OIE TWinning Programme: A Practical Example From Botswana (Botswana National Veterinary Laboratory)

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BOTSWANA
Area = 582, 000 km²
Share a border with five countries:-
RSA to the south and south east
Namibia to the west and north-west
Zambia (a point border in the northwest)
Zimbabwe to the north east
Semi-arid
Population of 1.7 m (2001 census)
2.5 m cattle
1.0 m goats
0.5 m sheep
164 110 Donkeys
40 000 Horses
Botswana’s Vision: prosperous productive and Innovative Nation

Rural Development is a priority

Livestock Production Underpins The rural economy

Agriculture contributes 3% to the GDP (of which the livestock component (beef exports) is 2.6%)

Access to export market Underpins Livestock production
EXAMPLE OF RURAL ECONOMY
FRONT VIEW OF THE LABORATORY
LAB VIEW: SIDE AND FRONT
INTRODUCTION

- Became aware of the OIE twinning programme in 2007. This was communicated to SADC subcommittee for Veterinary Laboratories by OIE-SRR.
- Used the published list of OIE reference laboratories to select the laboratories dealing in the field of interest and contacted them by email.
IZS acknowledged the email and later they arranged a visit to our lab to appreciate the needs and help in the design of the twinning project.

The project was launched in 2008 following a preparatory meeting in Italy, Teramo.

Another project was conceptualised in 2008 and we approached the Veterinary Laboratory Agency of UK to assist. Like IZS, they sent an expert to do a study of our needs before the design of project.
Another project was conceptualised in 2009 with Istituto Superiore di Sanita and is about to be implemented.

The projects are all aimed at developing BNVL capabilities either to be a reference laboratory or to improve capabilities to meet OIE standards as well trade requirements.
SCOPE OF TWINNING PROJECTS

- Improving or building capacity in a specific area: Trichinellosis
- Improving capacity for a group of diseases: AI & NCD
- Reaching OIE reference Laboratory status: CBPP for the region
- Attain OIE standards only in a specific area of work: AI
BNVL PROJECTS

1. CBPP project
2. Avian Influenza & Newcastle project
3. Trichinellosis project
CBPP PROJECT

- Objectives:
  - Production of reagents for the serological testing;
  - Isolation and identification procedures of the aetiological agent;
  - Disease pathology and differential diagnosis;
  - Conducting epidemiological surveillance.
CBPP CONT’D

- The diagnostic procedures have been standardised and validated according to the OIE standards
- BNVL is ready to acquire status of Reference laboratory for CBPP, and will provide expertise and scientific support to neighbouring countries.
- The project is ending in July 2010
2. AVIAN INFLUENZA AND NEWCASTLE DISEASE

- Objectives:
  - To develop a laboratory contingency plan for AI and NCD
  - Identify key areas to strengthen capacity building at BNVL
  - Transfer tests, skills and reagents in order to provide a robust diagnostic/virus confirmatory capabilities
  - Produce key diagnostic reagents to support testing
AVIAN INFLUENZA AND NEWCASTLE DISEASE

- Various activities such as training of staff has been done
- Participation in proficiency schemes is ongoing
- Visit by experts still to be done
- The project is on schedule
3. TRICHINELLOSIS

- The twinning project will establish scientific and technological expertise at BNVL through
  - Training of laboratory personnel
  - Training of slaughterhouse personnel to collect muscles from target animals for the detection of *Trichinella* infection by training the trainer
  - Dissemination and publication of information on *Trichinella* in Botswana and neighbouring countries
The project is finalised for implementation this year.
The implementation planned for November this year.
BNVL EXPERIENCES

- Commitment from both parent and candidate laboratories has been extremely good for the implemented projects and we are realizing the desired results.
- Level of research engaged in is critical to becoming an OIE reference laboratory, especially the publications made on the subject. This is where more emphasis needs to be made for the future.
- Availability of resources, including the equipments needed to carryout added functions was very crucial. Support from principals very good.
BNVL EXPERIENCES CONT’D

- Change of leadership at OIE delegate and laboratory level creates loss of momentum when it occurs, this was the experience
- Economic down turn globally, tended to affect our funding support more and in turn compromised the implementation of the projects
- Poor service delivery by suppliers of services and consumables directly impacted negatively to the project progress
- Lack of competent equipment maintenance companies or engineers in the region created a draw back.
CONSTRAINTS AND CHALLENGES

- Limited financial resources to support newly acquired skills and technologies as well as implementing them was a challenge.
- OIE Twinning project(s) do not provide support for making available the necessary equipment(s) to candidate laboratories to build capacity, this is seen as a challenge to developing countries.
Absence of specific diseases in a candidate country also brings about challenges of acquiring the materials; developing countries tend to send materials to labs abroad more than they could send to sister labs in Africa.

Stability of technical staff in the country/candidate laboratory remain a challenge, especially that our Lab is a public institution and wages are set by government. To retain staff is difficult.

Redeployment of team members in the twinning project without their replacement also acts against the intended objectives. This happens when one is promoted.
RECOMMENDATIONS

- Maintain adequate support to laboratory by OIE delegate in terms of:
  - Staff complement, avoid deploying staff away from the project (before its closure)
  - Financial resources
  - Facilitation of scientific research

- OIE to make it possible for candidate laboratory to access funds that will assist in the implementation of the Twinning, by making available some little funds for critical apparatus or equipment or consummables