

Country Report: Malawi

F.L. Kampeni¹

MALAWI is located in Eastern Central Africa between latitude 9°25' and 17°17' and longitudes 33°40' and 35°55'. It is a land-locked country stretching 900 kilometres from north to south and varying in width from 16 to 160 kilometres from east to west. The neighbouring countries are Tanzania to the north and northeast, Mozambique to the south-east and Zambia to the west and northwest. The total area of the country is 118 000 square kilometres of which 20% (23 726 km²) is lakes.

The 1998 census indicated that Malawi has a human population of 9.7 million people. Women outnumber men (52% to 48%). Population density is one of the highest in the world at 90–95 per square kilometres. Eighty-five per cent of the population live in rural areas. There are 2.2 million farming families. Agricultural activities, especially crop growing, are the main occupation with an average land holding of 0.5 hectares.

Rural Chickens

According to the 1997 National Livestock Development Master Plan Survey, 95% of households own chickens. Chickens are the most popular type of livestock. Other livestock species include cattle, goats, sheep and pigs. The village chicken population is approximately 12 million consisting of various, uncharacterised breeds. The average flock size is 7 to 8 chickens. The chickens are kept under free-range conditions and the chickens are left to scavenge for themselves with little or no supplementation. The main problems associated with village chicken production, in order of priority, are: Newcastle disease (ND), predation and parasites, both internal and external.

Newcastle Disease

ND outbreaks occur mainly in the hot period of August to December with the peak occurring in October. The reasons for the seasonality are unknown and require further research. The mortality rate ranges from 40–100%. Young chickens 6–20 weeks old are the most vulnerable.

Control methods

Vaccination campaigns against ND are held annually from May to July. Approximately 30% of chickens are vaccinated but the aim is to vaccinate 80%. The strains of vaccine used include La Sota, Hitchner B1 and inactivated oil emulsion-based vaccine. The live vaccines are administered via drinking water and the inactivated vaccine is injected.

Problems

Many problems have been encountered in the control of ND in rural areas:

- very few veterinary personnel to cover the 2.2 million households;
- lack of civic education, e.g. some people believe that eating a vaccinated chicken will make them impotent;
- difficulty in maintaining the cold chain;
- lack of funding (field allowances, etc.);
- lack of chicken housing—some chickens have no sleeping quarters; they sleep in tree tops, making them difficult to vaccinate.

Administrators of vaccine

The vaccine has been administered by government or non-governmental organisation extension workers.

Payment

The charge per dose is MK 0.15 (USD 0.33). During the campaigns, farmers are encouraged to contribute money to cover the purchase of the vaccine. Farmers are organised into groups (clubs) to facilitate the purchase and distribution of the vaccine.

¹ Veterinary Services, Box 2096, Lilongwe, Malawi

Vaccination campaign results

Where campaigns have been strictly implemented, the following results have been observed:

- flock size per household increased to an average of 15;
- increased income from sales of eggs as there were surplus eggs after meeting requirements for replacement stock;
- increased consumption of eggs from 9 to 33 eggs per person per annum; and
- consumption of poultry meat increased from 2 to 6 chickens per year per family (GTZ survey).

Village chicken research

V4 Newcastle disease vaccine research

Research into the control of ND in rural areas using the original V4 ND strain was initiated in 1981. The research was done in selected hot districts of the country by a development project. When the project ended in 1983, the research terminated without conclusive results.

Performance of naked neck and other village chicken breeds

Investigations into the performance of naked neck and other village chicken breeds are ongoing. Results are not yet available.

Village chicken improvement: the Malawian experience

The Malawian Government has supported a village chicken-upgrading program since 1964. The objective of the program is to improve the performance of the local chickens with regards age at maturity, egg production, egg size and body size.

The program involved crossing the big bodied, dual purpose Black Australorp male with the local female chicken. The offspring produced more eggs, bigger eggs, had a larger body size and matured earlier (they reached point of lay at 24 weeks) while maintaining the hardiness of local birds. The Black Australorp birds were produced on government farms and were distributed to designated selling points throughout the country on pre-announced dates.

The program became very popular. The Black Australorp was dubbed the 'Mikolongwe bird' and this became a household name.

As the years passed, problems started to occur, namely:

- people lost track of the original objective and the preference change from male to female chickens;
- some kept the Black Australorps among themselves for egg production;
- the heavily subsidized Black Australorps became a cheap source of chicken for the table;
- no disease control or husbandry packages accompanied the chickens to the villages and consequently, many died of ND, internal and external parasites and malnutrition; and
- there were too few birds produced to meet demand so the birds ended up being bought by civil servants, or by influential people in society and not the villagers.

These problems almost lead to the collapse of the program. The African Development Bank (AfDB) has recently commenced supporting the program through the National Livestock Development Project. The above problems are to be dealt with in the following manner:

- the Black Australorp birds will no longer be subsidised;
- only male chickens will be distributed to villagers;
- female chickens will go to village mini-breeders who will be involved in the multiplication of the birds;
- disease control and breeding packages have been developed to accompany the chickens to the villages;
- only farmers who are members of the multiplier clubs/groups are to be supplied with the birds.

Projects with village chicken components

Village chicken production and multiplication is currently being supported by the following projects:

- GTZ supported Basic Animal Health Services Project (BASHP);
- AfDB supported National Livestock Development Project; and
- Danish International Development Agency supported Livestock Project (DASPS II).