International Journal of Food, Agriculture and Veterinary Sciences ISSN: 2277-209X (Online)
An Online International Journal Available at http://www.cibtech.org/jfav.htm
2012 Vol. 2 (2) May-August, pp.1-4/Mathialagan and Senthilkumar
Research Article

EXTENT OF AWARENESS AND ADOPTION OF DISEASE PREVENTION AND CONTROL BY POULTRY FARMERS

Mathialagan P. [1] and Senthilkumar K.[2]
[1]*Department of Veterinary and Animal Husbandry Extension and Entrepreneurship, Madras Veterinary College, Tamil Nadu Veterinary and Animal Sciences University, Chennai -7*
[2]*Department of Wildlife Science, Madras Veterinary College, Tamil Nadu Veterinary and Animal Sciences University, Chennai -7*
**Author for Correspondence*

ABSTRACT
Amidst growing demand for eggs on poultry production globally, this study examines the extent of awareness and adoption of disease prevention and control by the commercial poultry (layer) farmers on scientific poultry farming among the farmers of Namakkal district in Tamil Nadu. Nearly sixteen packages of practices were identified and categorized under five headings. It was revealed that majority of the farmers were aware and also had adopted most of the technologies as the impact of non-adoption of technology will be tremendous which might be compelled them to adopt the technologies. This study recommends a great need to redesign the course syllabus of training according to the technologies having low awareness and adoption index.

Key Words: *Poultry Farming, Namakkal, Poultry Farmers, Awareness, Adoption*

INTRODUCTION
Poultry farming is one of the best tools available for an integrated rural development and to bring about socio-economic transformation of small entrepreneurs. No other branch of agriculture/animal husbandry made such a growth in the development as achieved by the poultry industry. It has been emphasized by Economic Agricultural Committee, that poultry farming is one of the worthy ventures and can play an important role integrated rural development by providing supplementary income to the rural farmers. According to the policy note No. 22, (Animal Husbandry, 2009-10) of the Department of Animal Husbandry of the State Government, the average annual per capita availability of egg in Tamil Nadu, that was 128 eggs in 2009-2010.
Poultry farming has now developed into a commercial enterprise involving thousands of birds. Large poultry units have replaced the backyard poultry units while more efficient strains of meat or egg type birds, balanced feed, intensive housing and better poultry equipment came into use by farmers. Commercial poultry production is faced with many problems, such as high cost of feeding and veterinary drugs, poor quality of commercial feeds due to formulating abuses of the manufacturers, inadequate capital investment and lack of knowledge of nutrients and energy requirements of the various classes of poultry. Diseases/parasites, mortality, high cost of fixed inputs give poultry farmer's serious challenges and thus, hinder the poultry business (Aromolaran, 1999). Hence this study was undertaken to analyze the extent of awareness and adoption of disease prevention and control by poultry farmers.

MATERIALS AND METHODS
The study was conducted in Namakkal Block of Namakkal District in Tamilnadu. A sample size of 42 commercial poultry farmers was selected based on the proportionate random sampling technique from twenty eight village panchayats.
The data were collected by using a structured interview schedule, which comprises 17 awareness items representing the various aspects of Disease Prevention and Control of poultry production. The analysis of data was carried out by using frequency and percentages.

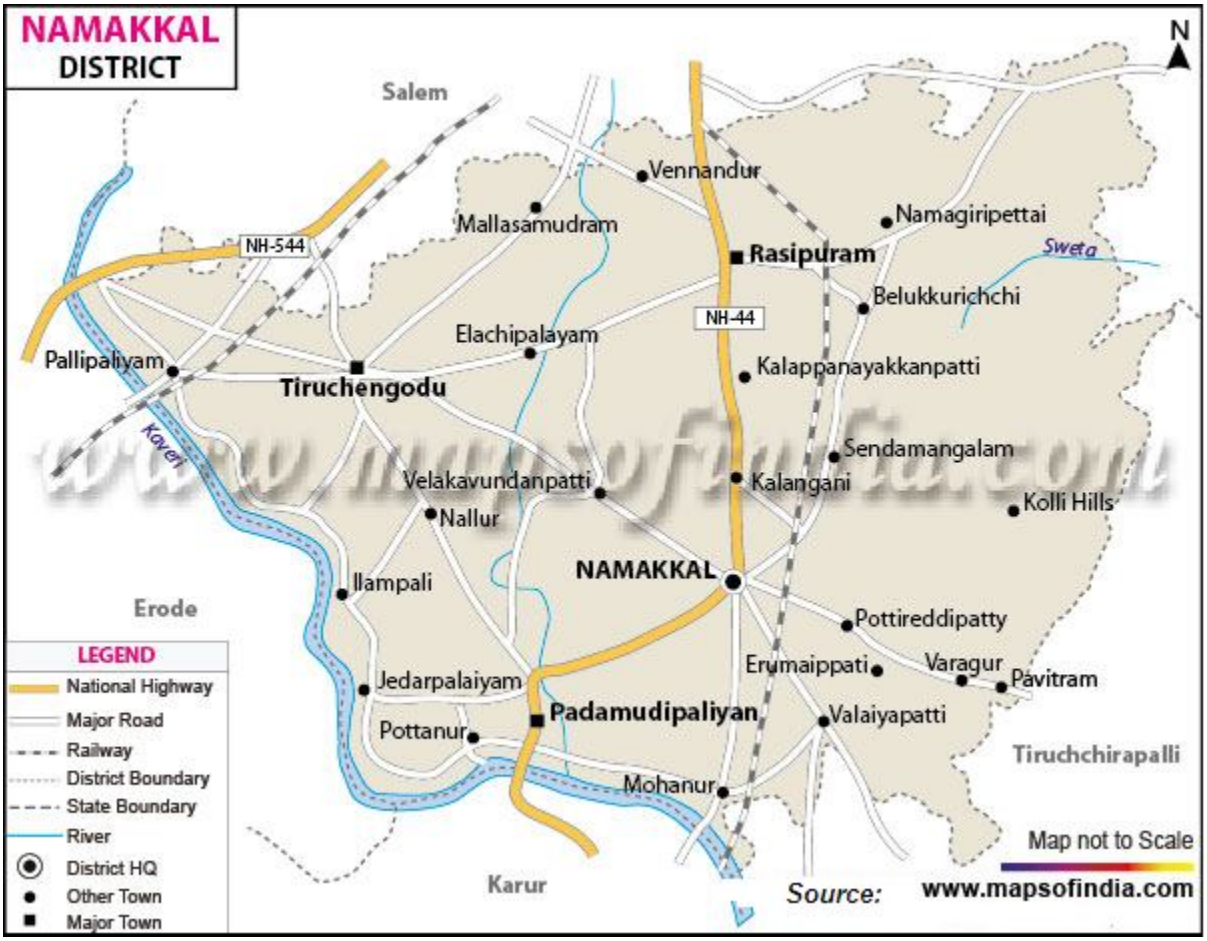

Figure 1: Study Area

RESULTS AND DISCUSSION

Awareness is an important component that significantly influences the adoption of new technology. In the study area, from Table-1, it is evident that majority of the farmers were aware and also had adopted most of the technologies as the impact of non-adoption of technology will be tremendous which might be compelled them to adopt the technologies. These findings are in conformity with the earlier studies of Thammiraju (2007).

With regard to the activity of vaccination, more than 95 per cent of the poultry farmers aware and adopt the technology of proper maintenance of quality vaccines (cold storage) and the time of administration of vaccine (morning or evening). But only 33.33 percent aware and 11.90 percent adopt the technique of proper disposal of empty vaccinated vials, which is an important technology as far as further out break of the disease.

As far as deworming of the birds concerned, more than 80 percent aware and adopt the technologies of selection of proper deworming drugs, correct deworming schedule and removal of worms, whereas only 38.09 per cent aware and 11.50 per cent adopt the technology of collection of 10 gms of pooled poultry droppings for lab analysis, which is due to absence of attribute called observability. Similar observations were made by Oyeyinka *et al.*, (2011).

It is interesting to note that their high level of knowledge with respect to treatment could be due to their cosmopoliteness, better access to information sources, change agents contact and more social participation (Rogers, 1995).

Table 1

S. No.	Activity	Technology	Awareness		Adoption	
			No.	%	No.	%
1	Vaccination					
	a) Assessing immunity	Blotting the punctured comb with filter paper to collect blood sample	20	47.62	10	23.88
	b) Disease Prevention	Following up the vaccination schedule	37	88.10	27	64.28
	c) Decision to purchase of vaccine	Purchasing cold stored vaccine	40	95.23	39	92.85
	d) Vaccination timing	Administering vaccine in the morning and evening	40	95.23	39	92.85
	e) After care	Provision of clean plain water. Avoiding chlorinated water	26	61.90	24	57.14
	f) Disposal of empty vials	Burying or burning the used vials	14	33.33	5	11.90
2	Deworming					
	a) Carrying droppings for lab	10 gms of 10-15 pooled samples	16	38.09	5	11.90
	b) Dewormer drug selection	Selection and purchase of suitable dewormer according to lab results	37	88.10	36	88.71
	c) Carry-out deworming	Adhering proper protocol to deworm the poultry (schedule and withdrawal of waterer and feeder 1 hr prior to deworming)	42	100	39	92.85
	d) Removal of worms	Expelled worms should be removed in order to avoid reinfection	42	100	38	90.47
3	Delicing					
	a) Delicing of infested flock	Using Acaricides to remove lice	42	100	38	90.47
	b) Anti-stress medication	Using anti-stress medicaments to minimize stress after deworming	38	90.47	35	83.33
4	Prevention of entry of Rodents	Maintaining rat proof roofing, and concrete flooring	42	100	34	80.95
5	Disease control					
	a) Contacting the lab or vet	Sick or dead birds should be sent to lab or vet for the disease confirmation	42	100	34	80.95
	b) Bio-security	Adopting sanitary measures, Preventing unauthorized entry of animate and inanimate objects	33	78.57	6	14.28
	c) Identification and isolation of the sick birds	Separating the diseased birds from the healthy flock to prevent spread of diseases	42	100	37	88.10
	d) Treatment	Appropriate treatment with the good quality medicines in consultation with experts	42	100	36	85.71

In case of technology bio-security, though the awareness rate was high but the adoption was very poor. This might be due to the incompatibility of the technology.

Conclusion

From the present study, it can be concluded that majority of the poultry farmers were aware and adhere to poultry production recommended practices of disease prevention and control. The study also concludes that there is a great need to redesign the course syllabus of training according to the technologies having low awareness and adoption index. Effective linkages between research, extension and commercial poultry farmers should help in identifying the problems faced by farmers in adoption of poultry farming practices, ultimately arriving at the most appropriated solutions through on farm research and on farm trails.

REFERENCES

Aromolaran AB (1999). Economics of size in Poultry Egg production in Abeokuta. *Tropical Journal of Animal Sciences* **2**(2) 177-185.

Thammi Raju D, Sudhakar Rao B and Ramesh Gupta (2007). Knowledge level of commercial poultry farmers. *Indian Journal of Animal Research* **41**(1) 51-54.

Oyeyinka RA, Raheem WK, Ayanda IF and Abiona BG (2011). Poultry farmers awareness and Knowledge of improved production practices in Afijio, local government area, Oyo State, Nigeria. *Journal of Agricultural Research and Development* **1**(1) 001-008.