

MINUTES

Second Meeting of the Avian Influenza Working Group of the SADC Laboratory Diagnostics Subcommittee 11 - 12 September, 2008 Gaborone International Conference Centre, Gaborone, Botswana

1. Background

The Avian Influenza Working Group was formed by the SADC Laboratory and Diagnostics Subcommittee to tackle specific technical issues related to laboratory diagnostic capacity for avian influenza in the SADC region. Through financial and technical support of the FAO-ECTAD unit for Southern Africa, the working group held its first meeting on the 3 - 4 March 2008 at the Regional Animal Health Centre (RAHC), Gaborone.

At its inception meeting, the working group agreed on terms of reference that would guide its future activities. Due to the inevitable link between field surveillance and laboratory diagnostics, the working group's mandate was broadened to address technical questions on avian influenza posed by both the laboratory and epidemiology sub-committees and hence also co-opted also members from the SADC Epidemiology and Informatics Sub Committee. In essence, the working group would meet on ad hoc basis to respond and advise the two sub-committees on all technical issues related to avian influenza prevention and control.

The following minutes are therefore a record of proceedings of the second meeting which was convened to address pertinent issues raised in the first working group meeting. The FAO-ECTAD unit for Southern Africa provided the financial and technical support for the meeting.

2. Participation

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 and the host country, Botswana. Co-opted members from the Epidemiology Sub Committee represented Swaziland, Namibia, Lesotho, South Africa, and OVI as the regional institution. The other partners within the Regional Animal Health Centre (RAHC), namely, the AU-IBAR and OIE participated in the meeting to provide technical support. Dr Ruth Manvell, VLA Weybridge, UK, participated as an invited expert to enlighten the working group on the mandate of VLA as a reference laboratory for HPAI, particularly with regard to proficiency testing.

3. Opening Remarks

The SADC-FANR Senior Program Manager, Mr Bedeenan Hulman, opened the meeting. In his opening remarks Mr Hulman:

- Thanked the FAO-ECTAD for providing the technical and financial support that will enable the working group to produce tangible outputs for regional avian influenza preparedness.
- Cautioned that even though the SADC region is still fortunate to be free from infection, member countries must not relax as the risk is still very much there and will always be there.
- Indicated that SADC has given the RAHC the mandate to assist member states in the implementation of their HPAI preparedness plans as well as the regional preparedness plan.
- Expressed the need for all SADC member countries to be at the same level of preparedness to ensure that the disease is not introduced into the region and hence the need for regional coordination.
- Emphasised that averting a human pandemic will depend on successfully controlling the disease at source.
- Informed the group of the imminent ADB project that will be implemented in the region to tackle Transboundary Animal Diseases (TADs) including avian influenza.
- Requested members of the working group to think over their possible contributions towards establishment of the Southern African Commission for the Control of TADs (SACCT).

4. Update on AI Activities

The regional manager for FAO-ECTAD in Southern Africa, Dr Susanne Munstermann presented an overview of avian influenza activities in the region. In her presentation she:

- Explained how the role of the avian influenza working group fitted in with the SADC general structure
- Explained that DRC and Tanzania are no longer members of the working group as they now fall under the RAHCs for west and east Africa respectively. For that reason, Zambia assumed the chair of the working group and Namibia and Mozambique came in as replacement countries
- Informed the meeting that three consultancies were launched by Alive each on Communication, Socio-Economics and Epidemiology surveillance.
- Indicated that Zambia had the first multi-sectoral AI simulation exercise in the region. While this was a table top exercise, it was very useful as it identified the strengths and gaps in the Zambian national preparedness plan.

Discussions arising from the presentation

- It was requested and agreed that, through Dr Munstermann, Zambia should provide other member countries with the necessary material so that they can benefit from such an exercise.
- On participation of members of the Epidemiology Sub Committee in the working group, it was agreed that it will remain flexible and the chairman of the Sub Committee will nominate members to attend depending on the issues on the agenda.

5. Laboratory Questionnaire Analysis

Background

At its inception meeting of the 3 - 4 March 2008, the working group agreed that there was a need to address capacity of member countries in surveillance and diagnosis. To that effect, a questionnaire developed and used by the west and central African laboratory network was used to guide discussions. It was eventually agreed that a revised format of the questionnaire would be sent to SADC Laboratories for completion and submission to FAO-ECTAD for analysis. The results of the analysis will be used to guide support to member countries with respect to provision of training and equipment.

Presentation of Analysis

Dr Pasca Gwarada presented the analysis of the questionnaire.

- 16 laboratories received the questionnaire, 13 national labs and 3 provincial labs in South Africa.
- 14 responses were received and are being analysed
- Whilst most countries managed to complete most of the questionnaire, there were still some gaps that needed to be completed. In addition it was agreed that the questionnaire needed to be validated by heads of laboratories so that it could reflect the situation on the ground. This was important as it appeared that countries interpreted some questions in different ways.
- It was clarified that the regional laboratories in RSA are not yet doing inter-laboratory testing for AI with OVI. However, preparations are ongoing.
- The group agreed that the needs of all the laboratories in the region must be based on certain minimum laboratory requirements in order to undertake HPAI diagnosis. A check list for each test (e.g. HA/HI, AGID, ELISA) should be used to standardise the requirements. This information can then be used to categorise the laboratories.
- Once this baseline information is available, it will need to be updated regularly. Therefore it was agreed that member countries must submit quarterly reports to Dr Munstermann for compilation.

6. Identification of a second regional Service laboratory

The need for a second regional service laboratory to provide SADC countries with diagnostic services for the testing of HPAI samples was identified during the first AI Working Group meeting. Criteria were developed and FAO was tasked to source funding for such a consultancy. During this meeting, the Terms of reference for a regional and an international consultant were developed.

The ToR are given in Annex 1.

7. Presentation by VLA Weybridge on its mandate as a reference laboratory for HPAI with special emphasis on proficiency testing.

Dr Ruth Manvell, the invited guest expert, presented the role of VLA as a reference laboratory for HPAI. In her remarks Dr Manvell mentioned the following:

- That VLA is an FAO/OIE and EU reference laboratory for Newcastle Disease and Avian Influenza
- That VLA undertakes coordination of ring trials or proficiency testing using H5, H7 and PMV1 panels for EU member countries
- That for proficiency testing it is very important for laboratories to use the same test and source of reagents.

8. Discussions on the way forward regarding proficiency testing

The need for validation of tests across the SADC labs had been clearly identified during the first meeting of this Group. OVI had been tasked to come up with a proposed work plan and budget for a proficiency test during this meeting.

Dr Majiwa gave a short presentation on his estimations of requirements and the proposed process regarding proficiency testing. After discussions on the subject, the group agreed on the following:

- That the Laboratories must do the test that is already being carried out in member states. i.e. HA/HI (9 out of 14 carry out this test)
- OVI will procure reagents for proficiency testing from VLA
- On arrival, OVI will then evaluate those reagents
- OVI to provide the “panel” = AG, AS plus pos + neg Control to countries
- Countries are to use their own reagents and laboratory materials
- Laboratories are to carry out the test for H5 and H7 (<10 samples each) during the same time period
- Report back to OVI using OVI reporting format
- OVI will then analyse the results and compile the report and send to SADC/ECTAD
- **Follow-up action:** in-country training; depending on outcome, also strengthen capacity for adoption of other tests
- The estimated budget for the proficiency test: 14.000 \$ (2 rounds)

In view of the proficiency testing, it was agreed that the Standard Operating Procedures (SOPs) currently in use in member countries must be harmonized. In that regard the group agreed as follows:

- That those member countries that had not yet submitted their SOPs to Dr Pasca Gwarada must do so before the end of September 2008.
- That Ms Dellile from OVI must prepare harmonization of the documents during the month of October 2008

- At the end of October, Dr Joule Kangumba (RSA), Dr Makaya (ZIM) and Ms Dellile will meet in OVI to agree on the harmonized SOPs
- These harmonised SOPs are to be used at the OVI regional training during the 1st week of November 08
- That the harmonised SOPs are to be sent to all countries for adoption
- The ring test is due to start in January 09 using the harmonised SOPs

Time frame for proficiency test

| ACTIVITY | TIME FRAME |
|--|--------------------|
| 1.0 Procurement of reagents from VLA | 6 weeks (Jan 09) |
| 2.0 Validation of reagents at OVI | 1 week |
| 3.0 Packaging and distribution to participating laboratories | 1 week |
| 4.0 Testing in-country and reporting back to OVI | 2 weeks (March 09) |
| 5.0 Analysis of results and reporting | 4 weeks |
| Preferred timing: January - April 09 | |

9. Development of surveillance guidelines for AI for the SADC region

A need for the development of surveillance guidelines for the SADC region had been identified during the first meeting of this Group. The rationale was that (i) this is a non-infected area, (ii) countries rarely carry out active surveillance in poultry, except when related to trade, e.g. in ostriches, (iii) country budgets for surveillance are chronically small. Hence surveillance guidelines taking these factors into account, need to be developed in support of stepping up meaningful surveillance.

Dr Bamhare presented the draft terms of reference. After discussion the group agreed to the ToR as presented in Annex 2.

10. Other key issues addressed by the working group

The working group deliberated on other issues the details of which are as summarized below:

- **Training:** the information received from the questionnaires on number of lab personnel trained and number that would still need training, was not very precise and Dr Gwarada was tasked to verify and collect additional information by end of September.
- The South African delegate expressed concern on **AI risk assessments** undertaken by STOP-AI in RSA, in particular use of information from non-official sources.
- The group further agreed that the systematic approach adopted by the WG in dealing with AI diagnostics and surveillance must be extended to other TADs.

- The group also noted the request from SADC secretariat regarding the Working Group's input in the concept for the establishment of SACCT.
- Finally, the group agreed that it would be better to receive meeting proceedings on AI related activities in a memory stick rather than on CDs. This was based on the fact that memory sticks could be used for other things it was likely that the information from meetings will easily be made available for use by participants. Countries were requested to submit their requests to Dr Munstermann indicating the number of AI contact persons, forthcoming trainings or important meetings in their respective countries.

11. RESOLUTIONS

Having deliberated on various issues relating to avian influenza diagnostics and surveillance in the SADC region, the WG resolved that:

- I. All countries should submit their SOPs immediately (latest end of September)
- II. 2 Francophone countries shall be visited in November
- III. All countries should name their contact person and his details (physical address, tel, fax, cell, email) for the proficiency testing (by end of Sept)
- IV. Laboratories should arrange for MASTER import permits for reagents (also in view of the supply hub)
- V. Countries should inform OVI (through ECTAD) which Hs or Ns they want to test for and what reagents are needed for other serological tests
- VI. The hub should support the provincial labs in RSA in maintaining their expertise by regular testing for Hs and Ns
- VII. To expand the supply hub to include NCD differential diagnosis using AG detection test kits and ELISA
- VIII. Mozambique to assist in getting the information from Angola (first by email, possibly visit, finalise by end of November)
- IX. A systematic approach to combine animal disease surveillance and diagnosis (as done for AI) to be extended to other TADs and zoonotic diseases

Annex 1

Consultancy to identify a second SADC regional service laboratory

Terms of Reference

Regional consultant

- The Consultant shall familiarize himself with the questionnaire based laboratory assessment and the reports from direct visits to francophone countries and shall validate unclear information contained herein by phone, fax, email
- He/she shall establish minimum equipment and reagent requirement check lists for the OIE recommended serology tests, AG detection, virus isolation and virus identification. These check lists should include availability of trained personnel to carry out the test
- He/she shall fill in the check lists for each laboratory from the information provided in the questionnaire. Where the information provided is doubtful, he/she shall clarify it by phone, fax, email.
- He/she shall categorize all labs into low, medium and high capacity, based on the level of completeness of the checklists
- He/she may visit up to 3 laboratories to verify the categorization in any of the categories.
- Thereafter he/she shall finalize the short-list of laboratories
- He/she shall have telephone interviews with the Directors of the labs in category “high capacity” to find out their willingness to become a “SADC service laboratory”.

Time frame: 3 weeks plus one week together with the international consultant;
RSA based with one visit to Gaborone and up to 3 visits to
Countries

Reporting: Draft assessment report latest 2 weeks after the end of the consultancy

Qualification:

The consultant should have a degree in Veterinary Science, Microbiology, Virology or related qualification with not less than 5 years experience in laboratory diagnosis in either microbiology, virology. Preferably experience in Quality Assurance management and general lab management. Accreditation as ISO 17025 auditor would be an added advantage.

The candidate should be based in South Africa, since this country is no candidate for this evaluation

Consultancy to identify a second SADC regional service laboratory

Terms of Reference

International consultant

- The consultant shall study all information available on the laboratory assessments that have already been carried out by the SADC laboratory network by questionnaire
- The consultant shall critically review the report of the regional consultant who carried out a “pre-screening” and established a short-list of laboratories to be visited
- He/she shall consult with the Chairpersons of the SADC Laboratory Diagnosis Sub Committee and the SADC HPAI Working Group as well as the Senior Program Manager SADC/FANR
- He/she should visit OVI to appreciate the delivery of services offered to the region at present
- He/she should visit short-listed laboratories and shall, in close consideration of the selection criteria, developed by the Working Group, make a thorough assessment of the suitability of the laboratories visited
- He/she should develop a plan of action for activities to be taken on board in order to fulfill the role of a “regional service laboratory” and discuss these activities thoroughly with the laboratories ranking on place 1 and 2 of the established final ranking list.
- The consultant shall formulate recommendations regarding ranking of the laboratories

Time frame: 1 month of which the first week shall be spent together with the regional consultant; up to 3 country visits plus visit to OVI and some days in Gaborone

Reporting: The consultant shall produce an inception report indicating also the intended methodology of assessment after 10 days of the consultancy. The final report to be produced not later than 2 weeks after the consultancy.

Qualification: The consultant should have a degree in Veterinary Science, Microbiology, Virology or related qualification with not less than 10 years experience in laboratory diagnosis in either microbiology, virology. Previous experience in laboratory assessments in the international context preferred.

Annex 2

Consultancy to develop HPAI surveillance guidelines for the SADC region

Terms of Reference

Regional Consultant

- The consultant shall familiarize himself with the assessments already done in the region by the SADC HPAI working group using a questionnaire with special emphasis on the collected disease investigation forms presently being used by the SADC countries
- The consultant shall carry out a literature review on recommended surveillance systems for HPAI in non-infected versus infected countries, applicable to different production systems, i.e. commercial, semi-commercial and small scale, backyard poultry
- He/she shall draft surveillance strategies and formats for the collection of data in each of the different systems, with emphasis on the backyard poultry sector
- He/she shall consider the possible combination of HPAI surveillance with NCD vaccination campaigns (“scanning surveillance”)
- He/she should carry out selected country visits (not more than 5) and test the acceptance of the proposed surveillance formats and guidelines in these countries
- He/she shall liaise closely with STOP-AI who will carry out epidemio-surveillance training in the region, on the development of training materials for this training
- He/she should have discussions with SADC/PRINT on possible integration of poultry disease surveillance into LIMS

Timeframe: 1 month (country visits, stay in Gaborone)

Reporting: The consultant shall produce a report within 2 weeks after the completion of the consultancy

Qualification: The consultant should have a degree in Veterinary Science or related qualification with specialization in Veterinary epidemiology. He/she should have not less than 5 years proven experience working with surveillance systems for any of the TADs in Southern Africa. Publications and/or workshop proceedings are an added advantage.