

Galvanising action against Newcastle Disease in Tanzania

Since 2011, low income rural farmers in Babati district in Tanzania, who rear indigenous chickens to supplement their livelihoods are seeing the significant benefits of having improved access to the I-2 Newcastle Disease (ND) vaccine to protect their poultry on a regular basis. The disease is a serious problem for poultry farmers; according to Dr Rogers Moshia, poultry project manager at the Global Alliance Livestock Veterinary Medicine (GALVmed), ND is responsible for over 50% of all chicken losses to disease across Tanzania.

Although the I-2 ND vaccine was available before 2011 from the Tanzania Veterinary Vaccine Institute (TVVI), farmers were not aware it existed. To overcome this challenge and help farmers access the vaccine, GALVmed came in to support TVVI with marketing, funding and streamlining the vaccine delivery process from the institute via agrovet to the farmers. As a result of this support and through the efforts of other organisations with similar objectives as GALVmed, over 1.2 million chickens are now being vaccinated in the country every three months.

A collaborative approach

To achieve this success, GALVmed brought together government extension officers, agrovet distributors and dealers at district and ward levels for training on handling and administering the vaccine to poultry. GALVmed chose to pilot the initiative in Babati, Hanang and Mbulu districts, where farming of grains like maize, cowpeas and sunflower is vibrant. “These crops support backyard poultry very well,” emphasises Moshia.

From the three districts, 30 extension officers with a background in animal health were selected and trained by GALVmed and each had to then train 10 community vaccinators (CV), who had achieved at least primary school education. Iboma Abubakar, a 43 year-old CV in Gallapo ward, Babati district, is just one beneficiary of the training; every three months of the year, he now vaccinates 3,000 chickens from around 300 households in the ward. Before vaccinating, Iboma visits the Gallapo households to count the number of birds that need to be vaccinated, which enables him to know how many vaccine vials to

buy from the local agrovet. According to size, one vial can vaccinate 100, 200 or 400 chickens; each chicken receives a droplet of the vaccine in the eye from the vial. The training has also enabled Iboma to recognise the symptoms of ND, including neck paralysis, coughs, breathing difficulties and green diarrhoea.

Access to the vaccine has resulted in Modesta Kalalu, a grandmother in Gallapo ward being able to successfully rear 100 chickens. Before 2011, the 20 to 30 chickens she reared all succumbed to ND. She has also learned from the local CV about maintaining hygiene in her chicken sheds. "I ensure there is no dampness in the sheds as that causes the disease to linger," states Kalalu. A young mother, Katerina Maribor, also from Gallapo agrees: "The CVs have made us aware that our chickens are safe from ND, as long as they are vaccinated every three months." Today she has almost 70 indigenous chickens, since she started rearing nine months ago.

Accessing the vaccine

Local agroverts at ward level supply the vaccine to CVs like Iboma. In Gallapo ward, William Laiser, a retired extension officer, started stocking the vaccine in 2012. In a month, he used to sell only two vials but today he sells over 10 making a small profit. "Before, people would only buy the vaccine during ND outbreaks; today they vaccinate on schedule due to the awareness campaigns," he says.

Laiser buys his ND vaccine stocks from the larger Mamba agrovet, which provides vaccines for the whole of Babati district. Since 2012, the proprietor, Rumininsia Mwanga, has supplied 10 ward agroverts and over 50 farmers across the district. In that time, she reports that she has seen demand for the vaccine increase by 80%. Rumininsia also gives poultry-related advice including on deworming and the selection of the right poultry feed. Stocking the vaccine has resulted in a 40% increase in demand for other products at her agrovet store. Rumininsia buys the ND vaccine from Alpha Veterinary Services in Arusha run by Dr Elisante Ngowi. Ngowi buys the vaccine directly from TVVI and, in turn, sells it to 15 district agroverts in Arusha and Manyara regions and around 150 to 200 farmers as well as relief NGOs. The success of the vaccine in rural areas has also resulted in increased demand for the indigenous chickens he hatches for sale. "Monthly, I sell 1,000 to 1,200 (indigenous) chicken to Babati and Kondoa districts," he says.



The spread of success

After the success of the ND vaccination campaign in the three initial districts, GALVmed has since rolled out the intervention to Chemba, Karatu, Kondoa and Simanjiro districts. The success of the vaccination and awareness campaigns has also spilled over into Gairo district which was not initially targeted. In Gairo district, 39 new CVs in the third quarter of 2015 have vaccinated 120,000 chickens from 12,000 households. "Farmers who regularly maintain a vaccination schedule have seen their ND infections reduced to zero," says Mosha. However, he also advises farmers to adhere to good basic animal husbandry practices to help reduce outbreak incidences; such practices include quarantine of new chickens for a month to assess their health status, and vaccinating them before mixing them with others.

For commercial poultry keepers, Mosha urges them to practice an "all in-all out" management system, where chickens of the same maturity are raised and all sold at the same time. Where the practice is not feasible, especially in rural villages, the vaccination remains a viable option. He also urges farmers to be vigilant during festive seasons when chicken movement between different markets is high, as this often facilitates the spread of ND.