Post vaccination monitoring tool

Strengthening or developing new tools:

4. Post vaccination monitoring tool

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GF-TADs
GLOBAL FRAMEWORK FOR THE PROGRESSIVE CONTROL OF TRANSBOUNDARY ANIMAL DISEASES

What would we like to monitor?

- Efficacy of the “delivery system” of the vaccination campaign
  - Vaccination coverage
- Indirect monitoring of the “efficacy” of the Veterinary Services
- De facto reduction of the incidence
- Has the vaccination scheme responded to the particularities of the production system?
- Define movement patterns of vaccinated animals

What means do we have with this tool?

- Sero-monitoring
- Animal identification
- Participatory appraisal of farmers' perception on vaccination success
- Mobil Telephone surveys and questionnaires
- Appraisal of the delivery system

Proposed approach to PVM

- Know the socio-ethnic aspects of your small stock production system
- Devise a sampling frame depending on the production system
- Sample (*period of sampling tba)*
- Optimise sampling strategy as a function of your control budget with majority on vaccination, a justifiable percentage on PVM

Supportive actions/enabling environment

- Sensibilisation of livestock owners for necessity of PVM
- Training of veterinary staff and auxiliaries in effective blood sampling, preservation of samples and shipment of samples to have least possible spoilage
- Training of lab staff to have capacity to test and have lowest possible turn-around time to produce results
- Consider incentives such as antiparasitic treatment or other extension methods

Considerations

- PVM for PPR can only CONTRIBUTE to gather information on vaccination success unlike in RP or FMD
- Put results into context of production system, delivery system and disease development

However, an important tool to measure spatial distribution / mapping of herd immunity and efficiency of vaccination system!!

Interpretation of PVM

If sero-monitoring confirms low sero-prevalence

- Technical failure along the vaccination delivery system (e.g. cool chain, syringes, training of staff etc)
- Administrative failures (not enough vaccines delivered to certain areas etc)
- Not all animals were shown for vaccination
- New animals were introduced into the flock between vaccination and PVM
- Vaccinated animals have migrated and new ones introduced (unvaccinated)

Corrective action

- Correct defects if reasons are technical or administrative
  - Carry out training, improve technical aspects
- Improve delivery system if reasons are in the production system
  - Improved sensitisation before vaccination campaigns
  - Involvement of livestock owners
  - Engagement of CAHWs
- **REPEAT VACCINATION!!!**

Example

PVM in Somalia

- 20,000,0000 small ruminants were vaccinated in 2012 and 1% (20,000) serum samples earmarked for collection in the vaccination areas of which

- 10,000 pre vaccination and
- 10,000 post vaccination

Serum samples to be tested locally and one aliquot in PANVAC

Compare sero-prevalence: 2010/11 with pre-vaccination and post-vaccination

Central Vet authority (where it exist), was to undertake the monitoring during and after the vaccination,

Somali Vet professional to keep all empty vials for PVM

- The questionnaire was to record the telephone number of the livestock owner for PVM.
- Participatory appraisal was also used.

Distribution of cold chain in Somalia