

MANAGEMENTAL GUIDELINES FOR SETTING UP A POULTRY FARM

INTRODUCTION: Why Poultry Farming?

Poultry Sector provides a great opportunity for employment generation and enhancing Rural Economy of the State. The Poultry Industry is one of the fastest growing segments of Agriculture Production Sector in India showing growth rate of about 10% per annum. Considering the wide gap between Production and Demand of Poultry Meat and Eggs, the recommended and actual levels of consumption/ availability, poor economy of the State, level of unemployment, abundance of land and human resources by way of poultry rearing, viz, Backyard, Commercial and Layer poultry farming there is an ample scope for furthering the Poultry Industry in Kashmir Valley. Both backyard and commercial poultry sectors have revolutionized poultry meat availability in Kashmir. The sector has witnessed a 28% CAGR during the last two decades and currently employs over 10,000 people.

PRE-REQUISITES FOR STARTING POULTRY FARM (BROILER):

Before setting up of a Poultry Farm, following pre-requisites are necessary:

- **Land:** Adequate land is needed to build various Poultry Structures for carrying out various farm operations.
- **Water:** Adequate supply of clean and fresh water is needed for drinking and cleaning purpose.
- **Electricity:** Provision of Electricity should be there.
- **Skills & Experience:** Basic training and relevant experience in Poultry Management is essential for running the Project successfully.

Selection of Site:

- The selected site should be preferably at a raised level to avoid water logging/ dampness with plenty of sun shine.
- The site selected should be far from residential areas.
- The site should have good road connectivity with easy access to market for procurement and sale of farm produce.

Construction Details:

- **Foundation:** Concrete blocks 1 – 1.5 ft below and 2.5 – 3.0 ft above the ground surface be made
- **Width:** Ideally width of the Shed should not be more than 30 feet
- **Length:** Length of the shed varies according to strength of the farm
- **Height:** Height of the sides from foundation to the roof line should be 7- 8 ft keeping in view weather conditions of that particular area

- **Other considerations:**
 - a. Lengthwise orientation of the shed should be in the East West direction so that the house will get sufficient ventilation and sunlight inside the house
 - b. It should be ensured that the Poultry House is water proof
 - c. The floor for a Poultry house should be Smooth, Strong and made of Concrete with a slight slope so that it is easy to clean
 - d. Poultry Houses should be away from each other about 100 ft.

Floor Space Requirement for Broiler Birds (Deep Litter System):

Age Group	Floor Space
0- 1 week	0. 25 – 0. 33 sq. ft. per bird
2- 3 week	0. 50 sq. ft per bird
4- 5 week	0. 75 sq. ft. per bird
5 weeks onwards	1. 00 sq. ft. per bird

EQUIPMENT:

Equipment required for raising 1000 Broiler Chicks:

- Saw Dust Bukharies 02 No's.
- Chick Drinkers (3 – 5 lt capacity) 20 No's
- Chick Feeders (3 – 5 kg capacity) 20 No's
- Grower Drinkers (8 lt capacity) 20 No's
- Grower Feeders (8 kg capacity) 20 No's
- Exhaust Fans 03 No's.
- Chick Guard of corrugated tin sheet (ft) 1.5 x 20 (W x L) 04 No's

CHICK MANAGEMENT:

Chick Management is an important aspect of broiler farming. Following aspects need to be considered for raising chicks into healthy broilers with profitability:

Selection of Broiler Chicks

The selection of commercial broiler stock can be the determining factor for profitability. Chicks must be genetically capable of fast growing into broilers otherwise time, effort and money will be wasted. Only specialized broiler strain chicks of reputed firms should be procured with an average weight of 48- 52 gms and uniform size at day old stage.

Preparation before Chick arrival:

- Wash off any organic matter present in the Brooder House Properly disinfect the premises using recommended disinfectants
- Fumigate the shed properly with suitable fumigants
- Spread already procured and dried saw dust evenly maintaining the thickness of 2 – 4 inches
- Spread the Paper on the surface so that saw dust is completely masked and remove the same after 3 – 4 days of chick arrival
- Sugar, Electrolyte, Vitamin and probiotic solution must be kept ready in the Waterers before arrival of chicks

Brooding:

- Start brooder 24- 36 hours before the arrival of chicks
- Maintain the temperature of Brooder House at 95⁰ F at first week and reduce the temperature by 5⁰ F every week until 70⁰ F at 6 weeks age
- Place the Chick guard for first week to prevent chicks from moving far from the heating source

VENTILATION:

Proper ventilation of Poultry House is important as it meets oxygen requirement of birds. The ventilation system must remove the waste gases and deliver good quality air. The main contaminants of air (Ammonia/ Carbon gases) within the House may damage the Respiratory tract and reduce bird performance. Preference should be given to cover the ventilators by Jute Matting instead of Polythene and Installation of Exhaust Fans.

LIGHTING MANAGEMENT:

24 hour lighting should be provided to broiler birds so that they can feed round the clock. However an hour or so darkness is recommended to get chicks acclimatized with darkness so that they do not panic in event of sudden power failure.

LITTER MANAGEMENT:

- Provide Dry and Warm covering to the floor by using a good quality litter material
- Moldy Litter should not be used as it is a source of infection.
- Use fresh litter for each batch, to prevent re-infection.
- In-spite of all precautions, 0.5 – 1.0 kg/m² of Super Phosphate may be added to litter which checks moisture effectively for 15 days.

FEEDING AND WATERING MANAGEMENT:

Feeding management is the major important consideration for efficient commercial broiler farming as it constitutes about 70% of the total recurring production cost and significantly affects the performance of the birds. Improper feeding causes deficiency diseases leading to poor performance of the birds. Feeding space requirement, different types of feed fed and average feed consumption by broilers is depicted in the Table below

Feed types Fed at different age Groups

Type	Age (Days)	Crude Protein	Energy (Kcal/ kg)
Pre- Starter	0 - 10	22 - 23	2900 – 2950
Starter	11- 20	21. 50	3050
Finisher	21 till marketing	20	3150

Water plays an important role in regulating body temperature, digesting food and eliminating body wastes. Drinking water quality has a profound effect on the broiler performance. Fresh, clean and good quality drinking water should be made available to the broilers all the time. Average Feed/ Water consumption of broilers at different age group is shown in table below:

Age (Weeks)	Water Consumption (liters/ 100 chicks/day)	Feed Consumption (gm/ chick/ day)
1 st	2	15
2 nd	4	30
3 rd	6	45
4 th	8	65
5 th	9. 5	85
6 th	11. 5	105

Filling of Feeders:

Linear Feeders require special care while filling. Following points need to be considered in this regard:

- When feeders are filled full, 30% feed is wasted.
- When feeders are filled to 2/3 capacity 10% feed is wasted.
- When feeders are filled to 1/2 capacity 3% feed is wasted.
- When feeders are filled to 1/3 capacity 1% feed is wasted.

Feeding Management of day-old chicks:

- Provide fresh lukewarm water containing sugar, electrolytes, vitamins and probiotics to the chicks at arrival.
- Adding sugar (sucrose) to first water improves growth.
- Ensure that chicks drink medicated water within few hours after their arrival.
- Place the maize grit on the paper and paper trays, three hours after arrival of chicks, when almost whole of the drinking water has been consumed by them.
- Ensure all the chicks are feeding properly.
- Morning and Evening Feeding should be preferred, i.e., Twice in a day
- Constant 24 hours monitoring is very essential for first few days.
- Remove the paper after 4 days of chick arrival.

VACCINATION:

Vaccination plays a vital role in prevention of many poultry diseases. Vaccines if administered timely and properly will avoid un-necessary complications and production losses caused by diseases.

Vaccination Schedule of Broiler Birds:

S. No	Age of the Bird	Name of the Vaccine	Route of Administration
1	0 day	Marek's Disease Vaccine	S/C Inj. (at Hatchery)
2	3 rd – 5 th day	Ranikhet Disease Vaccine F ₁ /B ₁	Naso-Ocular drop or through Drinking Water
3	12 th – 15 th day	Live intermediate IBD	Through Drinking Water
4	21 st – 23 rd day	Ranikhet Disease Vaccine (LaSota)	Through Drinking Water

MARKETING OF POULTRY PRODUCE:

Following steps should be followed to fetch maximum profitability of Poultry Produce, viz, Poultry Meat and eggs.

- Interference of Middle Man should be avoided in Marketing of Poultry Produce
- Ensure Marketing through Co-operative Societies or Departmental Marketing Division/ Departmental Sale outlets.

BIOSECURITY MEASURES:

Prevention and control of the disease can be achieved by proper sanitation, disinfection and efficient biosecurity measures as mentioned below:

- Poultry Farm should be properly fenced.
- Keep minimum access of visitors to Poultry sheds.
- Have Foot Dips at entry point of each Poultry Shed.
- ALL-IN ALL-OUT system of rearing should be followed.
- Adopt a single age policy for each site.
- Limit stock movement and try to have separate Poultry Keeper for each Shed to reduce transfer of disease between stocks of different age groups.
- Wash hands and dip shoes between visits to each farm.
- Disinfection and sanitization of Poultry sheds and equipment's should be carried out regularly.
- Prevent the entry of animals, wild birds and rodents inside the premises.
- Spray wheels of all vehicles entering the Farm area with disinfectants.
- Proper disposal of carcasses is necessary to control diseases, flies and odour.