



## Focus on diseases of poultry

A. Rajan

**D**iseases are unavoidable evils associated with poultry production programmes.

When the production efforts are intensified with the objective of achieving maximum production utilizing strains with high production potential, diseases are bound to come in a big way many times threatening the existence of the farms. This is more so when farmers who are not much conversant with the production technology practice farming. This is also a problem when farmers in their over enthusiasm to harvest more within a limited time overlooks the basic principles of poultry production. He often forgets the fact that high-tech production demands meticulous production strategy.

Although, Kerala poultry farmer is educated and has a very good receptive background, he is not being effectively motivated. The technical know-how has to be imbibed by him and implemented faithfully. It is the responsibility of the veterinarian to infiltrate the technical know-how and impart on-hand training to the farmer for efficient poultry production. In order to have an economically viable production unit simple cost – effective technology has to be adopted. In this context the veterinarian has a significant role to play. He has to dis-

charge the responsibilities entrusted to him by the society and take up the challenge of increasing the productivity by minimizing the disease problems. Only he can educate, motivate and help the farmer to harvest the highest yield. Lack of vision and future oriented outlook and mismanagement on the part of the farmers are some of the causes of not achieving the anticipated production. The Veterinarian should make available the latest technology and help them to adopt them in the existing situation. Production can be achieved only through the farmer and it is the responsibility of the Veterinarian to provide the technical know-how needed for enhancing the production. It should be possible to undertake a dispassionate assessment of the strength and weaknesses of the poultry production programme with particular reference to the disease control programme.

The selection of a good strain of chicken is of paramount importance in order to have a healthy flock. This is often forgotten. Under sized, unhealthy chicken not only are susceptible to disease, they also act as sources of infection. Unhealthy ones have to be identified and culled at the start itself. Uniformity in flock size has to be ensured to prevent precipitation of diseases.

If we look in to history as a teacher and analyse the past it would be abundantly clear that one of the most important constraints in poultry production was outbreaks of diseases and many times farms had to be closed and the farmers were totally dejected and disappointed. If we further analyse we will understand that the disease problems were due to mismanagement and misconceptions. These things would not have happened if the farmers were properly trained and they had adopted the sound advises.

Poorly transported and poorly housed chicken will certainly get the disease. The importance of stress in precipitating disease is not recognized. Overcrowding, high humidity, excess heat and cold, poorly ventilated pens etc. can lead to stress and immunological incompetence and disease outbreaks. Prevention of disease has to be stressed and all these factors have to be given due importance. Check on these parameters when you visit the farms. Failure to recognize and correct them will lead to disease outbreaks and severe economic loss.

*Dr.A.Rajan, M.V.Sc., Ph.D.  
FNAVSC; FIAVP; FUWAI*

Dean (Retired), College of  
Veterinary & Animal Sciences  
Mannuthy





A healthy environment is most essential to harvest maximum production and to ensure disease free flock. A clean good litter, well-ventilated clean pens, controlled heat and humidity etc. are essential prerequisites for production. The veterinarians involved in poultry disease diagnosis and control should be conversant with all aspects of management. He should be a specialist in disease control and at the same time a generalist poultry manager. He should know the requirements of a good quality feed. Mycotoxicosis is an important problem associated with feed. The present day feed is like a Trojan horse. Many toxic principles remain hidden in the feed. Whenever disease is encountered, the feed has to be checked. Maybe that the disease was due to the result of the presence of mycotoxins and other chemicals in the feed which had caused immunological deficiency. Check always for IBD in the flock. The sub-clinical IBD infection can cause immunosuppression and outbreaks of many diseases. Your treatment will not be effective if you don't diagnose and control IBD.

The water that is given is of poor quality in many of the farms. There is no habit of testing the water. They are often contaminated and chicken get colibacillosis and Salmonellosis. Should the chicken get Colibacillosis and treat the flock or should we test the water and prevent colibacillosis? Protected water supply is a prerequisite for maintaining a disease free flock.

Timely preventive vaccines have to be administered as per the prescribed schedule. The vaccines are being updated and the latest vaccines available in the market have to be preferred. The storage, transport, dilution of the vaccine etc. have to be given proper care. The farmers some times observe outbreaks of diseases even after the vaccination and often the vaccines are blamed rather than the vaccinator. The handling of the vaccines has to be given utmost care. The situation in the farms has to be assessed correctly and based on this the type of vaccine has to be prescribed as in the case of IBD.

Immunological incompetence is an important aspect that has to be looked into. The practice of giving antibiotics during the first few days of the chicken is something that can be dispensed with if proper hygienic methods are adopted and good management is followed. Unnecessary and indiscriminate use of antibiotics can lead to immunological suppression.

The disease once sets in has to be diagnosed most

precisely to control the disease. Postmortem diagnosis has an important role to play. Timely and correct diagnosis by a technically competent person is very essential. Laboratory investigations have only a secondary role and it is done to confirm the postmortem diagnosis. Corrective action has to be done immediately based on the postmortem observations to prevent further mortality and economic loss. What are the existing diseases and emerging diseases? The Veterinarian should have a clear updated background information. The farmers should be taught and their skill should be improved. The veterinarians should up date their knowledge and attend the up dating sessions organized by the association and other establishments. He should at least subscribe for a semi-scientific journal concerned with poultry health/poultry production. The veterinary hospitals should be the centres of transfer technology and the farmers should look towards it as a temple of worship. They should get what they need to improve their performance in terms of technical support.

The Veterinarian should develop a keen observation power, should visit the farm, see the flock behaviour, assess the nutritional status, housing system etc. A history on disease profile, mortality pattern and an interaction with the farmer should help him to arrive at a precise postmortem diagnosis. The poultry medicine is flock medicine and few ailing birds if necessary can be sacrificed to make a diagnosis.

In the case of chicken the lesions due to the disease process are well defined. Raised nodules in the mucosa of the oesophagus in vitamin A deficiency, greyish white nodules in the airsacs in CRD, enlargement of the Bursa in IBD. Haemorrhage in the trachea in ILT, thickening of the sciatic nerve in Marek's disease, greyish white nodules in the lungs in Aspergillosis are few examples.

The Veterinarian in charge of poultry health should give the technical inputs as a package. It may be mentioned that all along the Veterinarian has been concentrating on large animals and he was busy with that. He should take up the challenge and should be the custodian of poultry health too. The situation has changed, the society wants his services as a poultry disease specialist and they should look towards him to assure the poultry health.

