



BIOSECURITY ALONG THE VALUE CHAIN

Sector 1: Feed
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FEED CONTAMINATION

- ▶ Low risk of infection from blood contaminated field crops (2hrs at room temperature) ⁽¹⁾
- ▶ Complete feed - infectious ASF found after 30 days ⁽²⁾
- ▶ Feed ingredients half-life 9.6 to 14.2 days suggesting over 30-day survival ⁽³⁾
 - ▶ Soya bean up to 60 days.
- ▶ Dried blood /plasma products
- ▶ Lower viral load required in liquid compared to whole feed



MITIGATING RISK

- ▶ **NO SWILL**
- ▶ Reliable source of raw ingredients /complete feed
- ▶ Clean safe transport
- ▶ Heat treatment of ingredients
- ▶ MCFA (1% inclusion) decreases ASFV infectivity in feed ingredients
- ▶ Formaldehyde (0,33%) plus propionic acid decreases ASFV infectivity in feed ingredients
- ▶ Pelleting



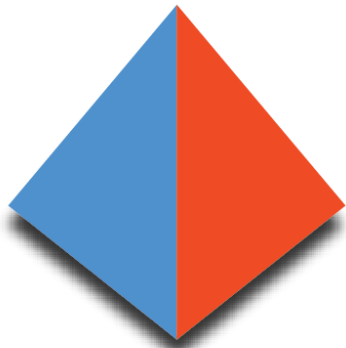
CASE STUDY: UGANDA

- ▶ Poultry feed mill
- ▶ Pelleted feed
- ▶ Index case - AI boar approx. week after new feed
- ▶ Retention sample PCR +ve
- ▶ Retention sample of poultry feed PCR +ve
- ▶ Biosecurity assessment of feed mill
 - ▶ High level of ASF in village
 - ▶ Personnel management - around change of clothes /footwear??
 - ▶ Free access to feed production area



References

1. Fischer M, Mohnke M, Probst C, et al. Stability of African swine fever virus on heat-treated field crops. *Transbound Emerg Dis.* 2020;67:2318–2323.
2. Khanal, P., Olcha, M., Niederwerder, M. C. (2021). Detection of African swine fever virus in feed dust collected from experimentally inoculated complete feed using quantitative PCR and virus titration assays. *Transboundary and Emerging Diseases.* 1-6.
3. Dee SA, Niederwerder MC, Patterson G, et al. The risk of viral transmission in feed: What do we know, what do we do?. *Transbound Emerg Dis.* 2020;67:2365–2371



GF-TADs

GLOBAL FRAMEWORK FOR THE
PROGRESSIVE CONTROL OF
TRANSBOUNDARY ANIMAL DISEASES

Africa



Food and Agriculture
Organization of the
United Nations



World Organisation
for Animal Health
Founded as OIE

African Union 