

THE USE OF PARTICIPATORY APPRAISAL TO ASSESS THE IMPACT OF COMMUNITY-BASED ANIMAL HEALTH SERVICES: EXPERIENCES FROM SOUTHERN SUDAN

Catley A

Participatory Approaches to Veterinary Epidemiology (PAVE) Project, Sustainable Agriculture and Rural Livelihoods Programme, International Institute for Environment and Development,
3 Endsleigh Street, London WC1H ODD, United Kingdom.

Veterinary services in southern Sudan are provided by the UNICEF-Operation Lifeline Sudan (Southern Sector) Livestock Programme and partner non governmental organisations. The programme has developed a successful community-based animal health worker (CAHW) system involving more than 700 workers who cover approximately 70% of southern Sudan¹. Operational constraints in southern Sudan and similar areas severely limit the use of conventional data collection methods. This paper describes the use of participatory appraisal (PA) methods to assess the impact of community-based animal health interventions developed by Vétérinaires San Frontières Belgium working with a Dinka community in Akop and Vétérinaires Sans Frontières Switzerland working with a Nuer community in Ganyiel, southern Sudan. These projects had been operating for five years at the time of the assessment and project activities had included rinderpest vaccination and the provision of a basic diagnostic and curative service via CAHWs.

There is no standard set of methods for conducting participatory impact assessment. The approach provides scope for project staff to work with communities to develop methods that suit a particular set of information needs, working conditions and local capacity.

Materials and Methods

Time-lines and participatory mapping were used to define the temporal and spatial boundaries of the projects. These methods are well described in the literature² and are not discussed further in this summary. Proportional piling was used to understand the relative importance of livestock-derived benefits. This method required groups of informants to name the benefits provided by livestock and divide a pile of 100 seeds to show the relative importance of the named benefits. Results were recorded by counting the seeds in each pile. The level of agreement between informant groups was determined using Kendall's Coefficient of Concordance³ (W).

A paired proportional piling method was used to assess local perceptions of changes in cattle mortality in the periods before the project and at the time of the assessment⁴. By reference to time-lines, groups of informants were asked to consider the time before the project began and name the most important causes of cattle mortality at that time. These causes of mortality were then represented using everyday objects. The informants then showed the relative numbers of cattle dying by dividing 100 seeds. Informants were then asked to consider the point in time 'now' and add to, subtract from or leave the piles of seeds in order to show cattle deaths at the current time. When this task was completed, the piles of seeds were used as points of reference to facilitate discussion on the reasons

why the presence of specific diseases had increased, decreased or remained the same. Levels of agreement between informant groups were determined using Kendall's Coefficient of Concordance (W). Reports of project activities such as rinderpest vaccination and disease treatment records were used to cross-check the perceptions of informants.

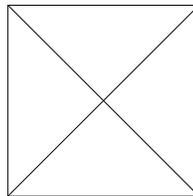
Results

An example of results from Akop describing local perceptions of livestock-derived benefits is shown in Figure 1. Analysis of results indicated good agreement between the informants groups (W= 0.64).



Figure 1. The relative importance of livestock-derived benefits in Akop.

Figure 2. Local perceptions of causes of cattle mortality in Ganyiel before and after animal health interventions.



An example of results describing local perceptions of changes in cattle mortality is shown in Figure 2. There was good agreement between the informant groups (W= 0.61) and results were summarised using proportional pie charts.

Discussion

Results in Figure 1 show how participatory methods can be used to identify both social and economic indicators of animal health interventions. Although milk for local consumption was considered to be the main benefit, the use of cattle for dowry reflected the importance of marriage as a key social event in Akop. Exchange of cattle between families consolidated kinship ties and traditional social support mechanisms. Both milk and dowry indicators were considered to be highly relevant in a project that aimed to improve food security of the human population.

Results in Figure 2 indicated a marked reduction in cattle deaths due to rinderpest and this finding that was supported by accounts of rinderpest vaccination activities in project reports. The results also indicated that chronic wasting of cattle had become relatively more important as a cause of cattle mortality in Ganyiel. This finding suggested that further characterisation of the chronic wasting problem was required. Although results presented in Figures 1 and 2 reflect agreement between informant groups, the need to seek agreement was not considered to be an important aspect of the participatory methodology development. Participatory inquiry usually aims to identify different perspectives within communities and in the examples used, informant groups included groups of men, women and children of varying social status.

Experience with the use of participatory methods in southern Sudan indicates that these methods are highly appropriate in projects that aim to encourage local people to analyse problems and assess aid interventions on their own terms. In the case of animal health work, standardised participatory methods such as simple proportional piling methods are a useful way to bridge a gap between the indigenous knowledge and perceptions of livestock keepers, and the information needs of aid agencies and donors.

References

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