

**Engaging church missions and non-governmental organizations in
Newcastle Disease (ND) Control
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Initiatives:

1. Introduction:

Christian missions and other small non-government organizations (in this paper referred together as ‘NGOs’) are doing some of the most effective and sustainable agriculture and food security work in developing countries. NGOs are able to innovate and include a package or menu of community options in villages in rural areas. They can be responsive to the interests of communities, and promote a sustainable model of rural poultry vaccination sometimes more effectively than the district or local government alone.

What does a typical model of a sustainable Newcastle disease (ND) control consist of for rural poultry keepers?

2. The model and how it operates:

The NGO involves the local Government Authorities (LGAs) in the vaccination program. An NGO works with district and village leadership to either raise awareness or respond to known need for ND control. The NGO agrees to conduct a village meeting with a representative of the district to confirm with villagers their experience of death loss to ND, ascertaining which season of the year it is more prevalent in their experience, and raising interest in a solution. At the same meeting, the model described below is shared with the community members, the concept of rural vaccinators administering a service to their neighbors three times per year with cost-recovery. At the end of this village meeting, individuals may be identified who best fit the criteria explained to them for community vaccinators, and they may be selected for subsequent training.

District extension officers are engaged in partnership to prepare the community, participate in selecting, supervising, monitoring and reporting on the activities of community vaccinators to the NGO and the District. Ideal qualifications and roles are shown in Table 1.

Table 1 Typical qualifications and role of district extension staff

EXTENSIONI ST ¹	<ul style="list-style-type: none"> • Technical know-how (Certificate or Diploma) in general agriculture. • Prepared to collaborate with NGOs in agricultural development programs. • Willingness to promote an integrated support effort among caregivers in the initiative • Scope for integration of rural poultry vaccination in their working situation • Prepared to learn and disseminate new initiatives in food security • Prepared to assist other stakeholders by follow-up and linking actors together
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¹ Normally already assigned to the village by district

Summary of preparatory steps:

- ▣ *Meet with district & ward & village officials, determine geographic and program focus*
- ▣ *Identify extension field staff – Village Extension Officers*
- ▣ *Baseline data in pilot village(s) or*
- ▣ *Rapid rural appraisal in target village(s) and focus groups to identify successes/constraints in the farming system, particularly in regard to poultry*
- ▣ *Seek possible NGO partnerships or established farmer groups*
- ▣ *Begin facilitation of food security committee and community vaccinators*

This initiative is about empowerment. Community vaccinators will be selected, trained, and mobilized to assist their neighbors. Community vaccinators in other initiatives have proven to enhance significantly the adoption by community members of wider innovations, for example, they have reduced significantly the number of cases of other poultry diseases in the community, helped in the take-up of simple poultry innovations, and helped to target needy participants to benefit from initiative interventions.

Ideally at the same time that community vaccinators are being mobilized, a community food security committee is formed from among community leaders and existing groups to support dissemination of interventions by increasing cohesion of sub-groups and wider participation. A strong participation in selection, training and a close follow-up by local village leadership, such as a food security committee, helps to keep these people to remain active or be replaced. The committees may vary in size and activities according to their interest, but generally comprise 4 or 5 members chosen based upon criteria in Table 2 below.

Table 2 Activities of the food security committees

FOOD SECURITY COMMITTEE	<ul style="list-style-type: none"> • mobilize selection of appropriate groups within the community for training • identifying and supervising potential rural caregivers from sub-villages • ensure community cooperation so that families pay for animal vaccinations • ensure the welfare of more vulnerable households through participation, sharing and caring among members and their families through visits to households • assist preparation for trainers, e.g., alerting community, venue for meetings, food • other activities, as appropriate, e.g., mobilize home-based care by caregivers, support of HIV+ groups • assist coordination of field days and agriculture shows • promote addressing of environmental issues, e.g. sanitation, tree planting, etc. • provide accountability of group equipment such as bicycles for community vaccinators • share progress reports and productivity records with wider village leaders <p>identify and address constraints: potential markets, sources of micro-finance, or agriculture inputs for the group members</p>
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Community vaccinators are chosen based upon criteria such as those in Table 3 below. receive one week long orientation training together with accompanying them on their first vaccinations. In this week, community vaccinators are trained on issues related to animal health and vaccination is intensively covered. In the early mornings, they apply the simple vaccination skills learnt by vaccinating chicken of farmers on dates agreed upon in the larger community assembly.

Table 3 Typical Requirements for Community Vaccinators

VACCINATOR	<ul style="list-style-type: none"> • Residing in the community • Available to undertake regular campaigns and to record their work, including receipts. • Reside in or near to the respective community. • Chosen by the village government, and willingness to cooperate with them • Commitment to providing services by a set calendar, and obtaining fair fee for services rendered (contract with village authorities) • Minimum 50% women
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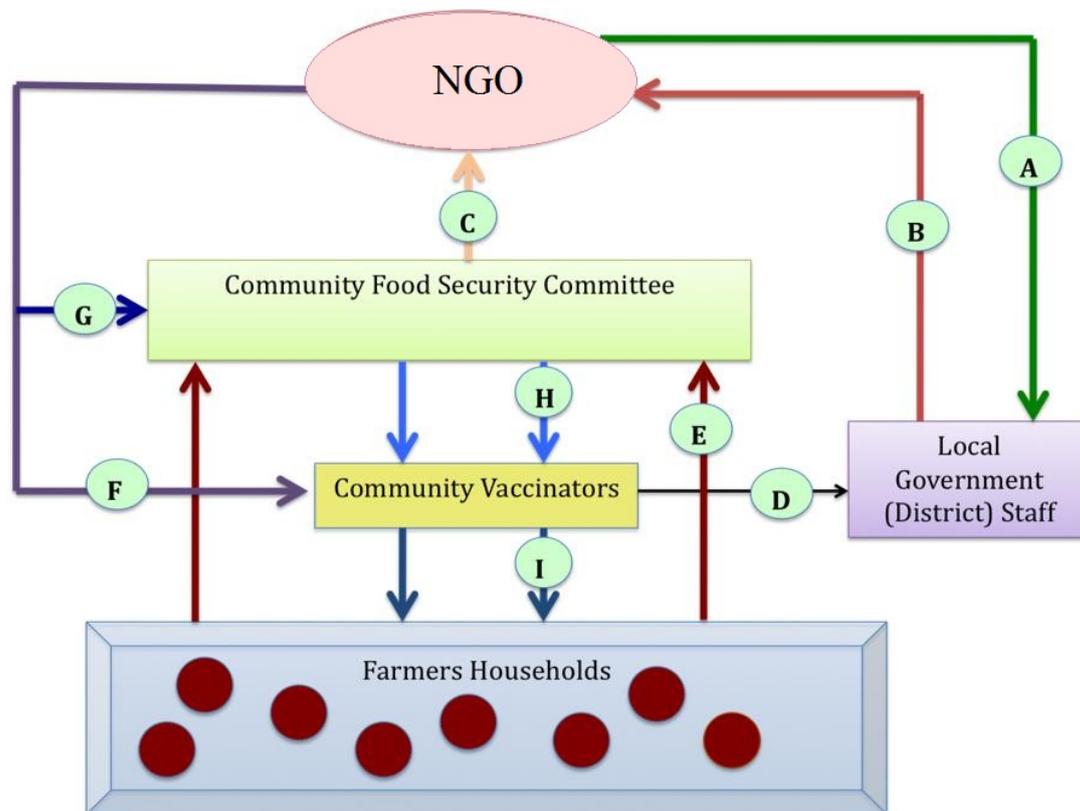
The first round of vaccination may be charged unless the NGO is concerned that adoption may be too low until people see the effect that a first-time free vaccination will provide. If subsidized the first time, it should be emphasized that subsequent vaccinations will need to be paid for to cover the costs of vaccines

and the community vaccinators' time. Thereafter, community vaccinators are encouraged to buy vaccines and vaccinate chicken on a for-profit basis, whereby farmers pay for the vaccination. Community vaccinators buy vaccines for approximately \$6 per vial of 400 doses in Tanzania, or the equivalent of \$0.015 per dose. However, the community vaccinator should charge up to \$0.10 for each chicken vaccinated, as agreed in the community meeting; (the same dose is given for a small chick as for a mature cockerel: one drop). At this price, a community vaccinator earns almost \$35 profit from one vial, making it worthwhile for the 3 – 4 days involved in canvassing and servicing the homesteads in her area.

Follow-up is equally important as mobilizing community vaccinators and food security committees. NGO trainings and mobilization of local farmer groups should be supported with assistance of district extension staff. This link with the local government at the district level ensures a level of sustainability and scaling up where successful. The district staff gathers vaccination data from community vaccinators and submits progress reports (e.g., number of chicken vaccinated in a given period of time). If the NGO can manage, for well-performing community vaccinators, transport on bicycles may be provided to facilitate their movements in the villages. District staffs may receive a small stipend each quarter as appreciation for their facilitation for their involvement in the program and reporting.

The figure below is a diagrammatic presentation of the NGO model and how it works.

Diagrammatic presentation of NGO – Newcastle disease Control Model



- A** = NGO facilitation of the district staff
- B** = District staff submits progress reports to NGO
- C** = Community Food Security Committee reports to NGO
- D** = Community Vaccinators reports to the district staff
- E** = Farmer households nominates members to
- F** = NGO support (e.g training) to community vaccinators
- G** = NGO support to Community Food Security Committee
- H** = CFSC supervises community vaccinators
- I** = Community vaccinators vaccinating chicken at farmer household levels

Sustainability of the model:

To a large extent the model is successful and sustainable. The success of the model is owed to the following factors.

a) Profitability to the community vaccinators

Community vaccinators derive profit out of this venture; the better performers are also facilitated (with bicycles), an additional incentive to them and hence they are able to conduct vaccination as a business and as a means of livelihood.

b) Involvement and motivation of the district staff

The NGO ensures support of the district staff and the local leaders by involving them in the vaccination program. Local leaders are involved in mobilizing farmers. Also some members of the community households are nominated into the Community Food Security Committee (CFSC). The district staff is involved to monitor and supervise the activities and report to the NGO. The district staff is given some stipend upon submission of a report to the NGO as a motivation to them.

c) Reporting structure (a three way reporting structure)

Farmer households report to CFSC (as indicated by arrow D). The CFSC reports to the NGO (as indicated by arrow C), and district staff reports to the NGO (as indicated by arrow B). The three-way reporting structure ensures an inbuilt mechanism to ensure reliability of information, as the NGO is able to cross check and compare the two reports and clarify deviations and reasons for deviations.

Limitations of the model:

The NGO has to coordinate among the local government staff (arrow A), the CFSC (indicated by arrow G) and community vaccinators (indicated by arrow F), a process, which can be tedious and time consuming especially in the initial stages until all are equipped with transport, and a routine is established. If well prepared, the vaccinators with community oversight can continue to ensure service provision continues after the NGO withdraws support in two or three years.

• Case study 1: Healthy Chickens Increase Villagers' Prosperity

Naisula Estomiy is a 36-year old mother of two living in Olkereyan village on the outskirts of Arusha in Tanzania. In June 2009, Naisula joined a village group to attend a poultry production training session with Global Service Corps – Tanzania. Based on Naisula's intelligent questions and lively participation in the training organized by GSC-TZ, Naisula was selected by others in her group to attend a special training to become a community chicken vaccinator. She learned how to vaccinate chickens as a small business on behalf of the group and the wider community.



With support of her village extension officer, she set up a regular schedule of chicken vaccination in her sub-village to protect them from Newcastle disease. Before the vaccination program, villagers were unwilling to invest much in raising chickens since most of them died from Newcastle disease. They rarely provided food for their chickens and instead left them to scavenge for food. She learned how to apply the simple eye-drop vaccine to all chickens whatever their

ages at a cost per vaccination of only 50 shillings, equivalent to \$0.03 each.

The vaccination program has significantly lowered chicken losses and in 48 villages where GSC-TZ has trained community vaccinators, poultry keepers now experience higher yields. Naisula has increased her flock by 700% to 90 chickens and collects 25 eggs per day (as compared to the pre-vaccination time when a whole week often passed with no egg collection.) Naisula is also able to collect a small fee for her vaccination rounds which reached 3,000 chickens every fourth month, an income of Tsh 150,000 (US\$100) for one week of work each round. Recently she paid for a wire mesh perimeter fence to confine her growing chicken flock within her yard. The increased income from bird and egg sales has meant she can afford more food for her family and school fees for her two children.