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Water and Rural Development  
\*\*\*\*  
Directorate of Veterinary Services  
\*\*\*  
NOREESP-ONDANGWA

Ambassade de France en  
NAMIBIE  
WINDHOEK  
Service de Coopération et  
d'Action Culturelle

# MISSION IN SUPPORT OF TRAINING IN ANIMAL DISEASE EPIDEMIOLOGICAL SURVEILLANCE

North-Central District - NAMIBIA

**Report on the mission  
From 8 to 15 October 2000**

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## SUMMARY

This one-week mission in support of animal disease epidemiological surveillance training for staff from the **Epidemiological Information System (EIS) in North-Central District, Namibia**, provided an opportunity to test a **highly participatory teaching method**, centring on the realities of everyday work, continuous assessment and practical work.

The training week concentrated on the **organizational aspects of the system** and on techniques **for meetings and training**. The consultants also provided guidance on compiling and producing a training handbook.

Three types of assessment were introduced during the session:

- Continuous daily assessment through recap questionnaires,
- Assessment of participants by training staff,
- Assessment of the session by the participants, showing a high level of satisfaction.

An evaluation of the teaching support provided revealed a certain number of improvements that could be made to the training programme, notably concerning the use of forms (Community Visit Form - CVF, in particular), meetings with livestock farmers, and training techniques.

In the next section, the consultants make their **comments and recommendations**, primarily concerning:

- ⇒ Close, regular monitoring of field activities,
- ⇒ The supervisory role of CAHI and AHI,
- ⇒ The organization of monthly meetings and regular training sessions,
- ⇒ The introduction of a training plan, with increased human resources,
- ⇒ Priority diseases,
- ⇒ Zoonoses,
- ⇒ An organization chart of the system,
- ⇒ Logistical problems,
- ⇒ Communication aspects,
- ⇒ Laboratory support of the EIS,
- ⇒ Stepping up the system's field operations,
- ⇒ Performance indicators.

In the final section, the consultants present the future prospects:

- In the public sector:  
With the opportunity of organizing a workshop on «**epidemiological surveillance methods**», aimed at senior staff from Namibia and the sub-region,



- In the private sector:  
By training **stakeholders from the private sector**: butchers, CAHA, producers.

The conclusion of the report stresses:

- The **major role of the system in improving the zoosanitary situation and public health,**
- The need to **raise the general level of staff training and provide ongoing training,**
- The need to **provide farmers with feedback so as to boost their motivation and win their confidence.**



## ACRONYMS

AET	:	Agriculture Extension Technician
AHI	:	Animal Health Inspector
CAHA	:	Community Animal Health Agent
CAHI	:	Chief Animal Health Inspector
CIRAD-EMVT	:	Centre de Coopération Internationale en Recherche Agronomique pour le Développement - Animal Production and Veterinary Medicine Department
CVF	:	Community Visit Form
DEES	:	Directorate of Extension and Engineering Services
DVS	:	Directorate of Veterinary Services
EIS	:	Epidemiological Information System
NOREESP	:	Northern Research Extension and Epidemiosurveillance Support Project
SIA	:	Stock Inspection Assistant
SF	:	Suspicion Form
SV	:	State Veterinarian



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## **1 - INTRODUCTION**

Under the NOREESP project, there was an initial mission by Pascal HENDRIKX (CIRAD-EMVT) in April 2000 to provide support for organization of the Epidemiological Information System (EIS) in northern central Namibia. A request was made during the mission for support in training the system's field staff (see Terms of Reference in **Annex 1**). Data were gathered during this first mission on the sanitary situation and institutional environment, providing CIRAD-EMVT with the necessary background information.

The training support covered in this report was provided in two stages. The first, in September 2000, involved support in preparing the training session (programme and teaching methods). The second, in October 2000, was intended to support its implementation (specific contributions, assessment, teaching materials).

## **2 – MISSION PROGRAMME**

### **Saturday 7 October 2000:**

- Departure from Montpellier in late evening
- Departure from Paris Charles de Gaulle at 11 pm  
International flights Paris/Johannesburg/Windhoek

### **Sunday 8 October 2000:**

- Arrival in Windhoek at 2:30 pm
- Met at the airport by Dr Flavie GOUTARD
- Travel by car Windhoek/Oshakati
- Arrival in Oshakati at 11 pm
- Met by Dr Ludovic LARBODIERE

### **Monday 9 to Friday 13 October included:**

- Training session for staff from the Epidemiological Information System (EIS) in Ondwanga (cf. detailed programme, **Annex 4**)
- Writing up of an aide-mémoire
- Meeting with Dr Patrick RAIMBAULT (project 7 ACP-RPR.146 Lubango EU Angola)
- Summing up meeting with Dr MUSILIKA (SV Ondwanga)

### **Saturday 14 October 2000:**

- Travel by car Oshakati/Windhoek.

### **Sunday 15 October 2000:**

- Summing up meeting in Windhoek with Dr J. SHAW, Director of Veterinary Services in Namibia, Mr T. DAUPLAIS, French technical cooperation assistant, and Drs L. LARBODIERE and Flavie GOUTARD from NOREESP.

- Departure from Windhoek at 2 pm: international flights Windhoek/Johannesburg/Paris CDG.

### **Monday 16 October 2000:**

- Arrival at Paris CDG at 6:30 am and in Montpellier in late morning.

## **3 - PEOPLE MET**

### **➤ Ministry of Agriculture, Water and Rural Development**

- ⇒ **Dr John SHAW** : Director of Veterinary Services in Namibia (Windhoek)
- ⇒ **Drs Tina MUSILIKA and NATANGWE AMUTHENU**: SV Ondwanga DVS
- ⇒ **Mr Thierry DAUPLAIS**: Extension advisor – French rural development project coordinator (Windhoek), French technical cooperation assistant
- ⇒ **Drs Ludovic LARBODIERE and Flavie GOUTARD**: NOREESP project - Ondwanga DVS – French technical cooperation assistants
- ⇒ **21 participants** in the training course (AHI, SIA North-Central District, Namibia)

### **➤ European Union project – 7 ACP-RPR.146 Lubango (Angola)**

- ⇒ **Dr Patrick RAIMBAULT**

## **4 – TEACHING SUPPORT FOR PROGRAMME PREPARATION**

### **4-1. Methods**

The programme preparation phase involved the following:

- internal meetings at CIRAD-EMVT between epidemiology and training specialists,
- telephone discussions with the NOREESP project,
- exchanges of information via e-mail.

Based on an initial draft training programme suggested by the NOREESP project (**Annex 2**), a **proposal** was drawn up by CIRAD-EMVT (**Annex 3**) detailing, for each session:

- ⇒ its objectives
- ⇒ its duration
- ⇒ broad outlines of content,
- ⇒ the course leadership and teaching techniques to be used.

Based on these proposals, the NOREESP project consulted its partners from the Namibian veterinary services with a view to drawing up the **final training programme (Annex 4)**.



## 4-2. Outlines

### **Participatory techniques:**

The target “audience” comprised adults with varying levels of qualifications, and numerous participants learnt their skills “on the job”. These two factors led us to opt for participatory techniques that meant pooling knowledge and personal experiences, followed by validation by the trainer, rather than theoretical lessons led by the supervisor.

### **Attachment to the realities of the participants’ work:**

The course fitted into an institutional context in which major changes are likely to occur in the posts and tasks of the participants. It was thus essential to tailor the programme to the realities of their work. To this end, there were sessions enabling an analysis of their idea of epidemiological surveillance and the issues at stake, and their assessment of the system in which they have been working up to now, at the start of the course. Along the same lines, there were sessions enabling participants to obtain precise answers concerning the operating methods and practical organization of the new system.

### **Continuous assessment:**

Particular attention was paid to continuous assessment of the participants’ progress. To this end, there were recap questionnaires at the start of each day, enabling the participants to ask questions about what they had not understood the previous day. During these sessions, trainers were able to measure the extent to which the lessons taught the previous day had been taken on board, and to clarify things if necessary.

### **Practical work:**

The quality of sampling by field staff is one of the factors governing the efficacy of surveillance systems. A large part of the course was therefore given over to practical work, taking care to ensure that each participant had a chance to practice the technique at least once, and that only the equipment provided on the course was used.

## 4-3. Results

The programme covered two weeks. The first centred on a presentation of the EIS, the surveillance protocols for priority diseases, and sampling techniques. It used only staff available nationally, with two types of target audience:

- ⇒ AHI and SIA (veterinary service staff), who work for the system in the field and attended the whole of the course;
- ⇒ AET, who attended only the first week. They were included in the course so as to foster operational coordination with them (they all have access to a vehicle).

Close monitoring of the number and type of operations conducted in conjunction with AET should show whether the decision to combine these two types of audience was indeed beneficial.



The second week centred on **organizational aspects of the system (use of forms, organizing activities, etc) and on techniques for meetings and training**. It included specific contributions by CIRAD-EMVT.

## 5 - SUPPORT FOR IMPLEMENTATION

CIRAD-EMVT was involved throughout the second week of training, during which it was able to:

- make **specific contributions regarding the organization of meetings** with livestock farmers and training of field staff;
- provide **support for the compilation and production of a training handbook**;
- **organize the assessment of the course**;
- provide support wherever necessary, at the request of the participants, **by explaining or clarifying certain concepts**.

### 5 -1. Specific contributions

The initial objectives, which were to pass on skills for planning and organizing meetings with farmers or training courses, had to be revised to take account of the level of the participants. The theoretical contributions initially planned were abandoned in favour of **group work**, during which the participants decided on how to organize and plan the content of the meetings and training courses they will be required to conduct in the field.

Significant efforts were made concerning the **main two types of meetings with farmers: regular community visits and meetings in the event of a disease outbreak**. For each type, a sheet to help with organizing and leading such meetings was drawn up collectively.

To look at how to lead such meetings, a **meeting was then simulated**. So as to stick as closely as possible to field conditions and to take account of the fact that certain participants did not speak English very well, it was conducted in Oshiwambo. The final analysis of the session, with the participants, led to several main recommendations concerning how to lead meetings, stressing the importance of:

- setting clear, precise and realistic targets for the meeting and explaining them at the outset;
- having a good grasp of the subject of the meeting;
- preparing the running and leadership of the meeting sufficiently (aide-mémoire).

However, the work on training field teams was more superficial. In fact, the distribution of tasks and posts amongst the different field stakeholders in the system (butchers, CAHA, field team members, SIA and trained AHI) was not sufficiently clear at the time of the course to enable the definition of the team member training programme to be used as the basis for training course leaders. Moreover, we felt that most of the participants were not of a sufficiently high level to act as trainers. This job should be given to AHI, and if possible, at least to begin with, supervised by State Veterinarians.

## 5-2. Production of teaching materials

A large amount of top-quality work had been done beforehand by the NOREESP project team on building up a documentary base for the **future training handbook**. CIRAD supported this work by producing additional teaching material (see **Annex 5**) illustrating its specific contributions or some of the aspects on which it had to provide clarification, and by designing the overall layout of the handbook (see contents in **Annex 6**).

## 5-3. Assessment

Three types of assessments were established during the course.

Continuous daily assessment through recap questionnaires (see above), enabling a day-to-day check on whether what had been taught had indeed been taken on board, and providing the necessary additional information to fill in any gaps for certain participants. These sessions went well and were greatly appreciated by the participants.

Assessment of the participants by the trainers, concerning to what extent they had grasped the main ideas. This assessment was informal, through group work based on questions posed by the supervisors (see list in **Annex 7**). This session demonstrated that all the topics covered had been grasped well, except the use of forms.

Assessment of the course by the participants, based on the questionnaire provided. The analysis of the results (details of which are given in **Annex 8**) revealed a very high level of satisfaction (17.5/20).

The most popular sessions were:

- ⇒ the study of priority diseases (*quoted 7 times*)
- ⇒ organization of meetings with farmers (*quoted 5 times*)
- ⇒ presentation of the EIS (*quoted 5 times*)
- ⇒ practical sampling work (*quoted 5 times*).

**The aspect deemed hardest to understand was:**

- ⇒ **the use of forms** (*quoted 15 times*).

The participants' expectations concerning other study topics following on from this course centred on increasing their knowledge of epidemiological surveillance and parasite-borne diseases, and of animal health (obstetrics, diseases, etc). To maintain their motivation, it would be wise to take these requests into account when drawing up the next training programme for them.



## 6. ASSESSMENT OF TRAINING SUPPORT

The assessments conducted revealed a certain number of possible improvements to the training programme.

### 6-1. Use of forms:

It transpired at the end of the course that many participants were still having considerable problems filling out certain forms, particularly the *Community Visit Form (CVF)*.

These problems result from their complexity:

- numerous data have to be recorded within a small space;
  - the forms are in English, which some participants speak poorly;
  - some information or opinions have to be supplied by the agent himself, while others have to be collected from an official source (village elder) or all those at the meeting, and it is not made very clear to the agent what is the relevant source of information for any particular question.
- Close monitoring of this aspect of the agents' work in the field should help both to re-explain to each agent how to fill out each type of form, and to identify possible improvements to the forms, in terms of content and presentation.

In terms of the training proper, fitting the session into one day (morning: theoretical presentation, afternoon: practical exercises), as was done this time, should be reconsidered. The following procedure could be proposed instead:

- presentation of the documentary system (the different forms, their respective roles, their circulation, etc) at the same time as the overall presentation of the EIS at the start of the session;
  - instructions on how to fill out each *Epidemiological Survey Form* at the time when each surveillance protocol is studied or modifications are made to the use of the form;
  - presentation of the *Community Visit Form* and the *Suspicion Form*, stressing how each type of information should be collected and based on a teaching document showing an Oshiwambo version of the form;
  - increasing the number of simulations of form filling by the participants, using examples given by the trainer or real-life situations.
- At least three half-days, spread over the course as a whole, should be allowed for this aspect.

## **6-2. Techniques for meetings with farmers**

The modifications made to the initial sequence bearing in mind the level of the participants proved a success. The following procedure can thus be adopted:

- a brief description of how to organize meetings (**Annex 9**),
  - group work on drawing up a guide to organizing and leading meetings, for regular community visits,
  - two simulated community visits,
  - group work on drawing up a guide to organizing and leading meetings, for disease outbreak meetings,
  - a simulated disease outbreak meeting.
- At least three half-days, spread over the course as a whole, should be allowed for this aspect.

## **6-3. Training techniques**

For an audience of this level, it was impossible to master the techniques sufficiently to embark upon training in its broadest sense within the allotted time.

However, it would have been possible to train the participants in how to conduct a clearly determined training sequence. This would have meant having a clear idea beforehand of the types of skills to be taught to field team members and, in some cases, to farmers. This was not the case at the time of the mission, although there were plans for discussions of the subject between veterinary service managers.

Moreover, we felt it would be wiser to entrust the task of training to sufficiently qualified staff members (AHI, CAHI).

This is why the discussions on the subject during the course were restricted to group work aimed at setting out the participants' ideas concerning the tasks to be given to field team members. Their contribution could be used to fuel the veterinary services' discussions.

For future courses, it will thus be important to define beforehand what field team members should and should not be doing, at what stage they should be involved in the EIS, with what objectives and in what way, and to deduce from this the precise practical skills they need to acquire. This will make it possible to establish a field team member training programme within which the relevant interventions could be split between the different levels of trainers (CAHI, AHI, SIA), who in turn would be given specific training to this end.



## 7 – COMMENTS AND RECOMMENDATIONS

### 7-1. Concerning the training aspect:

- With a view to measuring and increasing the impact of the course, field activities need to be monitored closely and regularly. Particular attention should be paid to:
  - **use of forms,**
  - **sampling,**
  - **conducting meetings,**
  - **planning and monitoring activities.**

This task should be entrusted to CAHI and AHI, during their monthly meetings or field support visits.

- To prevent any loss of the knowledge and skills acquired, **field activities should be launched as soon as possible after the course.** The transport problems often quoted by the participants should not be used as an excuse for a lack of activity, since there are alternatives, particularly with AET. In this respect, if resources were to be released, in order to motivate staff, they should be given first to those who have managed to work well despite the previous lack of resources.
- As regards training for field team members, **it is important that the management team decide on precise, realistic tasks for those staff members,** based on the work done with the participants during the course. In any event, it would be best for this operation to be **supervised closely by CAHI or AHI.** In effect, it would be risky to allow SIA to assume such a responsibility on their own.
- The fact that the CAHI and most of the AHI were not free to attend this training course could be a significant handicap. It is crucial that they be given the information provided during the course as soon as possible. The existence of an exhaustive training handbook is an asset in this respect. However, their skills in terms of sampling and of conducting meetings will have to be checked. They have to be brought up to standard as soon as possible if they are to be expected to supervise the work of the SIA.
- **The monthly meetings** planned in the EIS work programme are an excellent opportunity of monitoring and supervising operations. The following points should be looked at in particular:
  - **summing up of the extent to which the activities planned the previous month have been completed**
  - **correction of the imperfections or malfunctions** observed (particularly concerning the use of forms),
  - **general information** on EIS operations,
  - **schedule of activities** for the following month.

The support of State veterinary staff will no doubt be required for the first monthly meetings.



- **A certain momentum was built up** during the course among the group of participants. **It should be maintained**, particularly since training is apparently a major factor in motivating these staff members. Regular sessions could be planned to keep up this encouragement and complete the training provided to the system's field staff. The sessions could initially be organized every six months (at the start and end of vaccination campaigns), and annually once the EIS is really up and running, and should enable:
  - a qualitative and quantitative assessment of the system's operations;
  - further training for the staff involved, based on the operational malfunctions observed and on changes in the EIS (for instance new priority diseases);
  - broadening of these staff members' skills, taking account of training requirements expressed during previous courses.
- Lastly, a **coherent overall training plan** should be drawn up for all the stakeholders involved in the EIS, and more generally in basic animal health. It should centre on the specific roles each type of stakeholder is to play (State Veterinarians, CAHI, AHI, SIA, field team members, CAHA, butchers, farmers).

## **7-2. Concerning the establishment of the Epidemiological Information System (EIS)**

### **7-2-1. Priority diseases**

- Given the possibility of future changes in the sanitary situation in **North-Central District**, **the current list of priority diseases may be modified and extended in time.**
- Moreover, it is recommended that in subsequent training cycles, the supervisors once again explain the difference between the **list of priority diseases** established according to epidemiological criteria and the **list of scheduled diseases** established in an operational context, since the participants in this session did not seem to have grasped the difference.

### **7-2-2. Zoonoses**

- To encourage farmers to take an active part in the EIS, it is recommended that the emphasis be placed on **controlling zoonoses such as rabies, botulism and anthrax** (a scheduled disease), which are major sanitary constraints in terms of **public health**.
- These "headline diseases" could be ranked in order of importance for the different areas of North-Central District .
- To this end, it would be advisable to establish **operational collaboration between the DVS/EIS in Ondangwa and the regional human health authorities.**



- **Information brochures** on the subject of “human and animal rabies” could be drawn up jointly by the regional veterinary and human health services, for widespread distribution to rural populations and for display in public places.
- As far as setting up coordinated control strategies against “zoonosis-rabies” is concerned, organizations such as the **Institut Pasteur in Paris and the WHO in Geneva** could provide support. The rabies specialists to be contacted are:
  - ⇒ **Dr Hervé BOURHY**, Unité de la rage, Institut PASTEUR  
25 rue du Dr Roux – 75724 PARIS Cedex 15 (France)  
Tel: 33 1 45 68 87 85  
Fax: 33 1 40 61 30 20  
E-mail: [hbourhy@pasteur.fr](mailto:hbourhy@pasteur.fr)
  - ⇒ **Dr François Xavier MESLIN**  
WHO – APH/CSR/CDS  
20 via Appia – 1211 GENEVA (Switzerland)  
Tel: 00 41 22 791 2575  
Fax: 00 41 22 791 48 93  
E-mail: [meslinf@who.ch](mailto:meslinf@who.ch)

### 7-2-3. Establishment of the Epidemiological Information System

- A **general structural diagram** of the Epidemiological Information System (EIS) was presented at the training session (see **Annex 5**). It highlights the specific role of the various agents at every level of the system, and the need for close, sustained links between the stakeholders so as to enable them to accomplish the tasks assigned to them under the “**early warning – rapid response**” **emergency intervention programme**.

In this context, it is important to bear in mind that it would be wise, given the extra workload represented by the field operations involved in an Epidemiological Information System, to **make a clear distinction between the tasks** given to the veterinary service staff involved in the EIS and the agents in charge of basic healthcare alone.

- **Logistical problems:**

#### ⇒ **Field vehicles:**

- **The pool of 4x4 vehicles should be expanded urgently** if the EIS is to operate effectively. Moreover, a certain number of old vehicles should be replaced. There are just **16 4x4 vehicles** for all the staff (75 people) from the veterinary services in North-Central District :
  - 11 vehicles for 3 SV, 2 CAHI, 6 AHI,
  - **5 vehicles for 64 SIA!!**
- The mileage allowances paid to staff need to be revised.
- The purchase of **motorbikes** may be worth looking at as an alternative solution, with the investment to be amortized over three years and offering the users the chance to buy the motorbike afterwards.
- In the immediate future, the possibility of making **joint field trips with the 54 AET** in North-Central District , all of whom have access to a car, could be a good temporary solution.



- ⇒ **The available radio communications equipment** is limited and often obsolete. It needs to be replaced and expanded, taking account of the strategic positions in the system.

The consultants are to ask their CIRAD colleagues based in Zimbabwe for the references of field equipment purchased recently (multi-waveband radios and satellite telephones).

➤ **Communication:**

- ⇒ This plays a major role in sustaining such systems.
- ⇒ **Smooth circulation of information** from farmers to the DVS via the EIS, and rapid feedback, is essential.
- ⇒ **Reports should be written and disseminated** at every level of the system: they are a good means of circulating information.
- ⇒ The publication of a quarterly **Newsletter** is recommended.
- ⇒ **A detailed monthly programme of meetings and activities** should be drawn up in advance and adhered to.

➤ **Laboratory support of the EIS:**

- ⇒ Transmission of samples from the field to the laboratory should follow the usual recommendations made by veterinary analysis laboratories, particularly as regards their **rapid transport** and **respecting the cold chain**. This last point needs to be improved as soon as possible, by providing the participants in this training session with field coolboxes.
- ⇒ The sampling equipment is currently supplied by the French cooperation organizations. In future, it would be better if it were supplied directly by the DVS.
- ⇒ In order to carry out routine diagnoses at the Ondangwa laboratory (they can currently only be done by veterinarians), it is recommended that the laboratory technicians be **specifically trained in diagnosis techniques**:
  - **Intestinal parasites** (coprology),
  - **Mange**,
  - **Haemoparasites** (anaplasmoses, babesioses).

➤ **Stepping up EIS field operations:**

Two operations should be launched rapidly:

⇒ **Stepping up surveillance:**

- **Along the international border with Angola**, significantly increasing the number of veterinary posts along the border.  
It is worth noting that the regular meetings between the Namibian and Angolan authorities launched recently constitute a very positive step, particularly with a view to establishing coordinated control strategies against CBPP .
- **In abattoirs and traditional slaughtering areas**, to control CBPP .

- ⇒ **Launching effective collaboration with the DEES** (Directorate of Extension and Engineering Services), with a view to joint field missions (AET, AHI/SIA) and to stepping up information meetings with farmer communities.



## ➤ Increasing human resources

⇒ A brief look at veterinary service staff numbers in North-Central District revealed a **considerable shortage of staff in view of the animal health and epidemiological surveillance tasks to be fulfilled**. There are currently:

- 3 State Veterinarians (SV)
- 2 CAHI
- 6 AHI
- 64 SIA

ie:

- 1 SV/200 000 head of cattle/20 000 farmers
- 1 AHI/75 000 head of cattle/7 500 farmers
- 1 SIA/10 000 head of cattle/1 000 farmers.

⇒ There are thus **obvious shortages, particularly of State Veterinarians and AHI**. Moreover, the **basic level of training** of the current CAHI, AHI and SIA is considered **very poor**.

⇒ The consultants noted that in response to this staff shortage, the DVS had drawn up a **training plan for SV, CAHI and AHI**.

⇒ There would seem to be a gradual move to do away with SIA with a view to improving the overall level.

⇒ In this context, **the role of the CAHA needs to be determined**. These stakeholders are privately employed, but could act as **valuable go-betweens between rural communities and the veterinary services**.

⇒ Without their support, with the disappearance of the SIA and despite the current training plan, how will the veterinary services be able to fulfil their mission in the field with respect to the 110 000 farmers in North-Central District ?

## ➤ Performance indicators:

We propose that a certain number of indicators be introduced as of now, such as:

- Respecting the scheduled frequency of community visits,
- The time lapse between sample collection in the field and transmission of the analysis results to the farmer,
- The number of suspected cases of priority diseases declared per month. This is a very effective indicator of the smooth running of the system: **a lack of suspected cases generally suggests that the system is not working**.
- Lastly, simulating “**early warning – rapid response**” situations in the field is also a good performance indicator.

## 8 - PROSPECTS

It is essential that the effort made to train the stakeholders in the system be maintained in future.

A distinction can be made between two types of stakeholders: on the one hand State sector staff with various levels of responsibility for epidemiological surveillance, and on the other, those from the private sector (butchers, CAHA, farmers) who, in their job, can play a crucial role in passing on information. Training courses need to be organized for both these sectors.



### **Concerning the public sector:**

We have already stressed the importance of regular training for field staff. Some thought could be given to providing teaching support for drawing up the programme for these twice-yearly workshops, so as to use teaching methods that foster the exchange of experiences and boost the internal momentum of the system.

For the most senior staff, it would be useful to harmonize their **epidemiological surveillance methodology** skills and **facilitate exchanges of experiences with colleagues from other countries in the sub-region**. A workshop could be organized for managers from the Namibian veterinary services and the EIS in North-Central District (and other Districts if the system were to be extended), and regional or national managers from neighbouring countries. Such a move would encourage the integration on a national level of adaptations specific to northern regions, and harmonization of the different national systems with a view to increasing collaboration and exchanges of information. CIRAD-EMVT could provide support on this aspect, and the organizations that provide epidemiological training in the sub-region (for instance the Onderstepoort Veterinary Science Faculty) could also be involved, as well as the O.I.E.

### **Concerning the private sector:**

Various stakeholders (**butchers, CAHA, farmers**) in this sector are concerned. Each of them has a specific role to play in the system, although they have a relatively limited amount of time to spend on such activities and there may be a degree of conflict between their work and their epidemiological surveillance activities.

Furthermore, every stakeholder has his own training requirements, which need to be taken into account. In this respect, Anne-Laure ANDRE's recent work with butchers showed how training can be a powerful factor in motivating these professionals.

It is thus important, when planning training operations, to include sessions that meet both the participants' professional needs and those of the system. This latter aspect means clearly, firmly and realistically determining the **specific roles and tasks of each of the stakeholders in epidemiological surveillance**. Wherever possible, this clarification should be negotiated with the professionals concerned.

In this respect, the following stages have yet to be completed for each type of stakeholder in the private sector:

- defining the specific role in epidemiological surveillance and related tasks;
- identifying the skills to be acquired;
- recording and analysing training requirements;
- analysing recent or current training programmes attended by stakeholders;
- drawing up specific training operations or teaching sessions and materials to be included in existing courses;
- training trainers;
- implementing and assessing training programmes.

During these discussions, care should be taken to ensure that the respective roles of the different stakeholders, and the information they are given about epidemiological surveillance, are coherent.

CIRAD-EMVT could also provide support in this field, through a mission by consultants or by supervising students.

## 9 – CONCLUSION

The Epidemiological Information System (EIS), which has got off to a promising start, **unquestionably has a major role to play in improving the zoosanitary and public health situation** in North-Central District of Namibia.

To succeed fully, it will have to:

- ⇒ **boost the overall level** of its staff and provide them with ongoing training,
- ⇒ **increase motivation and confidence among farmers** to ensure their commitment to the system. **Constant feedback** to farmers and **permanent assistance concerning priority diseases** are the only way to achieve this, and EIS field staff should bear this in mind.

## 10 – ACKNOWLEDGEMENTS

The consultants would like to thank the Director of Veterinary Services in Namibia, the Ondwanga Directorate of Veterinary services, all the participants in the training session and their colleagues from the French cooperation organizations for their warm welcome and willingness to cooperate throughout the mission.

Many thanks to Helen BURFORD for the translation.



## **ANNEXES**

<b>ANNEX 1</b>	:	Terms of reference of the mission
<b>ANNEX 2</b>	:	Draft training programme proposed by the NOREESP project
<b>ANNEX 3</b>	:	CIRAD-EMVT proposals
<b>ANNEX 4</b>	:	Final programme
<b>ANNEX 5</b>	:	Teaching material produced during the training course
<b>ANNEX 6</b>	:	Contents of the training aide-mémoire
<b>ANNEX 7</b>	:	List of questions for assessing participants
<b>ANNEX 8</b>	:	Assessment of the session by the participants
<b>ANNEX 9</b>	:	Organizing meetings with farmers

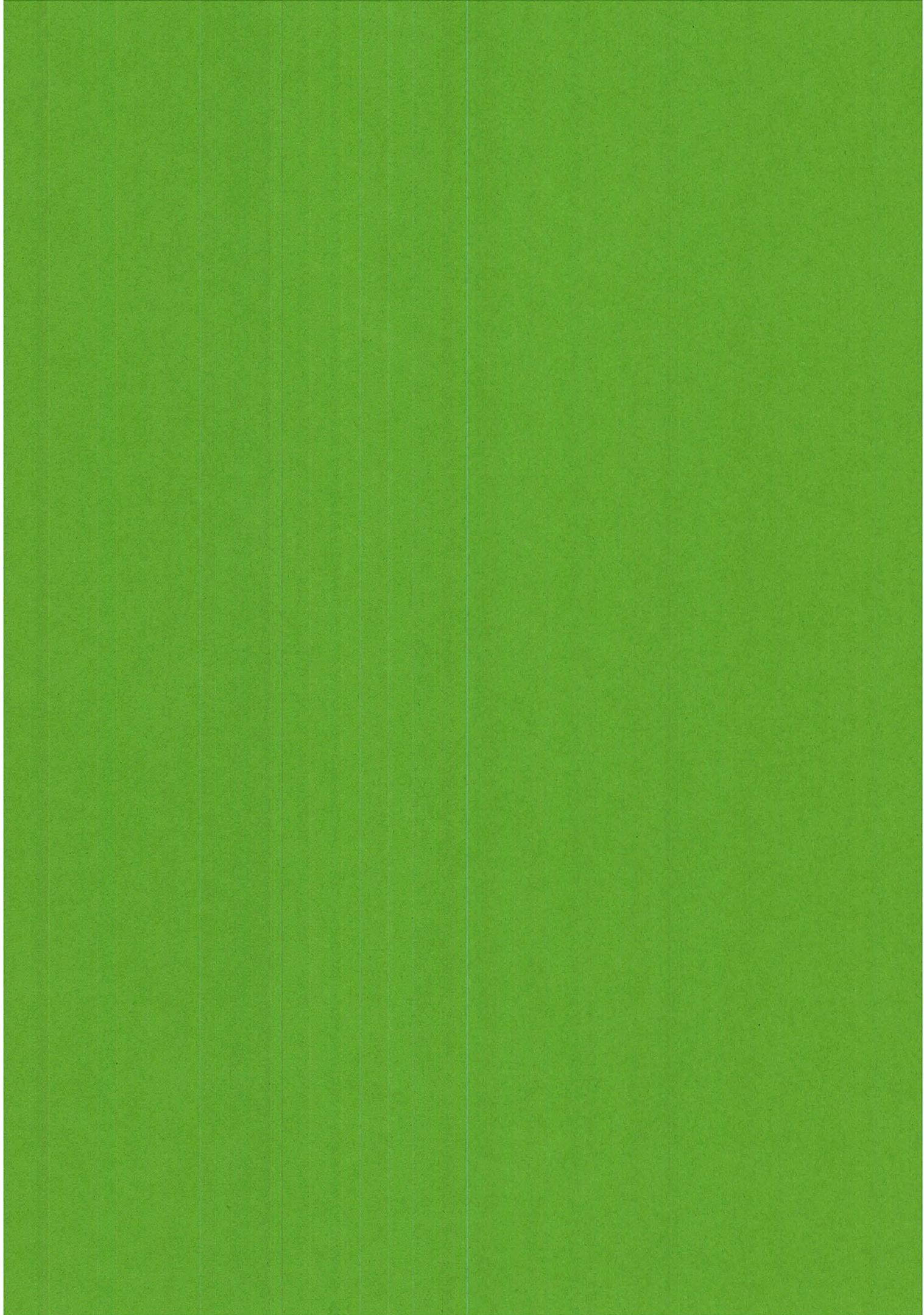




## **ANNEX 1**

**Terms of reference of the mission**







## **ANNEX 1**

### **Terms of reference**

Training in disease surveillance  
CIRAD-EMVT experts  
9 to 15 October 2000

**Project:** NOREESP Comp. 2– Agreement No. 99/  
**Title:** Support of training in disease surveillance  
**Duty Station:** North Central, Namibia  
**Duration:** 7 days

### **CONTEXT**

NOREESP has signed an agreement with CIRAD-EMVT for technical support of the project in epidemiosurveillance. One 12-day mission has already taken place, in April 2000, and should be followed by another one in early 2001.

Considering training as one of the major activities in improving surveillance performance, NOREESP has also signed an agreement with CIRAD-EMVT for support in organizing and conducting training in disease surveillance.

Two experts should be part of this mission: a disease surveillance specialist and a training specialist.

### **METHODOLOGY**

The experts will mainly provide three types of support to the project:

1. Before the mission itself, the experts will help NOREESP to design the training (objectives, planning, content, tools, teaching methodology, etc). They will use all the necessary communication tools (especially e-mail) to provide daily assistance in the preparation of the training.
2. During the mission, they will:
  - Give lectures on specific subjects (organization of meetings, of training, assessment, etc)
  - Follow the other lectures and facilitate their implementation
  - Design a user-friendly training manual
3. After the training, they will prepare a report focusing on the evaluation of the training. They will provide recommendations on the follow-up and on future training to be carried out.

## MISSION DESCRIPTION

- Arrival at Ondangwa before 9 October 2000.
- Co-facilitate, with NOREESP, the training in form filling (Monday 09/10).
- Implement two training sessions on Tuesday 10/10 (organize a meeting with farmers) and Wednesday 11/10 (organize training of your team and of farmers).
- Assist Chief Animal Health Inspectors in organizing and supervising their course (planning of activities of DVS staff in disease surveillance).
- Implement and supervise the final assessment of the training (Friday 13/10).
- Organize restitution with the local veterinary services and conduct debriefing in Windhoek (DVS, French Embassy) before departure.

## EXPECTED RESULTS AND OUTPUTS

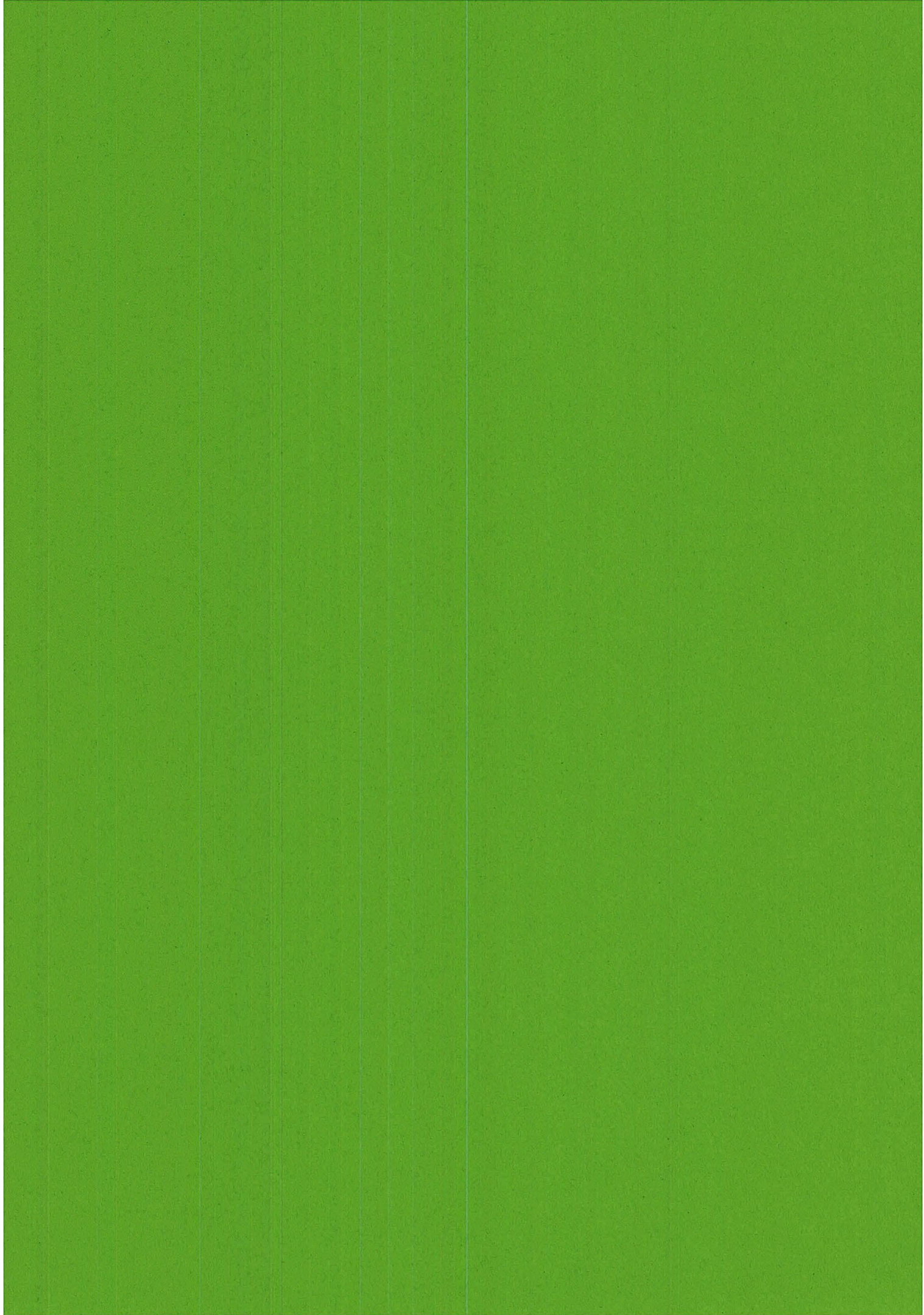
- ❖ The experts will have to support the NOREESP closely during the preparation phase:
  - Comments will be made on the general objectives and on organization (target audience, duration, place, etc);
  - A realistic and coherent training schedule will be drawn up;
  - The objective and the content of each training session will be detailed;
  - Indications will be given concerning the training tools and methodology to be used;
- ❖ At the end of the training session organized by CIRAD, the trainees should be able to organize meetings and training with farmers properly. They should also be able to train their teams in specific topics (“when and how to fill out a suspicion form”, “how to take samples for priority diseases”).  
They will be provided with all the necessary methodological and technical tools.
- ❖ A user-friendly training manual with all the necessary information to launch surveillance should be available before the end of the training.
- ❖ The mission will be required to assess the training session and requirements in terms of follow-up and further training. An aide-mémoire will be written before the end of the mission in order to list the main conclusions and recommendations.
- ❖ A detailed final mission report will be produced and presented afterwards to the Namibian authorities.



## **ANNEX 2**

**Draft training programme proposed  
by the NOREESP project**







## ANNEX 2

<b>DATE</b>	<b><u>Trainer (T)</u> <u>Facilitator (F)</u></b>	<b><u>Expected results</u></b>	<b><u>Courses and type</u> <u>Theoretical (T)</u> <u>Participatory Approach (PA)</u></b>	<b><u>Documents / Material</u></b>
Monday 2	<b><u>T: Dr Bamhare</u></b> (Epidemiology Unit Windhoek Headquarters) <b><u>F: Dr Schneider</u></b> (DVS Ondangwa)	Knowledge and understanding of the national EIS	Description; Objectives; Outputs (T)	Newsletters, forms
Monday 2	<b><u>T: Dr Schneider</u></b> (DVS Ondangwa) <b><u>F: Dr Bamhare</u></b> (Epidemiology Unit Windhoek Headquarters)	Understanding local adaptation of the EIS to NCD	Specific constraints Proposed adaptation	Suspicion form
Tuesday 3	<b><u>T: Dr Bamhare</u></b> (Epidemiology Unit Windhoek Headquarters) <b><u>F: CIRAD</u></b> (French research centre)	Knowledge of priority diseases	Practical cases, filling out of Suspicion forms and Epidemiological Survey (PA) Farm Visit Form	Stationery Forms Map
Wednesday 4 Thursday 5	<b><u>T: State Vet</u></b> (DVS Ondangwa) <b><u>F: CIRAD</u></b> (French research centre)	Knowledge of priority diseases	Clinical aspects and Protocols: CBPP, FMD, Rabies, Botulism, Mange, Intestinal parasites (T)	Protocol files
Friday 6	<b><u>State Vet</u></b> (DVS Ondangwa)	Knowledge of priority diseases	Clinical examination Assessment of AET Sampling with DVS staff	Laboratory consumables Tools Animals for sampling
Monday 9	<b><u>State Vet</u></b> ( DVS Ondangwa)	Knowledge of priority diseases	Sampling (P)	Laboratory consumables Tools Animals for sampling
Tuesday 10	<b><u>T: CIRAD</u></b> (French research centre) <b><u>F: Dr Musilika</u></b> (DVS Ondangwa)	Ability to communicate with farmers	Organize a meeting with farmers (PA)	Reference document

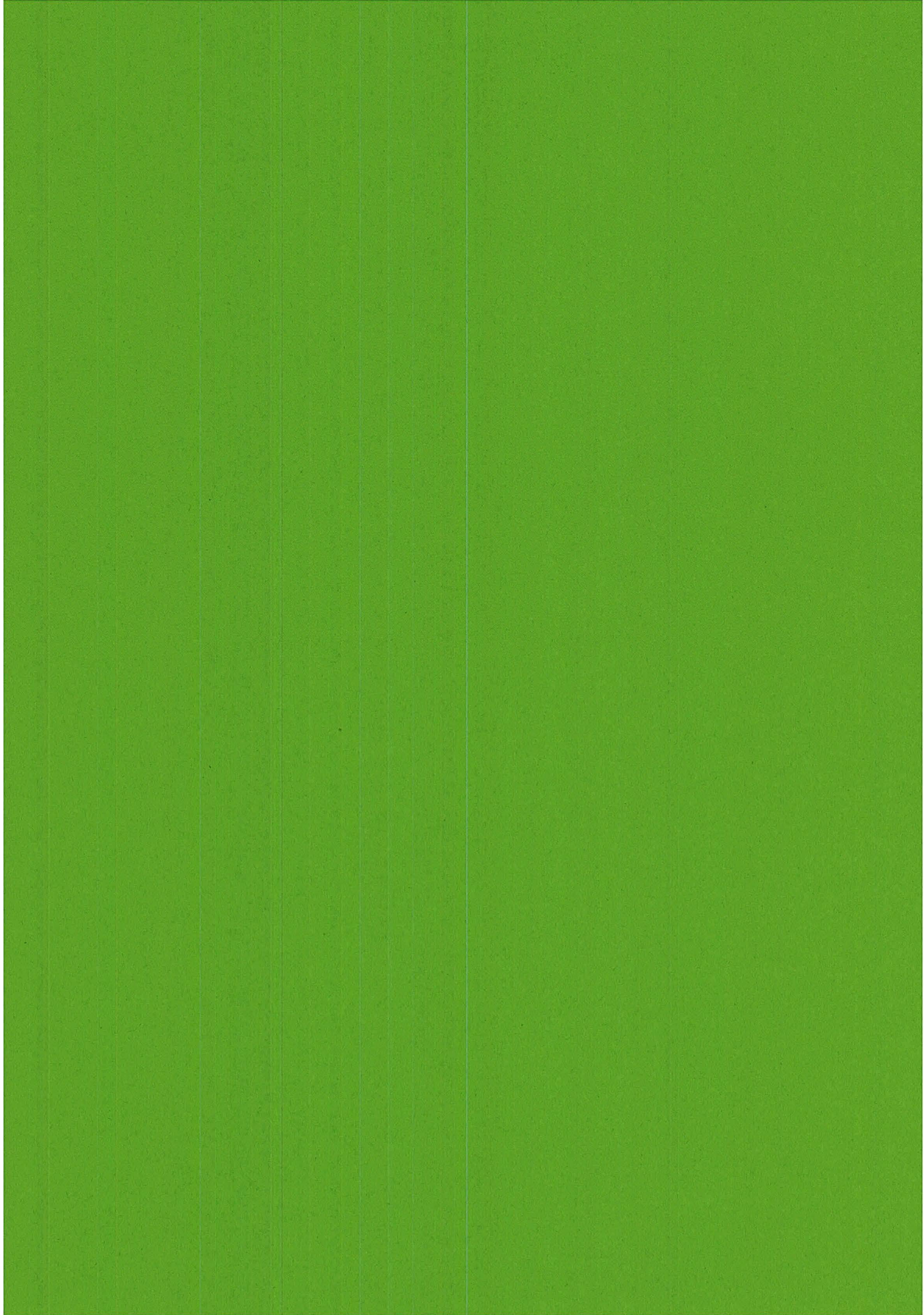
<b>DATE</b>	<b><u>Trainer (T)</u> <u>Facilitator (F)</u></b>	<b><u>Expected results</u></b>	<b><u>Courses and type</u> <u>Theoretical (T)</u> <u>Participatory Approach (PA)</u></b>	<b><u>Documents / Material</u></b>
Wednesday 11	<b><u>T: CIRAD</u></b> (French research centre) <b><u>F: Dr Schneider</u></b> (DVS Ondangwa)	Ability to communicate with farmers	Organize training of your team and of farmers (PA)	Teaching tools Reference document
Thursday 12	<b><u>T: Mr Namwandi</u></b> (CAHI Ondangwa) ( <i>Omusati, Oshana</i> ) <b><u>T: Mr Syoka</u></b> (CAHI Ondangwa) ( <i>Onhangwena, Oshikoto</i> )	Organization and management of the EIS	Planning of visits (farms, markets, CAHA, butchers) and follow-up of the activity by management (T)	Forms for planning and reporting on activities
Friday 13	<b>State Vet</b> (DVS Ondangwa)	Organization and management of the EIS	Calendar of future activities (Follow-up, newsletter, further training) Evaluation	



## **ANNEX 3**

### **CIRAD-EMVT proposals**







## ANNEX 3

### AHI and SIA training in Namibia

#### Programme for week 1

##### Preliminary questions

Is training in intervention in the event of a confirmed disease outbreak included in the programme? (not at present), and if not, is it part of the second course?

«Intestinal parasites» for blood-borne parasites too?? If so, the programme will have to be adapted accordingly.

Who is to fill out the survey forms?

What will be the respective tasks of the following field agents in the system:

AHI, SIA accepted for training, AET, untrained SIA, others (is there a formal document concerning this?).

**The training as a whole will comprise four parts:**

The system

Diseases

Training and supervisory activities by people in the system.

Implementation in the field.

<b>D1: Awareness of the existing national epidemiological information system</b>
--

##### **Aims of the day:**

- Awareness of national epidemiological surveillance issues.
- Awareness and analysis by the participants of the current epidemiological information system and its relevance to national issues.

**Participants:** Two separate groups (G1 and G2) of mixed composition (2 AHI, 10 SIA and 7 AET), which followed exactly the same sequence during the day, each with a different trainer.

- Introduction to the course (8:30–9:30 am) [in full session with everyone]

Duration: 1 h

Official opening?

Presentation of participants

Presentation of training programme (work methods, agreement of participants on times and undertaking to stick to them) and its objectives;

Presentation of administrative formalities (per diem, etc).

Separation into G1 and G2

- Analysis of ideas about epidemiological surveillance (9:30–10:30)

3 sub-groups in each group, working simultaneously on the same list of questions (30 min).  
Sample questions (to be revised)

- According to you, what exactly is epidemiological surveillance?
- What is it for?
- Who should be involved in it and how?

Discussions within each group, G1 and G2.

Summary (30 min).

- Break (10:30-11:00)
- Talk: Issues, merits and nature of epidemiological surveillance (why? what for?) (11:00–12:30)

Priority disease situation (CBPP, FMD, rabies, etc)

Market situation (exports)

- Talk: Necessary components of an epidemiological information system if it is to meet requirements (how?) (2:00-3:00)
- Participatory full session (3:00–4:00)

Duration: 1 h

- How does the current epidemiological information system work?

Stakeholders, structures

- Does the current system meet the challenges and quality criteria for an epidemiological information system?

List the strengths and weaknesses of the current system (assets, limitations) and rank them (note the participants' views).

- Summary by the trainer of the points quoted by the participants, provision of necessary further information (4:00-5:00)

<p><b>D2: Familiarization with changes in the national epidemiological information system and recording of administrative questions</b></p>
---

Participants: Both groups (G1 and G2) in full session

Programme for the day

- Recap questions (1½ h)

Training organization method that enables all the participants to ask questions on the topics they have not fully grasped the day before.



Each participant is given a maximum of five minutes to write one or two short questions on a slip of paper about the topics covered the day before (this is done anonymously). The questions are drawn at random by each participant and the one who reads out the question tries to answer it (if he can). If not, someone else can answer, and if nobody can, it is the trainer who answers.

Traps to avoid:

- Over-long or imprecise questions;
- Over-long answers (often particularly from the trainer);
- Trick questions (the question is not genuine, but designed to test the other participants);
- Irrelevant questions or questions that pre-empt subsequent work (put them to one side).

More time should be spent on recap questions the first time round. Once the participants are used to the method, it should not take so long to organize.

If possible, all the trainers who contributed the day before should attend the recap question session.

For this day, the participants should be split into two groups: one asking questions and the other answering.

- Break: 10:00-10:30
- Talk: The future functioning of the information system in NCD  
(10:30–12:30 / 2:00–4:00)

Point out the weaknesses of the current system (lack of exhaustiveness, lack of priorities, lack of field relay), based on the summary and on the results of the previous day's participatory session.

Pooling of the participatory work done by the two groups the day before.

Detailed description of the changes in the system:

- Current weaknesses
- Priority diseases and reasons for classification
- Functioning of the system and the documentary system
- Role of each stakeholder, particularly AHI, SIA etc
- Appropriate procedures (suspicions, forms, sampling).

The aim is to link the contributions made during the various training sessions.

- Administrative questions (4:00-5:00)

This session is a way of compiling all the questions the participants have about general system functioning, however trivial. All the questions will be answered on the last day (as some will be answered naturally during the course, while others will require clarification on the last day and the remainder will have to be answered at the end of the course).

Distribution of an anonymous questionnaire.

Completion of questionnaire: 30 min.

Listing and clarifying questions on the paperboard (take care not to answer them). This is a way of showing clearly that none of the questions will be overlooked and all of them will be answered on the last day.

### D3: Priority diseases and sampling

G1: Diseases in the morning and practical work in the afternoon (and vice versa for G2).  
For practical work, split each group into four sub-groups, depending on the number of trainers available.

#### Details of disease sessions:

Cover diseases one after another, in the same way:

- Pooling of participants' knowledge as follows (1 h) = participatory
  - Symptoms
  - Lesions
  - Causes
  - Epidemiology
  - Treatment
  - Prevention
  - Steps to be taken

Fill in boxes for each topic on paperboard.

Summary by trainer, who should correct and complete the work if necessary (do not add anything irrelevant).

Switch to criteria for suspecting the disease.

Description of surveillance protocol (legitimate suspicion, sampling, etc) (1 h).

#### Practical work:

Split into four sub-groups (work stations).

General demonstration in front of the group.

Training of the four sub-groups, supervised by the trainer (who moves from one group to another).

Or possibly support from participants already familiar with the techniques.

**Practical work should use only the equipment that will be available for sampling in the field.**

#### **Programme for G1:**

8:30-9:30: Pooling of CBPP knowledge

9:30-10:30: CBPP protocol

10:30-11:00: Break

11:00-12:00: Pooling of FMD knowledge

12:00-1:00: FMD protocol

2:00-3:00: Recap questions

3:00-6:00: Practical work: blood samples – mouth swabs – tissues (closed vesicle)

#### **Programme for G2:**

8:30-9:30: Recap questions

9:30-12:30: Practical work: blood samples – mouth swabs – tissues (closed vesicle)

2:00-3:00: Pooling of CBPP knowledge

3:00-4:00: CBPP protocol

4:00-4:30: Break



- 4:30-5:30: Pooling of FMD knowledge  
5:30-6:30: FMD protocol

Materials required for practical work:

- Recomposed vesicles on tongues (dead animals)
- Live animals for blood samples and mouth swabs (cattle and small ruminants)

One cow and one small ruminant per work station, ie four cows and four goats in the morning and again in the afternoon (ABSOLUTELY ESSENTIAL, as this is a level 3 sensorimotor skill [being consistently capable of taking good samples!!!])

<b>D4: Priority diseases and sampling</b>
---

G1: Diseases in the morning and practical work in the afternoon (and vice versa for G2).  
For practical work, split each group into four sub-groups, depending on the number of trainers available.

**Programme for G1:**

- 8:30-9:30: Pooling of RABIES knowledge  
9:30-10:30: RABIES protocol  
10:30-11:00: Break  
11:00-12:00: Pooling of BOTULISM knowledge  
12:00-13:00: BOTULISM protocol
- 2:00-3:00: Recap questions  
3:00-6:00: Practical work
- Serum-clot separation on blood samples taken the day before + samples collected from the abattoir the day before to increase the amount available.
  - Head samples (+ necessary precautions when working with a zoonosis).
  - Tissue: lungs, pleural fluid.

**Programme for G2:**

- 8:30-9:30: Recap questions  
9:30-12:30: Practical work:
- Serum-clot separation on blood samples taken the day before + samples collected from the abattoir the day before to increase the amount available.
  - Head samples (+ necessary precautions when working with a zoonosis).
  - Tissue: lungs, pleural fluid.
- 2:00-3:00: Pooling of RABIES knowledge  
3:00-4:00: RABIES protocol  
4:00-4:30: Break  
4:30-5:30: Pooling of BOTULISM knowledge  
5:30-6:30: BOTULISM protocol

Materials required for practical work:

- Blood samples taken the day before

- Reconstituted pleural fluid (tea) injected into the intra-pleural area of a carcass (or use a small ruminant)

## D5: Priority diseases and sampling

G1: Diseases in the morning and practical work in the afternoon (and vice versa for G2).  
For practical work, split each group into four sub-groups, depending on the number of trainers available.

### Programme for G1:

- 8:30-9:30: Pooling of MANGE knowledge
- 9:30-10:30: MANGE protocol
- 10:30-11:00: Break
- 11:00-12:00: Pooling of INTESTINAL PARASITE knowledge
- 12:00-13:00: INTESTINAL PARASITE protocol
  
- 2:00-3:00: Recap questions
- 3:00-6:00: Practical work
  - Scraping for mange
  - Copro
  - Identifying, packing and dispatching samples

### Programme for G2:

- 8:30-9:30: Recap questions
- 9:30-12:30: Practical work
  - Scraping for mange
  - Copro
  - Identifying, packing and dispatching samples
  
- 2:00-3:00: Pooling of MANGE knowledge
- 3:00-4:00: MANGE protocol
- 4:00-4:30: Break
- 4:30-5:30: Pooling of INTESTINAL PARASITE knowledge
- 5:30-6:30: INTESTINAL PARASITE protocol

### Materials required for practical work

- Small ruminants with mange (at least four per session)
- Small ruminants or cows for copro
- Identification and packing materials that will be provided to field agents



# **AHI and SIA training in NAMIBIA**

## **Programme for week 2**

### **Preliminary questions:**

Is the following equipment available (it is not essential, but if available, it would help to liven up the course somewhat):

Overhead projector

Video camera + tripod + mike that can be set up on a table and connected up to the video camera + VCR + TV + blank video tapes

Portable computer + printer

Photocopier

Electricity supply for all the above

The proposed times are just suggestions, to be adapted if necessary, but let us know of any modifications you may want to make so we can discuss them and adapt the programme if necessary.

## **D1**

- |             |  |
|-------------|--|
| 8:30-9:30   | Recap questions  |
| 9:30-10:30  | Presentation of the different documents to be filled out, what they are used for, who fills them out and when, how they are linked, etc (anatomy and physiology of the documentary system)   |
| 10:30-11:00 | Break  |
| 11:00-12:30 | Detailed presentation of each document (if possible shown on an overhead projector and filled in as it is explained)   |
| 2:00-3:00   | Detailed presentation of documents (cont.)   |
| 3:00-5:00   | <p>Case studies - Simulations:</p> <p>Aim of this session: to check whether the participants have grasped all the protocols.</p> <p>Procedure: a trainer describes a case (real or fictitious) in an ordered way (stage by stage), a participant (volunteer or chosen at random) describes what he is doing, stage by stage. The case begins in a work situation (see passive-active surveillance methodology) with a given disease (that the participant has to discover), and ends with the lab results and what to do with them, covering the filling out of forms. "Trick" or complex cases can also be included (non-priority disease, borderline case in relation to criteria for suspicion, reluctance on the part of farmers, etc. It is up to you to use your imagination, but the case has to be realistic and close to what is likely to be seen in the field). At least one normal case per disease, plus one or more difficult cases per disease, should be included. At the end of the simulation, the other participants assess what they have seen, and the trainer compiles their comments and adds to them if necessary.</p> |

## D2

8:30-9:30	Recap questions
9:30-10:00	Communication (practical exercise)
10:00-10:30	Break
10:30-12:00	Talk on preparing and leading meetings list of participants' expectations organizing meetings leading meetings
12:00-12:15	Description of types of meetings that could arise in the EIS (topics, context, message, etc): list drawn up in full session and completed by trainer
12:15-12:30	Setting the scene for simulations (distribution of roles, choice of two topics)
12:30-2:00	Preparation of simulations by the different groups of stakeholders
3:00-4:00	Completion and analysis of simulation 1
4:00-5:00	Completion and analysis of simulation 2

## D3

8:30-9:30	Recap questions
9:30-10:00	List of participants' expectations and of their training situation in the EIS
10:00-10:30	Break
10:30-11:30	Group work (three groups) on drawing up a training programme - phase 1
11:30-12:00	Reading of analysis and synopsis
12:00-1:30	Group work (three groups) on drawing up a training programme - phase 2
2:00-2:30	Group work, phase 2 (cont.)
2:30-3:30	Reading of analysis and synopsis, phase 2
3:30-5:00	Talk on drawing up and implementing training operations



## D4

8:30-9:30      Recap questions

We do not yet have enough details to be able to draw up a precise programme for the rest of the day.

However, two aspects should be covered:

- 1) phase covering the establishment and modification of the EIS (precise time scale, chronograms, procurement of necessary resources, etc)
- 2) day to day operations once up and running

Some time (1 to 1½ h) should be allowed for answering the administrative questions determined by the participants (anonymous slips of paper) on D2 of week 1.

## D5

8:30-9:30      General recap questions (on the whole of the session, plus questions put aside during the fortnight)

Continuation of D4 if necessary.

In terms of assessment, the participants have to be allowed to assess the session (we can determine the details with you to tailor the assessment to your requirements), to enable them to see the possible modifications to be made to the programme if it is to be repeated, and to identify new training topics for the group.

You will also need to decide whether you are aiming for an exam-based assessment of the participants (an examination with passes and failures) or an informal assessment (measurement of progress without giving marks but to judge the situation). Think about what you want to do, in any case, we can determine the details together when we arrive.

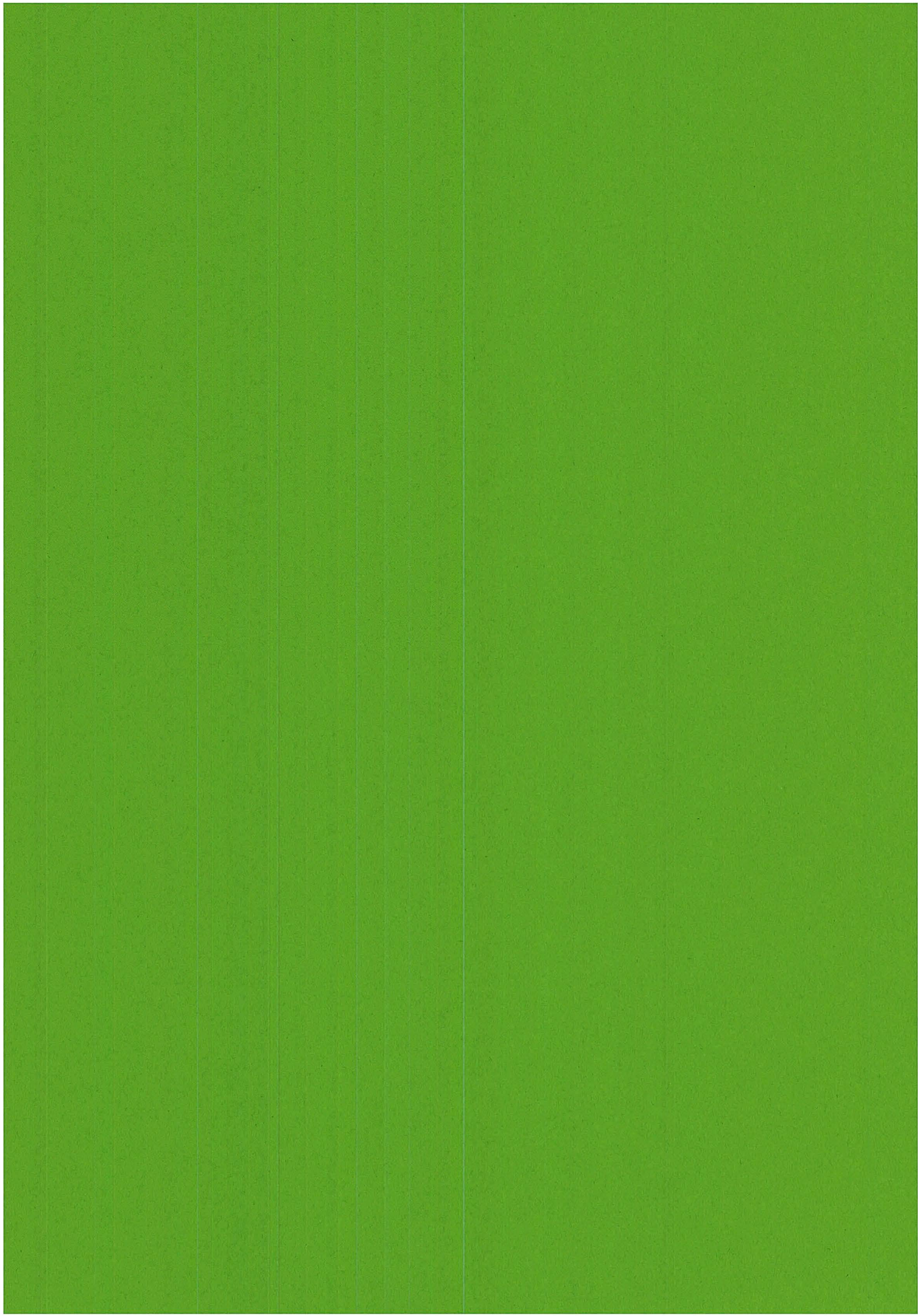




## **ANNEX 4**

### **Final programme**







## ANNEX 4

Monday 2 October	Tuesday 3 October	Wednesday 4 October		Thursday 5 October		Friday 6 October	
Official opening	Questions <b>Dr. Bamhare</b> Noreesp	Knowledge of priority diseases <i>Group 1</i>	<i>Group 2</i>	Knowledge of priority diseases <i>Group 1</i>	<i>Group 2</i>	Knowledge of priority diseases <i>Group 1</i>	<i>Group 2</i>
What do you know about EIS ? <b>Dr. Bamhare</b> Noreesp  <i>Group 1</i> Participatory technique		CBPP Protocol <b>Dr. Musilika</b>	CBPP Protocol <b>Dr. Schneider</b>	Rabies Protocol <b>Dr. Musilika</b>	Rabies Protocol <b>Dr. Masaire</b>	Mange Protocol <b>Dr. Schneider</b>	Mange Protocol <b>Dr. Masaire</b>
Interest of EIS <b>Dr. Bamhare</b> Noreesp	New system in NCD <b>Dr. Schneider</b> Noreesp	FMD Protocol <b>Dr. Musilika</b>	FMD Protocol <b>Dr. Schneider</b>	Botulism Protocol <b>Dr. Musilika</b>	Botulism Protocol <b>Dr. Masaire</b>	Internal Parasite Protocol <b>Dr. Schneider</b>	Internal Parasite Protocol <b>Dr. Masaire</b>
Quality request for an EIS <b>Dr. Bamhare</b> Noreesp	New system in NCD <b>Dr. Schneider</b> Noreesp	Sampling <b>Dr. Musilika</b> Sampling <b>Dr. Schneider</b>	Clinical examination <b>NOREESP</b>	Sampling <b>Dr. Musilika</b> Sampling <b>Dr. Masaire</b>	Filling out suspicion form <b>Dr. Schneider</b> Noreesp	Sampling <b>Dr. Schneider</b> Sampling <b>Dr. Masaire</b>	Evaluation of AET <b>NOREESP</b>
Assesement of the current EIS <b>Dr. Bamhare</b> Noreesp							
Summary <b>Dr. Bamhare</b> Noreesp	Questions about EIS <b>Dr. Schneider</b> Noreesp						

Group 1 = 13 (AHI + SIA) & 7 AET / Group 2 = 13 (AHI+SIA) & 7 AET

DVS staff only

AET staff only



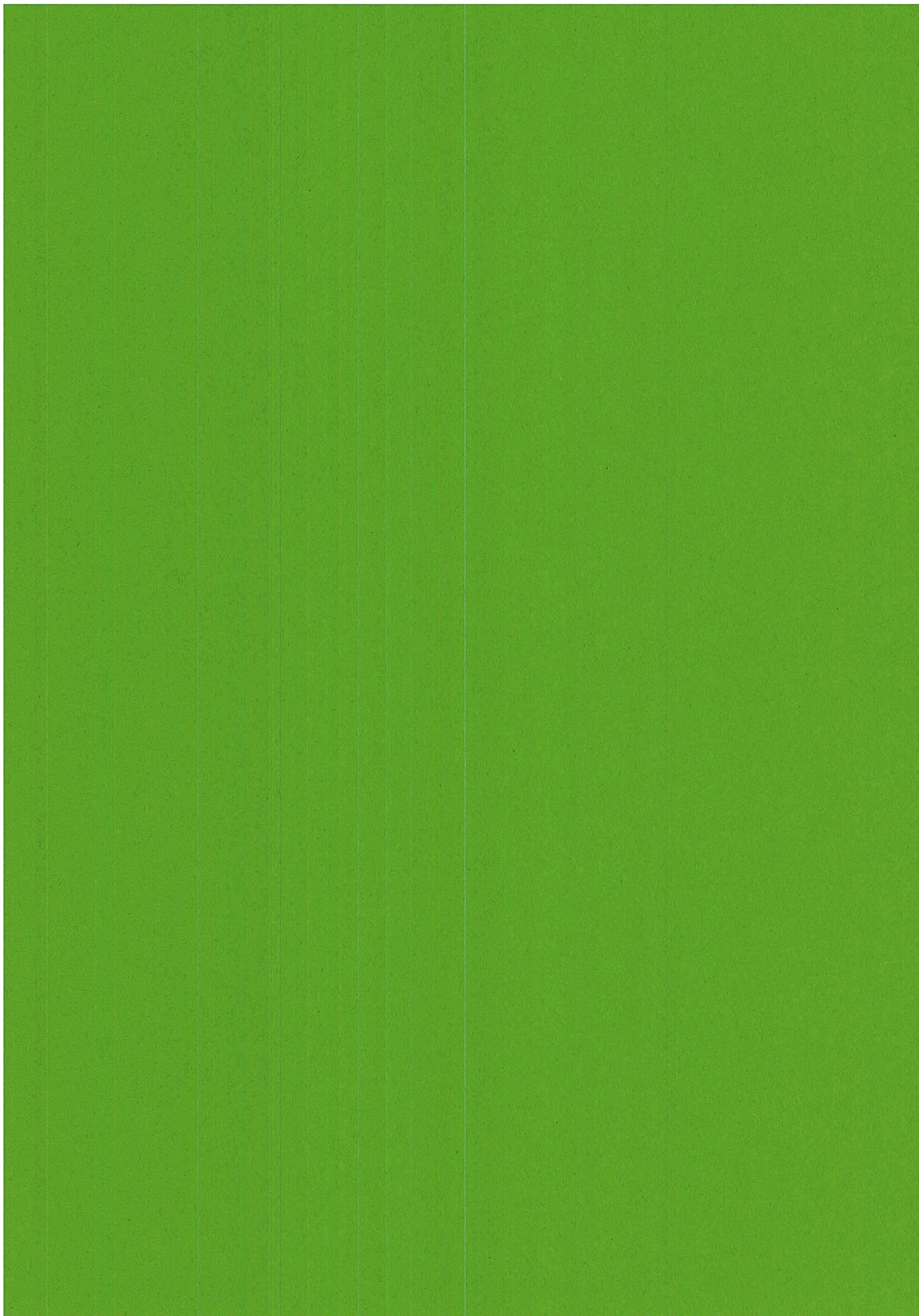
Monday 9 October	Tuesday 10 October		Wednesday 11 October		Thursday 12 October		Friday 13 October	
	Group 1	Group 2	Group 1	Group 2	Group 1	Group 2	Group 1	Group 2
Filling out of Community Visit Form <b>Dr. Schneider</b> Noreesp	Organizing meetings with farmers ( <b>CIRAD</b> )	Organizing meetings with farmers ( <b>CIRAD</b> )	Organizing training for your team and for farmers ( <b>CIRAD</b> )	Organizing training for your team and for farmers ( <b>CIRAD</b> )	Planning of visits (farms, markets, CAHA, butchers)Teams from Omusati and Oshana <b>Dr. Masaire</b> Noreesp	Planning of visits (farms, markets, CAHA, butchers)Teams from Oshikoto and Ohangwena <b>Dr. Musilika</b> Noreesp	Evaluation <b>CIRAD</b> Noreesp	Evaluation <b>CIRAD</b> Noreesp
Filling out Suspicion Form and Epidemiological Survey Form <b>Dr. Schneider</b> Noreesp	Organizing meetings with farmers ( <b>CIRAD</b> )	Organizing meetings with farmers ( <b>CIRAD</b> )	Organizing training for your team and for farmers ( <b>CIRAD</b> )	Organizing training for your team and for farmers ( <b>CIRAD</b> )	Planning of visits (farms, markets, CAHA, butchers)Teams from Omusati and Oshana <b>Dr. Masaire</b> Noreesp	Planning of visits (farms, markets, CAHA, butchers)Teams from Oshikoto and Ohangwena <b>Dr. Musilika</b> Noreesp	Evaluation <b>CIRAD</b> Noreesp	Evaluation <b>CIRAD</b> Noreesp



## **ANNEX 5**

**Teaching material produced  
during the training course**







## ANNEX 5

# REGULAR COMMUNITY VISITS

### WHAT AND WHY?

- Inform farmers about DVS and EIS activities
- Inform farmers about priority diseases
- Determine the animal health situation in the area
- Collect information from the field

### WHO?

- Headman
- Farmers
- Pastor
- Councillor
- CAHA (if possible)
  
- Other SIA or AHI
- AET (if possible)

### WHEN?

- From September to March (after the vaccination campaign)
- After lunch

### WHERE?

- Community Hall
- Under a tree
- School

### HOW?

#### **Logistical preparation**

- Invite people (contact Headman)
- Transport (AET, own car, other cars)
- Material (booklets, leaflets, coolbox, vaccines, kits, CVF, SF, ESF)

#### **Study of the guidelines**

## **GUIDELINES**

### **REGULAR COMMUNITY VISITS**

#### **BEFORE THE MEETING**

##### **1- Vaccinations against rabies**

#### **DURING THE MEETING**

##### **2- Introduction**

- Headman
- Prayer

##### **3- Introduce the objectives of the meeting**

- Inform farmers about DVS and EIS activities
- Inform farmers about priority diseases
- Determine the animal health situation in the area
- Collect information from the field

##### **4- Presentation of EIS**

- What is it?
- What priority diseases?
- What outputs for farmers (illustrated by CBPP and other priority diseases important for the area)?
- What is the role of farmers in the EIS?

##### ***5- Questions from farmers – Discussion***

##### **6- Collection of information**

- Explain why you collect information from the field
- Ask the questions on the Community Visit Form
- Fill out the Community Visit Form

##### ***7- Questions from farmers – Discussion***

##### **8- Summary**

#### **AFTER THE MEETING**

##### **9- Collect samples and fill out suspicion forms and epidemiological survey forms if there are any cases of priority diseases in the community**



# OUTBREAK MEETING

## WHAT AND WHY?

- Inform farmers about the situation
- Inform farmers about the disease itself
- Inform farmers about prevention and control measures
- Collect information from the field

## WHO?

- Headman
- Farmers
- Pastor
- Councillor
- CAHA (if possible)
  
- Other SIA or AHI
- AET (if possible)

## WHEN?

- When an outbreak occurs
- From September to March (after the vaccination campaign)
- After lunch

## WHERE?

- Community Hall
- Under a tree
- School

## HOW?

### **Logistical preparation**

- Invite people (contact Headman)
- Transport (AET, own car, other cars)
- Material (booklets, leaflets, coolbox, vaccines, kits, CVF, SF, ESF)

### **Study of the guidelines**

# **GUIDELINES**

## **OUTBREAK MEETING**

### **DURING THE MEETING**

#### **1- Introduction**

- Headman
- Prayer

#### **2- Introduce the objectives of the meeting**

- Inform farmers about the situation
- Inform farmers about the disease itself
- Inform farmers about prevention and control measures
- Collect information from the field

#### **3- Inform about the situation of the outbreak**

- Where is it?
- Where is it coming from (if possible)?
- Number of cases (importance)
- Risks for farmers

#### **4- *Questions from farmers – Discussion***

#### **5- Prevention and control of the disease**

- Presentation of the disease (symptoms, etc)
- Strategy within the outbreak
- Strategy around the outbreak

#### **6- *Questions from farmers – Discussion***

#### **7- Census of cases in the neighbouring area**

#### **8- Summary**

### **AFTER THE MEETING**

#### **9- Collect samples and fill out suspicion forms and epidemiological survey forms if there are any cases in the community**



# USE OF FORMS

## REGULAR VISITS

(Community)

## ON REQUEST

(Office)

**SCHEDULED DISEASE**

CVF

F1

F2

F3

Advice + Drug sales

**PRIORITY DISEASE**

CVF

F1

F2

F3

Advice + Visits

Suspicion  
Form

+

ES  
CBPP

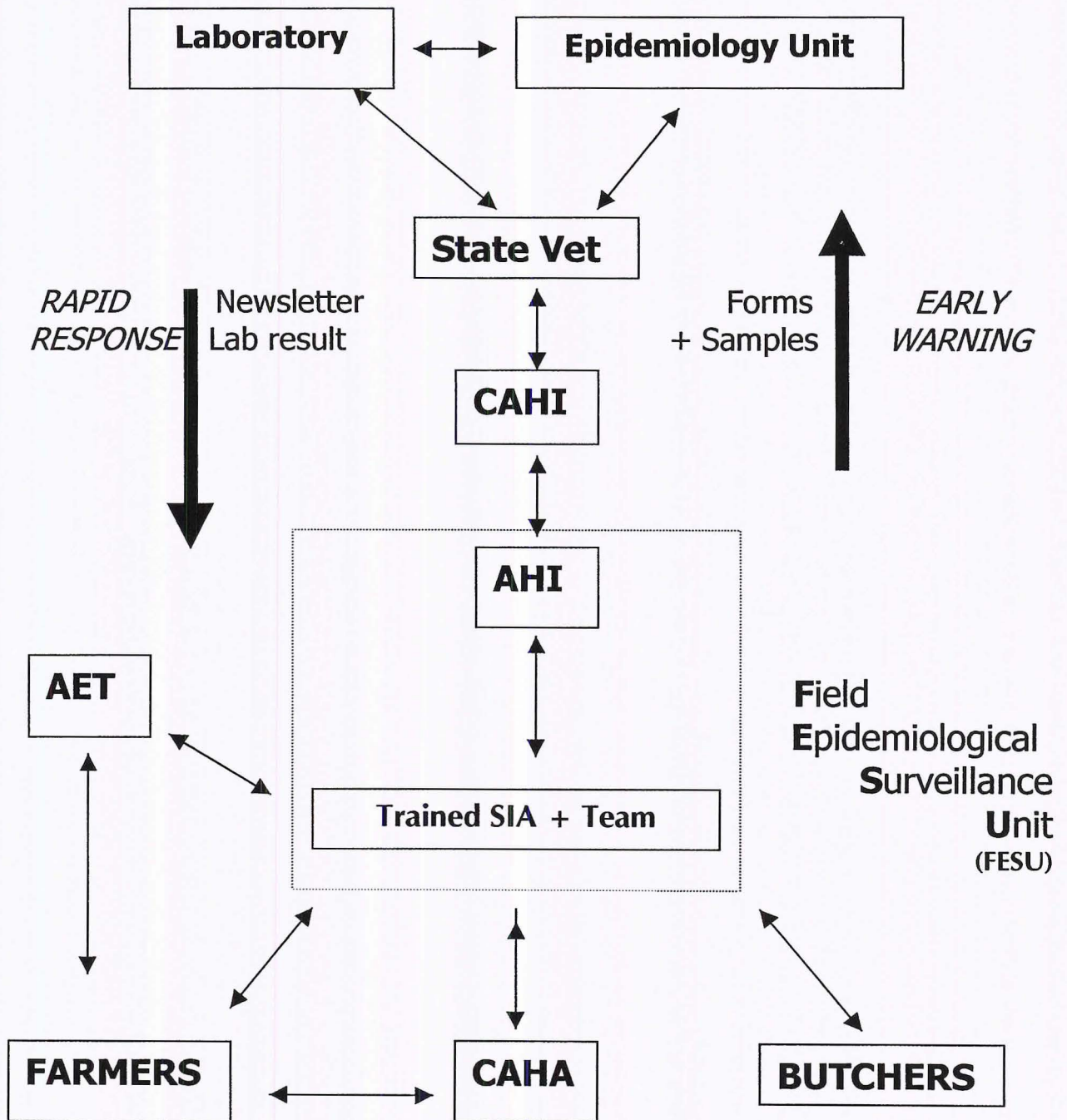
ES  
FMD

ES  
Rabies

ES  
Mange

ES  
Botulism

## EIS ORGANIZATION CHART

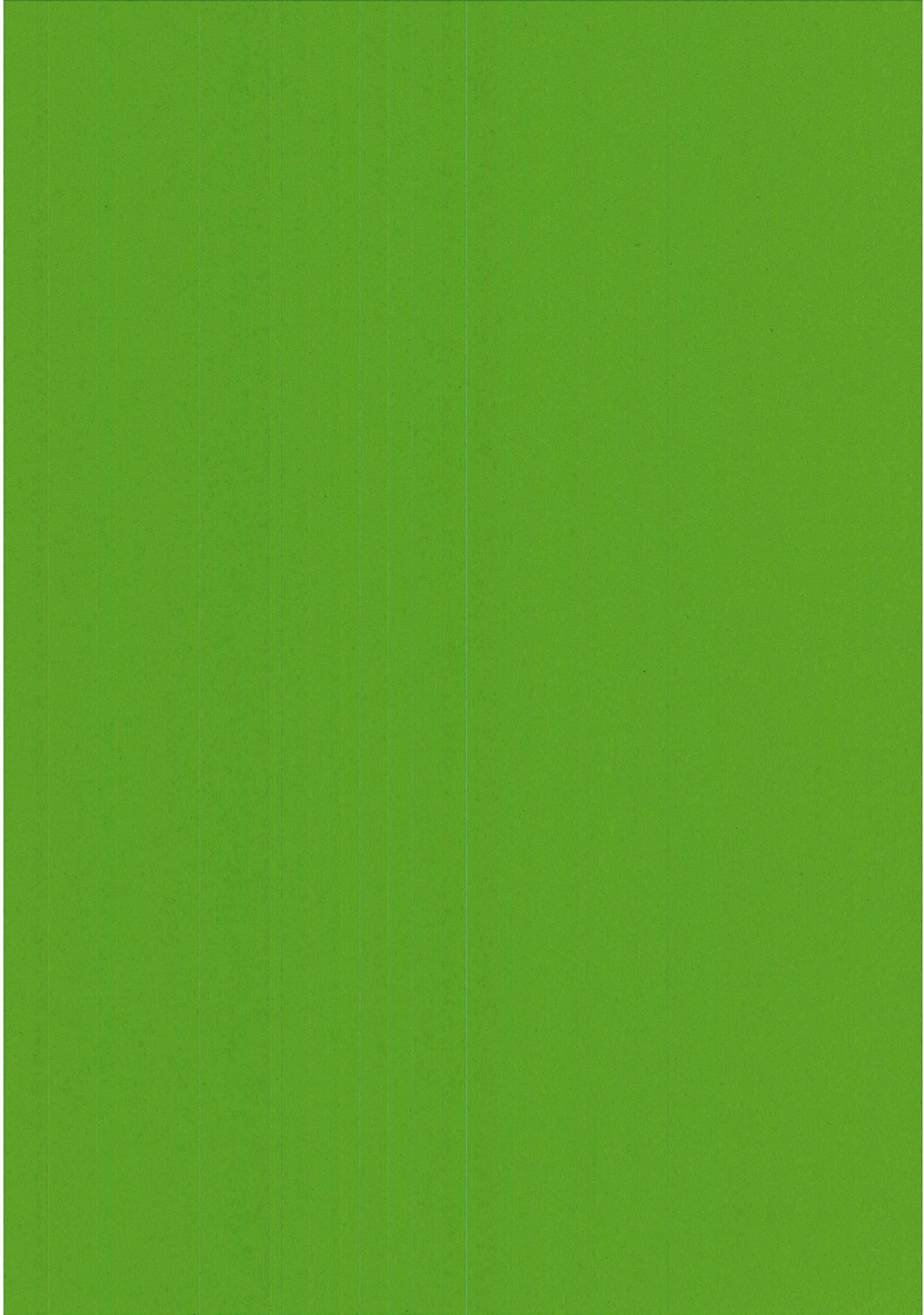




## **ANNEX 6**

### **Contents of the training aide-mémoire**







## **ANNEX 6**

<b>INDEX</b>
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### **OFFICIAL INTRODUCTION**

#### **I – DISEASES**

- I.1. Clinical examination of animals
- I.2. Contagious Bovine Pleuropneumonia (CBPP)
- I.3. CBPP & FMD Protocols
- I.4. Foot and Mouth Disease (FMD)
- I.5. Rabies
- I.6. Rabies & botulism Protocols
- I.7. Botulism
- I.8. Mange
- I.9. Mange & intestinal parasite Protocols
- I.10. Intestinal parasites

#### **II – EPIDEMIOLOGICAL INFORMATION SYSTEM**

- II.1. EIS organization chart
- II.2. Current EIS
- II.3. Current situation
- II.4. Planning of activities
- II.5. Use of forms
- II.6. Sample Community Visit Form
- II.7. Sample Suspicion Form
- II.8. Sample Epidemiological Survey Forms

#### **III – MEETING & TRAINING**

- III.1. Regular community visits
- III.2. Guidelines for regular community visits
- III.3. Outbreak meeting
- III.4. Guidelines for outbreak meeting
- III.5. Extension leaflet: CBPP
- III.6. Extension leaflet: FMD
- III.7. Extension leaflet: Rabies
- III.8. Extension leaflet: Botulism
- III.9. Extension leaflet: Mange
- III.10. Extension leaflet: Intestinal parasite 1
- III.11. Extension leaflet: Intestinal parasite 2

## **IV – MAPS & STATIC FILES**

IV.1. Area of activity

IV.2. EIS Map

IV.3. Static files

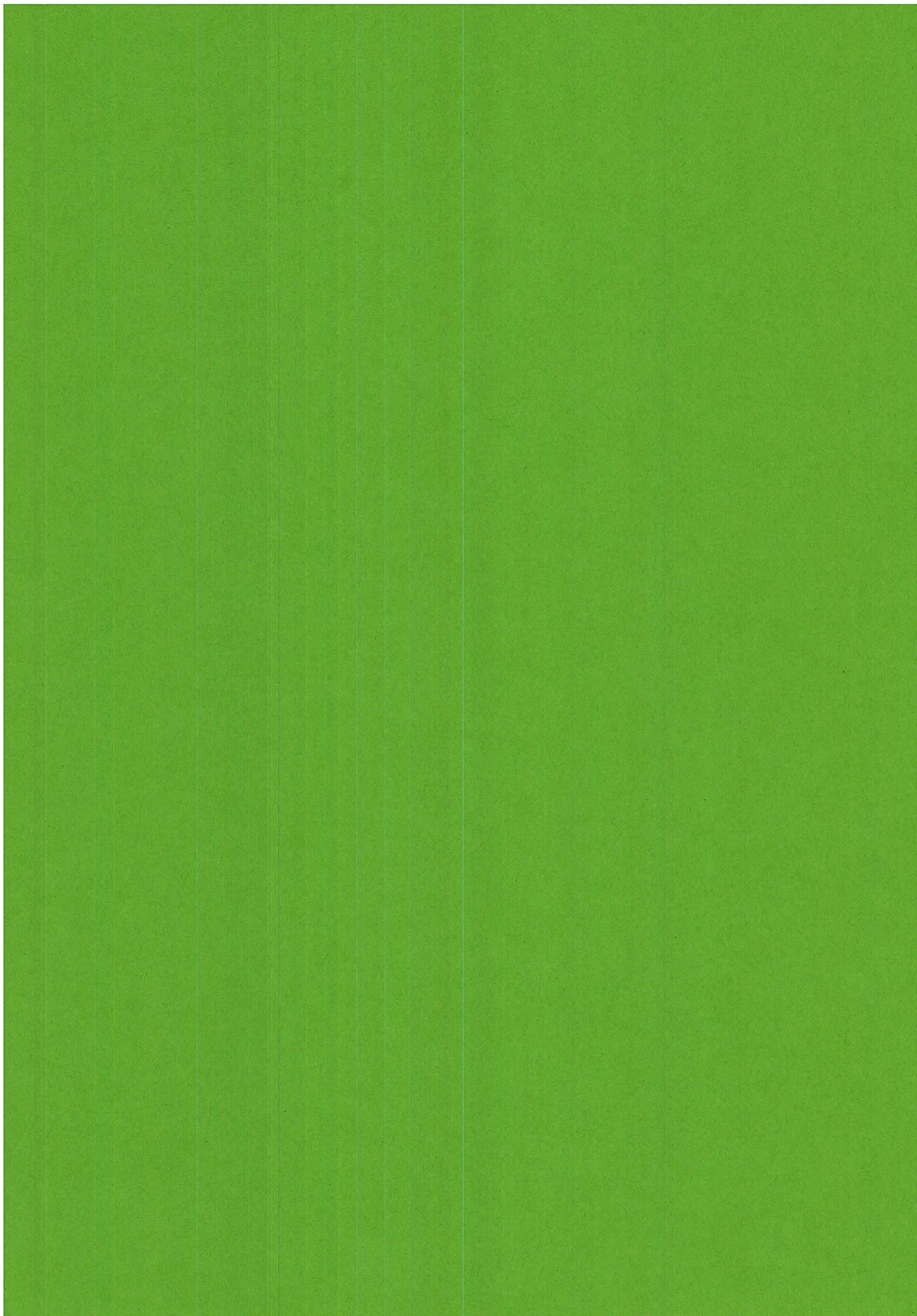
## **V – STOCK FORMS**



## **ANNEX 7**

### **List of questions for assessing participants**







## ANNEX 7

Give three ways to win the confidence of farmers

Give the list of priority diseases

In what situations do you have to fill out a suspicion form?

In what situations do you have to fill out a community visit form?

Give three symptoms of CBPP and what samples you have to take

Give three symptoms of FMD and what samples you have to take

Give three symptoms of intestinal parasites and what samples you have to take

Give three symptoms of rabies and what samples you have to take

Give three symptoms of botulism and what samples you have to take

Give three symptoms of mange and what samples you have to take

For the EIS, what are the five skills that your team must have?

What are the two kinds of meeting with farmers that you have to organize?

What do you have to do before a meeting?

What are the merits of the EIS for farmers?

What are the merits of the EIS for DVS?

What is the role of farmers in the EIS?

What is the role of butchers in the EIS?

What is the role of CAHA in the EIS?

What is the role of SIA and AHI in the EIS?

What is the role of CAHI in the EIS?

What is the role of State Vets in the EIS?

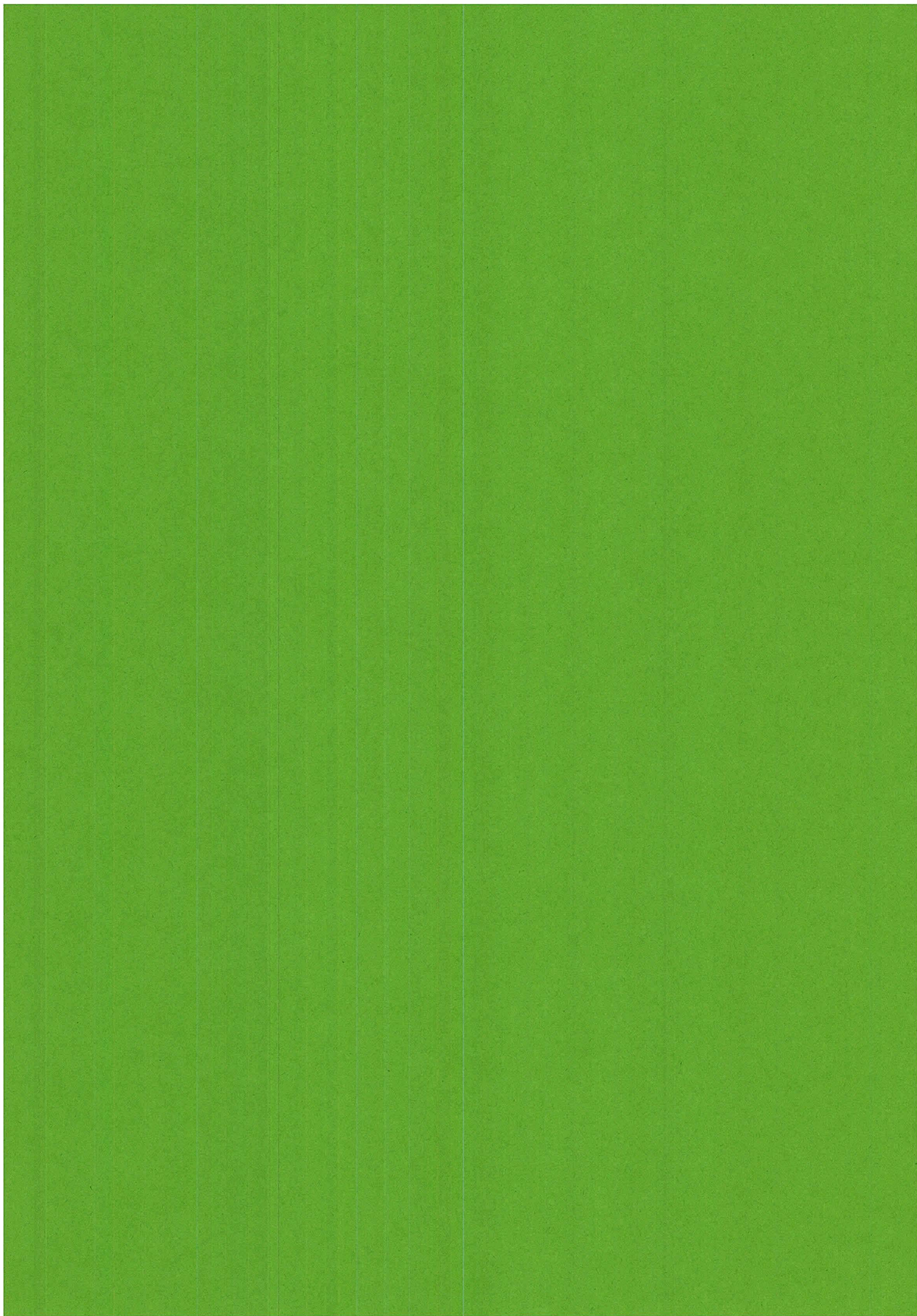




## ANNEX 8

Assessment of the session by the participants







## ANNEX 8

### ASSESSMENT OF TRAINING SESSION

EIS TRAINING  
2 to 13 October 2000

#### 1- What did you think about ?

	Bad	Weak	Good	Very good	Degree of Satisfaction
	1 point	2 points	3 points	4 points	
Accommodation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>17.5/20</b>  <b>or</b>  <b>88%</b>
Food	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Hall	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
General organization	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
EIS course (Dr Bamhare)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
EIS course (Dr Amuthenu)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Rabies & mange (Dr Masaire)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Botulism & FMD (Dr Musilika)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
CBPP & intestinal parasites (Dr Amuthenu)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Samples (practical work)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Use of forms (Dr Amuthenu)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Organizing meetings with farmers (CIRAD)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Organizing training for your team (CIRAD)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Planning of visits and work Plan (Dr Musilika)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

#### 2- What did you like most during the training?

- ⇒ study of priority diseases (*quoted 7 times*)
- ⇒ organizing meetings with farmers (*quoted 5 times*)
- ⇒ presentation of the EIS (*quoted 5 times*)
- ⇒ practical work on sampling (*quoted 5 times*)
- ⇒ the training as a whole (*quoted 3 times*)
- ⇒ use of forms (*quoted 3 times*)
- ⇒ recap questions (*quoted twice*)
- ⇒ the fact that theory was followed by practice (*quoted twice*)
- ⇒ field team member training (*quoted once*)
- ⇒ final assessment in a group (*quoted once*)
- ⇒ study of rabies and mange (*quoted once*)

### **3- What did you not like or like less during the training?**

- ⇒ **I liked everything** (*quoted 6 times*)
- ⇒ how to put what was learnt into practice (*quoted 3 times*)
- ⇒ lack of participation on the part of some students (*quoted twice*)
- ⇒ some students were sometimes too noisy (*quoted twice*)
- ⇒ the training was too intensive (*quoted twice*)
- ⇒ lessons in English with non-English speaking students (*quoted twice*)
- ⇒ the speakers did not talk loudly enough (*quoted twice*)
- ⇒ study of diseases (*quoted once*)
- ⇒ study of forms (*quoted once*)
- ⇒ simultaneous translation (*quoted once*)
- ⇒ too much time was spent on comments (*quoted once*)

### **4- What was the most difficult aspect to understand during the training?**

- ⇒ **use of forms** (*quoted 15 times*)
- ⇒ organizing meetings (*quoted twice*)
- ⇒ the speakers' English was poor (*quoted twice*)
- ⇒ how to work with AET (*quoted once*)
- ⇒ the difference between priority diseases and scheduled diseases (*quoted once*)
- ⇒ I understood everything (*quoted once*)

### **5- According to you, what should be done in future to improve the training course?**

- ⇒ **the speakers need to speak the language (English and Oshiwambo) better** (*quoted 3 times*)
- ⇒ more training in diseases (*quoted twice*)
- ⇒ more videos (*quoted twice*)
- ⇒ more practical work on training field team members (*quoted once*)
- ⇒ more direct practical work on animals (*quoted once*)
- ⇒ more training in techniques for meetings (*quoted once*)
- ⇒ tackling autopsy techniques (*quoted once*)
- ⇒ fewer comments (*quoted once*)
- ⇒ sticking to the schedule more (*quoted once*)
- ⇒ nothing needs improving (*quoted once*)



**6- After this training, what would you like to be trained in?**

- ⇒ **obstetrics** (*quoted 4 times*)
- ⇒ **disease surveillance** (*quoted 4 times*)
- ⇒ **EIS in greater depth** (*quoted 4 times*)
- ⇒ use of microscopes to diagnose verminoses (*quoted twice*)
- ⇒ use of GPS (*quoted twice*)
- ⇒ treatment of animals (*quoted twice*)
- ⇒ poultry, pig and donkey diseases (*quoted once*)
- ⇒ animal feeds (*quoted once*)
- ⇒ use of computers (*quoted once*)
- ⇒ techniques for meetings in greater depth (*quoted once*)
- ⇒ English (*quoted once*)
- ⇒ work planning (*quoted once*)
- ⇒ administrative organization (*quoted once*)
- ⇒ repeating the same training course (*quoted once*)

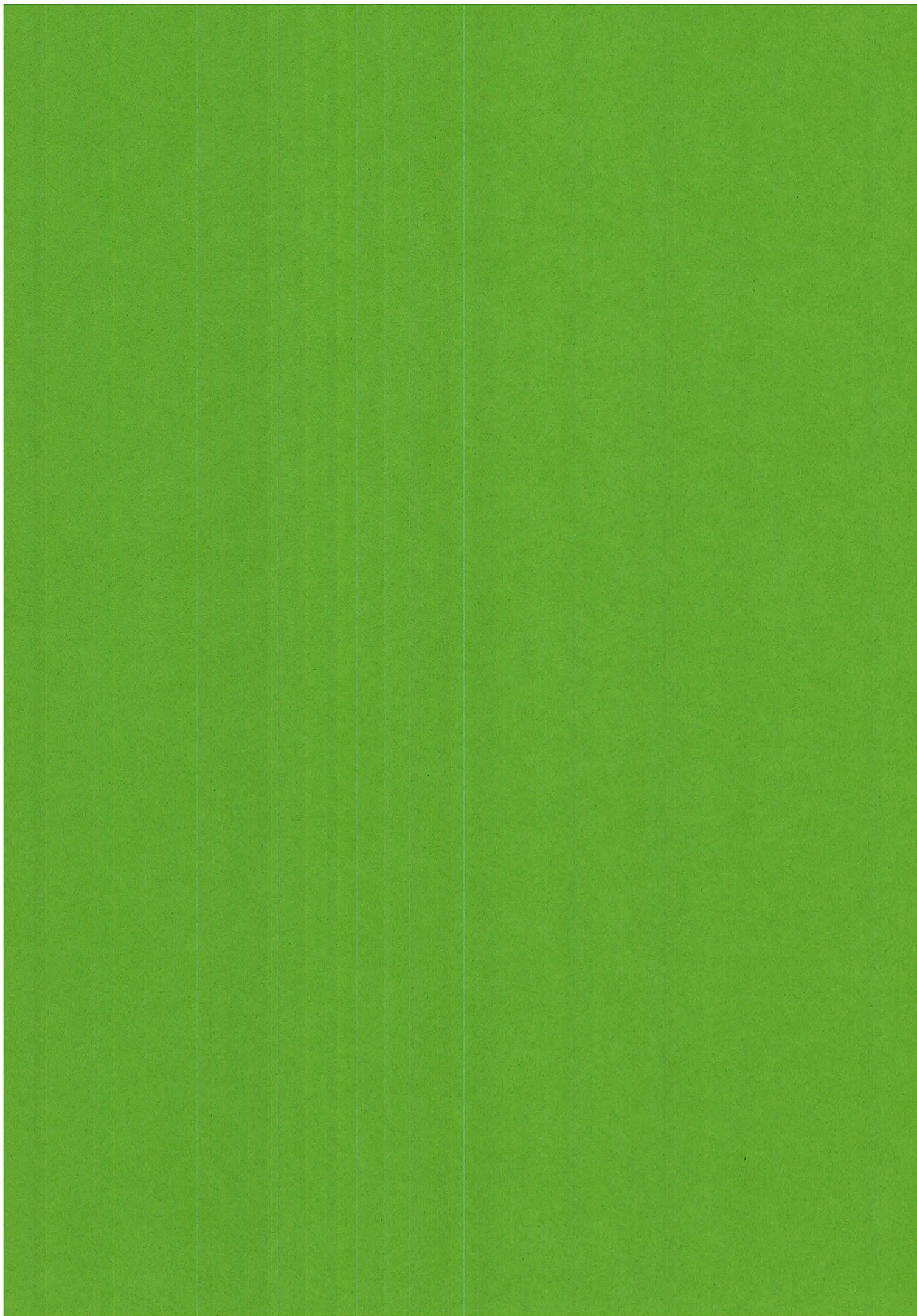




## **ANNEX 9**

### **Organizing meetings with farmers**







## ANNEX 9

### BEFORE THE MEETING

#### WHAT

- Subjects
- Message

#### WHY

- Justification
- Targets

#### WHO

- Participants
- Speakers

#### WHEN

- Period
- Day

#### WHERE

- Villages
- Premises

#### HOW MANY

- People to invite
- Supplies

#### HOW

- Logistic preparation
- Technical preparation
- Meeting techniques

**5 W 2 H**