



Health Care Management Practices of Backyard Poultry Rearing in Dungarpur District of Rajasthan

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ABSTRACT

The current research deals with the Health care management practices of backyard poultry rearing in experiment area of Dungarpur district. The field of investigation of this study covered four tehsils of Dungarpur district *i.e.* Dungarpur, Bicchiwada, Aspur and Sagwara. The Study reveals that in health care management practices maximum respondents (85.43 per cent) had veterinary facilities, 75.00 per cent did not follow the vaccination, 87.78 per cent respondents provided vaccine to bird after hatching, 48.89 per cent respondent cleans poultry and equipment on alternate days, 48.33 per cent farmers said that veterinary person visited the respondent poultry house monthly, maximum farmers were weighing their birds weekly (64.44 per cent), all 180 respondents (100 per cent) used isolation distance of sick poultry birds and 49.44 per cent respondents used bamboo type poultry house in the experiment area.

HIGHLIGHTS

- We studied Health Care Management Practices of Backyard Poultry rearing in Dungarpur district of Rajasthan.
- Maximum respondents provided vaccine to bird after hatching.
- Maximum respondents used bamboo type poultry house.

Keywords: Backyard poultry, Dungarpur, Health care, Poultry house, Vaccination

Livestock is an integral part of agriculture and plays an important role in contributing to national economy. Poultry is also a major part of livestock production in India. Poultry sector contributes about 36 per cent of total meat production in India (Department of animal husbandry, dairying and fisheries, 2018-19). Eggs contribute 3.77 per cent as value output from total livestock rearing. India shares 3.17 per cent of total poultry in the world, (Anonymous, 2018-19). The population of poultry under courtyard system is 317 million (20th census). This has occurred even though the fact that rural courtyard poultry is a main part of the activity portfolio of most of the rural families. As per 20th livestock census, there were 80.24 lacs poultry in Rajasthan, from which 30.33 lacs poultry were at backyard and remaining 49.91 lacs were at farm poultry. Dungarpur was at Vth position in the number of

backyard poultry with having 1.78 lacs population after Ajmer, Udaipur, Jhunjhunu and Banswara having Ist, IInd, IIIrd and IVth rank, respectively. Backyard poultry serves as an inexpensive means for households to generate highly nutritious food commodities at minimal cost (Pica-Ciamarra and Otte, 2010). The paying causes for this quicker progress rate are constant increase in demand of poultry products, developed genetic potential of the birds owing to continuous and accurate selection and breeding strategies, improvement in management practices as well as health cover and availability of the quality balanced

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feed. Indian poultry business is better planned and is succeeding towards renovation. Birds feed by scavenging or are provided with household scraps and crop by-products. Backyard poultry manure can be used directly (Pal *et al.*, 2020). cross breeding is widely used commercial production as a means of exploiting heterosis when the desired phenotype is a combination of existing breeds to impose the efficiency of the operation through the use of elit sire and dam lines. The backyard poultry are bird having desirable plumage colour with high performance compared to local indigenous bird with very small change in husbandry practice i.e. followed for the indigenous fowl, in addition to indigenous fowl crossbreed, produced using exotic breed is being used for backyard poultry farming (Das *et al.*, 2008 and Padhi *et al.*, 2012). The best fed and housed stock with the best genetic potential will not grow and produce efficiently if they become diseased or infested with parasites. Therefore good poultry health management is an important component of poultry production. Infectious disease causing agents will spread through a flock very quickly because of the high stocking densities of commercially housed poultry.

MATERIALS AND METHODS

The existing study was carried out in Dungarpur district of Rajasthan. Dungarpur district is situated in the south region of Rajasthan and geographically characterized by the Aravali hills. The district lies in the middle of 23.8°N latitude and 73.7°E longitude and altitude of 225 meter beyond average sea level. Dungarpur district comprises of total 8 tehsils, out of which 4 tehsils *i.e.* Dungarpur, Bicchiwada, Aspur and Sagwara were selected for the investigation. Three villages were selected from the each identified tehsil and total twelve villages were selected on the basis of backyard poultry birds availability in the villages. Fifteen respondents from every village were randomly selected and a total number of 180 farmers were investigated for current research. Data were collected with the help of a semi structured interview schedule and through observation. Data so collected, tabulated and analyzed as per standard statistical procedures of Snedecor and Cochran (1994).

RESULTS AND DISCUSSION

The results indicated that maximum respondents (85.43 per cent) had veterinary facilities and only 14.57 per

cent had no facilities of veterinary (Table 1). It is clear from Table 1 that most of respondents, 75.00 per cent did not follow the vaccination and remaining 25.00 per cent treated their birds through vaccination. The results of Table 1 exhibit that 87.78 per cent respondents provided vaccine to bird after hatching and only 12.22 per cent provided it after birth. The data of Table 2 revealed that respondents of study area used 24.72 per cent *kaccha*, 23.60 per cent *pucca*, 49.44 per cent bamboo and 29.67 per cent used mixed type poultry house. It clear from Table 2 that 12.78 per cent respondents cleaned poultry and equipment daily, 48.89 per cent respondents on alternate days and 38.33 per cent respondents did this weekly. Data presented in Table 3 shows that veterinary person visited the respondent poultry house as follows 3.33 per cent weekly, 41.11 per cent fortnight, 48.33 per cent monthly and only 7.22 per cent respondents had no visit by veterinary persons. The results of data exhibited that maximum farmers were weighing their birds weekly (64.44 per cent), followed by 2-3 days (46.55 per cent) and only 8.62 per cent respondent took weight of poultry birds daily (Table 3). It is clear from data that all 180 respondents (100 per cent) used isolation distance of sick poultry birds (Table 3).

It is observed that 24.72 per cent recipients used *kaccha* house, 23.60 per cent *pucca* house, 49.44 per cent used bamboo and 26.67 per cent of mixed poultry house in study area. However, Monsi and Ayodele (1989) noticed that poultry was reared in open sided house with a concrete floor covered with wood shadings. The maximum recipients (85.43 %) have veterinary facilities and only 14.57 percent have not any facilities of veterinary. The most of recipients, 75.00 percent not follow vaccination for poultry. The 87.78 % recipients provide vaccine to bird after hatching and only 12.22 % provide it after bird.

The mean number of eggs consumed and sold per year were 110 and 570, respectively. However, Singh *et al.* (2003) reported higher number of eggs consumed per week (9.45) as compared to the present study. The mean number of fowls disbursed and sold per year was 10.11 and 28.21, respectively. Bendfeldt *et al.* (2006) described that consuming or selling the fowls were 0-20 birds.

It was discovered that market for trade of poultry product was main problems in the study areas, as there is no trade facility in selected areas under investigation. These results are in agreement with the results of Bhattu *et al.* (1999)

and Bendfeldt *et al.* (2006). Instead of most (46.25 %) of recipients showed availability of developed strain of bird as a main constraints in study area. The consequences of current research are in agreement with the reports of Sing and Jilani (2005) and Mandal *et al.* (2006). Maximum recipients of research area placed problems as infection occurrence, predators, fitness service and feed accessibility on rank II, III, IV and V. Similarly Mandal *et al.* (2006) reported high occurrence of disease and predators as key constraints. Though Conroy *et al.* (2005) reported the predation as main as, or more important than infection. Thakre and Sarkar (2004) perceived that lack of health care facility as one of the main constraints. Further, Barua and Yoshimura (1997) discovered that scarcity of feed and high occurrence of disease as key problems.

Table 1: Distribution of respondents on the basis of availability of veterinary facilities, vaccination followed and days of vaccination

Item	Number of respondents	Percent
Availability Veterinary Facility		
Yes	129	85.43
No	22	14.57
Total	151	100.00
Vaccination		
Yes	45	25.00
No	135	75.00
Total	180	100.00
Days of Vaccination		
After birth	22	12.22
Hatching	158	87.78
Total	180	100.00

Table 2: Distribution of respondents on the basis of type of backyard poultry houses used and cleaning of poultry house and equipment's

Item	Number of respondents	Percent
Poultry house		
<i>Kachha</i>	22	24.72
<i>Pucca</i>	21	23.60
Bamboo	89	49.44
Mix type	48	26.67
Total	180	100.00

Cleaning of poultry house and equipment's		
Daily	23	12.78
Alternate days	88	48.89
Weekly	69	38.33
Total	180	100.00

Table 3: Distribution of respondents on the basis of monitoring by veterinary persons, weighing of chicks and Segregation of sick birds

Item	Number of respondents	Percent
Monitoring by Veterinary Persons		
Weekly	6	3.33
Fortnightly	74	41.11
Monthly	87	48.33
No	13	7.22
Total	180	100.00
Weighing of Chicks		
Daily	10	8.62
2-3 days	54	46.55
Weekly	116	64.44
2 weeks	0	0.00
Total	180	100.00
Segregation of Sick Birds		
Yes	180	100.00
No	0	0.00
Total	180	100.00

CONCLUSION

The study concluded that, in health care management practices maximum respondents had veterinary facilities, most of the respondents did not follow the vaccination and respondents provide vaccine to bird after hatching. Maximum respondent cleans poultry and equipment on alternate days not regular, most of farmers said that veterinary person visited the respondent poultry house monthly, maximum farmers were weighing their birds weekly, all respondents used isolation distance of sick poultry birds and maximum respondents used bamboo type poultry house in the investigation area.

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