

## Indigenous chickens: the best “crop” for farmers in Kibwezi district

*Project update: May 2011*



*Background:* Kibwezi district, in Kenya’s Eastern Province suffers from low and poorly distributed rainfall. Farmers have experienced crop failure for the past 5 years. The indigenous chicken, however, can thrive in this environment. There are numerous constraints to increased indigenous chicken production by small-holder farmers in Kenya. 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 KARI’s KASAL Programme, FIPS-Africa has established networks of Village-based Advisors (VBAs) in Machakos, Nzau, and Kibwezi districts, 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 including the vaccination of indigenous chickens, and dyeing of chicks with Gentic Violet (GV) to prevent predation by birds of prey. Vaccination of a chicken costs a farmer only KSh 5, which is a small insurance to pay to keep a chicken, which has a potential value of KSh 500 or more, alive. The vaccine costs the VBA only KSh 1, so the profit helps to motivate the VBAs to vaccinate many more birds.

During the months of June–December 2010, FIPS-Africa’s network of 8 Village-Based Advisors in Kibwezi district conducted a campaign to vaccinate chickens and to experiment with chick dyeing program among small-holder farmers. A total of 9,103 birds were vaccinated against the Newcastle disease, benefiting 1,004 farmers (557M, 447F). A further 1,060 chicks belonging to 105 farmers (55M, 50F) were dyed with GV. In May 2011, farmers were visited and interviewed to determine the performance of the birds and their impacts on their livelihoods. Some testimonials follow.

## 1. Mike Musango, Kivuti Village, Kikumbuiyu Location



Mike Musango, a VBA, lost 26 chickens to the Newcastle disease in March 2010. He vaccinated the surviving 7 birds and he now has 35. He has been saving from the income he gets from vaccination. Since May, he has earned over KSh 12,000 from vaccinating 2,500 chickens in his village. He has also experimented with chick dyeing. Since he started he hasn't lost a chick to the hawk.

## 2. Beatrice Wambua, Kalembwani Village, Kikumbulyu Location



In March 2010, Beatrice lost 25 chickens to the Newcastle disease. Her surviving 10 birds were vaccinated by Francis Mutuku, her local VBA, in June 2010. She now has 40 chickens. In December 2010, she sold 8 cockerels for KSh 5,200 and bought new school uniforms and stationery for her two sons worth KSh 4,600. She now collects 10 eggs a day, whereas she used to get only 3. Three hens are currently sitting on 13 eggs each. She currently sells 20 eggs every week for KSh 200 and uses the money to buy flour, sugar and other household items. Beatrice had her birds vaccinated again in December 2010 and more recently in March 2011.

### 3. Daniel Kilonzo, Milangoni Village, Kikumbulyu Location



In November 2009, Daniel lost all of his 70 chickens to the Newcastle disease. He started afresh in April 2010 by purchasing 10 birds from a neighbour. In June, Mike Musonga, his local VBA, vaccinated them against the Newcastle disease. The farmer now has 80 chickens, and he hasn't lost a bird to the disease since he vaccinated. In December 2010, he sold 8 cockerels for KSh 4,400. He bought 100 grafted mango seedlings for KSh 3,000 and paid KSh 1,500 for labour to prepare land and for planting. He has just sold 2 hens for KSh 600 which he will also use on his mango project.

### 4. Mary Munyi, Kivuti Village, Kikumbulyu Location



In March 2010, Mary lost 40 chickens to the Newcastle disease. She had her 3 surviving birds vaccinated against the disease by Mike Musonga in July 2010. She hasn't lost a bird to the disease since then and she now has 28 chickens. Previously, Mary used to collect an egg a day but she now gets 7.

### 5. Jane Muluki, Kivuti Village, Kikumbulyu Location



Jane lost 46 chickens to the Newcastle disease in June 2009. Mike Musonga vaccinated her surviving 7 birds in May 2010. She now has now 39 chickens; 11 adult hens, 20 medium sized and 8 cockerels. She now collects 10 eggs per day which means better nutrition for her family. She also trades the eggs in exchange for flour and sugar at a local shop. The birds were vaccinated for the 3<sup>rd</sup> time in February 2011.

## 6. Sarah Mailo, Mbuinzau Village, Kikumbulyu Location



Between the months of March and June 2010, Sarah lost over 90 chickens to the Newcastle disease. In July, Sammy Ndivo, her local VBA, vaccinated her surviving 3 hens and 2 cockerels. She now has 28 birds; 10 adult hens and 18 medium-sized birds. They are now producing 8 eggs per day. In the past she used to collect 1 egg a day. She now sells a tray of eggs every week for KSh 350. The family also enjoys eating a chicken once in a while.

## 7. Christian Nthenya, Kalembwani Village, Kikumbulyu Location



All of Christina's 49 chickens died in June 2009. In March 2010, she bought 4 hens and 2 cockerels from a neighbour, and in June she had them vaccinated by Francis Mutuku, her local VBA. She sold 9 chickens in February 2011 for KSh 2,520.

## 8. Margaret Musyoka, Mbuinzau Village, Kiimbulyu Location



Margaret had lost over 80 chickens to the Newcastle disease in March 2009. In April 2010, she bought 3 hens and a cockerel from the local market and she had them vaccinated against the disease by Sammy Ndivo a month later.

She sold 10 chickens in December for KSh 2,500. She now has 38 chickens and she is currently collecting 15 eggs a day. She trades the eggs in exchange for flour, rice and kerosene at a local shop.

## 9. Ruth Mutiso, Matua Village, Kikumbulyu Location



In March 2010, Ruth lost 50 birds to the Newcastle disease. In April 2010, she bought 3 hens and 2 cockerels from the local market which were vaccinated by Sammy Ndivo. In December 2010, she sold 16 chickens for KSh 4,000. She now has 36 chickens, which currently give her 13 eggs a day. Sale of eggs helps her to pay school fees for her 5 children. She has not lost any birds to the Newcastle disease since she started to vaccinate.

## 10. Grace Mithie, Mikuyuni Village, Kikumbulyu Location



Grace lost 52 chickens to the Newcastle disease in March 2010. Francis Mutuku vaccinated her 8 surviving birds in March 2010, and she now has 24 chickens. Grace repeated the vaccination in December 2010, and in March 2011, and she has not lost any birds to the disease.

### 11. Jane Musambi, Matua Village, Kikumbulyu Location



In June 2009, all of Jane's 38 chickens died of Newcastle disease. In December 2009, she purchased 5 adult birds and 2 cockerels. The number increased to 14 and in June 2010 they were vaccinated against Newcastle disease by Sammy Ndivo. In February 2011, she sold 7 cockerels for KSh 4,200, and paid school fees for her daughter. She now has 30 chickens and she collects 9 eggs a day. Over the last year, she estimates that 25 young chicks were taken by the hawk. She has now tried chick dyeing with gentian violet. She had 10 chicks dyed, and so far all have survived.

### 12. Alice Kioko, Mikuyuni Village, Kikumbulyu Location



In March 2010, Jane lost 24 chickens to the Newcastle disease. Her 3 surviving birds were vaccinated against the disease by Francis Mutuku in May. She now has 24 chickens, and she collects 7 eggs a day.

### 13. Teresia Mulwa, Mbuinzau Village, Kikumbulyu Location



All of Teresia's 45 chickens were wiped out by the Newcastle disease in June 2009. She bought 5 hens and one cock from a neighbor in January this year which were vaccinated by Sammy Ndivo in March 2011. She currently gets 2 eggs a day. Two of her hens are currently sitting on 14 and 11 eggs.

#### 14. Damaris Nzioka, Mbuinzau Village, Kikumbuiyu Location



Damaris lost 33 birds to the Newcastle disease in December 2009. Only 4 birds survived and these were vaccinated against the disease by Francis Mutuku, her local VBA, in June 2010. She now has 29 chickens which currently give her 10 eggs a day!

#### 15. Mary Mulwa, Mbuinzau Village, Kikumbulyu Location



Mary lost 56 chickens to the Newcastle disease in March 2009. In June 2010, Francis Mutuku, her local VBA, vaccinated her 10 surviving chickens. In December 2010 she sold 9 cockerels for KSh 4,950 which she used to pay school fees for her 3 children. She now has 65 chickens which currently lay 24 eggs a day. She says she has not lost any birds to disease since she started vaccinating.

### **16. Gladys Mbithe, Mbuinzau Village, Kikumbulyu Location**



Gladys lost 50 chickens in March 2009 and all hope of ever keeping chickens again. However, she persevered and in February 2010 she bought 6 hens and 2 cockerels from the local market. Francis Mutuku, her local VBA, vaccinated them in June 2010 and she now has 35 chickens which give her 18 eggs a day.

### **17. Alice Ndivo Muli, Mbuinzau Village, Kikumbuiyu Location**



Alice is the wife of Sammy Muli, a FIPS-Africa VBA. She lost 25 chickens to the Newcastle disease in March 2010. The surviving 6 birds were vaccinated against the disease by her husband in June 2010. She now has 34 chickens which give her 12 eggs a day. She sells the eggs at a nearby shop for KSh 10 each, selling about 30 a week. The money helps her to buy foodstuffs like flour and the other basic needs for her family. No death has been reported since the vaccination.

### **18. Damaris Mutiso, Katulani Village Kikumbuiyu Location**



In June 2009, Damaris lost all of her 65 chickens to the Newcastle disease. She started afresh in September the same year by purchasing 3 hens and one cockerel from a neighbor. She had 24 chickens by the time the first round of vaccination was carried out by Francis Mutuku in May 2010. She vaccinated 62 birds again in December 2010. During Christmas, she sold 12 cockerels for KSh 7,200 that helped her repay a loan of KSh 5,000 while using the balance to meet the family's basic needs. She says she has not lost any birds to the disease since she started vaccinating.



## 19. Zipporah Mwikali, Kalembwani Village, Kikumbulyu Location



Zipporah lost all her 70 chickens to the Newcastle disease in March 2009. She started afresh after purchasing 4 hens and 2 cockerels in January 2010 which were vaccinated against the Newcastle disease by Francis Mutuku, her local VBA in May 2010. She has so far sold 6 cockerels for KSh 3,600 and she now has 28 chickens, which currently give her 10 eggs a day.

## 20. Peris Nzioka, Ndentani Village, Kikumbulyu Location



In March 2010, Peris lost 28 chickens to Newcastle disease. Only 4 hens survived that were vaccinated by Francis Mutuku, her local VBA, in June 2010. She now has 14 chickens which give her 8 eggs per day.

## 21. Esther Kilonzo, Kalemwani Village, Kikubuiyu Location



Esther lost 32 chickens to the Newcastle disease in June 2009. Francis Mutuku, her local VBA, vaccinated her 6 surviving birds in June 2010. No death has been reported since and she now gets 8 eggs per day.

## 22. Josephine Mwendwa, Nyekendune Village Kikumbulyu Location



Josephine lost a total of 46 birds in June 2009 to the Newcastle disease. Sammy Ndivo, her local VBA, vaccinated her 3 surviving birds in May 2010. She now has 16 chickens which give her 6 eggs a day.

## 23. Nduku Mwendwa, Mikuyuni Village, Kikumbulyu Location



In June 2009, Nduku lost all of her 60 chickens to the Newcastle disease. She started rearing chickens again in March 2010 when she bought 2 hens and a cock from the local market, which she had vaccinated by Francis Mutuku, in June. She now has 17 chickens.

#### **24. Christine Kitelo, Kalembwani Village, Kikumbulyu Location**



In July 2009, Christine lost all of her 34 chickens to the Newcastle disease. In March 2010, she bought 5 adult birds from the local market that were vaccinated in June 2010 by Francis Mutuku, her local VBA. She now has 25 chickens.

#### **25. Lydia Muli, Matua Village, Kikumbuiyu Location**



In March 2010, Lydia lost 30 birds to Newcastle disease and only 4 survived. Sammy Ndivo, her local VBA, vaccinated them in June 2010. The four hens hatched a total of 46 chicks. In December 2010, Lydia sold 10 cockerels for KSh 6,000. This helped her pay school fees for her son for a whole year. She now gets 14 eggs per day.

#### **26. Rhoda Hamisi, Katulani Village, Kikumbulyu Location**



Rhoda started poultry keeping in March 2010 when she bought two cockerels and a hen from a neighbour. The 3 birds were vaccinated by Sammy Muli, her local VBA, in June 2010. By the time of the second vaccination in December 2010, she had 14 chickens.