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BACKYARD POULTRY FARMING – A SOURCE OF LIVELIHOOD FOR RURAL FARMERS

[1]Rashmi Bhinda, Annu Devi Gora, Sushila Aechra, Gayatree Jhajhara

[1]Livestock Production Management

Maharana Pratap University of Agriculture & Technology, Udaipur, 313001

Introduction:

Backyard poultry rearing requires hardly any infrastructure setup. Besides targeted egg production, it is a potent tool for upliftment of the poor. Most of the backyard poultry production comprises rearing of indigenous birds with poor production performances. The potentiality of indigenous birds in terms of egg production is only 70 to 80 eggs/ bird/ year and meat production is also very less. However, the backyard poultry production can be easily boost up with improved varieties of chicken and can promise a better production of meat and egg. It has a very positive impact to improve the socio-economic factors of the socio economically backward people (Chakrabarti *et al.,* 2014). Backyard poultry production can cater to the nutritional requirements of the family as well as cater to a niche market, thus providing a source of subsistence income. Backyard poultry can be taken up by every household as a subsidiary occupation, as a source of additional income or to cater to the egg and meat requirements of the family by taking up colored bird units ranging from 10-20 birds per family in their backyards. Such units require very little hand feeding and can give a fairly handsome return with bare minimum night shelter (Miao *et al.*, 2005).

Chicken varieties suitable for Backyard Rearing

Native (Desi) Chicken Native chicken have undergone natural selection and are best adapted for the local climatic conditions, they can survive on kitchen and agricultural wastes and survives well on scavenging and left over feed. They are hardy and resistant to many diseases. They survive well from predators. Native hens are good brooders and have good mothering ability. Native chickens are capable of self propagation; they can set their own

nest, lay eggs in nest, brood and take care of their young ones. But native chicken are low on productivity, so to increase productivity improved varieties of chicken need to be reared.

Improved Varieties

Vanaraja: Vanaraja is a dual-purpose variety for free range farming in rural and tribal areas. The bird is hardy and has better immune competence. Because of its multi coloured plumage and brown eggs, it is well accepted by the rural people across the country.

Gramapriya: Gramapriya is a layer type variety developed for free range farming in rural and tribal areas. The bird has the production potential of 230-240 eggs in a year and can lay 160-180 eggs in free-range conditions with minimum supplementary feeding.

Giriraja: Giriraja breed of chicken suited for mixed and backyard farming. Females lay 130-150 eggs per year, with each egg weighing 52-55 grams. The bird's exhibit better growth compared to local varieties, they can be raised as free-roaming birds and can be fed with locally available materials. Being good scavengers, they feed on a variety of insects and green foliage. They can also be fed on farm and kitchen waste. The birds are resistant to many diseases, an exception being Ranikhet disease.

Swarnadhara: It is a hardy bird having high egg production potential along with better growth compared to other local varieties and are suited for mixed and backyard farming. The bird can be reared for its eggs and meat. Hens attain a body weight of about 3 kg and the cocks about 4 Kg by 23rd week. They lay about 180-190 eggs in a year. For backyard rearing, a flock of five hens and one cock can be ideally grown.

Housing management for backyard poultry farming: No elaborate housing is required for backyard poultry farming but, it should protect the birds from sun, rain and predators. If free range system is practiced the birds are let loose in day time for foraging and at night sheltered in shed. For better production performances certain criteria that can be considered are –

1. The poultry house should be in east-west orientation to protect from summer wind and cold stress and also for direct sunlight in winter months.
2. During summer direct sun light should be avoided to reduce the summer stress in birds.
3. Low cost housing material like wood, bamboo, grass, thatch etc can be utilized.
4. The poultry house should be free from water seepage or moisture.
5. Floor should be in elevated land or above ground level (minimum 2ft) and free from water crack, easily cleaned, rat proof and durable.
6. There should be free air movement in upper part of the shed to reduce gas formation inside the shed.
7. Height of the side wall in poultry house is generally 7 ft to 8 ft. The centre height is 9 ft to 12 ft with slope in either side.
8. Roofing material like thatch, tiles, asbestos etc can be used.
9. Brooder house should have easy ventilation and wire netting which is used for open air ventilation.
10. Provision of bulb fitted above the ground as hoover may be utilized to keep the chicks worm.

Feeding management: The feed cost alone is 70% of total expenditure in poultry production. In backyard poultry farming the feed cost is considered to be minimum. Hence, the birds are let loose for scavenging in the open yard and collect the required protein, energy, minerals and vitamins etc from insects, snail, termites, seeds of grasses and weeds, leftover grains, crop residues and household wastes. Feed ingredients like broken rice, ground nut straw, wheat or job's tear grain, rice bean etc also can be given to the birds. During rainy season poultry feed should not be stored more than 1.5 months to avoid fungus growth (Aflatoxicosis). (Chakrabarti *et al.*,2014)

In backyard poultry farming generally two times feeding is practiced; once at morning and another at evening. The birds may be supplied with extra concentrate ration @ 30 to 60 gm/ day/ bird for better performance. The balanced ration may be formulated with appropriate percentage of maize, rice polish, wheat bran, ground nut cake, fish meal, shell grit or lime stone along with salt, minerals and vitamins or may be with locally available ingredients.

Health care management: For better health care in backyard poultry farming the birds should be vaccinated against virus diseases in time. The diseases that mostly effect the birds are Ranikhet disease, Marek's Disease, Fowl pox, Gumbroo disease etc. Regular vaccination schedule may be followed in a poultry farm (Table 1). Deworming for internal and external parasites also should be done to maintain a healthy flock. Other diseases that may affect the poultry birds are Coccidiosis, infectious coryza, Salmonellosis etc.

Table 1. Vaccination schedule for poultry birds (Chakrabarti *et al.*,2014)

Sl. No.	Age of birds	Name of Vaccine	Name of Disease	Doses	Route of Vaccination
1	Day old Chicks	HVT MD Vaccine	Marek's Disease	0.2 ml	S/c or I/m
2	4 to 7 days	F-1/ Lasota	Ranikhet Disease	One drop	Eye or nostril
3	14 to 18 days	Intermediate plus	Gumboro disease	-	Drinking water
4	35 days	F-1/ Lasota	Ranikhet Disease	One drop	Eye and nostril
5	6 to 7 weeks	Chicken embryo adopted	Fowl Pox	0.5 ml	Wing stab method
6	8 to 10 weeks	Strain killed vaccine	Ranikhet Disease	0.5 ml	S/c or I/m

Benefits of Backyard Poultry Farming

1. Natural Pest Control: Rather than using harmful chemicals and pesticides in your yard and garden, use chickens instead. Chickens are known to reduce or eliminate populations of grasshoppers, termites, fire ants, slugs, fleas, scorpions, and even rodents by cleaning up food sources that might attract them.

2. Fresh Eggs: Fresh eggs produced by well nourished, free ranging hens are so much better than their store-bought counterparts. Not only do you get the satisfaction and egg-citement of collecting them every morning, but nutritionally they are better for your health. (Alders *et al.*, 2009)

3. Chickens Are an Excellent Source of Organic Fertilizer: Poultry manure contains all the essential nutrients for plant growth and offers a rich source of nitrogen, potassium, and phosphorous in the garden. Because of the high nitrogen level and nutrient balance, chicken manure is considered the best type of manure for garden use. It is an environmentally friendly alternative to chemical fertilizers and good for the earth. Every time you clean the coop, the resulting by product is a fresh pile of manure that can be recycled in your backyard ecosystem. (Das 2005).

4. Friends for life: Many chicken keepers love to tend to their flock – not just for the tasty fresh eggs they produce, but for the company they provide. Most domestic chicken breeds form a real bond with their owners and vice versa – running up to greet them in the morning, jumping on their owner's laps for cuddles and pottering around the garden whilst you're doing your gardening. The benefits of keeping chickens stretch far beyond simply having fresh eggs every day.

References

Chakrabarti, A. Dey A. and Barari, S K (2014). Backyard Poultry Farming- A source of better livelihood for Rural Farmers. http://www.krishisewa.com/articles/livestock/410-backyard-poultry-farming.html

Das, P.C. (2005). Manures and Fertilizers New Delhi: Kalyani Publishers.

Alders R. G, Spradbrow P. B and Young M. P. (2009). Village Chicken, poverty alleviation and the sustainable control of Newcastle disease. ACIAR Proceeding No. 131. Australian Centre for International Agricultural Research: http://aciar.gov.au/files/node/11133/PR131%20part%201.pd

Miao, Z.H; Glatz, P.C and Ru, Y.J (2005). Free-range poultry production – A review. Asian-Aust. J. Animal

Back yard poultry farming as a source of livelihood in tribal village: an economic appraisal (pdf Download Available). Available from: https://www.researchgate.net/publication/312595055_back_yard_poultry_farming_as_a_source_of_livelihood_in_tribal_village_an_economic_appraisal [accessed Oct 5, 2017].