

## Farmers in RIU networks in N. Tanzania benefit from increasing chicken populations

*Promotion Update: April 2011*



*Image: Alipenda, a FIPS-Africa VBA has been saving money from chicken vaccination to help her start a business.*



*Image: A FIPS-Africa VBA demonstrating how to dye a chick with gentian violet (GV)*



*Image: A beneficiary farmer*

*Background:* There are numerous constraints to increased indigenous chicken production by small-holder farmers in Tanzania. These include disease, predation, and lack of information on improved husbandry. Most farmers perceive chickens to have little value and leave them to freely range to scavenge for food. However, in the process, young chicks often fall prey to avian predators such as the hawk which may take up to 100% of young chicks. Any chicks that survive the predators often succumb to the Newcastle disease. Because farmers typically have a small number of chickens (less than 10), vaccination against the disease is not economic because vaccines are packed in doses of 400 for the larger commercial farmers. As a result, chickens are mostly kept as a hobby rather than a business.

With the support of DFID's Research Into Use programme (RIU), FIPS-Africa has established networks of self-employed Village-based Advisors (VBAs) in Moshi and Meru districts, trained by Ministry of Agriculture staff, with the aim of helping small-holder farmers gain access to the appropriate farm inputs, and information on their best management. In the process, VBAs generate income from a number of activities such as the sale of improved seeds and fertilizers. This income helps to sustain their activities. They also offer services such as vaccination of indigenous chickens, and dyeing of chicks with Gentian Violet (GV) to prevent predation by birds of prey.

The development of a thermostable vaccine by the Government of Tanzania, which is administered by a drop through the eye, has greatly simplified the process of vaccination. Vaccination of a chicken costs a farmer only TZS 50 (USD 0.025), which is a small insurance to pay to keep a chicken, which has a potential value of TZS 5000 (USD 2.5) or more, alive. The vaccine costs the VBA only TZS 10, so the profit helps to motivate the VBAs to vaccinate many more birds.

Over the past year, VBAs have assisted over 3,700 farmers to increase their chicken production. In March, FIPS-Africa staff visited beneficiary farmers to determine the impact of this work on their livelihoods. Some testimonials follow.

## 1. Eliboraya Naiman; Karangai Village, Kikwe Ward, Meru District



The mother of four did not know about chicken vaccination prior to FIPS-Africa's VBA Joshua Kitumari's visit in June 2010. During that month, she had lost 25 adult birds and 36 chicks. That would have been worth TZS.180,000 if the birds had survived and been sold.

In June, Joshua vaccinated her remaining 20 adult birds against the Newcastle disease, and since then, none have died from the disease.

"I now benefit from selling eggs because the number of birds has increased. Initially I would collect 5 to 10 eggs in a week, but now I collect a tray every week. I now sell three trays every month for, which earns me TZS 13,500. I have been using the money to buy stationery for my children who go to a local primary school. We have much to eat and to sell, contrary to what we used to get before vaccination," says Naiman.

**2. David Laiza; Manyatta village, Kikwe Ward, Meru District**



The VBA, Joshua Kitumari, has been advising David how to improve the management of his indigenous chickens. Before he had his birds vaccinated against the Newcastle disease, he had lost 26 birds, worth about TZS 80,000. Since the vaccination he has not lost any birds to disease. David also used to lose most of his chicks to the hawk, so he was persuaded to have 22 of his chicks dyed with Gentian violet (GV). All of the chicks have survived. As a result, he has more chickens, and he is collecting more eggs.

“I never used to get any financial benefit from my birds prior to vaccination and using the chick dye, but I now have enough eggs which I sell to raise money for buying food for my family. We also benefit from eggs for food during breakfast and more meat, says David. He now has a total of 32 adult birds and 12 medium sized birds.



### 3. Lydia Mbesi; Miembeni Village, Kikwe Ward, Meru District



In May 2010, Lydia had 15 adult and 10 medium sized chickens. When the Newcastle disease struck, she lost 9 adult birds and all the medium sized birds. Her VBA, Joshua Kitumari, vaccinated the remaining 6 adult birds against the Newcastle disease at a cost of TZS 300. Since then, none of her birds have died, and 3 of her hens have now hatched 18 chicks.



4. Degisio Akyoo; Miembeni Village, Kikwe Ward, Meru District



It seemed that every time her chicks would reach the age of 1 month, that they would die of the Newcastle disease. In the first five months of 2010, Akyoo lost 10 adult birds and 35 chicks to the Newcastle disease. Her local VBA, Joshua Kitumari, vaccinated her surviving 5 chickens in June 2010. She now has 12 hens, and four of these have hatched 8, 9, 10, and 12 chicks. All have been vaccinated against the Newcastle disease and none have died since then. She is getting more eggs and she uses the money from selling these to buy stationery for her children.



5. Fredrick Nyalimasa; Nkomala Village, Nkoanvua Ward, Meru District; 1582m, S03.34375<sup>0</sup>, E036.75542<sup>0</sup>



FIPS-Africa VBA, Dominic Tinyari, vaccinated Fredrick's 10 chickens and 15 chicks against the Newcastle disease. None of his birds have died since then.



6. Elizebeth Lewi; Nkamala Village, Nkooanrua ward, Meru district.



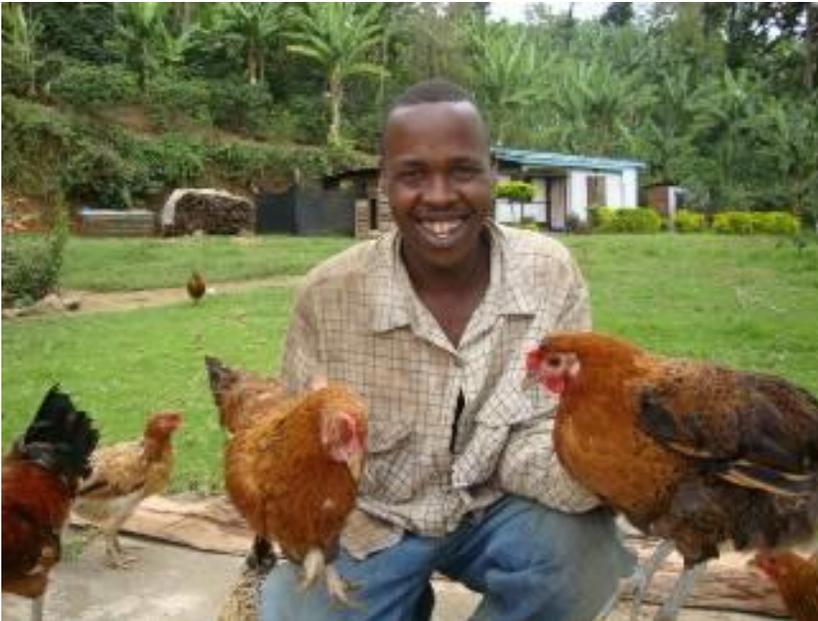
Elizebeth had lost 9 adult and 7 medium size birds to the Newcastle disease . In June 2010, she had her 15 adult and 5 young surviving birds vaccinated against the Newcastle disease. She has not lost any since vaccination.

7. Apaeli Sethi; Nkomola Village, Nkooanrua Ward, Meru District.



Since Dominic Tinyari vaccinated her chickens, Apaeli's chicken flock has increased from 20 to 60. She has managed to sell 15 cocks for TZS 6000 each and used the money to pay for school fees for her children. The number of eggs she collects per day has increased from 9 to 20.

8. Stephen Maqo; Nkomala Village, Nkoanrua ward, Meru District



Stephen had no serious interest in poultry farming and was not concerned when his birds would die from Newcastle disease. After VBA Dominic Tinyari briefed him on the importance of poultry keeping, he agreed to have his 10 surviving birds vaccinated. He had lost 20 adult birds and 15 chicks prior to the vaccination that was carried out in July 2010. He now has 30 chickens and 16 chicks.

9. Gerald Masewe; Msasani Village, Malsita Ward, Moshi District



Before the Newcastle disease struck, Gerald had 65 birds in his poultry house. In June 2010, he lost 35 birds to the disease. The same month, he had the remaining 30 birds vaccinated against the disease, and he had his birds vaccinated again in September and most recently in February. No bird has died from the Newcastle disease since he started the vaccination. He has increased his flock size to 59 birds, and he has since sold 11 cocks and 9 hens for TZS 9,000 and TZS 6,000 each, respectively.

Gerald had also lost 14 chicks to the hawk but none has become a prey after application of the chick dye.

10. Andrew Mdee; Upper Kikavu village, Macheme Weruweru ward, Moshi District



The 26 year old graduate has 243 chickens: 41 adult birds, 131 medium-sized and 71 chicks, all vaccinated against Newcastle disease by Amati, his local VBA. The birds were first vaccinated in August 2010 and he had lost 30 birds to the Newcastle disease the previous month. He has not lost any birds to the Newcastle disease since then. Andrew aims to make poultry-keeping an important income-generating activity. He currently sells over 10 trays of eggs every week and has become the major supplier of eggs in his village.

11. Esther Wajioma; Mkulama Village, Machame Weruweru Ward, Moshi District.



The month before she had her chickens vaccinated, Esther lost 26 adult birds to the Newcastle disease. Following vaccination in August 2010, her number of birds increased from 12 to 28. She also sold 5 mature cockerels for TZS 45,000 to help pay for her children's school expenses. She never used to sell chickens before she started to vaccinate. The number of eggs she sells has also increased and this has made it easier for her to meet her own personal needs.

12. Restina Liziwani; Mkalama village, Machame Weruweru ward, Moshi District.



Shortly before vaccination, Restina had lost 13 adult chickens and 22 chicks to the Newcastle disease. After vaccination, not one of her birds has died from the disease, and the number of her birds has increased from 5 to 11. Two of her hens are sitting on eggs and are due to hatch.

13. Azoma Yasini; Gonseru Village, Machami Weruweru ward, Moshi District.



Two months before she started vaccinating her chickens, Azoma lost 50 chickens to disease. She had resorted to boiling herbs, and gave the herbal medicine to the birds to drink, but they kept on dying. Amati, her local VBA, vaccinated her surviving 30 birds in July 2010. She now has 110 chickens and she collects 2 trays of eggs every day. She sells about 10 trays a week and uses the money to buy poultry feed and stationery for her children.

14. Zelai Ebabwo; Kahe Sangeni Village, Moshi District



Zelai woke up one morning in April 2010 and found 15 of her chickens had died of disease. She lost interest in poultry keeping. But when Naomi Mbwombo, her local VBA, explained to her the benefit of vaccination against the Newcastle disease, she agreed to give it a try. Zelai had been left with just 2 hens and one cock but she now has 14 hens and 5 cockerels. She sells a tray of eggs every week for TZS 4000. She uses the income to buy food for her family.

15. Nishalla Karigari; Sangeni village, Kahe ward, Moshi District. 856m, S03.49059<sup>0</sup>, E037.48798<sup>0</sup>.



Two months before she started vaccinating, Nishalla lost 18 adult birds, 10 medium sized and over 20 chicks to the Newcastle disease. She tried using the traditional herbs to cure the birds, but it didn't work. The delighted mother of 5 children now has 26 adult birds, 19 chicks and 10 medium sized birds. She has constructed a new house to accommodate them.

16. Naomi Mbwambo.



Naomi, a mother of three children, joined FIPS-Africa as a VBA in August 2010. She had been saving money to buy a generator for pumping water on her 2 acre land. With her allowance, and income from chick dyeing, chicken vaccination and from selling seeds, the VBA has recently purchased the generator. She had also lost 18 chickens to the Newcastle disease but she has not lost any birds since she started vaccination. Naomi now has 32 birds, 18 birds adult and 14 medium sized. She has recently put up a bigger poultry house and she sells 3 trays of eggs every week, using the money to pay for school fees and to buy stationery for her children.

17. Mwasi Mwasio; Sangeni village, Kahe ward, Moshi district.



All of Mwasi's 60 chickens died of the Newcastle disease in March 2010. She was determined to start all over again, and she bought a hen and a cockerel in May. The number of her chickens has been increasing slowly. Her 6 birds were vaccinated against Newcastle disease in August 2010 by Naomi Mbwambao, her local VBA. She has not lost any of her birds to the disease since.

18. Mdeshe Soio; Urisho Village, Songoro ward, Meru District



Mdeshe had lost 45 chickens to the Newcastle disease in March 2010. This was very hard for her, because she relied upon selling eggs and cockerels as her main source of income. After vaccination of the surviving birds, she is back in the business of selling eggs to sustain herself. She now has 16 adult birds: 10 hens and 6 cockerels. She intends to sell four (4) cockerels at a price of TZS. 9,000 each. Three of her 10 hens are due to hatch.

19. Christine Mbise; Urishe Village, Songoro Ward, Meru District



Christine had just lost 30 chickens to the Newcastle disease, when Aliapenda, her local VBA, approached her. She agreed to have her two surviving hens vaccinated. One hen has just hatched 10 chicks, and the other 9.

20. Eleakim Ndendeya; Nsitoni Village, Singini Ward, Meru District



Prior to vaccination, he had lost 45 chickens. In June, Bertha, his local VBA, vaccinated his 30 birds which had survived the epidemic. He now has 100 birds. Five of his hens have hatched 10, 11, 12, 13, and 14 chicks, respectively. 6 other hens are sitting and their eggs are about to hatch. He sells four trays of eggs per week for TZS 4,000 per tray. He uses the money to educate his children and also to buy poultry feeds. He has not lost any birds to the Newcastle disease since he started to vaccinate.

21. Josphat Ephas; Nsitoni village, Singini ward, Meru District



Ephas uses an incubator to hatch 1,000 chicks per week on his farm. Every week, Bertha, his local VBA, vaccinates his chicks when they are between 1-2 days old. All of his 200 hens were vaccinated against Newcastle disease by Bertha starting in August 2010.

“We sell chicks to at a wholesale price of TZS 700 per chick,” says Ephas. Prior to vaccination the farmer had lost almost 100 adult birds and over 500 chicks to the Newcastle disease.

## 22. Wameiri Mpwambao; Musuni village, Uru ward, Moshi District



Every day, Wameiri would lose two chicks to the hawk, one in the morning and one in the afternoon. In the two months before trying the chick dye, she had lost 36 chicks. Since she started to paint her chicks, she has not lost any to the hawk.

“I was giving up in poultry keeping but Columani, my local VBA, visited me one day and told me about the idea. At first I thought it was a joke but the chicks move around freely within the compound while the hawk is up in the trees and he has never taken any since I tried it”, said the delighted farmer.

## 23. Neema Akioki; Ngwasa Village, Songoro Ward, Meru District



In March 2010, Neema lost all of her 40 chickens (30 adult, 10 chicks and 20 medium sized) to the Newcastle disease. She had to start all over again and in April 2010, she bought four hens and two cockerels. In June 2010, she had them vaccinated by Aliapenda, her local VBA. No bird has died since, and she now has 18 chickens. Neema is now selling two trays of eggs every week.