Many Dirty Eggs?
Floor laying is a common cause of dirty eggs. In hot weather, surface bacteria rapidly penetrate the shell, give eggs a musty taste and cause rapid spoilage. Provide enough nesting space (1 nest box for every 4 layers) and use wire to fence off popular floor laying spots. Keep floor dry to prevent hens entering the nests with dirty feet.

Are Too Many Eggs Being Broken?
Increasing the amount of nesting space will often dramatically reduce breakage. Keep the nests well bedded with litter. Collect eggs frequently to prevent them piling up in the nest.

Thin shell can also be a result of inadequate minerals in the diet and can also lead to excess breakage (gather eggs in trays, not buckets).

DISEASES AND DEATH RATE
High death rates may be caused by disease; poor sanitation practices or cannibalism.

Is Disease Present In The Flock?
Let a veterinarian diagnose the sick birds to identify the disease and recommend possible treatments.

Is Your Sanitation Programme Adequate?
Layers may become infected with diseases that are not easily detected. These diseases may not kill the birds but affect their overall health and therefore decrease egg production.
Do routine daily sanitation. Clean waterers and feeders and keep litter dry. Thoroughly clean and disinfect the pens between flocks.

Are The Hens Infested With Parasites?
In addition to worms, external parasites like fleas, mites and lice can make the birds sick and reduce their productivity. Inspect a sample of the flock and treat for parasites if necessary.

Is Cannibalism Causing Casualties?
As rearing becomes more intensive, cannibalism is more common.

The Occurrence Of Cannibalism Can Be Reduced By:
- Debeaking day old chicks and later beak trimming of pullets.
- Reducing light intensity or introducing red lighting (Use 1 watt per 8 ft² or 1.3 watt per m² of floor).
- Using mash feed instead of pelleted feed may prevent the outbreak of cannibalism as the birds spend a longer time eating.
- Having adequate feeding and watering space.
- Identifying and removing of 'trouble maker' birds as soon as possible as this can prevent the increase of cannibalism.