

JHARSIM



ALL INDIA CO-ORDINATED RESEARCH PROJECT ON POULTRY BREEDING

Ranchi College of Veterinary Science & Animal Husbandry

Directorate of Research

Birsa Agricultural University, Kanke, Ranchi



JHARSIM

Jharkhand, the 28th State of the Indian Union is best known for its rich mineral resources. However, 78% of the total population of 2.69 crore live in rural areas, largely dependent only on agriculture and allied activities. The total cultivable land in the State compares well at 52% of the total geographical area with 55% in the country. But, unfortunately while 76% of the total cultivable area is under net sown area in the country, only 43% is cultivated in Jharkhand. The state suffers from several critical gaps in the agricultural and allied sectors (Jharkhand State Agriculture Development Plan 2008-09 to 2011-12)

At the moment domestic production of eggs and chicken meat in Jharkhand are not adequate in requirement which currently depends on other states for egg and meat. per capita availability of 15 eggs, whereas the national average is 62 eggs per annum. The adaptation of poultry farming with low input improved backyard chicken varieties and scientific feeding, health care and management practices in rural/tribal areas would enhance the production of egg and chicken meat at relatively lower input cost. It would greatly help in reducing the occurrence of protein malnutrition with improvement of health among rural/ tribal population. Poultry rearing would also provide the supplementary income and balance food in terms of egg and chicken meat.



Salient feature of JHARSIM

- ♦ Attractive multicolour feather, as tribal people of Jharkhand like coloured birds from religious point of view. Coloured plumage has character to protect themselves from predators.
- ♦ Perform on low plane of nutrition.
- ♦ Longer shank length which helps in self protection from predators in backyard areas.
- ♦ Good adaptability in backyard/ free range.
- ♦ Grow faster and produce more no of eggs than Desi hen.
- ♦ Produces brown eggs like Desi hen.

- ♦ Has broody characteristic.
- ♦ Fast growth rate . Body weight at 20 weeks of age ranged from 1.5 to 2 kg in males and 1.4 to 1.6 kg in females.
- ♦ Higher egg production of 165 which is three times more than local native (50-60 eggs).

In Jharkhand there is plenty of natural feed resources are available, a small number of birds (10-20) can be reared for egg purpose under free range system. If local demand is for meat they can be reared in large number in intensive/semi intensive system.

Nursery Management

Nursery management is done upto 6 weeks and let them loose in open free range after 6 weeks of age. Brooding is essential for these birds immediately after hatch to provide required temperature during initial 4-6 weeks of age. News paper is spread on 2-3 inches litter in brooder and arrange feeder and drinker. Artificial heat is provided by brooders made of wooden/metal/locally available material. Generally electric bulbs are used as source of heat. Heat source of 2 watt/chicks is required. The movement of chicks can be restricted nearer the heat source with the help of chick guard. At higher temperature the chicks move away from the heat source.



Feeding : Under nursery management upto 6th weeks of age complete balanced feed containing all required minerals, vitamins, antimicrobial and anticoccidial should be fed ad-lib. It is important to ensure easy access of feed to all the birds Jharsim chicks requires 2400 K Cal ME, 16 % protein, 0.77 % lysine, 0.36 % methionine, 0.35 % available phosphorus and 0.7 % calcium. The feed can be prepared by using local feed ingredient or the layer grower feed which are available commercially can also be fed upto 6 weeks of age.

Health care : Jharsim birds have better immune competence. They need protection against Ranikhet disease, Gumboro disease and Fowl pox. Vaccination schedule is as follows:

Table 1. Vaccination programme for Jharsim chicken

Age	Name of the Vaccine	Strain	Dose	Route
In the Hatchery				
1 st day	Marek's Disease	HVT	0.20 ml	SC injection
In the Nursery				
5 th day	Newcastle Disease	Lasota	One drop	Eye drop
14 th day	Infectious Bursal Disease	Georgia	One drop	Oral drop
21 th day	Pox	Fowl pox	0.20 ml	IM/SC injection
28 th day	Newcastle Disease	Lasota	One drop	Eye drop
In the field				
9 th week	Newcastle Disease	R2B	0.50 ml	SC injection
12 th week	Pox	Fowl pox	0.20 ml	SC injection

Repeat these two vaccines at every 6 months interval



Free range Management

Jharsim birds can be let out under backyard or free range condition. At 6 weeks of age birds will attain 500-600g body weight. These birds can be let out under backyard or free range condition at the rate of 10-20 birds/house depending upon the area and natural feed base available. Birds are let out for foraging during the day time while at night they are kept in night shelter. Provide clean drinking water everyday before the bird are let out from the night shelter. The males can be sold at any time after attaining the minimum body weight where as the Jharsim birds lay up to 130 eggs per year under free range condition.

Housing : House for birds can be made by use of locally available low cost material i.e. Mud, Stone, Wire mash, Bumboo, Wood etc for night shelter and protection from rain. Birds should be provided 1.5 to 2.0 square feet floor space per bird.

Feeding : Jharsim birds under free range can easily pick up its food from the backyard , once it learns to scavenge in the fields. They need additional feed supplementation depends on the free area available in the backyards. Under free range condition the birds meet their protein requirement through scavenging. Therefore,feeding the birds with cereals (bajra, ragi, jowar, broken rice, rice polish, rice bran etc.) available is always beneficial to sustain the production. The birds should largely depend on food available in free range condition. Care should be taken to restrict the weight of pullet (female) between 2 to 2.5 Kg at 6.0 6.5 month of the age. Excess body weight may reduce the egg production. For meat purpose,feeding commercial broiler/layer check feed is suggested.

Health Care : The most important disease that affects birds and free range farming is the Ranikhet/Newcastle disease. Follow proper vaccination schedule. Night shelter should have good ventilation, required light and protection from the predators. The material used for night shelter such as wood and bamboo offers good hiding place for external parasite. Therefore, periodic cleaning of night shelter is essential. The chicks move in free range, there is possibility of parasitic infestation. The deworming at 2-3 months interval is required. Under free range system the Jharsim birds should be vaccinated against Ranikhet disease at 6 month interval, preferably one should be before the onset of summer.

Table 2. Performance of Jharsim birds

Economic trait	Performance
Body weight, (g)	
Six weeks	400-500
At sexual maturity	1600-1800
Egg weight	
28 weeks	42-44
40 weeks	52-55
Age at first egg (days)	175-180
Egg production, no. up to 1.5 years (in village)	110-130
Egg production, no. up to 1.5 years (at farm)	165-170
Survivability,%(up to 6 weeks)	96



Supply

Fertile egg : fertile eggs and day old/six week old chicks are available at All India Co-ordinated Research Project on Poultry Breeding, Poultry farm of Ranchi Veterinary College, BAU Ranchi on payment basis. About 10-12 eggs can be set under a Desi broody hen for better hatchability. Eggs should be stored in cool place till they are set for hatching.

Day old /six weeks old chicks are available on advance payment in cash at farm and through DD in favor of comptroller, BAU, Ranchi. Please give your contact address and Telephone No. The customers are required to receive the birds from Poultry farm, Ranchi Veterinary College.



For More Information Please Contact



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Formulated by :

Dr. Sushil Prasad, Dr. Ravindra Kumar & Dr. Nishant Patel