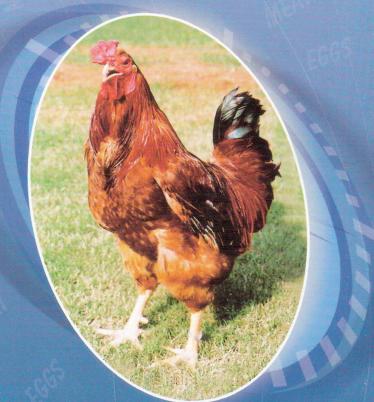




## Vanaraja

Meat & egg type colored bird for Rural Poultry Farming



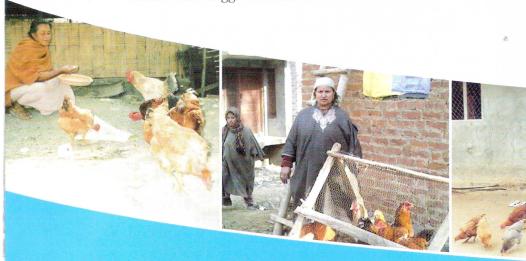




he per capita consumption of egg and chicken meat in urban areas is ranged between 80-120 eggs and 2.25-3.5kg, respectively against 5-20 eggs and 750g in rural areas. Further, these poultry products are expensive (10-40%) in rural / tribal areas due to their non-availability. Rural families in our country consume rice or wheat as staple food, which is rich in energy and low in protein. Due to protein deficiency in rural sectors the people, particularly pregnant women, nursing mothers and growing children are becoming vulnerable to many common diseases. The backyards in rural / tribal areas are rich with "Natural Food Base" (fallen grains, insects, earthworms, kitchen waste, green grass, etc). These waste food materials can be ploughed back into the human food chain, by converting them in to nutritionally balanced and delicious egg and chicken meat. Adapting the rural poultry farming can also alleviate the protein hunger.

Project Directorate on Poultry has developed a dual-purpose chicken variety i.e. *Vanaraja* which gives eggs and meat based on rearing and feeding practices. Important features of this bird include...

- Attractive multi-color feather pattern
- High general immune competence
- Perform on low plane of nutrition
- Grow faster and produce more eggs than Desi hen
- Produce brown eggs like Desi hen



In areas where plenty of natural feed resources are available, a small number of birds (10 - 20) can be reared for egg purpose under free-range conditions. If the local demand is for meat, they can be reared in large number under intensive /semi intensive conditions by providing all inputs similar to the commercial broilers. Typically, *Vanaraja* need to be reared under nursery management up to 6 weeks and let them loose in open free range after 6 weeks of age.

## I. Nursery Management

Brooding is essential for these birds immediately after hatch to provide required temperature and protection from predators. Spread the newspaper on 2-3 inches litter in the brooder. Arrange the feeders and drinkers.

**Brooders**: Metal or wooden broodens can be used and generally electrical bulbs are used as source of heat. Heat source of 2 watts /chick is required. The movement of chicks can be restricted nearer the heat source with the help of chick guard. At higher environmental temperature the birds move away from the heat source.

Feed: While rearing the bird under nursery management, complete balanced feed containing all nutrients; minerals and vitamins should be given. It is important to ensure easy access of feed to all the birds. Feed should be offered everyday. In nursery rearing, Vanaraja chicks need 2400 kcal ME, 16% protein, 0.77% lysine, 0.36% methionine, 0.35% available phosphorus and 0.7% calcium. The diet can be formulated using the locally available feed ingredients to meet the above nutrient specifications. Layer grower feed which is available commercially can also be fed during the initial 6 weeks of age.

*Health care*: Though *Vanaraja* has better immune competence, they need protection against Newcastle disease and fowl pox. Vaccination schedule is as follows.







Table 1. Vaccination program for Vanaraja chicken

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

<sup>\*</sup>Repeat these two vaccines at every 6 months interval

## II. Free range Management

At 6 weeks of age, birds will attain 650-750 g body weight (Table 2). These birds can be let out under backyard free-range conditions @ 10 -20 birds/house depending on the area and natural feed base available. The birds are let out for foraging during the daytime while at night they are kept in night shelter. Provide clean drinking water every day before the birds are let out from the night shelter. The males can be sold at any time after attaining the minimum body weight. Females of *Vanaraja* lay up to 110 eggs per year under free-range conditions.











Feeding: Vanaraja under free range can easily pick up its food from the backvards once it learns to scavenge in the fields. The need for additional feed supplementation depends on the free area available in the backyards. Generally, the birds under freerange conditions can meet their protein requirement through scavenging. Therefore, feeding the birds with cereals (bajra, ragi, jowar, korra, broken rice, rice polish, rice bran, etc.) available is always beneficial to sustain the production. The nature of supplemental feed depends on the purpose of rearing. For meat purpose, feeding the birds with commercial broiler / layer chick feed is suggested. If the purpose of rearing is for egg production, the birds should largely depend on food available in free-range conditions. Care should be taken to restrict the weight of pullets (female) between 2.2 to 2.5 kg at 6.0-6.5 months of age. Excess body weight may reduce egg production. The broken/shell-less eggs can be minimized by supplementing the calcium sources (lime powder, shell grit, stone grit, etc.) @ 3-4 g /bird / day.

Health care: The most important disease that affects birds under free-range farming is the Newcastle disease. 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 a good hiding place for external parasites. Therefore periodic cleaning of night shelter is essential. Since the chicks move in free range, there is a possibility of parasitic infestation. The deworming at 2-3 months interval is required. Under free-range conditions adult Vanaraja birds should be vaccinated against Newcastle disease at 6 months interval, preferably one should be before the onset of summer. Vaccination of native birds along with Vanaraja is recommended.

Table 2. Performance of Vanaraja birds

Economic trait	Performance	
Body weight, g		
Six weeks	650-750	
At sexual maturity (restricted feeding)	2,000-2,200	
Egg weight, g		
28 weeks	42-44	
40 weeks	52-58	
Age at first egg, d	175-180	
Egg production, no. up to 1.5 years	100-110	
Survivability, % (up to 6 weeks)	98	

## Supply

*Fertile eggs*: Fertile eggs of *Vanaraja* are available at this Directorate on all working days on payment basis. Eggs should be stored in a cool place till they are set for hatching. About 10-12 eggs can be set under a *Desi* broody hen for better hatchability.

Day old chicks: Chicks are available on advance payment. Payments can be made through DD drawn in favor of "Project Director, Project Directorate on Poultry," and should be sent to "Director, Project Directorate on Poultry, Rajendranagar, Hyderabad 500 030". Please give your contact address and telephone number. After receiving the DD, the Directorate will intimate the supply date. The customers are required to receive the birds from the Directorate.

Contact address

Project Director

Project Directorate on Poultry

Rajendranagar, Hyderabad - 500 030 Ph: 040-24017000/24015651, Fax: 040-24017002

Hatchery: 040-24018687

E.mail: pdpoult@ap.nic.in; www:pdonpoultry.org

int@vamsi.com