Introduction to the sustainable control of Newcastle disease

In developing countries, the most common reared livestock is village poultry. But Newcastle is one of the diseases faced by the farmers.

In these developing countries, Newcastle outbreaks occur once or twice every year and kill an average of 70 to 80% of the unvaccinated chicken population. The general approaches used to control Newcastle include basic sanitation, not introducing new birds during high risk periods, burry all birds that have died of Newcastle. In addition to the general approaches, the most effective is vaccination.

Vaccination challenges

There are many challenges that hinder Newcastle control by vaccination especially for thermolabile vaccines which must be kept between 2 and 8 degrees.

Large numbers of birds must be grouped together to obtain an efficient vaccination rate ie vaccinate birds of various ages because they are usually raised together.

Maintaining a cold chain for handling the thermolabile vaccines and the need for an adequate budget.

Choice of vaccine

There are many vaccines of Newcastle and the choice should depend on efficacy of the vaccine, thermotolerance, ease of use, transportability , cost, affordability and availability in the area. I-2 vaccine has been found to effectively protect birds against Newcastle if administered every 4 months.

Effective vaccination campaigns should include senior decision makers, farmers, community vaccinators, extension workers, veterinary staff services, private businesses, livestock/ social scientists and Non Governmental Organisations.