



Joint Mission Report

(ITM & FUB & VSFB)

Coordination Meeting for TRYRAC-activities of VetTogo in 2016

January 06-11 2016



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List of Abbreviations

AAT	African Animal Trypanosomoses
ARD	Global Programme on Agricultural Research for Development
DA	Diminazene Aceturate
DE	Direction de l'Élevage Lomé, Togo
DRAEPH	Direction Régionale de l'Agriculture, de l'Élevage, de la Pêche et de l'Hydraulique
EU	European Union
FUB	Freie Universitaet Berlin
G.	Glossina
ICAT	Institut de Conseil et d'Appui Technique
ISM	Isometamidium Chloride
ITM	Institute of Tropical Medicine Antwerp
KAP	Knowledge Attitude Practise
LPF	Livestock Protective Fencing
LUH	Leibniz Universitaet Hannover
T.	Trypanosoma
TRYRAC	Trypanosomosis Rational Chemotherapy
VSFB	Vétérinaires Sans Frontières Belgium
WP	Work Package

General Introduction

Trypanosome Rational Chemotherapy, TRYRAC, is part of the EU-funded initiative “Global Programme on Agricultural Research for Development” (ARD) that supports agricultural research for development on a global basis. TRYRAC is an international cooperation of academic, governmental and non-governmental organizations and has the aim of optimizing African Animal Trypanosomosis (AAT) management in western, eastern and southern Africa- represented by Togo, Ethiopia and Mozambique. TRYRAC started in March 2012 with a total funding period of 5 years.

The major constraints to optimal AAT management are ineffective chemical treatment due to limited accessibility of quality trypanocides, gaps in smallholder knowledge and restrictions in the detection of trypanocide resistance to the only two available drugs isometamidium chloride (ISM) and diminazene aceturate (DA).

That is why the main objective of TRYRAC is supporting livelihoods of resource-poor livestock producers in smallholder production systems in sub-Saharan Africa through improving the efficacy of trypanocidal drugs for the control of human and animal trypanosomosis. Specific objectives are 1) detecting trypanosome resistance 2) support drug quality control in African laboratories 3) improving the efficacy of trypanocides through promotion of rational drug use and development of adapted disease control methods.

Best bet strategies are optimizing trypanocidal efficiency and control drug resistance. They comprise selection of effective veterinary products, the promotion of rational drug use, economic vector control and improving animal health conditions in general. Extension messages will be disseminated throughout the study area by national agricultural research systems such as ICAT under the lead of VSFB. Towards the end of the project, a socio-economic impact assessment will be conducted through questionnaire surveys by the LUH.

Strategies for Togo have been determined after an investigative fact finding mission in October 2013 by the FUB to before-identified AAT hotspot regions where trypanocidal resistance/s occurred. These strategies are summarized in Figure 1 and they have been implemented and monitored since June 2014 in the vicinity of 3 community-based organisations in northern Togo: Koundoum, Lopano and Magnan.

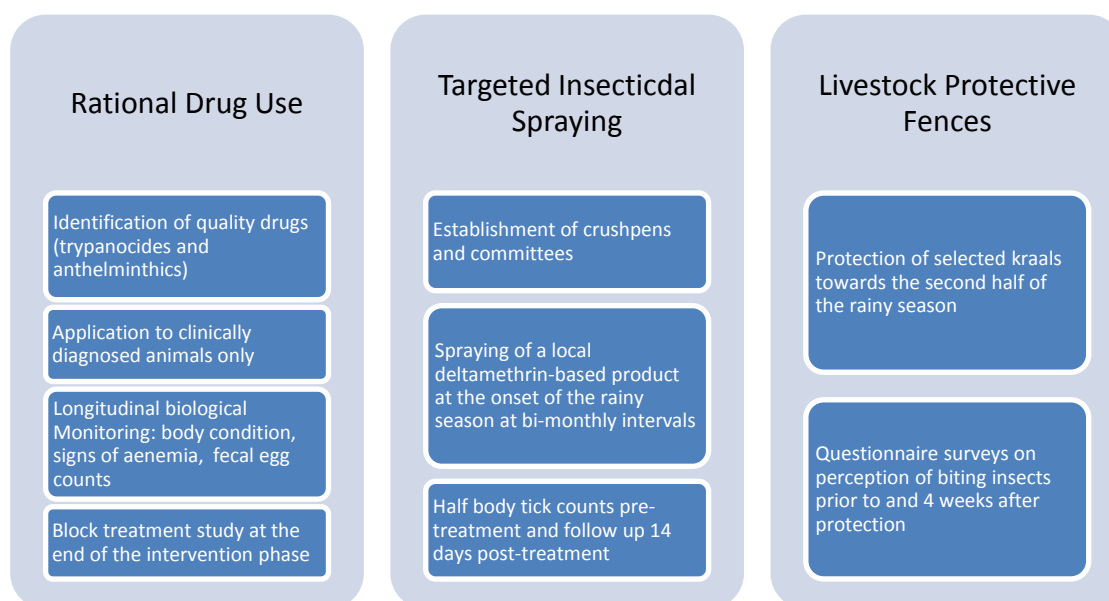


Figure 1. Outline of best-bet strategies, implemented in intervention herds of 100 animals each in Koundoum, Lopano and Magnan which serve as demonstration models for extension messages

It was agreed amongst stakeholders and the FUB, VSFB and VetTogo teams to launch WP 4 activities in late May/June 2014. Livestock protective fences could only be shipped by summer 2015 and were thus installed in the following rainy season July 2015. Training of the PhD student for net instalment and maintenance was done by the vector expert Dr. Bauer (see mission report).

Control sites, where farmers continue with their herd management approach, were established in Wakadé, Kadjitieri and Santigou. There, the biological monitoring is executed in the same manner as in the intervention sites.

Protocols for field interventions and monitoring were developed by Dr. Tchamdja in close collaboration with the FUB team. Protocols and mission reports are available in the partner area of the TRYRAC website: <http://www.trypanocide.eu/>.

Introduction and Mission objective

The activities of WP 4 (best bet strategies) were launched in Togo in June 2014. Initially, a biological evaluation of the program was planned after 24 months of implementation. However, VetTogo communicated to the FUB team that study participants, especially but not only in the control villages, are dropping out. A considerable amount of data could be lost which endangers the output of the project.

It was thus decided to plan a fusion of intervention and control sites and to optimize the program timely in order to ensure a successful outcome for the last implementation year. An adapted schedule to plan for the biological and socio-economic impact assessment is needed. For these reasons the following objectives were set for this mission:

- Analyse intermediate outputs and identify shortcomings
- Develop improvement strategies
- Develop a schedule for VetTogo, FUB, VSF and LUH activities in 2016
- Plan and discuss publications, exchange of biological material

The schedule below (in French) was developed to target the above mentioned objectives.

Table 1. Calendrier pour la réunion structurelle de VetTogo, ITM, FUB et VSF

Date	Heure	Activité	Emplacement
Mecredi, 06/01/2015	Vers 20:00	Arrivé	Anvers/Berlin/Lomé
Jeudi 07/01/2016	09.00- 17.00	Mises à jour sur le terrain, présentation des données, discussion sur les problèmes et les menaces possibles, planification des activités pour la dernière période du projet, élaborer un calendrier	Lomé, DE
Vendredi 08/01/2016	09.00- 17.00	Préparation du rapport, discussions sur le questionnaire d'Hannovre ; conférence de Skype entre VetTogo, ITM, FUB et LUH sur les activités de 2016 et sur le questionnaire	Lomé, DE
Samedi 09/01/2016	09.00- 17.00	Des publications/la thèse :analyses les données etc. ; remises des tiques pour être analysé à Berlin	Lomé, DE
Dimanche 10/01/2016		Départ	Lomé, DE
Lundi 11/01/2016		Arrivé	Lomé/Berlin/Anvers

Conference Protocols

Presentation of preliminary results, trouble shooting, discuss optimized strategies, scheduling TRYRAC activities for 2016

Place: Direction de l'Élevage et de la Pêche

Date: January 07 2016

Time: 09.00-16.30

Participants, occupation and affiliation:

KA Kossi Adomefa, DE/VetTogo
KW Komla Edun Woega, accountant, DE
SA Sifeile Adom, public veterinarian (chef de poste), DRAEPH Kara/VetTogo
CJ Comlan Johnson, assistant, ICAT
JA Jan Van Den Abbeele, project coordinator, ITM (WP 1)
DF Déthié Faye, extension specialist, VSFb (WP 5)
HB Anani, Helmut, Bankolé, veterinary inspector, DE/VetTogo
AH Antje Hoppenheit, postdoc, FUB (WP 4)
AB Aboudou Boukaya, public veterinarian (chef de poste), DRAEPH Savanes/VetTogo
AK Abalo Kulo, professeur, UL/supervisor of the PhD candidate Guy Tchamdja

Daniel Batawui (DB; country director VetTogo) could not attend the meeting due to official duties related to a visit of a German minister;

-absence of Guy Tchamdja (GT; PhD student VetTogo) due to annual leave

09:30 Opening of the meeting by KA and JA

It was stated that GT has been coordinating the project from Lomé since fall 2015.

It was clarified that SA and AB are responsible for the further implementation of all TRYRAC activities in Kara and Savanes, with the support of the already trained team (technicians Tchini and Isifa) and private veterinarians.

SA, AB and DF report from the field

The farmers of the control village Santigou have completely moved.

The intervention village of Lopano is struggling with an overall lack of motivation in the crushpen committees. The entire herd was accidentally treated with DIM in late summer of 2015 which could be an indication that the extension messages of the local team (ICAT, private vets, livestock keepers association) have not reached the farmers optimally.

The farmers were initially very enthusiastic of the installed LPF's but they are now complaining about a loss of efficacy after approximately 3 months of usage. It has to be evaluated what the underlying cause is of this unexpected rapid decrease of the efficacy of the LPF. One possible explanation is the fact that the netting was not removed during the dry season as advised; the LPFs were not removed because of the perceived positive effect of a lower mosquito density.

- For further evaluation of the above LPF issue the following actions will be undertaken: 1 m² of the netting of each location is to be cut and sent to the FUB;

- we will perform FlyBox tests of unwashed and washed netting to estimate its effect on sensitive and resistant house flies
- further, FUB will try to initiate pharmacological tests in the faculty
- Farmers must be re-informed how to use the netting properly (including washing to remove the dust) in order to improve the efficacy of the netting
- an information sheet will be developed by FUB and the vector specialist Dr. Burkhard Bauer;
- VetTogo/ICAT should approach the 9 LPF farmers of Magnan, Lopano and Koundoum and repeat training of net maintenance

AK presented the outline of GT's PhD thesis and intermediate results

In order to write up his thesis timely, GT has already collected extensive biological data on the herds in September-October 2015. This action is independent of the foreseen TRYRAC protocol (i.e. collection of biological data of the herd is scheduled for May-June 2016).

The thesis exists in a draft version and is being corrected by AK. AK's presentation can be found on the website; a brief summary follows below:

A cross-sectional study of cattle herds in Kara and Savanes was done in 2013; AAT prevalence and resistance status was determined; identified best-bet strategies are being implemented since June 2014; One paper on trypanocidal quality is accepted; another paper is being drafted by GT, FUB, ITM and Tanguy Marcotty as an external statistician; a third paper on best-bet strategies is planned for the end of 2016 after completion of the thesis.

Main output of the cross-sectional study:

AAT and drug resistance is a problem in Togo; the quality of trypanocides, especially from illegal sources is not sufficient

Main output of best bet strategies:

Intervention herds are slightly healthier than the control herds (but statistically not significant) but the usage of trypanocides has declined drastically in the intervention sites: out of approximately 300 only 15 animals have been treated with DIM in the entire study period of 14 months at the time of data collection. The LUH questionnaire will reveal the amount of self-/veterinary treatments in the control sites (and as well in the intervention sites). Albendazole and Deltamethrin are effective against helminths and insects/ticks in the study locations at the time of the study

DF and CJ each presented the developed extension tools and how they are being implemented in the different field locations

The complete presentation can be found on the website; the presentations can be summarized as follows:

- The tools were developed and translated in the local languages in time; some delay was observed in manufacturing the billboards; altogether the messages are well received and farmers seem very interested with the exception of Lopano where some lack of interest was observed.
- It was acknowledged how important and appreciated communication of Knowledge Attitude Practise (KAP) in animal trypanosomosis is.

The following actions are planned:

- the final schedule of activities in Togo (especially those of VSFB/ICAT/FUB) will target an optimized communication with the farmers
- VSFB and ICAT will try to identify the problems in Lopano and adjust their actions accordingly

A discussion developed between the participants on the accessibility to different trypanocides and its market/usage control in Togo, on the LPF's and on how to improve timely the communication of the project outcomes to the farmers at the intervention as well as the control sites. Drug sellers are interested to sell a high amount of trypanocides to vets and even farmers; this makes it hard to argue for rational drug use;. The practise of treating valuable animals regularly will be hard to change; veterinarians often sell big batches of drugs to the farmers so they don't need to visit them several times

-Vet authorities should play their role through a better control of the importation, distribution and use of vet drugs in general and trypanocides in particular. If not the positive outcome of the project might not be sustainable

The arguments/solution proposals are summarized below:

- To speed up the processing of the collected data statistical analysis of the data will be organised per publication; this will be done either through contracting external statisticians or through statisticians of the respective institutions according to the needed experience
- Positive effects of the best-bet strategies that lie mainly in the extreme low usage of trypanocides may not be so obvious to all the farmers; So stakeholders, especially farmers, could change their habits if they knew that spending less on trypanocides and treating only sick animals in a correct manner will not have a negative effect on their herds
- It is always difficult to change habits but a prompt communication of the projects output should be realized as soon as possible.

The EU has communicated to JA that actions should be undertaken to improve the international visibility of the TRYRAC project:

- a video is to be produced mainly in Togo with a local team; additional material should be filmed in Ethiopia and eventually Mozambique (to be decided yet); AH will develop a script; JA will contact the ITM Public Relation service to look for a Belgian production team for the final cut and production

Based on the presented results and the following discussions, the schedule which can be seen below was developed. This schedule is a rough sketch which helps in co-ordinating logistics for the involved TRYRAC partners. Further fine-tuning will be done by the respective institutions.

Activity		2016												2017		
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	
Biological Assessment WP 4	done in October, Blocktreatment missing; joined with Guy's plan? (verify with Clausen); ToDo FUB: develop adjusted protocol!															
Socioeconomical Assessment WP 6																
Communicate results to intervention farmers & sensitize control farmers (Dethie?/FUB/Bauer)																
Fusing Intervention and Control Sites	see if Dethie is available; see Guy Tchamdja's field schedule															
Production of a promotion video	ToDo FUB: develop "script" based on BMZ-Video; if possible join production															
Financial & Technical Report Audit (VetTogo, ITM, EMU)																
PMC (Moz? June /+ STVM Berlin? September)	to be confirmed with Moz, UP, Eth															
Submission article on prevalence																
Submission of the PhD thesis																
Submission article on best-bet strategies																

Table 2. Preliminary schedule of TRYRAC activities in Togo 2016

- WP Work package
- FUB Freie Universitaet Berlin
- VetTogo Country coordinators, PhD student, field personal of Togo
- ITM Institute of Tropical Medicine, Antwerp
- EMU Eduardo Mundlane University, Maputo
- PMC Project Management Committee
- Moz Mozambique (the TRYRAC team)
- UP University of Pretoria
- Eth Ethiopia (the TRYRAC team)

Revising the socio-economical evaluation questionnaire submitted by Leibniz University of Hannover

Place: Conference room of the Hotel Bellevue (Annexe)

Date: January 08 2016

Time: 14.00-17.30

Participants, occupation and affiliation:

KA Kossi Adomefa, DE/VetTogo
SA Sinfleile Adom, public veterinarian, DREAP Kara/VetTogo
JA Jan Van Den Abbeele, project coordinator, ITM (WP 1)
DF Déthié Faye, extension specialist, VSFB (WP 5)
AH Antje Hoppenheit, postdoc, FUB (WP 4)
AB Aboudou Boukaya, public veterinarian, DREAP Savanes/VetTogo

HW Hermann Waibel, LUH (WP 6) via Skype

PHC Peter-Henning Clausen, FUB (WP4) via Skype

(excused) CJ Comlan Johnson, assistant, ICAT

He sent his comments to the questionnaire via email to Dethie Faye (VSFB) and they were sent to LUH.

The morning was used by VetTogo, VSFB, ITM and FUB to review and discuss the submitted questionnaire extensively in two teams: VetTogo in French in the DE office and the rest of the TRYRAC team in English in the hotel Bellevue.

The following Skype conference which began at 14.00 was used to briefly exchange the newly developed schedule and important field updates with the partners in Berlin and Hannover. Due to internet connection difficulties it was decided to abandon the planned conference.

Instead, the questionnaire was discussed in detail and a joint document with suggested changes of VetTogo, VSFB, ITM and FUB was developed and sent to LUH.

Comments of the vector specialist Dr. Bauer are yet to be incorporated in the joint document. The final questionnaire will be accessible in the partner section of the TRYRAC website.