

# Managing international trade in infected countries – experience from African countries

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23 November 2022 – Webinar on WOAHP standards, trade and African swine fever

Make today matter



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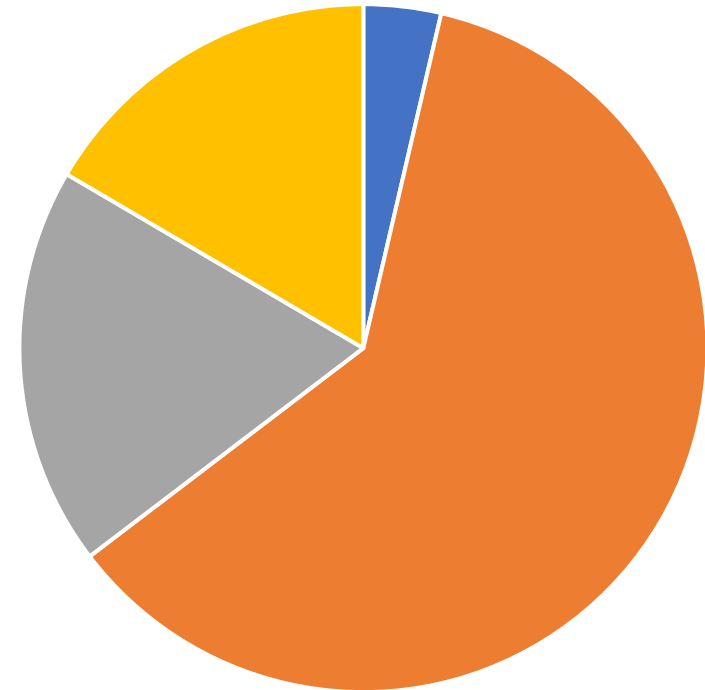


# Introduction to pig production in Africa

- Africa has less than 5% of the global pig population
- Pig and pig meat exports outside the region are minimal
- BUT – there have been two major escapes of the virus
- Pigs are important to some of the poorest people in Africa
- They have great potential to contribute to economic growth



REGIONAL DISTRIBUTION  
OF PIGS



■ AFRICA ■ ASIA ■ EUROPE ■ AMERICAS



# Epidemiology of ASF in Africa – 3 cycles

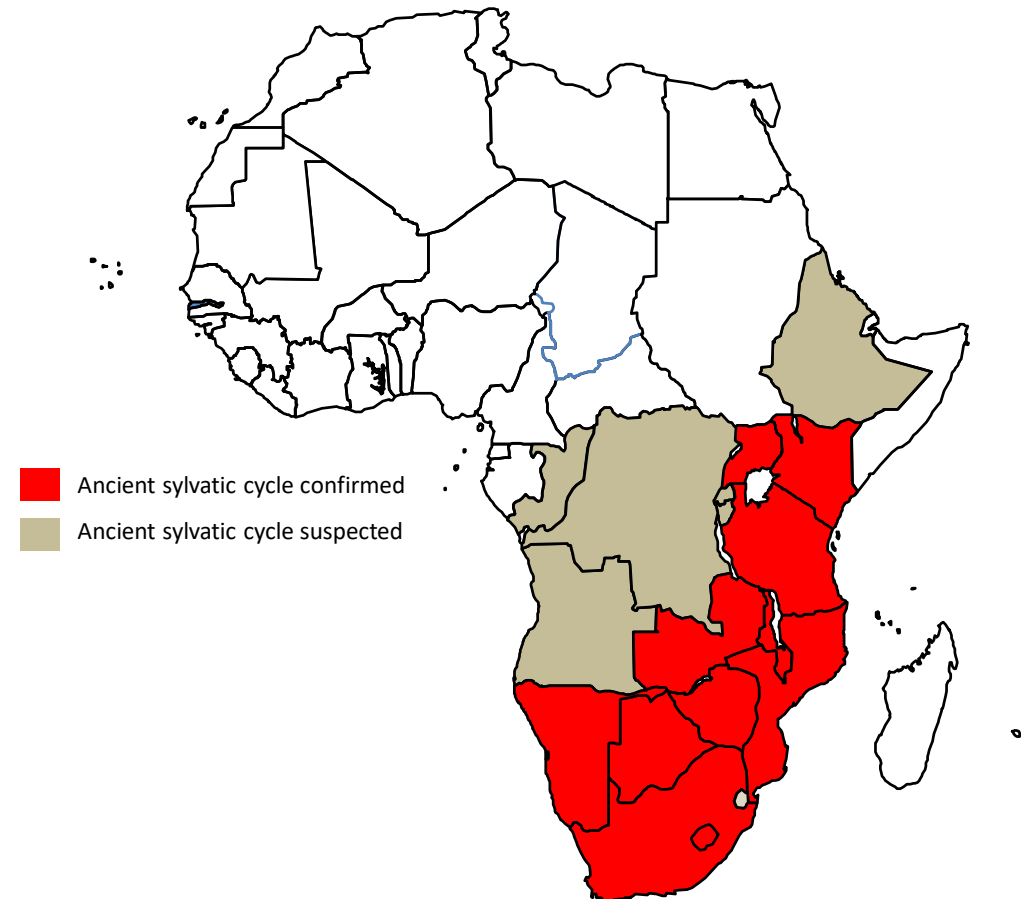


Warthog-tick (sylvatic cycle)

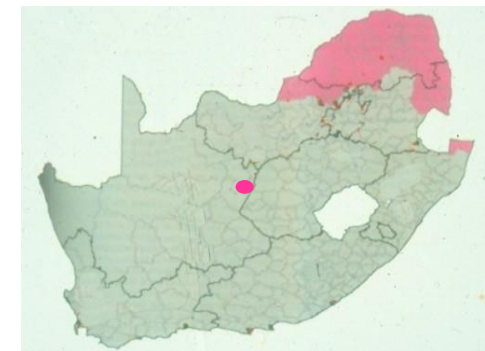
Domestic pig cycle

Domestic pig-tick cycle

# Distribution of the warthog-tick sylvatic cycle



Sylvatic cycle in South Africa



# Options for international trade in pigs and pork

- Identify markets in countries that are not free of ASF
  - The Sanitary & Phytosanitary (SPS) Agreement of WTO – principle of equivalence provides for unrestricted trade between countries of equivalent status
- Options provided by WOAH Terrestrial Animal Health Code
  - Countries or zones free of ASF (self-declaration) – Article 15.1.4
  - Compartments free of ASF certified by the official veterinary competent authority – Article 15.1.5, provisions of Chapters 4.4 and 4.5
  - Safe products – Articles 15.1.2 and 15.1.23





# Compartmentalisation of pig farms

- ASF is endemic in most pig-producing countries in sub-Saharan Africa and conditions are unfavourable for creation of free zones (South Africa no longer has one)
- Compartmentalisation is the best option for commercial pig farms to remain free of ASF and access high value export markets
- Freedom from ASF (and other specified infectious diseases) is assured by the rigorous implementation of an auditable biosecurity system based on the epidemiology of the disease
- Compartments are registered with and certified by the veterinary competent authority
- According to the WOHAI standards, pigs and pork may be exported from ASF-free compartments under the same conditions as free zones or countries



# History of compartmentalisation in South Africa

- ASF, first reported from Kenya in 1921, was reported in South Africa in 1928
- An area in the north-eastern part of the country where repeated outbreaks occurred in pigs that were not securely confined was identified and in 1935 was proclaimed as an ASF control area
- Involvement of warthogs was evident from the earliest reports (and infection in warthogs was confirmed later)
- To prevent contact with warthogs, domestic pigs had to be farmed in double-fenced premises
- These farms were the first 'pig compartments', and only pigs from these farms were able to be moved under veterinary permit for slaughter in designated abattoirs outside the controlled area where prices were higher
- Compartmentalisation of pig farms in the rest of South Africa was initiated after an outbreak of classical swine fever in two provinces was eradicated at great expense in 2006, and suspension of our foot and mouth disease-free zone after outbreaks outside it in 2011 resulted in SA pig compartments being certified as free from ASF, CSF and FMD



# Extent of compartmentalisation of pig farms

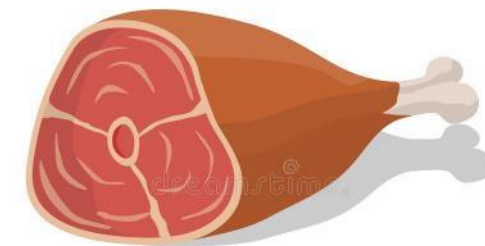
- South Africa has 134 registered compartmentalised pig units as at 31 May 2022  
<https://www.dalrrd.gov.za/vetweb/ImportExport/South%20African%20Biosecure%20Pig%20Compartments%202022-05-31.pdf>
- At least one compartmentalised value chain from farm to abattoir exists in South Africa <https://www.engineeringnews.co.za/print-version/compartiment-system-ensures-pork-safety-from-farm-to-fork-2021-08-04>
- Other African countries have commercial pig farms managed as compartments, including Uganda and Zimbabwe
- Even simple biosecurity can prevent ASF, as it is not air-borne and human behaviour is the most important driver of ASF
- There are increasing efforts, using participatory methods, to develop economically feasible and culturally acceptable biosecurity to protect smallholder pig farmers from ASF, in order to improve livelihoods and at the same time reduce risk globally





# Product safety assurance – Articles 15.1.2, 15.1.23

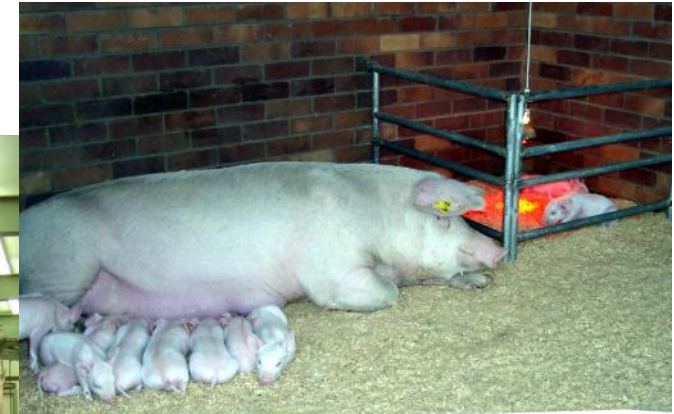
- The range of products that can be safely traded from countries that are not free of ASF is limited
- Article 15.1.2 identifies only two products that are inherently safe:
  - Meat in a hermetically sealed container with an F0 value of 3 or above (commercially canned meat);
  - Gelatine
- Article 15.2.23 provides for deactivation of potential ASF virus in pork by heating or dry curing processes:
  - Heat treatment for at least 30 minutes at a minimum temperature of 70°C throughout the meat, or any equivalent treatment demonstrated to inactivate the virus
  - Meat should be cured with salt and dried for a minimum of six months
- Processing, in particular dry curing, can add considerable value to the product, but also requires investment as well as pork of a defined type and quality



PARMA HAM

# Product safety assurance – risk mitigation

- While the WOAHA 'gold standard' for trade in animal-derived commodities is freedom of area of origin, the *Codex Alimentarius* that provides food safety standards relies on product and not area safety
- The HACCP (Hazard Analysis Critical Control Points) system is applied to food processing to ensure safety of the end product, regardless of area of origin
- In 2011, the FAO published guidelines on risk mitigation for animal diseases along value chains
- An approach that integrates food safety assurance and safety from animal diseases, commodity-based trade, is based on risk mitigation along value chains
- It is proving helpful in areas not free of foot and mouth disease and is captured to an extent in recent WOAHA standards for exporting beef from areas not free of FMD
- The process can be audited to support certification and backed up by risk analysis



# What are the challenges?

- ASF evolved in Africa and we have lived with it for more than 100 years; the wildlife host and tick vector make eradication impossible in the area where the sylvatic cycle is present
- Pigs are a coping strategy and a lifeline for millions of poor Africans living in lower income countries that cannot pay compensation for drastic control measures and often support agriculture poorly
- The geographic standards of country/zone freedom remain the 'gold standard' and 'first prize' but out of reach for many lower and even middle income countries
- The limited options for safe processed products are relatively well accepted, but the range could be considerably expanded if bolder but still safe approaches were widely adopted
- Although the principle of compartments is enshrined by WOAHP, there are challenging perceptions, e.g. that they should be in a free area (why would you do that??)
- So far countries with compartments in Africa still export mainly to neighbouring countries not free of ASF and some of the islands that need the pork and trust the certification
- More needs to be done, including in the General Assembly, to ensure that standards aiming to help countries living with ASF are accepted by trading partners
- Compartments should not be seen by the wealthy countries as an admission of defeat, but as a huge investment by serious pig farmers, who should be rewarded with market access for their very safe products





# Thank You



To WOAHP for inviting me  
To all of you for listening so patiently!