Lect. (One)

(HATCHERY)

Hatchery

Is a built with good insulation materials and ventilation, it is consist of different sections to be suitable for the incubators and hatcheries and as well other accessories.

Importance of Hatchery

- 1. Economic importance.
- 2. Get healthy chick embryos of good quality and quantity.
- 3. Access to large numbers of chickens throughout the year and all times (massive production/year).
- 4. Achievements too many types of chicks stock multiple types of eggs from a flock of many mothers.
- 5. Can be naturalized and the sorting of female and male for day old chicks.
- 6. Streamlined and easy to work for large numbers of eggs.

Hatchery Design and Management

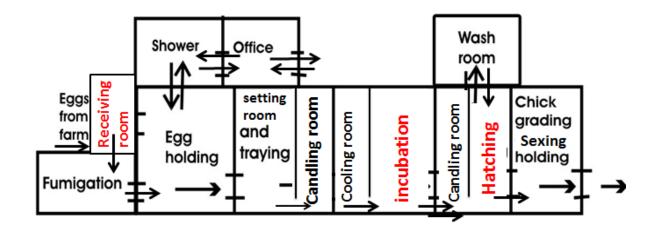
Hatchery building specifications:

- 1- The hatchery building should be designed to make cleaning easy. Floors, walls and ceilings should be smooth and waterproof to allow easy cleaning and sterilization and light colored to show up the dirty walls.
- **2-** Building and roofing / be of insulating material such as Sandwich panel the private equity Block of thermo stones).
- 3- Sewage / drainage are easy for dirt and debris.
- **4-** Ventilation / are adequate and regular.
- 5- Halls / be wide, adequate and good insulation.

Hatchery building dimensions:

The dimensions of the hatchery building will depend on the type number and size of machines, which in turn will depend on the number of chicks required to be hatched in a given period of time. The lay out plan, however, must meet basic hatchery premises plan.

The hatchery building design and sections:



1. The Egg Receiving Room

It should be located at the inlet of hatchery premises. The eggs from breeder farm may be received here preferably through the window and the person bringing them should not be allowed to enter the hatchery building.

2. The Disinfection, Fumigation and Holding Room

Fumigation room should be connected to the egg receiving room and after disinfection/fumigation eggs may be shifted to the cold storage/ holding room. The egg holding room should be connected to the fumigation room temperature 25 °C and relative humidity of 75%.

3. The Egg Setting Room

This should be quite spacious so that sufficient working space furnished with work benches ... etc. are available for the workers to do the job effectively, besides accommodating the required number of incubators.

4. Egg storage room or cooling room.

Its temperature 14 -18 °C and relative humidity of 70-75%, eggs stored until approached and placed in incubators.

5. The Candling Room

Evidently, the candling chamber should be dark and connected to the egg setting as well as hatching rooms. It should be equipped with fertility testing lamps or mass Candler. The eggs are candled for internal egg quality prior to loading in the incubators located in the setting room.

6. The Incubators and Hatchers Room

The <u>Incubators and Hatchers</u> should preferably be kept in a separate room. This part of the building should specifically be ideally cleaned and well ventilated for the production of large numbers of healthy chicks.

7. The Chick Sexing Room

This room may be attached to hatching room as well as the chick holding room. The room should be clubbed with appropriate light source (200 watt electric bulb in a reflector is essential) for chick sexing.

- **8.** The Chick Holding and Supply Room
- 9. The Store/Office
- **10.** The Generator Room
- 11. The equipment Store to Store different equipment and materials.
- **12.** The incinerator to burn the dead Chicks and the hatchery waste was buried in far from the hatchery.
- **13.** Chamber of washing and cleansing, are the tools used and washing trays and carts in hatching machine.
- 14. Chamber of assembly and the deportation of the remains of hatching.
- 15. Chamber cooling equipment, pumps.
- 16. Incubators department: Where there is machines incubation (setter)
- **17.** Hatcheries department: Where there is hatching machines.

Daily duties in hatcheries (daily works):

- 1. Preparation for the eggs and placed in incubators.
- 2. Take care to incubators the hatcheries to accurate the incubation estimation.
- **3.** Preparation for delivery or chicks for sale.
- **4**. Washing and disinfect hatchery parts very well after each hatch
- 5. Good design and management will assist in maintaining a clean hatchery.
- **6.** To keep records showing the (source of eggs conduct of hatching and calculate the percentage of fertilization and hatching rate and number of chicks delivered and the market value for each batch).