

**Community Animal Health and participatory  
Epidemiology Unit**

**Rinderpest Participatory Disease Searching in  
Sudan**

Workshop report

Malakal, Sudan March 8-13, 2004

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## SUMMARY

Rinderpest (RP) Participatory Disease Searching (PDS) is the application of Participatory Rural Appraisal (PRA) approaches and methods to the search for outbreaks of rinderpest. It is a form of active disease surveillance designed to locate current disease events and to understand the epidemiological history of the target disease in a specific community. PDS makes use of indigenous animal health knowledge as a source of disease reports and intelligence. When used as an integral part of a surveillance system, it increases the sensitivity, timeliness and representativeness.

Sudan has joined the OIE Pathway through zonal declaration of provisional freedom from rinderpest. Strong disease reporting and active disease search need to be initiated and maintained. Currently Kenya and Somalia are implementing PDS in specified high-risk areas as an integral part of a comprehensive surveillance system. The systems in the two countries are generating invaluable data on the epidemiology of mild rinderpest, a clear indication that PDS has increased the sensitivity, timeliness and representativeness of the surveillance systems.

A similar initiative was started in the Sudan in September 2003 when a course on PDS was conducted for 16 veterinarians at El Obeid. Thereafter, the trained veterinarians practiced PDS in the field before undertaking a training of trainers (TOT) course in PDS in December 2003. One of the recommendations of the TOT course was that a select number of the trainees implement PDS training for veterinarians working in the surveillance zone of the country. In order to enrich the training programme, a consultancy mission that would share experiences of both PDS field implementation and training was deemed necessary, hence the objective of this consultancy. The specific objectives of the backstopping mission were to:

- Assist in the preparation of the training program
- Backstop the PDS as a resource person

Prior to the training, the consultant established e-mail communication with the PDS training coordinator for PACE Sudan, Dr. Mardi Osman through which matters pertaining to content of the course and training programme were discussed. On arrival in Khartoum, these matters were further discussed and necessary adjustments that included the timing of the programme made. The latter meant reducing the number of days allocated to fieldwork by one to accommodate the delay in starting the workshop.

Administrative and logistical matters both in Khartoum and at the workshop venue were skillfully managed by Mr. Knight Tunis, save for the few that were beyond control.

Three TOT graduates from the PDS TOT course held in El Gedarrif in December 2003 were the local resource persons for this workshop. The three were Drs. Mardi Osman from the Disease Reporting and Information Unit/ Course Coordinator (Khartoum), Abdulrahim from the Monitoring and Evaluation Unit (Khartoum) and Onwar Odeny from FAO (Malkal field office).

A day before the training began, the consultant held a meeting with the three resource persons during which the following three points were discussed:

- The kind of guidance the local resource persons were expecting from the consultant

- The type of responsibilities they were expected to have
- What the consultant expected of them.

Further discussions with resource persons as a group or individually where necessary centered on:

- The overall programme and the timing of sessions
- The basic principles, process and methods that we hoped to impact on the trainees
- Trainers' team meetings to review what went well and what could have been done better.

Overall, the training operated on the basic principle of constructive contribution during each other's sessions by mentioning at the end of the session any additional learning points that the session coordinator might have missed.

## **TRAINING HIGHLIGHTS**

Ten (10) participants selected from 5 states as follows attended the training workshop: Bahar El Jabel (2), Unity (2), East Equatoria (1), Upper Nile (3), and Headquarter/ Khartoum (2). Fifteen participants would have been better number for the training and to make optimal use of resources. Nonetheless, the 10 participants were very carefully selected and highly motivated as evidenced by their expectations that were in line with workshop objectives, and right through the training process itself.

### **Participants' expectations**

1. Learn new approach to manage diseases
2. New knowledge on how to approach communities to understand disease outbreaks
3. To get to know prevalent diseases in a given area
4. Use of seasonal calendars
5. Disease mapping
6. To know the local names of diseases
7. To attain new knowledge and technologies in order to impact on pastoralists
8. To understand how to control disease outbreaks
9. Get the necessary knowledge to work with pastoralist communities
10. How to carry out a disease survey using PDS
11. To get new ideas
12. To improve disease search skills
13. To get an update on endemic diseases in specific areas
14. Be more able to identify community priorities concerning livestock diseases
15. Be able to understand local veterinary knowledge
16. To conduct scientific research on epizootic diseases in the area
17. An opportunity for vets to share knowledge
18. To enhance my knowledge in PDS
19. To know the role of local pastoral communities in projects
20. To know enough about PDS and how it can be utilized in disease surveillance
21. To know the experiences of other participants

### **Fears**

1. Time
2. Fieldwork fails due to lack of cooperation from pastoralists
3. Language barrier
4. Imbalance between theory and field practice
5. Other participants may not arrive
6. Insecurity
7. Lack of method for communicating PDS

The resource persons were well prepared and handled their assignments well. Due to language barrier (was listed as a fear, therefore the issue had to be addressed), both English and Arabic were used.

At the request of the local resource persons, the topics “Analysis of the current surveillance system” and “PDS and the concept of veterinary detective” were presented by the consultant. The former topic analyzed the existing surveillance system on the basis of indicators for effective surveillance and identified existing gaps and therefore the potential role of PDS as an integral component of a comprehensive surveillance system. The topic “PDS and the concept of veterinary detective” was taught using the treasure hunt whereby rinderpest was the treasure to be hunted. The exercise was used to show the difference between PDS and conventional surveys, and again how PDS can complement conventional surveillance systems. From the consultant’s experience, these topics need to be well understood to avoid the common notion that PDS is meant to replace conventional surveillance methods and approaches. As a result, considerable time was spent on the topics for the benefit of both the trainees and local resource persons and at the end of it all, there was no doubt that the topics had been well understood. The resource persons expressed satisfaction and were therefore ready to handle the topics on their own in future training workshops.

Specific techniques in PDS, namely: Semi-structured interviewing, proportional piling and participatory mapping were well handled, however, more emphasis is needed to concretize the fact that they are at the core of PDS implementation.

For reasons given elsewhere in this report, PDS field practice was carried out for two days only. This is not enough time to enable the trainees practice all the PDS techniques with real informants not to mention being able to respond to real disease situations. Three to four days during which mornings are spent in the field and afternoons in class discussing the fieldwork would be more appropriate.

PDS field practice is not just about practicing the PDS techniques learnt in class, but being ready to combine those techniques with conventional epidemiological data gathering and investigation methods including sample taking, as the situation may dictate. Unfortunately, no sampling equipment was provided for the field practice. This shortcoming was discussed with the trainers and I am sure it will not be repeated in future trainings.

## WAY FORWARD

As a way forward, participants discussed and agreed on the following:

1. Participants were divided into 3 groups on the basis of where they work in order to map out rinderpest high-risk areas within the surveillance zone of the Government controlled areas of the country. Later a combined map was produced (see high-risk areas).
2. From a total of 25 persons so far trained in PDS, up to 9 teams inclusive of a back-up one were to be formed to implement PDS in the identified high-risk areas.
3. On the basis of rainfall seasons and therefore accessibility by road, the ideal times for field PDS implementation were set at March-April, July-August, and November-December. However, this is may vary across the different states.
4. There is great need for coordination and where possible harmonization of activities with the Southern sector.
5. PDS results to be reported according to the format prepared during the El Obeid training workshop of September 2003. The outputs would validate the rinderpest situation in the country and generate useful information on pastoral/ farmer needs and priorities, epizootic diseases prevalence, risk assessment for RP and refine random sero-surveys plans among others.
6. Train more veterinary personnel working in the RP surveillance zone on PDS, and at the same time train those in the disease free zone on general PE.

In the consultant's view, if 3 successive PDS missions are implemented (by end of December 2004?) and no disease is detected, a purposive sero-survey could be carried out in the same high-risk areas.

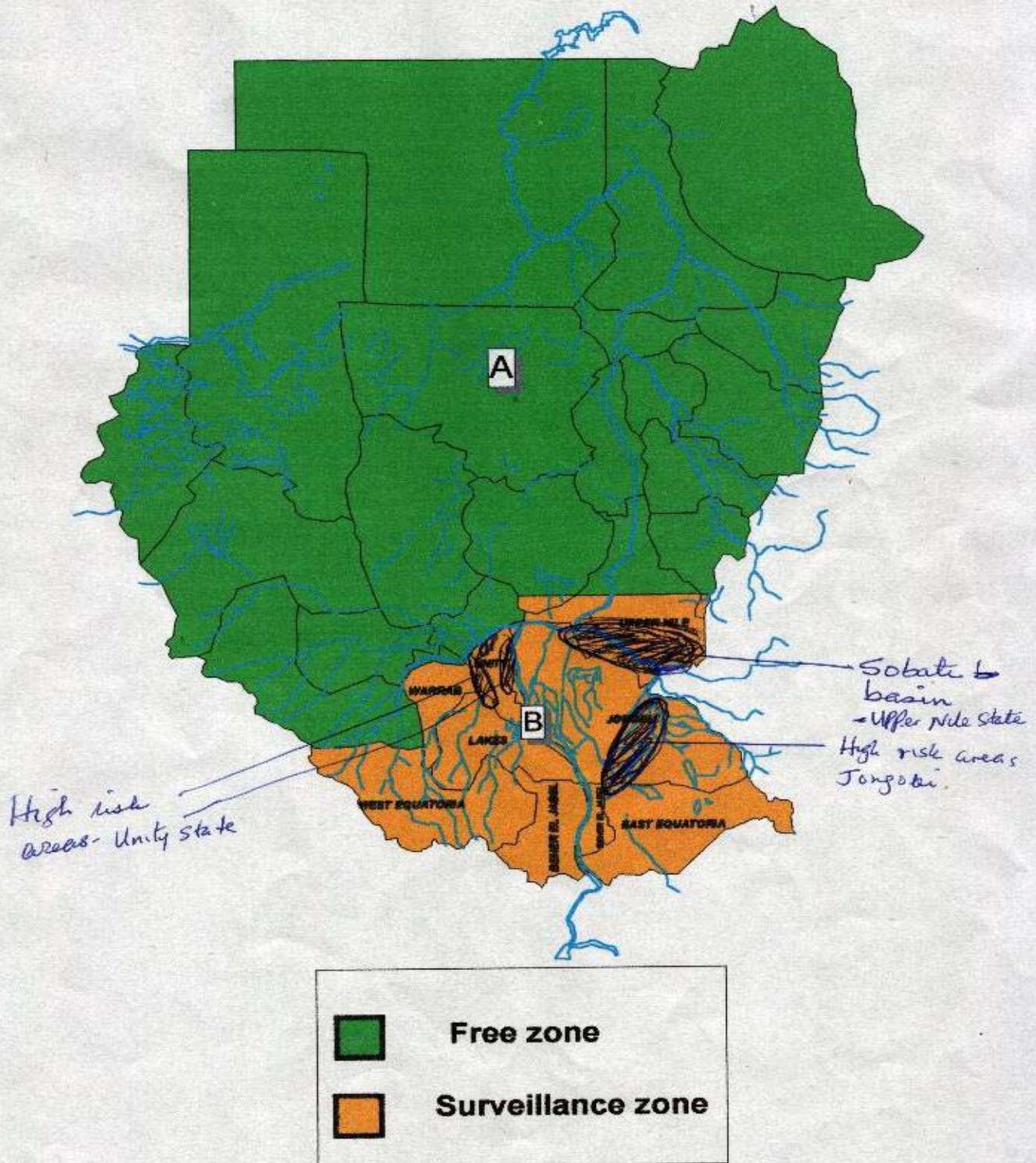
The processing and dissemination of surveillance data, PDS included needs to be streamlined at the Headquarters. It was not clear as to who does what.

## ITINERARY

- 3.3.2004 Traveled from Nairobi to Khartoum and was met by Dr. Mardi Osman
- 4.3.2004. Morning- Early afternoon: Visited PACE Sudan and held discussions with Drs. Wilfried Hartwig (Technical assistant- Sudan), Abdul Razig (Deputy PACE Coordinator/ Head of Epizootic diseases control), and Mardi Osman (PDS Training Coordinator/ leader disease information and reporting unit). Learned that due to logistical problems, the training could not start on the 6<sup>th</sup> of March as earlier planned, instead it had been re-scheduled for the 8<sup>th</sup> of March 2004.
- Evening: Was privileged to meet the Undersecretary for Ministry Agriculture and Animal Resources Dr. Hassan Mustafa, the Director-General of Animal Health and Epizootic Diseases Control Dr. Bashir, the visiting Head of GTZ International Services Dr. Manfred among others.
- 5-6.3.2004 Worked on logistical issues that included getting Government clearance to travel to Malkal in the South, the venue for the training workshop).
- 7.6.2004 Left Khartoum for Malkal by air with some of the workshop participants
- 8-13.3.2004 Conducted PDS training workshop in Malkal. See Timetable in annex for details.
- 14.3.2004 Flew back to Khartoum
- 15.3.2004 Held a short debriefing session with Drs. Hartwig and Abdul Raziq and an appointment was made wiith Dr Bashir for a main debriefing session the following day at 1.00 PM.
- With the assistance of Dr. Tim Leyland, my travel itinerary was changed, thus enabling me to travel from Khartoum directly to Addis Ababa. This became necessary because of the extra days I had spent in Sudan.
- 16.3.2004 Held a debriefing session at Dr. Bashir's office. The following were present: Drs. Bashir, Abdul Raziq, Ismail, Hartwig, Osman and Abdulrahim.
- Shortly thereafter, I had a similar (though shorter) debriefing session with the Undersecretary, Dr. Hassan Mustafa in his office.
- 17.3.2004 Left Khartoum for Addis Ababa

# Rinderpest Sudan strategy 2003

Areas Identified as high-risk  
during PBS training workshop  
held in Malkal, upper Nile state 8-13<sup>th</sup> March 2004.



## MALAKAL PDS WORKSHOP PROGRAMME 8-15 MARCH 2004

TIME	SESSION
<b>Day 1</b>	
9.00 am	Opening ceremony
10.00 am	Breakfast
11.00 am	Introduction
11.20 am	Expectations and fears
12.20 pm	What is community participation
1.40 pm	Break
2.00 pm	Why is participation important
2.45 pm	Importance of ethno-veterinary knowledge
<b>Day 2</b>	
9.00 am	What is PRA, PE and PDS?
9.40 am	What is triangulation
10.00 am	Attitudes and behaviour; Non-verbal communication
11.00 am	Breakfast
11.45 am	Results
12.10 pm	Managing ourselves
12.23 pm	Managing groups
1.00 pm	Break
1.30 pm	Handling dominant talkers
2.00 pm	Rinderpest eradication strategy; analysis of surveillance system in Sudan – SWOT analysis, PDS versus surveys, what is the difference
<b>Day 3</b>	
9.00 am	Introduction to PDS methods
10.00 am	Breakfast
10.30 am	SSI
12.00	Proportional piling
1.00 pm	Break
1.30 pm	Participatory mapping
<b>Day 4</b>	PDS field practice
<b>Day 5</b>	PDS field practice
<b>Day 6</b>	PDS implementation in relation to identification of risk areas, logistical support, sampling kits. Workshop evaluation and closing

## **READING MATERIAL GIVEN**

1. Methods on the Move: A review of veterinary uses of participatory approaches and methods focusing on experiences in dryland Africa
2. Manual on Participatory Epidemiology: Methods for the collection of action-oriented epidemiological intelligence (FAO Manual)
3. Handouts
  - Why is participation important?
  - Seven types of participation
  - Notes on attitudes and behaviour in participatory epidemiology
  - Participatory epidemiology and participatory disease searching: what is the difference?
  - A methodology for rinderpest participatory disease searching
  - Participatory disease searching versus surveys: what is the difference?
  - Triangulation in participatory disease searching
  - Working as a team when using participatory methods
  - Indicators of effective surveillance
  - Summary guidelines for semi-structured interviews
  - Participatory mapping
  - Proportional piling

## **REFERENCES**

1. Recommended procedures for disease and serological surveillance as part of the global rinderpest eradication program (GREP)- FAO-IAEA manual