

Broiler Management

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INTRODUCTION

Poultry population in India is estimated to be about 851.81 million in 2019, up 16.8 percent from the previous census. Aside from that, the population of backyard poultry is 317.07 million, up 45.8% from the previous Census, and commercial poultry is 534.74 million, up 4.5 percent from the previous Census. However, by growing human demand, poultry industries meet the demand for high-quality protein, vital vitamins, and minerals.

Eggs and meat are high in protein, fat, and other nutrients, and they are inexpensive. Broiler chickens grow at a quicker pace with lower mortality, increasing farm profitability. For the broiler sector, each phase in broiler management is crucial. As a result, biosecurity should be followed to reduce the possibility of microbial infection. Under the category of poultry meat, broilers are the most popular. Many private companies work with farms to produce boilers on a contract basis. As a result, marketing is no longer an issue.

A broiler is a young bird that is less than eight weeks old, weighs 1.5 to 2 kg, and has tender and soft meat. With an annual growth rate of 11.4 percent, court broiler output has increased to 3.9 million metric tonnes from 2,224 million broilers slaughtered per year, making it the world's fourth largest chicken producer. India's broiler business is growing at an unrivalled rate of more than 15% each year among Asia's courtiers.






The organized sector accounts for 80% of total chicken meat production and is heavily concentrated in the southern region of the country. Andhra Pradesh produces the most poultry meat, followed by Tamil Nadu, Maharashtra, Rajasthan, West Bengal, Uttar Pradesh, Punjab, Kerala, and Odisha, which together account for nearly 92 percent of total poultry meat output, according to the court. Other states provide around 3% of total poultry meat output.



Ventilation	Health
Lighting	Bird welfare
Feed supply	Nutrition
Chick quality	Temperature
Stocking density	Water supply
Vaccination status	

Fig. 1: Factors affecting broiler growth and quality.

Broiler Breeds from Central Avian Research Institute (CARI), Izatnagar

BREED	CHARACTER	IMAGE
CARIBRO-VISHAL (CARIBRO-91)	Weight at day old : 43g Weight at 6 weeks : 1650 to 1700g Weight at 7 weeks : 2100 to 2200g Dressing percentage : 75% Livability percentage : 97-98% Feed conversion ratio at 6 weeks : 1.94 to 2.20	
CARI-RAINBRO (B-77)	Weight at day old : 41g Weight at 6 weeks : 1300 g Weight at 7 weeks : 1600 g Dressing percentage : 73% Livability percentage : 98-99% Feed conversion ratio at 6 weeks : 2.3	
CARIBRO-DHANRAJA (Multi-Coloured)	Weight at day old : 46g Weight at 6 weeks : 1600 to 1650g Weight at 7 weeks : 2000 to 2150g Dressing percentage : 73% Livability percentage : 97-98% Feed conversion ratio at 6 weeks : 1.90 to 2.10	
CARIBRO-MRITUNJAI (CARI Naked Neck)	Weight at day old : 42g Weight at 6 weeks : 1650 to 1700g Weight at 7 weeks : 2000 to 2150g Dressing percentage : 77% Livability percentage : 97-98% Feed conversion ratio at 6 weeks : 1.9 to 2.0	
CARIBRO TROPICANA (For Hot and Humid Region)	Body weight at 6 weeks: 1300 g Body weight at 7 weeks: 1800 g Feed conversion ratio at 6 weeks: 1.90 Feed conversion ratio at 7 weeks: 2.11 Dressing percentage at 7 weeks: 74 Livability percentage at 7 weeks: 97	

Important Points of Broiler Management

A) Chick Quality	
1	Chick from healthy parents
2	Average weight of 100 chicks between 3.8 to 4.0 kg.
3	Uniform size and colour
4	Should be alert, active, free from deformities
5	Vaccinated at hatchery for Marek's disease and tested negative to Gumbaro (IBD)

B)	Chick Placement
1	Chicks must be carefully place and evenly distributed near feed and water throughout the brooding area
2	Cover the litter with paper/ old newspaper for first five days to prevent chicks from eating litter material
3	Space per chick under brooder 32 cm ² (5")
4	Space per broiler- 1sq. ft
5	Adequate ventilation and proper temperature
6	Temperature minimum 70 ⁰ F, Fresh air.

C)	Litter Arrangement
1	Kind of litter- Rice husk saw dust, wood shaving etc
2	Type of litter-Clean, dry, new, free from dust and aflatoxins, absorbent soft
3	Depth of litter- 5to 7 cm.

D)	Lighting
1	First week 95 ⁰ F (35 ⁰ C)
2	Second Week 90 ⁰ F (32 ⁰ C)
3	Third Week 85 ⁰ F (30 ⁰ C)

E)	Waterier
	Drinking water per 100 chicks:0 -2 weeks age 2 liters capacity waterier 3- 8 week age 3 waterier of 1 gallon capacity each
2	Birds for water should not go beyond 3 m distance
3	Keep wooden board below waterier

F)	Feeders
1	Type- linear feeder
2	Space per chick- 5 cm (2")
3	Feed should be provided as a good quality crumble
	After two weeks
1	When the brooders are removed provide 40 watt bulb light for 100 sq. ft. floor space.
2	If necessary debeak the birds to control cannibalism

H)	Disease Control
1	Vaccinate for Ranikhet disease- at 5th day age, If not done at hatchery
2	Keep litter dry to prevent coccidiosis as its organism thrive on wet litter
3	Use coccidiostats in feed

I)	Vaccination Programmed For Broiler			
	Age	Vaccine type and strain	Route	Dose
1	Day 5-7	ND Live (Lasota/B1/F/D-58)	IO/IN/DW	1 drop
2	Day 14	IBD/Gumboro Intermediate or Intermediate plus	IO/IN/DW	1 drop
3	Day 28	ND Live (Lasota/B1/F/D-58)- Booster dose	IO/IN/DW	1 drop
4	Day 30	IBD/Gumboro Intermediate or Intermediate plus	Eye drop/water	1 drop

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