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 the supply and demand, the price that the farmer gets for his broilers varies considerably at different times of the year.

➢ **Steps in marketing live broilers:**

1. **Feed withdrawal: is done** 6-10 hours prior to catching, loading, and transportation to a processing plant but broilers should still have access to water right up to catch time to prevent dehydration.

Objectives of feed withdrawal are to:

A. reduce fecal excretion and external cross-contamination during transportation
B. 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.

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

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

4. **Transportation is t**ransporting 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.

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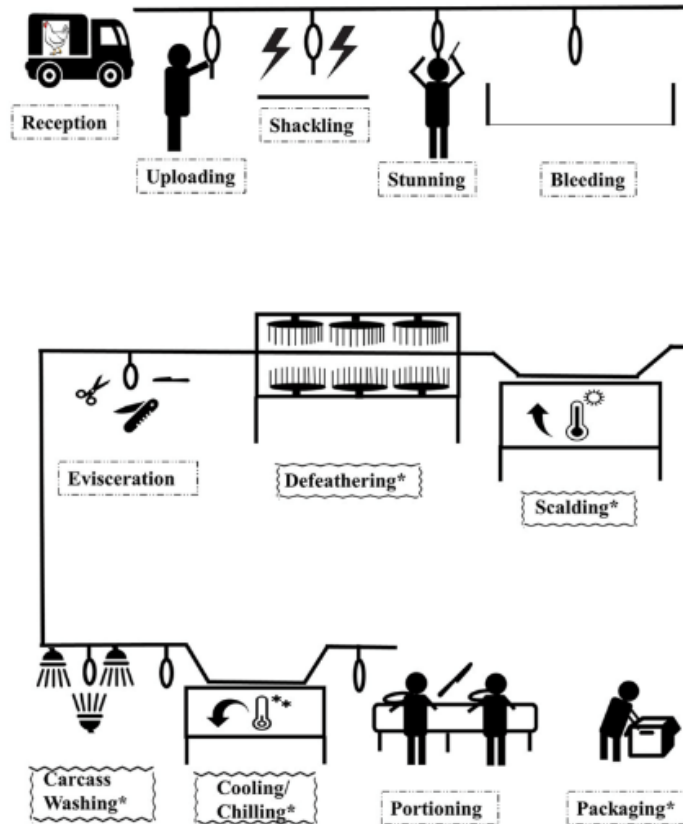
Figure (1): Typical sequence of steps in primary poultry processing

➢ **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:

$$\text{FCR (kg feed/kg gain)} = \frac{\text{Cumulative feed intake (kg)}}{\text{Total weight gain (kg)}}$$

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

3- Livability at market age

$$\text{Livability} = \frac{\text{Number of birds alive at market age}}{\text{Number of chicks purchased}} \times 100$$

$$\text{Mortality \%} = \frac{\text{Number of dead birds}}{\text{Initial number of birds housed)}} \times 100$$

OR

Mortality % = 100- Liveability %

Under standard rearing conditions the mortality rate should not exceed 4 %.

4- Production Efficiency Index (PEI)

Which is calculated using the following formula:

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

Q/ Calculate the production index efficiency for a flock, if you know that:
   Average initial body weight = 42 g
   Average marketing weight at 42 days = 3200 g
   Feed conversion ratio = 1.7
   Mortality % = 3 %
   Is the flock efficient? Why?

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

PEI = ((3.2* 97) *100)/(42*1.7)= (310.4* 100)/71.4= 434.73

Yes, the flock is efficient, because PEI value is more than 250.

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 = ___Carcass Wt.___ x 100 = %
                                      Live Body Wt.
Dressing Percentage with giblets = (Carcass Wt. +Giblets Wt.) x 100 = %
                                      Live Body Wt.

Q/ Calculate the dressing percentage without giblets, if you know that:
                  Carcass weight = 2600 g
                  Live body weight = 3200 g
      Dressing Percentage without giblets = ___Carcass Wt.___ x 100 = %
                                          Live Body Wt.
          D% = (2600/3200)*100= 0.8125*100= 81.26%