



# Improving Rural Livelihoods in Malawi Through Village Poultry

April 2014 - March 2016

## Final Report



### Village Poultry - Village Livelihoods

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### Background

The project "Improving Rural Livelihoods in Malawi Through Village Poultry" was approved in early 2014 and commenced operation on 1 April that year. A summary of the original proposal is as follows.

#### Project duration

- April 2014 to March 2016

#### Project budget

- AUD \$22,200 (approx USD \$20,000 at project beginning)

#### Funding agency

- GRM International (now Palladium) via the Communities 1st program.

#### Implementing agency

- KYEEMA Foundation through the National Rural Poultry Centre in Malawi.

#### Objectives and targets

- Establishment of at least 30 trained community based poultry technicians (50% female) in at least 15 villages;
  - Each technician is expected to support 80 rural families, thus reaching 2,400 families for the action overall;
- Establishment of a sustained program for community based services and vaccination against Newcastle disease for at least 15,000 village poultry;
- Establishment of one community based poultry coordinator capable of ensuring sustained benefits and undertaking and coordinating necessary follow up action.

#### Expected Outputs

- Increased production of village poultry in targeted villages;
- Decreased losses of village poultry from diseases, especially Newcastle disease;
- Increased income from the sale of poultry and/or eggs;
- Improved nutrition through increased consumption of poultry meat and eggs.

#### Planned Activities

- Communication/liason with government and district authorities
- Communication and fact finding within villages in the target district
- Identify potential target villages

- Communication with communities and community leaders
- Identify candidate community based poultry technicians
- Identify candidate community based poultry coordinator
- Train community based technicians/coordinator
- Organise logistics for vaccine distribution
- Procure drugs, equipment, awareness materials
- Develop training modules for village chicken vaccination, disease control and prevention, breeding and mating techniques, housing and other husbandry systems
- Undertake training programs in target villages
- Organise Newcastle disease (ND) vaccination program
- Monitoring and evaluation
- Reporting

## Activities

In the early stages of the project, NRPC liaised with District animal health authorities in Ntchisi and with the Small Scale Livestock and Livelihoods Program (SSLLP) which was also working in Ntchisi District at the time. Both institutions provided invaluable support to the project.

NRPC engaged a field officer, Mr Wongani Khonje, on a part-time basis to manage and conduct some of the field activities associated with the project. A small initial baseline survey of households indicated that Newcastle disease was an important source of loss in village chickens.

Selection of target sites (VDCs) was done in May 2014. Sites were selected in two Extension Planning Areas (EPAs), Chikwatula and Kalira, on the basis of:

1. a desire to avoid working in VDCs already adequately served via SSLLP's livestock extension activities in the district, and
2. the advantages of working in villages which have a relatively high population of chicken owning households.



Each selected VDC was asked to nominate two candidates, one male and one female, for training as a community based poultry technician. The selection criteria for these nominations were based on criteria previously developed by the NRPC.

At this stage, the project reported its plans to the District Executive Committee (DEC), the overarching policy making body for the District. The DEC endorsed the project without alteration.

Training materials were prepared and a tailored curriculum developed for presentation over a three day period. The materials were translated into the local language, Chichewa, for enhanced communication and effectiveness. Training covered poultry management, feeding and disease control, but dwelt at length on vaccination of chickens using the I-2 vaccine.

Training took place in August 2014 at Chikwatula EPA. This consisted of classes and practicals for some 30 community based poultry technicians from 15 target communities. Ultimately there were 16 male and 14 female candidates for training.



At this stage, a review of progress indicated that an expansion of the program was possible and desirable. Approval was sought and given for amendment to the program to include a further 12 VDCs in two new EPAs, Malomo and Chipuka.

Following sensitisation meetings in these VDCs, an additional 31 community based poultry technicians together with two local government field staff were selected for an additional training program which took place in October 2014.

Each trained community based poultry technician was provided with a certificate of training, a suitably printed T-shirt, and one vial of the I-2 vaccine in order to start Newcastle disease vaccination activities.

A refrigerator was purchased for holding vaccine stocks at the NRPC office for distribution to the field under the project.



A calendar was prepared with guidelines to assist with vaccination programs. Copies were made available to all trained community based poultry technicians.

At this stage, community based poultry technicians were asked to form a group within each EPA and to nominate two representatives who could act on behalf of all members for purchase of vaccines and medicines. Such materials were available only in Lilongwe, about 100 km away.

Group representatives were given additional training, brought to Lilongwe and given practical introduction to some of the main suppliers of vaccines and medicines in Lilongwe. Cooler boxes were provided to each representative in order to transport materials which required to be kept refrigerated.

Monitoring and evaluation was a constant activity throughout the remainder of the project period and a standard format for recording and reporting of data was developed. This was an important means by which the impact of the project could later be determined.

M&E data was used to identify those of the community based poultry technicians who were more active in vaccination against Newcastle disease. Some 33 of these people were allocated bicycles to assist in their activities. The provision of bicycles was an important means by which the effectiveness of vaccinators can be increased. To be vaccinated, village chickens need to be caught before they are released to scavenge during the day. Therefore, the vaccinator needs to arrive early, preferably just after sunrise. If s/he delays, the chickens will have been released and cannot be caught for vaccination. Bicycle transport enables the vaccinator to arrive at more distant destinations in good time, thus widening his/her impact area.

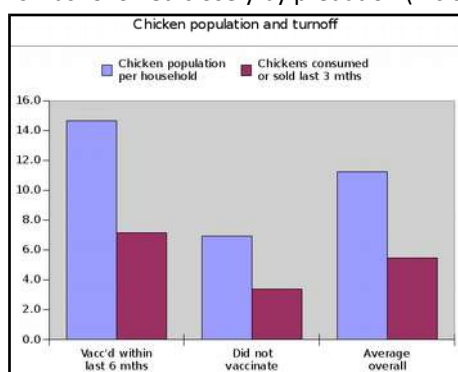


A low level post-project monitoring program with minimal interventions has sought to clarify how the project activities are continuing over the months.

## Outcomes

An end of project survey was conducted in early 2016 in an effort to quantify some of the outcomes from the project. This survey concentrated on vaccination against Newcastle disease but also examined housing practices. Significant findings were as follows.

Overall the single biggest source of loss in terms of percentage of chickens currently owned was Newcastle disease. This was followed closely by predation (including theft) and then, other diseases.

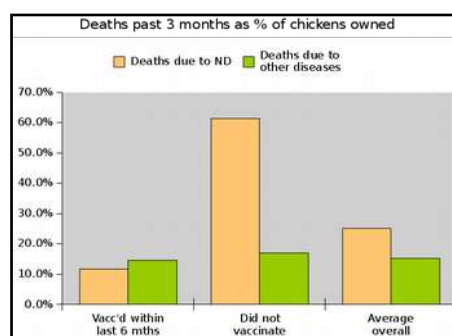


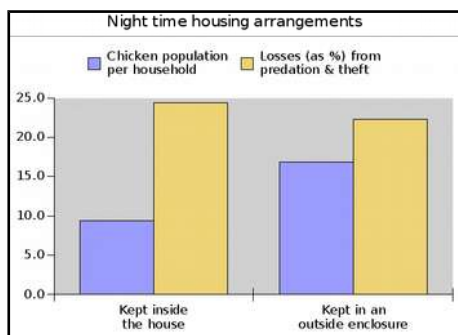
Households which had vaccinated for Newcastle disease within the past 6 months (n=166) were compared to those which had not vaccinated (n=131).

The average number of chickens owned per vaccinating household was just over double that for non-vaccinating households, 14.7 vs 6.9. A similar ratio was observed for the average number of chickens sold or consumed within the past 3 months.

Households which had not vaccinated lost over five times as many chickens to Newcastle disease as those which had vaccinated. Losses from diseases other than Newcastle disease were similar for the two groups.

The vaccine in use was the Newcastle disease I-2 strain, wet vaccine, administered by eye-drop by trained community based vaccinators.





Over 70% of households confined their chickens in the owner's house at night as distinct from an outside enclosure ("khola") the chief reason being to mitigate petty theft. However those that used a khola had an average household chicken population 79% higher than for households without a khola. The overall rate of losses due to predation and theft did not appear significantly different between these groups.

## Achievement of Objectives and Targets

The project undertook to train 30 community based poultry technicians. It trained 64 of whom 47 became actively involved in the program. Another 23 vaccinators within the target area were 'adopted' by NRPC half way through the program. These vaccinators had been trained originally by SLLP and later, after that project was concluded, were encouraged by NRPC to participate in field coordination meetings and the cooperative aspects of the program. Their vaccination data are **not** included in the figures quoted in this report.

Other project targets included the establishment of a sustained program for community based services and vaccination against Newcastle disease for at least 15,000 village poultry reaching 2,400 rural families. By project end, the NRPC trained vaccinators had vaccinated at least 70,000 chickens over five vaccination campaigns at intervals of 4 months. Clearly the target coverage for poultry numbers was well exceeded.

Calculating the number of households reached poses a problem in that the situation is very dynamic. Households which vaccinated last campaign may not vaccinate this campaign and *vice versa*. Hence an indirect estimate of households reached is calculated by dividing the total number of chickens vaccinated by the average chicken population per household. By this method, we can reasonably say that individual households were reached over 7,000 times. In the knowledge that many households do not vaccinate on every campaign, we can surmise that probably over 2,000 households were reached.

The original target of establishing one community based poultry coordinator was exceeded because it became clear that one would not suffice due to the distances between vaccinators. Rather, it was necessary to train one male and one female in each of the four EPAs in the target area. Thus, eight such people were ultimately trained and established.

## Impact

The expected outputs listed on page 2 were not directly measured for confirmation. However, we can have little doubt that they were realistic and were achieved. The end of project survey indicated that Newcastle disease was the single biggest source of loss in the target area and that losses from Newcastle disease were five times as high amongst non-vaccinating households as amongst vaccinating households. There can thus be little doubt that the project achieved its goals of:

- Increased production of village poultry in targeted villages;
- Decreased losses of village poultry from diseases, especially Newcastle disease;
- Increased income from the sale of poultry and/or eggs;
- Improved nutrition through increased consumption of poultry meat and eggs.

Sustainability was a key element of consideration from the outset of this project. The overall project design set out to achieve strengthening and capacity building among the communities and their representatives. It ensured that the trainees would ultimately be fully capable of continuing their function without further need for inputs from government or other institutions. Post project monitoring indicates that activities are continuing and that some community based poultry technicians are very keen to take a lead role among their peers to ensure continued momentum.

## **Acknowledgements**

NRPC acknowledges the valuable inputs from numerous individuals (there are too many to name) and the following institutions in successfully implementing this project:

- The Communities and chicken owners of Chikwatula, Kalira, Malomo and Chipuka EPAs;
- GRM International, now Palladium;
- the KYEEMA Foundation;
- Ntchisi District Administration and the District Agricultural Development Office;
- The Central Veterinary Laboratory, Lilongwe;
- The Department of Animal Health and Livestock Development.

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Report prepared by Pat Boland, 22 November 2016