



# BIOSECURITY ALONG THE VALUE CHAIN

BY DR. LUMU PAUL

ON BEHALF OF DR. ANNA ROSE ADEMUN

CVO Uganda



# Presentation outline

- ▶ Background
- ▶ Biosecurity at Farm
- ▶ Interventions to Minimize ASF spread
- ▶ Enhanced Surveillance
- ▶ Diagnostic capabilities



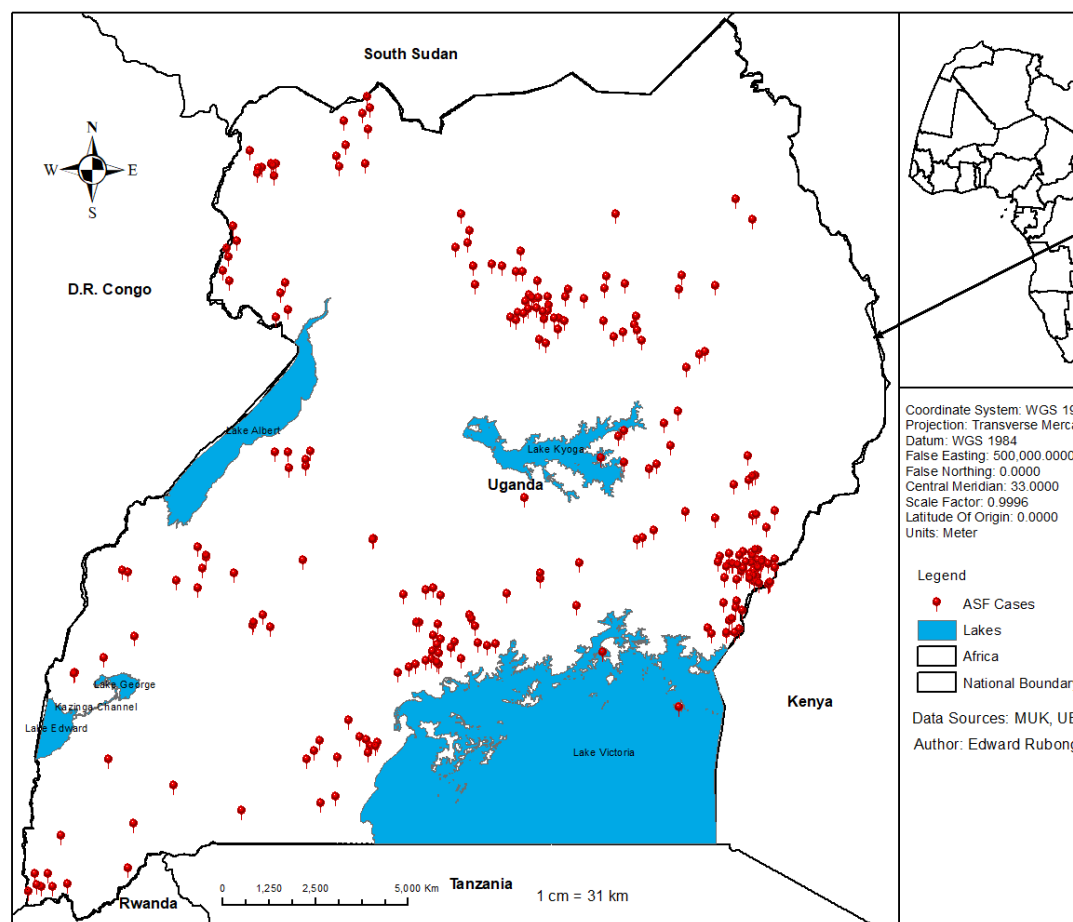
## Background & Introduction

- The livestock subsector is one of Uganda's crucial sectors with prospects of improving livelihoods of the rural poor.
- The Piggery enterprise presents tremendous opportunity for rural households to generate income and to move out of poverty because it requires low capital investment and gives relatively quick and attractive returns.
- In Uganda, the pig sector is largely dominated by smallholders, who collectively constitute more than 90% of the agricultural system.
- Pig farming is one of the fastest growing livestock enterprises in Uganda, with 17.8% of households rearing pigs (UBOS, 2011).



## ASF cases, 2015 - 2021

- However, ASF is the number one cause of disease-related pig deaths, with outbreaks often killing up to 100 percent of affected pigs.
- ASF causes devastating socio-economic consequences, because of its rapid spread, high mortality and its potential to spread across borders.





# Interventions to minimize ASF Spread.

- ▶ Instituting **Movement restrictions** where ASF outbreaks have been confirmed by PCR.
- ▶ **Destruction of the infected flock** has been recommended but difficult to implement since there is no direct way of compensating the farmers.
- ▶ At times mass **onfarm Slaughter** and cooking the meat to above 80 degrees has been encouraged and recommended meat to be supplied to specific institutions with guidelines on disposal of the leftovers
- ▶ **Training of farmers** on biosecurity measures especially in the hot spot areas by the Ministry, District Veterinarians, Community based organizations, NGOs, Pig farmer platforms, Press releases, Electronic Media.
- ▶ Development of the ASF control strategy with support from FAO is underway.
- ▶ Sourcing stock from disease free districts and farms (Screening).



# Interventions to minimize ASF spread.

## **DRAFT ASF CONTROL STRATEGY (MAAIF, FAO UGANDA)**

A Uganda where ASF no longer constrains sustainable pig production

### **Mission**

To contribute to food and nutrition security and poverty reduction through sustainable pig production.

### **Objectives**

- 1. Improve in-country capacity to detect, prevent and respond to ASF.**
- 2. Establish an effective coordination and cooperation framework for ASF control.**
- 3. Increase the competitiveness of pork and pig products in domestic and international markets**
- 4. Improve communication and data management for ASF**



**ENHANCED  
SURVEILLANCE AND  
DIAGNOSTIC CAPABILITIES  
FOR ASF**



# ASF SURVEILLANCE IN UGANDA

- ▶ Historically outbreaks of ASF have been reported in Uganda, where farmers have registered serious production and economic losses.
- ▶ The farmers report these suspected ASF outbreaks to Sub-county Animal health workers who are either Veterinarians or Animal production Officers. The Sub-county Animal health workers report to the District Veterinary officers (DVOs).
- ▶ The DVOs will use the clinical presentation to verify whether it fits the case definition of a suspected case of ASF in Uganda.





# ASF SURVEILLANCE IN UGANDA

- ▶ The team at the Center has responded to most of the suspected ASF cases especially during project mode where blood samples have been collected from exposed animals in addition to tissues (liver, spleen, mesenteric lymph nodes) obtained from dead animals.
- ▶ The same tissues have been collected at pig slaughter places during inspection and submitted to the National laboratory for confirmation.
- ▶ The information on ASF outbreaks is also obtained from the Monthly reports and, samples submitted to the National Veterinary laboratory.



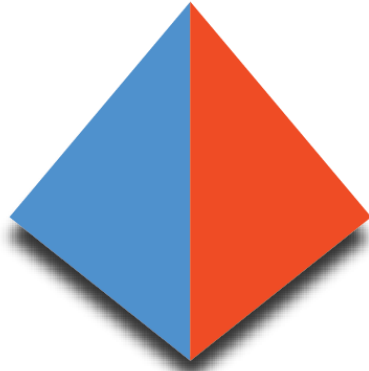
## ASF tests at the National Animal Disease Diagnostics and Epidemiology Centre (NADDEC)

- At the laboratory, samples are processed and tested for ASFV presence using the real time PCR (qPCR) technology (Tetracore, USA) on a ABI 7500 FAST platform (ABI, USA).
- Real time PCR is also conducted at two Colleagues of Makerere University and at the National Animal Livestock Research Institute (NALRI) at Namulonge. The results are usually shared with the CVO.
- Outbreaks are also captured in the Monthly passive reports though ASF being notifiable, it is reported immediately to the CVO by the fastest means accessible such email, Phone call or submission of a hard copy report not later than 72 hours of suspecting the ASF outbreak.



## ASF tests at the National Animal Disease Diagnostics and Epidemiology Centre (NADDEC)

- Serological tests are also conducted at NADDEC and at two colleges of Makerere University.
- ASFV from confirmed cases of the disease will further be characterized for accurate genetic attributions.



# GF-TADs

GLOBAL FRAMEWORK FOR THE  
PROGRESSIVE CONTROL OF  
TRANSBOUNDARY ANIMAL DISEASES

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