

AVIAN INFLUENZA/NEWCASTLE DISEASE: MAINSTREAMING CAPACITY BUILDING NEEDS AND SUPPORT OFFERED OUTSIDE THE SCOPE OF TWINNING



Regional Seminar on the OIE Laboratory Twinning Programme: Concepts and Perspectives

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Background



- The role as a second service lab in the SADC region

Selection of BNVL as a Regional Second Service Laboratory for AI – SADC Region

- A regional reference/service Lab in RSA: ARC-OVI offered testing services on HPAI/LPAI since 2006 to some SADC member states
- This lab was occasionally overwhelmed with samples and hence a need to have a second service lab for SADC
- The initiative to have a second service lab was discussed at different forums and accepted by all stakeholders
- The BNVL was therefore nominated as a second service Lab following a series of consultations and was endorsed by SADC Council of Ministers
- The BNVL operated as a second service Lab for AI for the SADC region since 2010
- The service Lab was supported financially by FAO through two projects – 1. OSRO/RAF/719/USA & 2. OSRO/RAF/722/SWE



Broad Objective of second service Lab



- To assist OVI in the provision of diagnostic testing to the SADC member states particularly supporting surveillance programs for AI
 - ▣ Capacity building at BNVL and the Labs in the SADC region

Areas of focus as second service Lab – capacity building

- Provision of equipment to upgrade the Viorology Lab for AI diagnosis
- Provison of diagnostic services
 - ▣ Promotion of BNVL as a second service lab for SADC region
- Storage and distribution of AI diagnostic reagents (Reagents Hub) for the SADC Vet Labs
- Organize ring trials for AI – HI/Elisa for SADC Labs
- Provision of training to BNVL staff and back-stopping training to SADC Labs



Installation of equipment in Virology Laboratory at BNVL

- The equipment was bought with the support of FAO in order to upgrade Virology Lab for AI diagnosis
- All equipment that were planned to be procured were purchased, installed and commissioned for use.
- Procurement of equipment took into consideration the availability of both local and regional service providers



Equipment procured



Item	Description	Qty	Total cost US\$
1	Biosafety cabinet	2	16, 424.
2	Autoclave (wall)	1	40, 860.
3	Refridgerated centrifuge	1	8, 388.15
4	Lab. Freezer	2	15, 600.
5	Lab. Fridge	3	6, 709.
6	Electronic balance	2	4, 200.
7	pH meter	2	3, 600.

Provision of diagnostic services to the specific SADC Vet Labs

- The following countries were to be provided with diagnostic services during the project period:
 - ▣ Malawi, Mozambique, Zambia and Zimbabwe
- All countries benefited except Malawi
- A total of **2 823** samples have been tested so far.



Provision of Proficiency Testing (PT) services to SADC Labs

- The Lab conducted PT for AI serology
 - ▣ HA/HI and ELISA
 - ▣ All reagents and antisera were sourced from AHVLA
- **Ten countries participated:** Botswana, Lesotho, Malawi, Madagascar, Mauritius, Mozambique, Namibia, Zambia and 2 Labs in RSA
- PT was successful with 90% (9/10) submissions and 7/9 performed well



Storage and distribution of AI diagnostic reagents and kits

- Demand-Supply Hub which was successfully started by OVI under their LoA (PR No. 40332) with FAO was transferred to BNVL
- Established in 1st QTR 2010 in collaboration with OVI and moved 2nd QTR 2010 to BNVL
- AI reagents and kits were distributed 2nd QTR 2010 (Zambia, Zimbabwe, Malawi, RSA, Mozambique, DRC and Madagascar)
- Currently there are no reagents left in the Hub.

Provision of training in-house and to SADC Labs

- Two technicians were trained on HA/HI in AHVLA in UK in 2010
- Back-stopping training was conducted for two SADC Labs that did not perform well in the PT together with the third one that did submit PT results
- A follow-up PT was not done



Challenges and constraints

- Institutional Level
 - Staff exodus for greener pastures remains a challenge
- Technical matters
 - Unsuitable samples were sent (dry swabs) – SOPs were then provided
 - Vials of sera not tightly closed hence leakages during transportation



Challenges and constraints cont.

- Logistics (shipment, communication, procurement e.t.c)
 - ▣ Delays in sending import documents resulted in delays in distribution of AI reagents to some Labs
- Financial matters
 - ▣ Pamphlets have been developed but lacked finances to print flyers for distribution to SADC Labs as advertisement



Current situation

- Upgrading of Virology Lab to BSL 3 status is ongoing, consultant was engaged and provided the report
- Advertisement of BNVL as a second service Lab is in the website for MOA (www.moa.gov.bw).



Way forward

- To upgrade Virology Lab to higher level containment
- Need for further PT to evaluate the performance of labs that were assisted to improve and harness expertise of labs on AI diagnosis in the region

