Marketing the live broilers

There is a chain of channels broiler meat should pass through them to reach markets (consumers). **The most common marketing channels involved in broiler marketing are: 1) Broiler farmer; 2) Wholesaler; 3) Retailer; and 4) Consumer.**

Marketing channels chain depend on <u>the supply and demand,</u> <u>the price</u> that the farmer gets for his broilers varies considerably <u>at different times of the year</u>.

When selecting live broilers, keep the judging criteria in mind:

1. **Conformation** – look at the overall shape of the bird. The bird should be rectangular. A long and straight breast bone, a long and wide back, and a full and deep body are the positive.

2. **Fleshing** – The amount and distribution of muscle is fleshing. Looking at the amount of meat on the breast, thighs and drumsticks. The breast is the most valued part of the broiler and will be given the most consideration during judging.

3. **Uniformity** – the birds in a pen should be alike. They should be as similar as possible in size, shape, fleshing and finish.

4. **Finish** – look for fat in and immediately under the skin. Well-finished birds will have a uniform layer of fat.

5. **Skin pigmentation** – Skin color is a minor trait that the judge will evaluate. The skin should be yellowish.

➢ **Steps in marketing live broilers:**

   1.   Feed withdrawal

   Withholding feed from broiler chickens immediately prior to catching, loading, and transportation to a processing plant is a standard management practice but broiler chickens should still have access to water right up to catch time to prevent dehydration. Objectives of feed withdrawal are to reduce fecal excretion and external cross-contamination during transportation and to reduce fecal contamination of poultry carcasses that may occur during automated evisceration in a processing plant. During

this time, broilers' crops are emptied of feed and the volume of ingesta in the intestines is markedly reduced, but cecal contents may or may not be evacuated. After 6-10 hours without feed, intestines are flattened and lie low in the body cavity, which allows automated machines to eviscerate the birds without breaking the intestine.

2. **Catching:** Broiler chickens can be caught using manual labor or a mechanical harvester.

3. **Load-out**

Load out is usually done at night or under very dim lighting conditions, which helps keep birds calm during the catching process.

4. **Transportation**

Transporting the birds on a truck to the processing plant birds are exposed to new conditions (e.g., climate, vibrations, social order, feed restriction) special care should be taken to minimize potential damage.

Minimizing stress during transport is an important issue from both:

1- Animal welfare :- effect of transportation stresses may range from mild discomfort for the bird to significant discomfort and death.

2- Meat quality perspective :- Avoid heat stress during transport it may make birds more susceptible to a condition known as pale, soft, and exudative (PSE) meat.

✓ **Arriving to the slaughter house:** the missions that done at slaughter houses from receiving the live birds till packaging step by step sub sequentially are in Fig. (1)
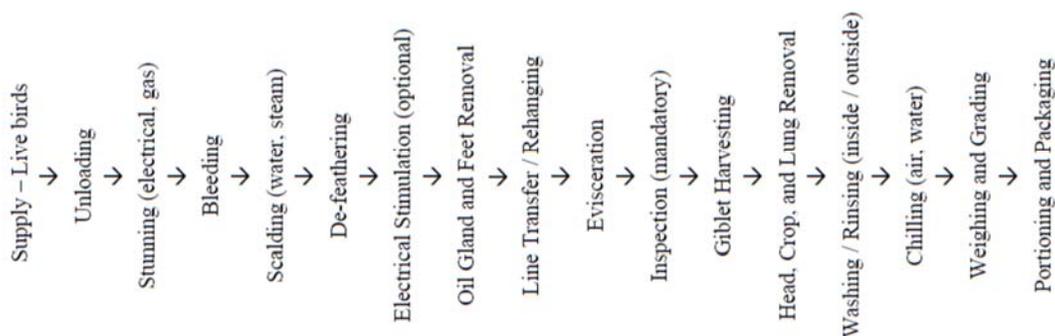

Supply – Live birds → Unloading → Stunning (electrical, gas) → Bleeding → Scalding (water, steam) → De-feathering → Electrical Stimulation (optional) → Oil Gland and Feet Removal → Line Transfer / Rehanging → Evisceration → Inspection (mandatory) → Giblet Harvesting → Head, Crop, and Lung Removal → Washing / Rinsing (inside / outside) → Chilling (air, water) → Weighing and Grading → Portioning and Packaging

Figure (1): Typical sequence of steps in primary poultry processing

➢ **Records management**

Relative to records management, each poultry house should have a record book on which information on the number of stocked live birds, slaughtered and deaths are recorded. Record keeping assists the farmer to calculate an accurate gross margin budget and make informed decisions about the project.

The following records should be adequately kept:

✓ All feeds consumed and purchased.

✓ Number of day old chicks purchased.

✓ Deaths and causes

✓ Vaccination and other veterinary requisites expenses.

✓ Labor and other variable costs.

✓ Number of chickens slaughtered.

✓ Number of chickens sold and used for home consumption.

✓ Number of slaughtered chickens damaged.

✓ Water and feed intake daily.

Economic traits of broilers

The factors or characteristics of broilers that influence profitability in broiler production are termed the economic traits of broilers. They are:

1- Body weight at market age

➢ This is the average live weight of a broiler when sold to market.

➢ It is obtained by dividing the total weight of birds sold by the number of broilers.

➢ Since the broilers fetch a price based on their body weight, it is an advantage if the birds are heavy at an early market age (fast growing).

➢ **Body weight gain = Body weight (g) at the end of the period – Initial body weight (g).**

2- Feed conversion ratio

The term indicates the quantity of feed required to raise the live body weight by one unit. Since feed involves 70-75 percent of the cost of production, feed efficiency or

efficiency of feed conversion by the broilers, largely determines the profit margin. It is calculated as:

FCR (kg feed/kg gain) = <u>Cumulative feed intake (kg)</u>

Total weight gain (kg)

The lower the feed efficiency value, the better it is for the farmer.

3- Livability at market age

Livability = <u>Number of birds alive at market age</u> x 100

Number of chicks purchased

Mortality % = <u>   Number of dead birds   </u> × 100
                 Initial number of birds housed)
OR
Mortality % = 100- Liveability %

Under standard rearing conditions, 96 % livability is anticipated at market age, since the mortality rate should not exceed 4 %.

4- Production Efficiency Index (PEI)

Which is calculated using the following formula:

$$\text{PEI (\%)} = \frac{\text{Body weight (kg) x livability (\%) x 100}}{\text{Age (days) x feed conversion ratio}}$$

5- Dressing yield (percentage)

This is the proportion of edible meat to the total live weight, which varies from 72-76 %. *The strain of the bird, energy content of the diet, feeding and watering before slaughter and the length and time of transport* are some of the factors that influence the dressing yield.

Dressing Percentage without giblets = <u> Carcass Wt. </u> x 100 = %
                                         Live Body Wt.
Dressing Percentage with giblets = <u>(Carcass Wt. +Giblets Wt.)</u> x 100 = %
                                      Live Body Wt.