Programme for the Pan African Control
of Epizootics

Community Animal Health and Participatory Epidemiology Unit

Rinderpest Participatory Disease Searching in Karamoja, Uganda

Workshop Report

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Executive Summary

Participatory disease searching (PDS) is the application of participatory approaches to the collection of epidemiological information as part of an active, targeted disease surveillance programme. Livestock owners have detailed knowledge of the diseases occurring in their community. They can usually recognize, name and describe the diseases of importance. It is this existing veterinary knowledge that PDS seeks to understand and make accessible to veterinary authorities and decision-makers.

Participatory assessments are usually conducted by expert teams of two to four members. They interact with and learn directly from key informants. One of the strengths of PDS is that the expert teams have the ability to move from region to region in a country and develop an overall view of the epidemiology of the disease in the country. Expert teams also have direct access to decision-makers and can communicate the livestock owner's needs and intelligence with a minimum of filtration or distortion. This means the PDS process can result in more appropriate disease control strategies that are well grounded in practical reality and that truly reflect the epidemiological status of the country.

Beyond PDS, participatory epidemiological (PE) skills can strengthen the relationship between veterinarians and livestock owners and enhance routine information flow as part of the national disease reporting system. A training of trainers approach has been adopted as the most effective way to ensure both the development of expert PDS teams and broader dissemination of PE skills within the veterinary services of Karamoja.

The Participatory Disease Search (PDS) Training Programme for Karamoja has been divided into three phases. These are:

1. A seven day training course on the use of PDS in the search for rinderpest (RP).
2. A three month field assignment where participants gain experience in the application of techniques as part of the RP surveillance programme in Karamoja. This phase will provide overviews of the epidemiology of RP in Karamoja by district.
3. A five day training of trainers course where the participant's technical knowledge is re-enforced and training skills are developed.

This report describes the completion of the basic training programme in Moroto, the preparation of risk maps for each of the three districts in Karamoja and preparations for the field assignments.

The participants attending the course were carefully selected and highly motivated. Logistically, the course was well organized and the consultant wishes to thank PACE/Uganda for its efforts in arranging the course.

The workshop facilitator reviewed a proposal from the DVO for a CBPP impact assessment.

The DVOs and local veterinarians expressed concerns about the extent of CAPE's presence over the past year in Karamoja and described a lack of communication between CAPE and the Karamoja region. They looked forward to the posting of the CAPE veterinarian for Karamoja in Moroto and had not been informed of the decision to base this post in Nairobi prior to the training course. However, Karamoja veterinary professionals indicated a strong interest in collaborating with CAPE in the future. The consultant assured the counterparts of CAPE's commitment to the region and made efforts to improve communication between the stakeholders.

It is recommended that PACE/Uganda utilize the participatory disease search programme as an opportunity to understand the present RP situation in Karamoja and as a tool to validate the disease status of the region. The training workshop energized the veterinarians from the three districts and they are highly motivated to undertake field work. The three districts produced realistic proposals for disease searching. It is now up to PACE/Uganda to review the proposals and provide the necessary operational costs to undertake the field assignments.

Training Highlights

The expectations of the participants were in line with the objectives of the training course. Primarily, participants desired to learn new ways to interact more effectively with livestock owners that allowed them to have a better understanding of the disease situation in the region.

Time was spent discussing the types of participation and how participation benefits development. Ultimately, participation was defined as the empowerment of community members to identify and solve their own problems. The workshop participants were asked to identify projects and discuss to what extent they were participatory and how this affected project impact and the sustainability of outputs. It was noted that many projects prior to decentralization lacked local input and were essentially imposed from the outside. PACE was identified by the participants as a programme where neither livestock owners nor veterinary service providers were consulted in the design.

It was explained that PRA did not make use of questionnaires and that forms were not usually a major concern in PDS. It was explained that PDS used a checklist of issues

to be covered in interviews. This is to allow enough flexibility for respondents to introduce topics and needs that the PRA team may not have anticipated. This process is often referred to as discovery. It was also explained that PRA approaches were largely built upon a shared learning experience (co-learning) between both the PRA team and the respondents as opposed to 'obtaining' or 'extracting' information.

The PDS interview begins with the interviewer asking an open-ended question about the disease problems currently occurring in the community. In response to this question, the informants usually list and describe a number of problems. Once the problems are adequately identified, two proportional piling exercises are completed.

The first asks the respondents to indicate the relative importance (overall impact) of the diseases they have mentioned. The second piling exercise asks the respondents to indicate the relative prevalence (frequency) of the diseases. Thus, each interview establishes the disease priorities of the communities. This process gives the informants opportunities to mention RP without the interviewer asking leading questions.

The interview locations included communities in the Matheniko, Bokora and Tepeth areas. The Matheniko and Bokora interviews were conducted in homestead areas. One workshop group volunteered to complete follow-up interviews in remote Tepeth communities on Mount Moroto. This group noted that the quality of information improved as they reached more remote areas. They also interviewed the youth and found that they were able to describe all the major diseases and important category of key informants. Upon sharing their experience with the workshop, the participants realized that they needed to penetrate deeper into the Karamojong grazing areas to obtain the best quality intelligence. This led to a discussion on best approaches to accessing remote grazing areas in the mountains and swamps.

A total of 16 animal health professionals participated in the workshop. One female and three male veterinarians from the local community were trained as part of the

PDS course. Women have important roles in livestock keeping in Karamoja and are often the first to recognize disease. It is suggested that the veterinary services and projects active in Uganda seeks ways to further increase the participation of women and local communities in the provision of services.

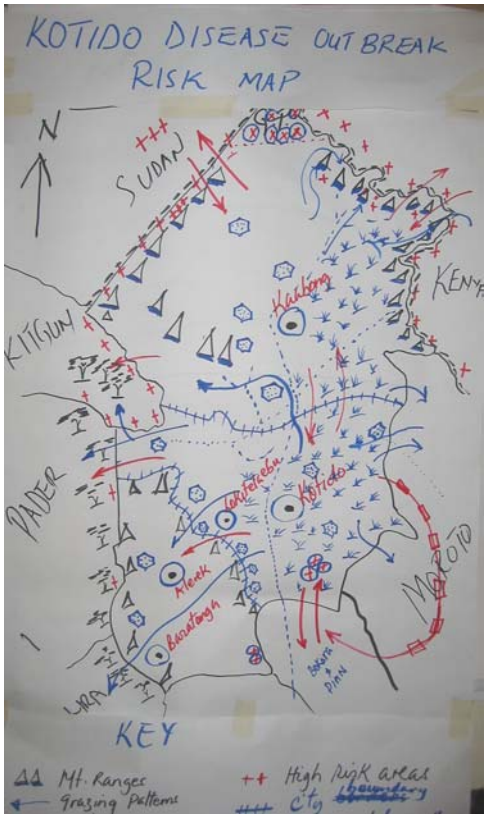
It was apparent from the interviews that the meaning of the

Karamojong term for RP (*loleoo*) was evolving over time. At the time of workshop, respondents were using the term *loleoo* to refer to both historical rinderpest and non-specific diarrhoea. Respondents could clearly distinguish between true RP and non-specific diarrhoea, so this did not pose a problem for PDS. The trainees were very much aware that they needed to probe the term *loleoo* whenever it is mentioned by the farmers to find out how they were using the term. Also, the technique of matrix scoring was found to be useful for distinguishing between the uses of *loleoo* and other conditions compatible with a diagnosis of stomatitis-enteritis. The workshop participants were using the terms 'old' *loleoo* and 'new' *loleoo* in classroom discussions to distinguish between the two uses of the term. No reports of current RP cases (old *loleoo*) were received during the field activities of the workshop.

Field Programme

The workshop participants were asked to draw up work plans for their field assignments. One field team per district was formed. The process of developing work plans was broken down into a three step process:

1. Preparation of risk maps by district.
2. Preparation of technical work plans
3. Identification of resource needs and budgets



The risk maps indicated livestock populations, movements and service delivery issues. Participants were asked to identify key grazing areas and environmental features that made access difficult.

The work plans produced by the groups began by prioritizing epidemiologically high risk areas for disease searching utilizing the maps. The initial plans identified areas as starting points for the surveillance. The nature of PDS as a searching or hunting activity (rather than a systematic survey approach) was re-iterated. Thereafter, strategies for developing a mixture of interview session with different key informant groups were discussed in relation to the field plans.

The workshop discussed how they should report the results of their field assignments and a core report outline was agreed upon. It was agreed that other information could be provided in the report, but that this core framework would be followed to insure that the main objectives will be adequately addressed.

Realistic budgets were prepared using standardized per diem rates for Uganda. It was apparent that transport was a major constraint. Kotido District did not have a functional vehicle and Moroto and Nakapiripirit Districts had a single vehicle each in a poor state of repair.

The participants were provided with an interview reporting form to record a very limited number of key points from each interview. The form (Annex III) is less than one page long and is to facilitate the collation of information for reporting to the Office International des Epizooties relative to the RP pathway. The form is to be completed after the interview.

Review of the CBPP Proposal

A proposal was submitted to CAPE by the DVO Kotido to conduct an impact assessment on CBPP in Karamoja and was reviewed by the facilitator. In general, the proposal was highly relevant and has good potential. The proposal included a questionnaire survey and support for a number of enumerator. Upon completion of the workshop, the DVO expressed a desire to revise the proposal by removing the questionnaire component and including more PE activities. The proposal included considerable background on the theory and use of PE, but lacked specific detail such as the key hypothesis to be investigated, the checklist proposed and the type of participatory exercises that would be conducted. The DVO Kotido agreed to up date the proposal with more specifics. It was agreed that about 90 interviews would be required and that the budget would be adjusted accordingly. The proposal included 5,000,000 Uganda shillings for the repair of the district vehicle. It was pointed out that this proposal was a larger research proposal than those CAPE typically funded. It was suggested that the repair of the vehicle should be considered by PACE/Uganda.

Conclusion

The workshop participants were active and did an excellent job mastering the material. They are adequately prepared for the field assignment phase of the PDS training programme. There will be transport constraints unless this can be addressed by PACE/Uganda. A target data of early May, 2004 was set for the PDS training of trainers workshop. Only those who have completed the field assignment will be able to attend that course and be accredited as trainers in PDS.

Beyond validating the current RP situation in Karamoja, the PDS programme will generate a significant amount of information on livestock owner needs and priorities. In the consultant's opinion this is the core of the 'participatory' component of PDS. Surveillance has been defined in the textbooks as 'information for action.' Decision-makers will need to utilize the information on livestock owner priorities to refine animal health policy and appropriately target interventions to meet the needs of Karamojong livestock owners.

Trainees relaxing between sessions

Participants present mapping exercises

Annex I: Moroto PDS Workshop Programme

Day	Time	Session Title	Preparation
Day 1	8:30 AM	Official Opening and Breakfast	
	12:00 AM	Introductions	
	12:30 AM	Participant Expectations	What do you hope to obtain from this training course?
	1:00 PM	Discussion: Participation in Animal Health	Methods on the Move: pp 8 and 9
	2:00 PM	Prayer Break	
	2:30 PM	Community-based and Participatory Programmes in Disease Surveillance	
	3:00 PM	What do we mean by a community?	Methods on the Move: pp 7
	3:30 AM	Existing Veterinary Knowledge	Be prepared to provide examples of local knowledge
	4:00 PM	Formation of Working Groups	

Day	Time	Session Title	Preparation
Day 2	8:30 AM	Reading Discussion	
	8:45 AM	Presentation: Participatory Epidemiology	
	10:00 AM	Breakfast	
	10:30 AM	PE Tools 1: Interviewing, Ranking and Scoring Techniques	
	12:00 AM	Tea Break	
	12:30 AM	PE Tools 2: Visualization Techniques – Mapping and Venn diagrams	
	3:00 PM	Analysis and Validation of Results	
	4:00 PM	End of Day 2	Reading for Day 3: Methods on the Move: read pp 47-57, skim 57-82.

Day	Time	Session Title	Preparation
Day 3	8:30 AM	Reading Discussion	
	8:45 AM	PDS I	
	10:00 AM	Breakfast	
	10:30 AM	PDS II	
	12:00 AM	Tea Break	
	12:30 AM	PDS III	
	3:00 PM	Investigating Stomatitis-Enteritis Events	
	4:00 PM	End of Day 3	Reading for day 4-6: Participatory Epidemiology Manual

Day	Time	Session Title	Preparation
Day 4	7:00 AM	Practical Field Exercises PDS interviews with proportional piling	
	1:00 PM	Group reports and discussion	10 minute presentations by each group
Day 5	7:00 AM	Practical Field Exercises PDS interviews with proportional piling and mapping	
	3:00 PM	Group reports and discussion	
Day 6	7:00 AM	Practical Field Exercises PDS interviews with proportional piling and mapping	
	3:00 PM	Group reports and discussion	10 minute presentations by each group

Day 7	8:30 AM	presentation of PDS Work Plans by State Working Groups
	10:00 AM	Breakfast Break
	10:30 AM	Group Discussion
	1:00 PM	End of Session

Core Reading

1. Catley, A. Participatory Approaches to Veterinary Epidemiology: Methods on the Move Catley, A. London: Sustainable Agriculture and Rural Livelihoods Programme, IIED; 1999.

2. Mariner, J. C. Manual on Participatory Epidemiology. Rome: Food and Agriculture Organisation; 2000.

Supplemental Reading

1. Catley, A. The use of participatory appraisal by veterinarians in Africa. Rev Sci Tech. 2000 Dec; 19(3):702-14.

2. Catley A. ; Irungu, P.; Simiyu, K.; Dadye, J.; Mwakio, W.; Kiragu, J., and Nyamwaro, S. O. Participatory investigations of bovine trypanosomiasis in Tana River District, Kenya. Medical and Veterinary Entomology. 2002; 161-12.

3. Catley, A.; Okoth, S.; Osman, J.; Fison T. ; Njiru, Z.; Mwangi, J.; Jones, B. A., and Leyland, T. J. Participatory diagnosis of a chronic wasting disease in cattle in southern Sudan. Preventive Veterinary Medicine. 2001; 51161-181.

4. Catley, A.; Osman, J.; Mawien C. ; Jones B.A. , and Leyland T.J. Participatory analysis of seasonal incidences of diseases of cattle, disease vectors and rainfall in southern Sudan. Preventive Veterinary Medicine. 2002; 53275-284.

Annex II: PDS Checklist

Checklist for a Participatory Disease Search

Avoid mentioning diseases by name before the livestock owners do.

1. Introduce the appraisal team as an animal health appraisal.
2. Ask the respondents to introduce themselves.
3. Ask what types of livestock they own.
4. Ask about their main grazing locations (mapping) and contact with other regions.
5. What are disease problems in their animals?
   If tearing or diarrhoea (SE) is mentioned, explore these syndromes in detail.
6. Ask them to rank the five most important diseases and then conduct a proportional piling exercise on those five diseases.
7. Historically, what are the most important disease problems?
   Invariably rinderpest is mentioned in the response to this question if the cattle owners have experienced outbreaks in the last two decades. Frequently it will be the first disease mentioned.
8. Ask if there are any disease problems that show any of the signs of SE.
9. Have they personally seen rinderpest in their lifetimes? What does it look like?
10. When was the last time their cattle where affected by rinderpest? Where? Where did it come from?

Ask probing question when the target disease is volunteered by the respondents. These questions are intended to cross check reports made in other interviews, further define cattle movements which may affect the epidemiology of the disease (mapping), or to contrast current outbreaks with previous outbreaks in regard to the severity of disease. Probing questions can also be used to identify risk or predisposing factors for disease.

Notes should be taken during the interview. Reporting pro formas should be completed immediately after the interview, but not during. Only those disease mentioned in response to the indirect question (1 to 8) should be recorded on the data forms. Responses to items 8 and 9 should be recorded in the notes and reported. However, as the questions are leading, the information obtained should not be entered in the database.

Annex III: Interview Record

		Record No.	
District:	Location:		
Date:	Interview Team:		
Number of Participants:	Name of Elder:		
Latitude:	Longitude:		
Ethnic Group:			
Contact with other regions:			
❑ public vet service	❑ sedentary		
❑ private vet service	❑ transhumant		
❑ informal healers			

Livestock Disease Scoring

Traditional Name	English Name	Prevalence	Importance

Rinderpest

Traditional Name:

Date of last outbreak: Species affected:

Symptoms described:

Description of outbreak:

❑ Cases present Pen-side test result:

❑ Samples collected:

Stomatitis-Enteritis Description Traditional Name:

Date of last outbreak: Species affected:

Symptoms described:

Description of outbreak:

❑ Cases present pen-side test result:

❑ Samples collected: