**ABSTRACT**

Participatory epidemiology (PE) is an evolving branch of veterinary epidemiology which uses a combination of practitioner communication skills and participatory methods to improve the involvement of animal keepers in the analysis of animal disease problems and design, implementation and evaluation of disease control programmes. PE relies on the widely accepted techniques of participatory rural appraisal and ethno-veterinary surveys supported by triangulation of data with conventional veterinary diagnostic methods. In an ongoing intervention by VSFG, PE approaches have been used in livestock disease surveillance to inform timely responses to livestock disease outbreaks as well as early warning for droughts based on deterioration of livestock body condition. This intervention has achieved its intended results through four key interventions; i) Training of Government veterinary officers (VOs) on Participatory Appraisal (PRA) tools to enhance data gathering from illiterate livestock keepers, ii) Selection and training of Community Disease Reporters (CDRs) from target communities on identification of notifiable livestock diseases as well as those of great economic importance, iii) Disease reporting by CDRs, iv) Passive disease surveillance through remote communication between CDRs and VOs as well as regular field visits by VOs through semi-structured interviews with livestock herders and active disease search in response to suspected disease outbreaks based on CDR reports. Participatory Epidemiology has undoubtedly gained popularity as the basis for carrying out targeted livestock vaccinations in response to livestock disease outbreaks as well as responding to other livestock health issues by the County Departments of veterinary services. The approach has also resulted in linkage between livestock keepers and animal health service providers thus enhancing response to livestock emergencies. This timely response has controlled disease outbreaks and reduced losses of productive livelihood assets. Finally with livestock diseases profiling mapping Marsabit County is using the information to develop more focused and effective disease control programmes.

**FIELD VISITS BY GOVERNMENT VETERINARY OFFICERS**

- Residents of Marsabit county largely practice nomadic pastoralism which warrants for working closely with livestock keepers to appraise diseases for effective service provision.
- Livestock is key livelihood asset for population living in Marsabit county and account for 80% of the population solely depending on livestock for their livelihood.
- Disease control has direct impact on livestock productivity and subsequently impacting on livelihoods depended on livestock.

**APPROACHES USED TO IMPROVING CONTROL OF LIVESTOCK DISEASE OUTBREAKS**

**INTERVENTIONS, OUTCOMES AND BENEFICIARIES**

**Core Interventions**
- Training of government officers on Participatory Epidemiology Approaches
- Selection and training of Community Disease Reporters on identification of notifiable diseases
- Reporting of diseases by Community Disease reporters to Veterinary Officers
- Active disease search in response to outbreak disease reports

**Outcomes**
- Linkage between livestock keepers and animal health service providers
- Timely and effective response to disease outbreaks
- Reduced losses due to controllable diseases

**PATHWAYS**
- MOU detailing responsibilities of national and department of veterinary services at National and County levels
- Capacity building of government veterinary officers and Community Disease Reporters
- Sensitization to livestock keepers to enhance disease reporting
- Linkage and data collection

**Beneficiaries**
- 16 veterinary officers
- 105 Community Disease Reporters
- 100,000 households (80% of Marsabit County population depend on livestock for their livelihoods)

**LESSON LEARNED**

- Linkage between veterinary officers and community disease reporters enhances disease reporting with subsequent timely response hence reducing losses due to controllable disease.
- Routine field visits by veterinary officers improves awareness by livestock keepers on disease control and more effective conventional veterinary practices.
- Timely response to reported disease outbreaks reduces losses and spread of diseases to healthy herds.
- Through Disease Surveillance, the county veterinary department in able to develop more focused and effective Animal Health service delivery programmes.
- Participatory approaches gives livestock keepers an opportunity to share and explain ethno veterinary practices with veterinary officers which leads to decrease in ineffective or detrimental practices and maintains effective ones with clear guidance by veterinary officer.

**MAIN CHALLENGES**

- Inadequate technical staff to support effective implementation of the PE model.
- Marsabit County still experiences erratic ethnic conflicts which hinders access to livestock keepers.
- Inadequate support by government veterinary department both at county and national levels.
- Low awareness by livestock keepers on conventional methods of disease control hence poor reporting.

**THE PROJECT**

This work refers to an initiative implemented by a consortium of INGOs (Oxfam, VSFG, ACTED and Concern worldwide) from 2013 ongoing to 2016 funded by ECHO called "Strengthening Resilience of the population living in the Arid lands of Kenya through Emergency Preparedness and Early Response."