

A project in Cameroon's drought-stricken northern region is enabling an increasing number of farmers to take up traditional poultry keeping. In the villages of Bibemi and Djola in Garoua, regular access to the I-2 Newcastle Disease (ND) vaccine is protecting poultry against this fatal disease, and is providing farmers with a complimentary source of income in the face of an erratic climate and dwindling crop yields.

The campaign is run by CAPHAVET, a society of veterinarians in Cameroon, with support from the Global Alliance for Livestock Veterinary Medicine (GALVmed) – a non-profit company that makes livestock vaccines accessible and affordable to smallholder farmers in Africa and South Asia. CAPHAVET distributes ND vaccinations to poultry keepers every 4 months. According to GALVmed's poultry project manager, Jean-Narcisse Koffi, "GALVmed has continued to multiply its efforts working with partners on the ground to help smallholder farmers combat this infection, which can kill over 80-90% of poultry."

Direct and indirect impacts

Hebena Brigitte, a farmer from the Djola village says the programme is improving farmers' incomes and the wellbeing of their families. "From the sale of my chickens, I am now able to pay my children's school fees and medical bills. Before, due to the prolonged drought, poor harvests from my vegetable farm left us desperate."

In the Bibeni village where the project was introduced 2 years ago, farmers are also benefiting from the boost in poultry production. "I rear over 600 chickens and sell about 200 every month. I am also able to sell 10-15 trays of 24 eggs a week. I sold far less when there was no modern vaccine," says local farmer Kangoube Joel.

Farmers are seeing indirect benefits to vaccinated chickens, which some are saying are at healthier weights and achieving higher market prices. "Before the programme, my chickens weighed less than 2.5 kg, but now, thanks to the vaccine, they weigh about 5 kg when they are ready for market," attests

Joel. At 4-6 months, vaccinated chickens weigh 4-5 kg and sell for between 4,000-6,000 Central African francs (XAF) (US \$6-8), while a tray of 24 eggs sells at 1,200 XFA (US \$2). Prior to the vaccine, Joel's chickens sold for between 2,500-3,000 XFA (US \$4.06-4.87).

Partner veterinarians from Garoua say more emphasis should be placed on farmer sensitisation to vaccine benefits and broadening vaccine distribution. Habiba Hayatou, a female farmer at Bibemi village says some of her neighbours who weren't aware of the project initially resisted vaccinating their birds, and suffered heavy losses when the infection broke out. "I vaccinated all my 250 chickens a month before the infection was announced, which is why they all survived," says Hayatou.

Local health service support

According to Dr Mahamat Mamate, project manager at CAPHAVET in Ngoundere, since 2013, the vaccination programme has been introduced to poultry farmers in the far north, north, northwest and western regions of Cameroon. This has been achieved partly through the continuous training of local vaccinators. Although not veterinary experts, the vaccinators, who are trained by CAPHAVET and Cameroon's cotton production health service SODECOTON, advise poultry keepers on disease preventive measures. SODECOTON supports smallholder cotton farmers in the area with alternative income generating activities as part of their corporate social responsibility. In the Garoua region alone, over 100 vaccinators have been trained on providing poultry management advice in the local language of Fulfude.

Dr Assana Mouhamadou, the chief of service for veterinary medicine at SODECOTON and coordinator of vaccinator training, says that as well as helping smallholder farmers, these youths earn some additional income through their work. Trained vaccinators purchase vials from SODECOTON containing 50 doses of the vaccine for 2,500 XFA (US \$4.06) and administer one dose per chicken for small communities of 15-20 households. In less than five hours, they can administer the vaccine to over 15 households in small villages. The vaccinator receives a contribution of roughly 3,500 XAF (US \$5) from each community they deliver the vaccination to.

Upping the uptake

The vaccinating process is simple to understand says Louablbe Robert, a vaccinator in the Pitoa community. It involves mixing 4 ml of water in a bottle of 5 ml I-2 ND vaccine, which contains 50 doses. Robert vaccinated 700 chickens from 46 households in 2015 and says this number doubled in 2016, indicating that many more families are responding positively to the new vaccine. Bouba Thomas, another vaccinator, points out that the simplicity of the new eye drop procedure is encouraging more farmers to use it. "Even farmers who used to refuse the [former injection] vaccination accept the new method," he says. The Itanew and Multi-vax injections used 3 years ago were difficult for the local agents to administer and could not be used on chicks. However, the new application is showing positive results for the farmers, explains Dr. Mouhamadou.

ND vaccines are also supplied to commercial chicken farmers in greater volumes to cater for large-scale production of over 1,000 chickens, says Dr Azibe Mazra, CAPHAVET Director General. But for traditional, backyard poultry farming, where fewer than 200 chickens are reared for subsistence purposes, the smaller package of I-2 is provided. "We supply the smaller packs to remote village areas, with poor road networks, experiencing problems with the infection," explains Mazra, Over 1.5 million chickens now receive the I-2 ND vaccine every 4 months in the north regions of Cameroon since it was introduced 2 years ago, according to Azibe. And with the intensification of the campaign through increased vaccinator training and sensitisation of many more households to poultry farming, vaccination uptake shows signs of increasing.



Written by Elias Ntungwe Ngalame





