

## **Minutes**

### **5<sup>th</sup> Meeting of the SADC HPAI Working Group**

Gaborone, Botswana

23<sup>rd</sup> – 24<sup>th</sup> March 2010

#### **1.0 Background**

Since its formation in 2007, the SADC Avian Influenza Technical Working Group has already held four meetings: 2008 (March & September); 2009 (April & October). All the meetings were held in Gaborone, Botswana. Through a specific task oriented approach, technically and financially supported by FAO-ECATD for Southern Africa, the technical working group has been able to achieve tangible outputs in avian influenza surveillance, control and preparedness. Some of the notable outputs realised thus far include: (1) Development of the HPAI surveillance guidelines with particular emphasis on backyard poultry systems; (2) Planning and accomplishment of the first Proficiency Test on HA/HI for HPAI for SADC laboratories; (3) Establishment of a demand-supply hub for HPAI diagnostic reagents and kits; (4) Selection of a second Service Laboratory for the SADC region. Other outputs were facilitated by the working group include organisation of regional trainings on HPAI diagnostics and assessment of laboratory capacity for avian influenza diagnosis within the SADC region.

Given these laudable achievements, both the SADC Laboratory Diagnostics and Epidemiology & Informatics subcommittees have supported the continuation of the mandate of the working group. Furthermore, in realisation of the effectiveness of such a working group to ably address specific technical tasks assigned by the subcommittees, the mandate of the AI working group has been extended beyond purely avian influenza issues to include other Transboundary Animal Disease (TADs) issues. It is in this context that this 5<sup>th</sup> meeting also focussed on some issues related to rabies surveillance and control in the SADC region.

#### **2.0 Participation**

As usual, the meeting was attended by members of the working group, namely Laboratory experts from Zambia (Chair), South Africa, Zimbabwe (Chair of Lab Sub committee), Swaziland, Namibia, Mozambique, the host country -Botswana and ARC-OVI as the regional institution. During this meeting the co-opted members from the Epidemiology Sub Committee were not present. Due to its mandate under SPINAP, AU-IBAR participated in the meeting to provide an update and progress report on implementation of SPINAP in SADC. Other collaborating partners present included the USAID regional coordinator, Mrs

Kimberly Crunckleton, Ms Rejoice Muavhi from USDA, Dr John Gachohi from ILRI, Nairobi and Drs Rosa Costa and Tanya Radosavljevic from Kyeema Foundation Project. The national consultants for the USAID funded FAO HPAI surveillance project also attended the meeting.

### **3.0 Opening Remarks**

The chair of the working group, Dr Kabilika, welcomed the participants and briefly outlined the objectives of the meeting.

The official opening was performed by Dr Samantha Kejelepula from the Botswana National Veterinary Laboratory (BNVL).

### **4.0 Overview of FAO-ECTAD supported AI work**

Dr Susanne Munstermann provided an overview of the AI work that has been supported by the FAO ECTAD for southern Africa. Since the formation of the working group (WG) in 2007, ECTAD has supported technically and financially 5 meetings of the WG. Through this support, the WG has been able to realise tremendous achievements that have placed the SADC region in a favourable position in the surveillance and control of AI. These achievements have included, but were not limited to regional and country-specific trainings on AI diagnostics; development of HPAI field surveillance guidelines, which have been practically implemented in some SADC member countries; establishment of a demand-supply hub for AI reagents and kits; assessment of SADC laboratory capacity for AI diagnosis and the subsequent carrying out of the first AI Proficiency Test (PT) for SADC laboratories. Finally, FAO ECTAD facilitated the selection of the second service laboratory for the region. As this second Service Laboratory, Botswana National Veterinary Laboratory (BNVL) has now signed a contract with FAO to provide diagnostic services to SADC member countries and will eventually facilitate the second PT.

### **5.0 AI Simulation Exercises**

A video of the Zambia AI simulation exercise was played for the participants after which, Dr Gison Njuga presented the report on the AI simulation exercise carried out in Malawi.

The participants agreed that the two simulation exercises were very educational and other countries will improve on the lessons learnt.

### **6.0 Avian Influenza FAO Surveillance project reports**

Nada Abu Samra (FAO ECTAD Gaborone) presented the HPAI surveillance guidelines for the SADC region which have been put into practice in 2009 in four

countries. It was emphasised that during 2010 AI surveillance should be linked to Newcastle Disease (ND) vaccination campaign.

## **7.0 Kyeema Foundation Projects**

Drs Rosa Costa and Tanya Redosavljevic presented the activities of the Kyeema Foundation, which is an Australian non-profit organisation that has set up the International Rural Poultry Centre (IRPC). IRPC works with governments, communities and farmers to promote poultry production. Kyeema is involved in ND vaccine production (I2 thermostable vaccine) in Malawi, Zambia and Mozambique, as well as with post vaccination sero-monitoring of vaccination efficacy.

The meeting discussed possible collaboration between the AI surveillance and the Kyeema initiative in these 3 countries. In addition, Kyeema's support and involvement during the cross-border surveillance was suggested.

## **7.0 Country Presentations**

Four countries; Zambia, Mozambique, Malawi and Zimbabwe presented their current situation with regards to AI surveillance and diagnostics.

On the basis of these presentations, the meeting agreed that those countries that are currently carrying out diagnostic PCR for AI should submit their protocols with a view to harmonising and producing a protocol for the region.

The participants further emphasised the need to strengthen collaboration between the field and the laboratories with regards to AI surveillance.

## **8.0 HA/HI training – OVI report**

Dr Phelix Majiwa presented the report on the HA/HI training conducted as in-country training in 5 SADC countries by ARC-OVI. It was indicated that the training proved to be very useful for some countries with countries such as Malawi reporting tremendous improvements after the training. The meeting agreed that the full report will be sent to all heads of laboratories.

## **9.0 Revision of the HA/HI SOP**

Dr Joule Kangumba presented the revised HA/HI SOP. The meeting agreed that it was important to take into consideration the peculiarities of each laboratory. E.g. whether ELISA/AGID or HA/HI are used as screening tests. However, during the Inception workshop held in February (16<sup>th</sup> - 17<sup>th</sup>) the 4 countries involved in the AI surveillance project agreed to first screen all samples using ELISA kits. Only the samples testing positive on ELISA will be retested using HA/HI. During

this meeting the necessity to test for other haemagglutinin subtypes beside H5 and H7 was expressed.

Some of the issues highlighted on the new version of the SOP were:

- In the Introduction, the new version of the SOP will clearly stipulate that AGID and/or ELISA will be recommended as Step 1 test (i.e. screening test to detect antibodies to the group antigen of influenza A virus)
- The word “button’ used in the initial version will be replaced by “tear-shaped streaming” to avoid confusion with the button such as that observed on Complement Fixation test
- Clarification on the evaluation of the plate e.g. use of the tear drop
- List of materials was reorganised by ways of creating separate bullet for each listed item
- List of equipment was updated by inserting items that were cited in the text but omitted on the list
- Inactivation of sera under Sample handling and preparation was changed to become optional
- Additional notes on preparation on non-chicken sera by treating them with 2% chicken RBC were added
- A new alternative (i.e. third option) was added under Test procedure for preparation of PBS
- Dilution of Antigen under Methodology was removed
- Additional note was inserted to qualify the outcome of the Back titration (HA) before proceeding to the next step (HI)
- Under Criteria for test acceptance/quality control, “Antigen back titration to give 4HAU” was changed to”Antigen back titration to give 100% haemolysis up to 1HAU
- Validation of the last version of the SOP (PT test should be done annually)

## **10. Progress report on EDRSAIA project and introduction of PDS**

Dr John Gachohi reported on the progress of the EDRSAIA project. In addition he presented and explained the development of the HPAI risk maps. The first and second generation maps were demonstrated. The discussions followed by this presentation were mainly clarification on the tool used to create the maps.

## **11. SPINAP presentation**

Dr Gift Wanda gave an update on the remaining SPINAP activities and presented laboratory specific activities/investments of all involved SADC countries. The importance of collaboration between SPINAP and FAO national coordinators in Malawi, Mozambique, Zambia and Zimbabwe was underlined.

## **12. USDA – Biosafety and Biosecurity project proposal**

Ms Rejoice Muavhi announced that the project proposal on biosafety and biosecurity training to support SADC laboratories has been approved by USDA. Thereafter Dr Munstermann presented the detailed project proposal. Initially a one week training course at the BNVL for biosafety managers from SADC laboratories is planned, followed by in-country visits by a biosafety expert to 4 selected countries in the region: Botswana, Namibia, Zambia and Mozambique. These countries were chosen based on advanced biosafety. The budget does not allow the visit to all SADC countries. The question was raised if more than one laboratory person could be allowed to participate in the training in Botswana.

### **13. BNVL contract with FAO**

Dr Samantha Kejelepula gave a progress report on the services provided to the Laboratories in the Region to date. The services comprised the testing samples submitted by Mozambique, Zambia and Zimbabwe. The demand-supply hub has been transferred from ARC-OVI to BNVL and is operational. The request form was presented to the meeting, discussed and agreed upon. Dr Samanta Kejelepula was requested to send the approved form to all laboratories.

### **14. Rabies proposal**

Dr Munstermann presented the Rabies proposal, yet to be submitted for funding. The meeting discussed that SADC laboratories should be involved in post-vaccination monitoring and characterisation of virus strains. Counties were encouraged to build capacity in provincial laboratories for rabies diagnosis in order to reduce the turnaround time. The meeting proposed that the FAT test protocol should be harmonised for the region in a similar way as was done for the HA/HI and laboratories should engage in a PT test for FAT. Dr Claude Sabeta from ARC-OVI should be involved.

## **Resolutions**

### **1. AI agenda**

- BNVL to test samples that were positive in screening test (ELISA) also for other H than H5 and H7
- Prepare a harmonized PCR protocol – a group of experts was nominated, consisting of Namibia, South Africa, ARC-OVI. The protocols from the 8 laboratories currently carrying out PCR shall be submitted by end of March.
- ECTAD shall coordinate the experts' meeting to harmonize the protocol
- Send out ARC-OVI in-country training report to all heads of SADC Labs (to be done by ECTAD)
- Finalize HA/HI SOP's revision by end of next week (to be done by Dr Kangumba); countries to send comments within one week; thereafter publishing on website

- Send the hub inventory, including a description of quantities available, together with the requisition form, to all heads of Labs, in copy to the contact persons (to be done by ECTAD and BNVL)
- PPT presentation on long term storage of samples to be improved by Dr Majiwa, to be sent to ECTAD, who in turn will send to all Heads of Labs. They are to describe possibilities to apply them to the country situation
- Kyeema and FAO collaboration in the three countries under the surveillance/ ND projects
- Production of documentation on achievements of Working Group (Chair and ECTAD by May)
- Raise further adoption of AI Surveillance Guidelines at the joint EIS/LAB SC meeting in July
- To carry out impact assessment on trainings done in 2009 (to be done by ECTAD)
- Send out information on forthcoming biosafety training to Heads of Labs (end of the month; to be done by ECTAD)
- ILRI to communicate to the Working Group where the 2<sup>nd</sup> generation of risk maps will become available on-line in the future

## **2. Rabies Agenda**

- Harmonization of the FAT protocol: all countries to send current protocols to ECTAD (next week), which in turn will compile them and officially submit to OIE Rabies Reference Lab at ARC-OVI, with request to assist in harmonization
- Assessment of diagnostic capacity of all Labs (format as in AI assessment; to be sent by ECTAD)
- Send out reminder to other countries to reply to Rabies questionnaire by May 30<sup>th</sup> (FAO-ECTAD)
- Send out copy of the Rabies proposal to Head of Labs by April 30<sup>th</sup> (FAO-ECTAD)