# **Backyard Poultry**



Vanaraja birds have been introduced by ICAR in Mizoram. The acceptability among the people is found to be high, as these birds has a triple advantage in terms of colour and hardiness like local bird, high egg laying capacity (160-180 eggs/year) and higher weight gain than the local birds. It has better resistance against common poultry diseases and is adaptable to the free range rearing with minimum supplementation of locally available feed ingredients.

## Preparation of brooder house

Hygienic housing is one of the most important poultry managemental practices. The brooder house has to be cleaned and disinfected well before the arrival of chicks. Sweeping, brushing, washing and painting of floor with lime will protect the chicks from some of the common diseases. After this preparation, the house should be left empty for 1-2 weeks before arrival of chicks.

A day before chicks arrival, the floor has to be covered with clean and dry litter up to 2-4 inches thickness. It is important to keep in stock, dried locally available litter materials like saw dust, paddy husk etc. The litter has to be covered with news paper at least for initial few days so that the chicks will not eat litter materials by mistaking as feed.

## Giving chicks a good start

To get optimum production, the chicks have to be given a good start. Make sure that the brooder house is draft free, rain proof, free of rats and mice and protected against predators.

## Brooding

Day old chicks need brooding up to 4-6 weeks of age. The chick guard can be prepared with locally available materials like card board, bamboo or plywood sheets. etc. Place the chick guard in such a way that it makes a complete round of desired area, depending upon the number of chicks to be brooded and expand the chick guard according to the growth of chicks.

# Brooding of chicks with chick guard

Brooding temperature is very important especially in winter. Too high or too low temperature slows down growth and causes mortality. During the first week the temperature should be 95°F ( $35^{\circ}$ C) which may be reduced by 5°F per week during each successive week till 70°F ( $21^{\circ}$ C). The brooder should be switched on for at least 24 h before the chicks arrive.

Hundred/two hundred watt bulbs can be used to maintain the temperature. Monitor the chicks for their behavior to see if they are comfortable and getting enough heat. If they hurdle together, increase the number/watt of the bulbs and if they stay away form heat source, probably they are too warm, so reduce the number/watt of bulbs. In the places where electricity is not available Sigiri can be used to fulfill the purpose. It should be remembered that bulbs are not only used to provide heat, but also to provide light, and light is very important for good growth, development and production of birds. For chicks, light has to be provided round the clock up to 3 weeks age.



Vanaraja chicks in brooder

Reduced light will result in less active flock. Another important factor is ventilation. Chick house should be well ventilated otherwise the ammonia produced in the house will cause ill health to chicks.

Brooder space of 7-10 sq inches is recommended per chick.

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	Age (wks)	Floor space (sq.ft)	Feeding space (cm)	Watering space (cm)	
	0-4	0.5	2.5	1.5	
	4-8	1.0	5.0	2.0	
	8-12	2.0	6.5	2.5	

## **Space requirement for poultry**

## Feeding and watering

For the first week to 10 days, chicks can be fed with chick mash starter. If feeders are not available, the chicks can be fed in cut-opened card-board boxes. The edges of the boxes should have about 3-4 cm height on the sides. After 10 days, the feeding and watering space has to be increased.

Never fill the feeders more than half to avoid wastage and it should be kept in mind not to use the feed that has been stored for more than a month because feed gets spoiled by insects and fungus. One of the most important, yet most neglected nutrients is water. Water is essential for proper growth, development and production. The baby chick is about 80% water. A young chick needs constant supply of fresh water and it does not drink a lot of water at one time but it drinks often. Hence, fresh and clean water should be available at all times.



Vanaraja birds at farmers backyard

#### Litter management

Litter management is one of the integral parts of poultry rearing. Wet litter predisposes to many diseases. One among them is Coccidiosis, which is a serious disease and will kill chicks. Its organism thrives on wet litter. In case of out break, the Coccidiocidal drug in drinking water should be used at recommended level. The easy way to know when the litter material needs to be changed is taking a handful of litter, squeezing and dropping on the ground. There should be no fingerprint and the litter should break up. The litter should not be dusty or moist and caked. Caked litter should be removed and replaced with fresh, dry and clean litter.

## **Other managemental practices**

When the chicks are procured from reliable hatchery, the chicks have already been vaccinated against Marek's disease (MD) before selling. If the chicks are hatched at home by conventional hen brooding then they have to be vaccinated against MD. After that, the birds are to be vaccinated against Ranikhet disease (RD).

#### Vaccination schedule for backyard poultry

Vaccine	Rote	Age
MD	Sub-Cutaneous	1 day
RD lasota	Occulo-nasal	4-7 <sup>th</sup> day
RD R <sub>2</sub> B	Sub-cutaneous	8 -10 weeks

Veterinary Department vaccinates birds at free of cost/nominal cost against RD.

Besides this, the chicks should be regularly observed to make sure that they are healthy and taking feed and water. In case any bird show some symptoms of disease, immediate isolation of the individual bird is necessary. If many birds show one or more common symptoms like depression, closed eyes, dropping wings, loss of appetite, diarrhea, poor growth, disability etc. isolate the affected birds and Veterinarian should be contacted immediately.

## Management under free range conditions

Besides the above mentioned managemental practices, during their later period of brooding, the chicks can be fed with layer starter diet. After brooding, these chicks need initial acclimatization to backyard environment before they are let free. Once they get adapted to the backyard farming conditions, they can perform better by scavenging for feed in the backyards. Additional feed need to be offered to the birds depending upon the extent of vegetation in the backyard and open area available for scavenging.

## Suggestions to obtain high returns from backyard poultry rearing

- Protect from predators
- Provide additional concentrate feeding.
- Provide adequate fresh, clean water.
- Clean sanitary conditions of poultry equipments.
- Proper vaccination and veterinary care
- Poultry manure, if infected, can spread disease, hence keep the litter dry.

# On farm Performance of Vanaraja birds under Mizoram

75%
<7
2.52
35g
163g
493g
857g
1300g

By 12 weeks the male and female attained the body weight of 2.77 and 2.25 kg, respectively.



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