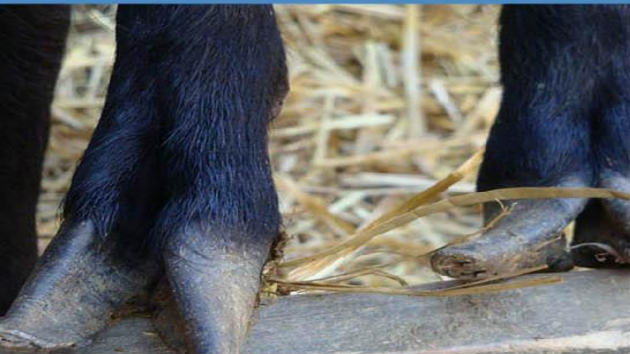




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# Global ASF Status and Risk-Based Prevention and Control Strategy

**Food and Agriculture Organization of the United Nations**



# Acknowledgement

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- Government counterparts
- GF-TADs Standing Group of Experts on African Swine Fever  
[http://web.oie.int/RR-Europe/eng/Regprog/en\\_GF\\_TADS%20-%20Standing%20Group%20ASF.htm](http://web.oie.int/RR-Europe/eng/Regprog/en_GF_TADS%20-%20Standing%20Group%20ASF.htm)
- EFSA 2015. Scientific opinion on African swine fever
- EFSA 2017. Scientific opinion Scientific report on the epidemiological analyses of African swine fever in the Baltic States and Poland. EFSA Journal, 15(11): 5068, 59pp. <https://doi.org/10.2903/j.efsa.2017.5068>
- V. Guberti, S. Khomenko, M. Masiulus, S. Kerba – African swine fever in wild boar and biosecurity during hunting, 2019 in preparation
- Chenais, E., Ståhl, K., Guberti, V. & Depner, K. 2018. Identification of wild boar–habitat epidemiologic cycle in African swine fever epizootic. Emerging Infectious Diseases, 24(4): 810–812. <https://dx.doi.org/10.3201/eid2404.172127>



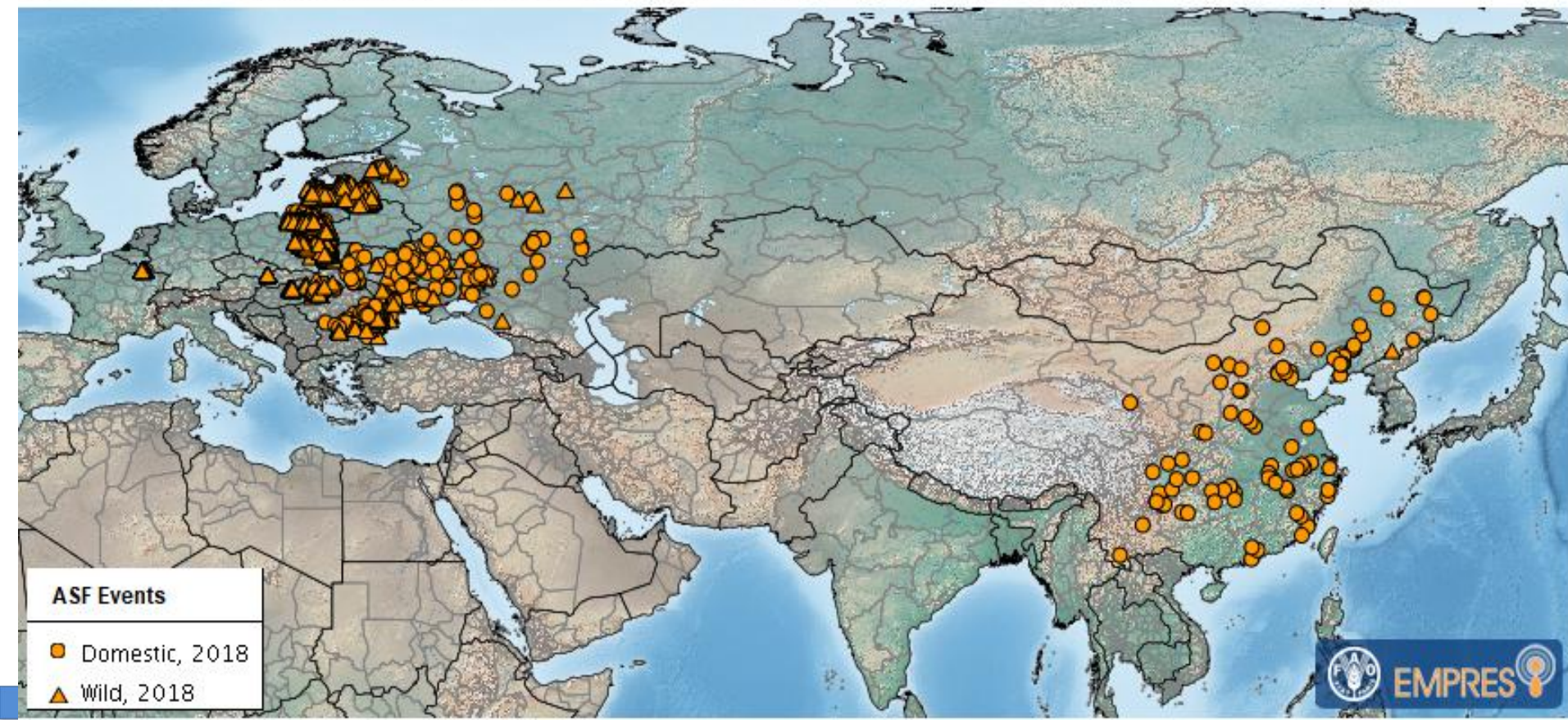
# Contents

- **Global status of ASF**
- **Lessons Learnt from Genotype II from 2007-2019**
- **Rational for global and regional prevention and control**
- **Global Strategy for ASF Prevention and Control**



# ASF genotype II in Europe and Asia - 2018

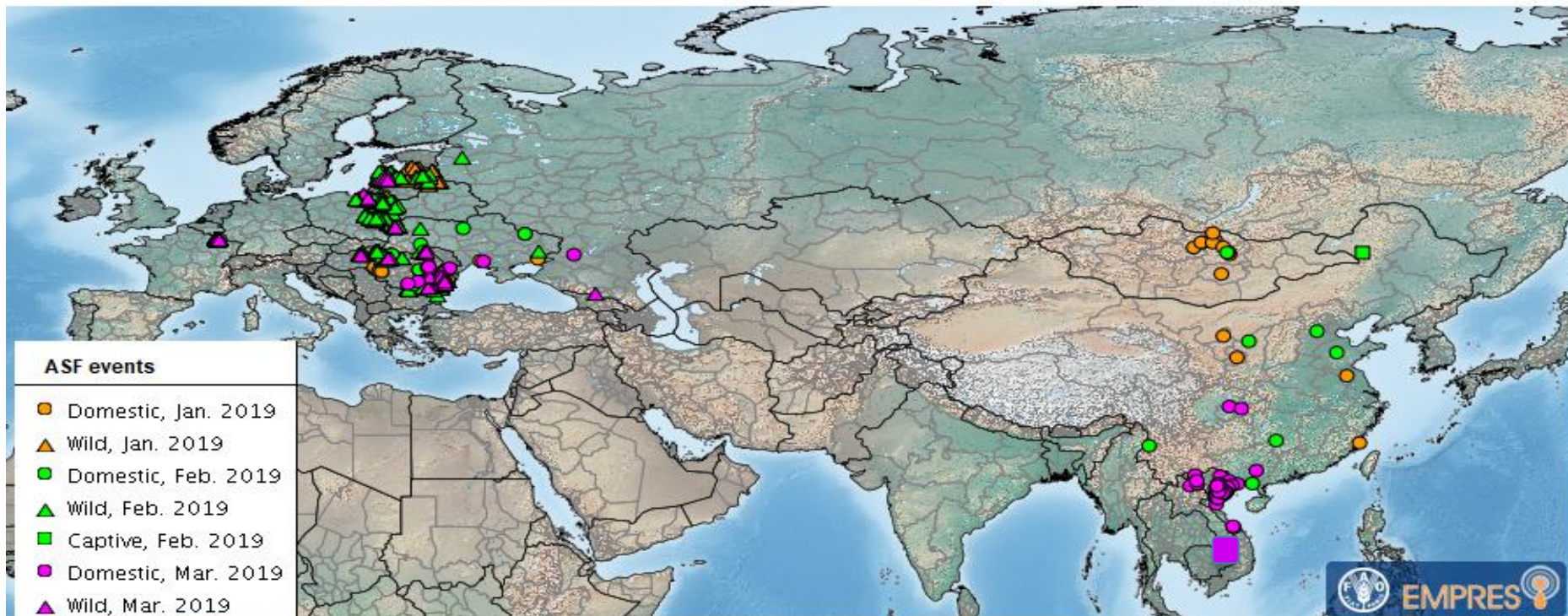
ASF events in wild and domestic swine in Europe and Eastern Asia in 2018 (01 Jan - 31 Dec)





# ASF genotype II in Europe and Asia - 2019

ASF events in wild and domestic swine in Europe and Asia, 01 Jan. – 29 Mar. 2019 (by month of onset)

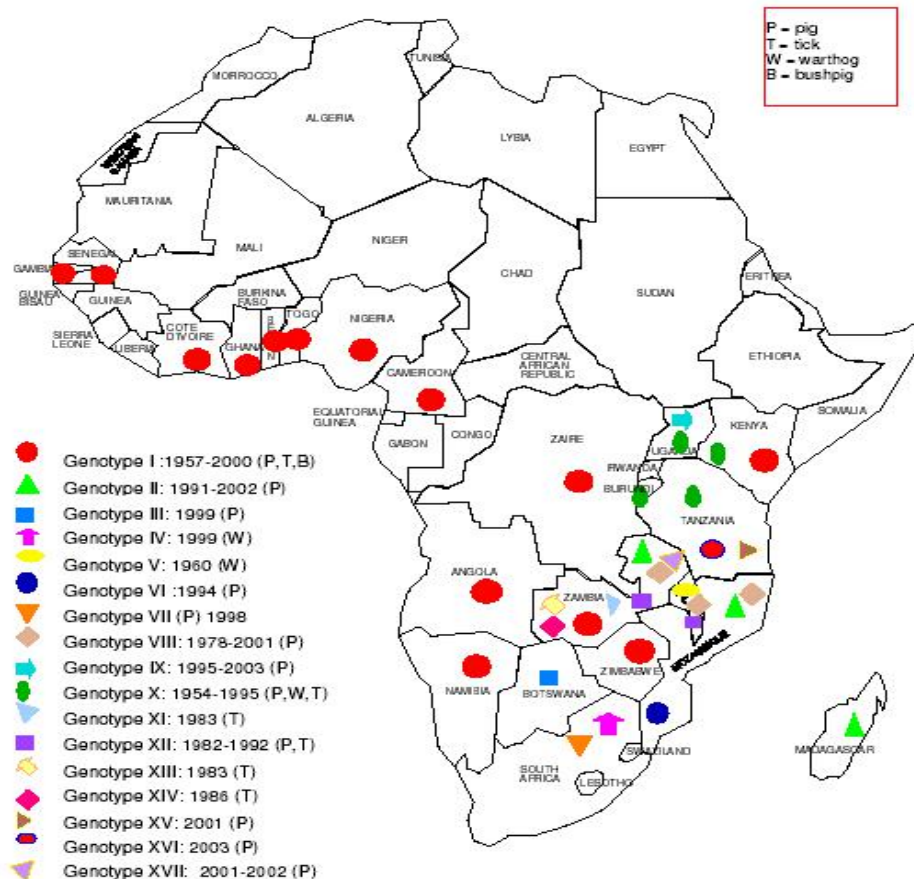


Asia: 4 countries: China, Mongolia, Viet Nam and Cambodia

Europe: 11 countries Belgium, Bulgaria, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Republic of Moldova, the Russian Federation and Ukraine

# ASF in Africa

- > 20 genotypes
- By 2013, the OIE WAHIS database indicated that more than 20 countries in Sub Sahara Africa reported ASF
- Lack of regular reporting



## ASF Virus features

- High case fatality rate (>90%)
- Moderate transmissibility
- High persistence of ASFV
- Stable over wide ranges of temperatures and pH levels for long periods in protein rich environment
- Resistant to autolysis and various disinfectants

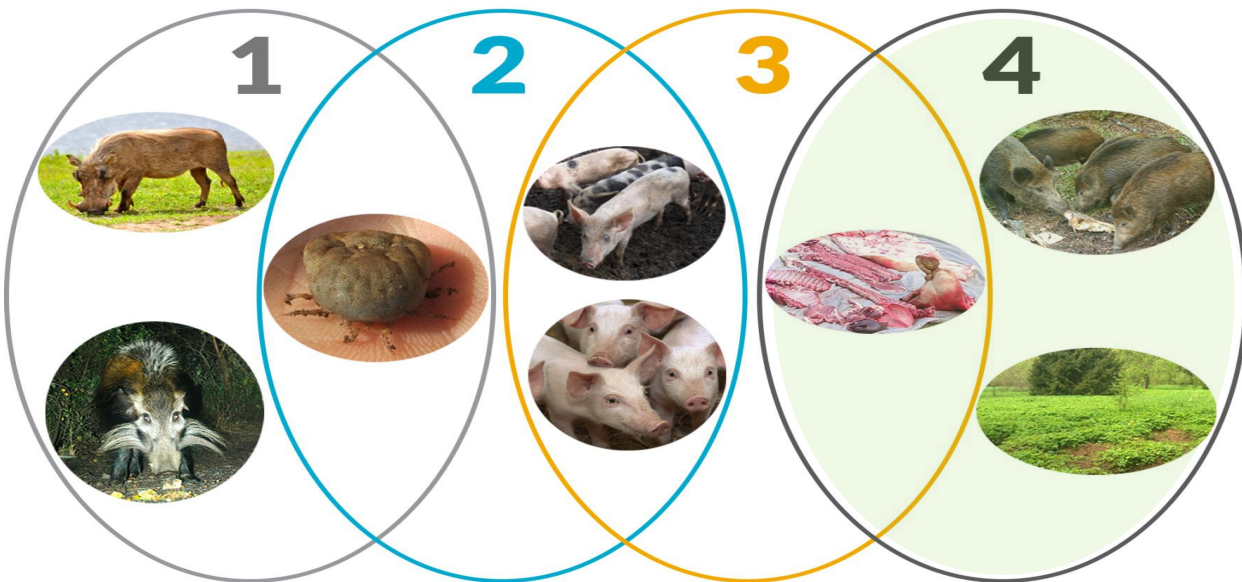




# Lessons learnt from ASF genotype II- 2007-2019

## ASF Epidemiological Features in Europe 2014-2018

Credit: Chenais et al., 2018



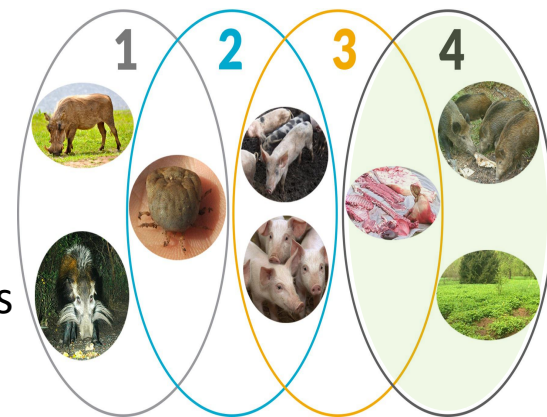
1. Sylvatic cycle : the common warthogs; bush pigs and soft ticks.
2. Tick-pig cycle: soft ticks; domestic pigs.
3. Domestic cycle: domestic pigs and pig products.
4. Wild boar-habitat cycle: wild boar; pig- and wild boar products and carcasses; the habitat



# Lessons learnt from ASF genotype II- 2007-2019

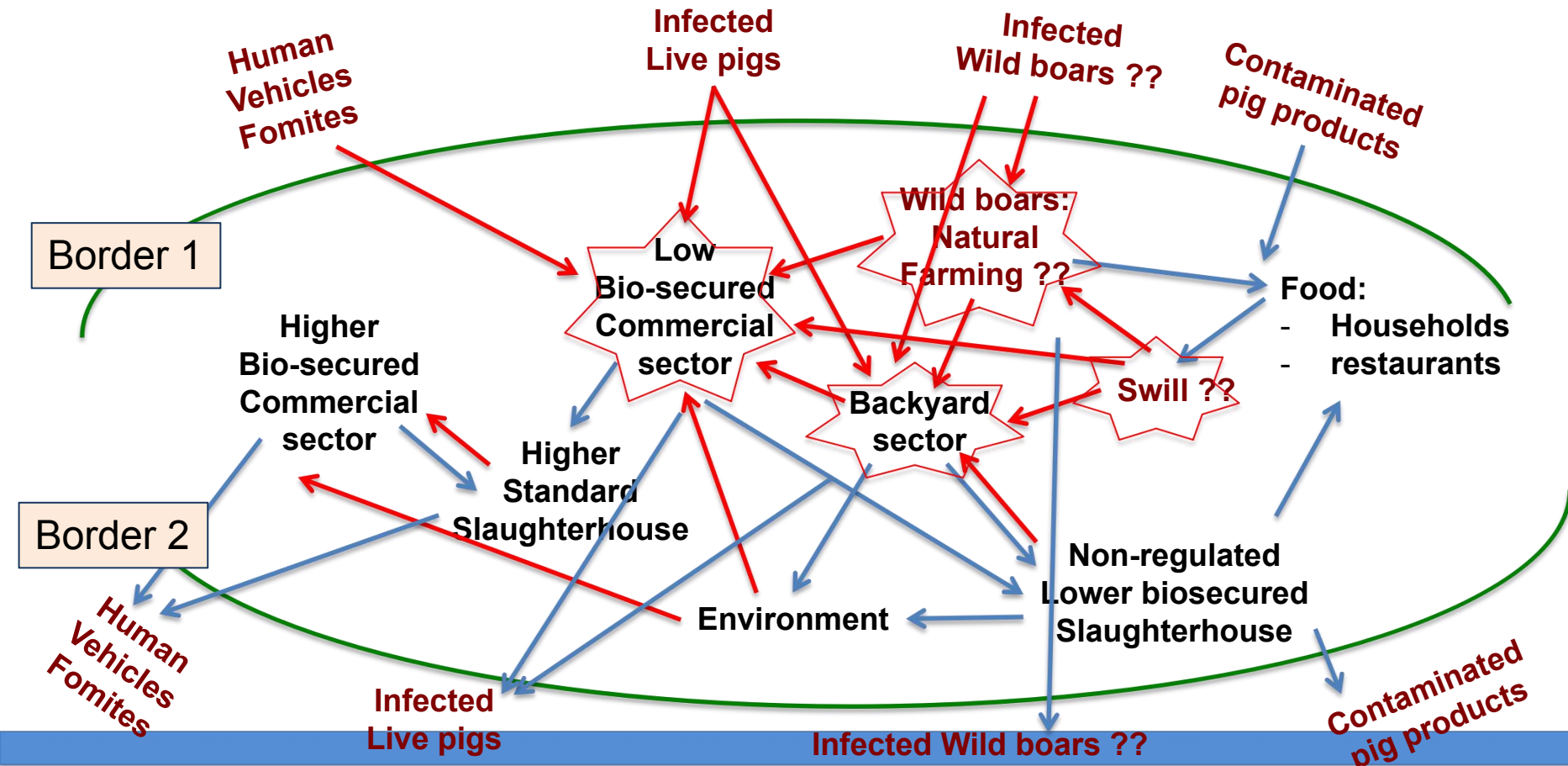
## *Transmission*

1. Direct transmission from pig to pig, wild boar to wild boar, wild boar to pig:
  2. Indirect transmission: fomites-to-pig transmission
  3. Feed-to-pig transmission: swill feeding
- Human driven disease ( long-distance disease transmission and its introduction in domestic pig population)
  - Not necessarily a density dependent process
  - Social and economic factors (e.g. poverty level, herd size and gross income
  - Seasonal peaks for domestic pigs June-August and for wild boars June –July and November-December





# Preliminary risk pathways for SE Asia





## **Risk Mitigation and Management:**

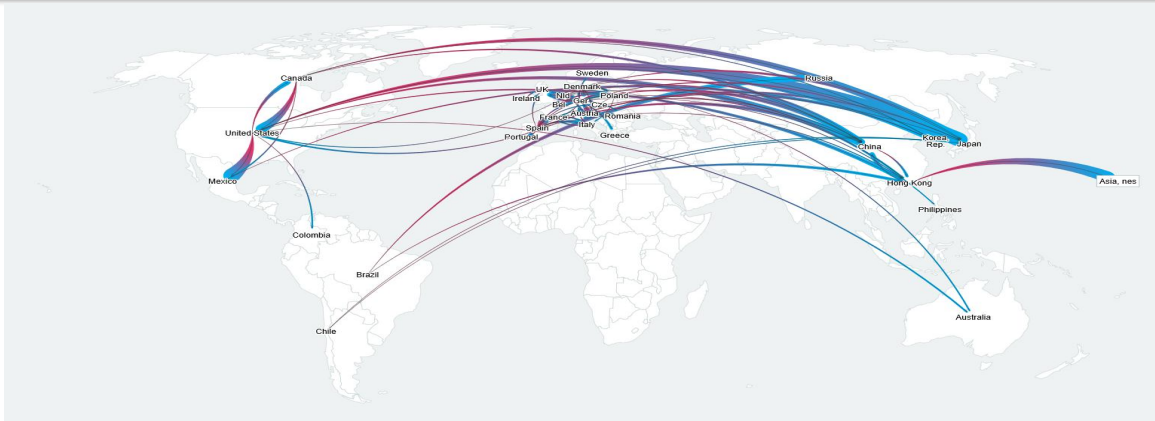
- Overall Prevention – Biosecurity improvement
- Outbreak Containment – in domestic pigs and wild boars
- Preventive measures in infected and surrounding areas
- Surveillance

Will hear more in later sessions

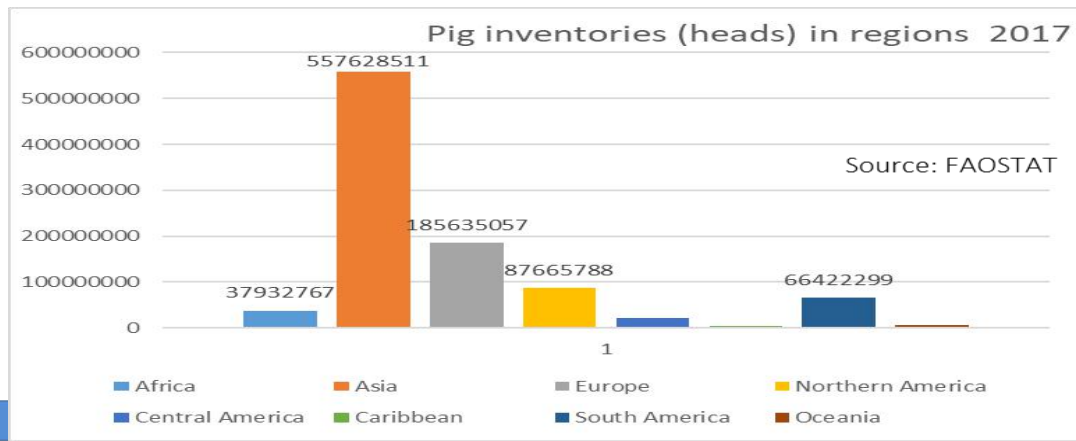


# Economic drivers and consequences

- Important sector with global sale of pork USD 39.2 bn in 2017
- The share of pork of global meat trade is 32% .
- Global threat to the livestock sector impacting the livelihoods of farmers and food security
- Cost of ASF prevention and control e.g. since 2013, a total amount of **EUR 95 million ben granted** for EU member states to combat ASF
- Trade restrictions and related economic losses
- Feed industry and pig technology suppliers including pharmaceuticals and vaccines



Source: <https://resourcetrade.earth/data?year=2017&category=80&units=value>





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Directorate G - Crisis management in food, animals and plants  
Unit G3 – Official controls and eradication of diseases in animals

Brussels  
SANCO G3/FB (23.11.2018)

SANTE/7113/2015 - Rev 10

WORKING DOCUMENT

Strategic approach to the management of African Swine Fever for the EU

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ASF Regional  
Strategy for  
Asia ???



Accra, 2017





- Having **better understanding** of pig sectors, value chains, possible risks and drivers for ASF introduction and spread at the country and sub-regional levels;
- **Advocacy and communication**, including awareness on ASF risks and importance of timely reporting;
- **Capacity development** on the following areas:
  - Laboratory diagnosis
  - Good Emergency Management Practices including development of national policy, contingency plan, standard operating procedures, trainings and exercises, and other enabling environments
  - Early detection and response
- **Pig Sector specific risk management**, including safer movement and trades;
- Overall pig **herd health management**, including biosecurity
- Multi-sectoral and multi-lateral **coordination and collaboration** among stakeholders including **private sectors and other ministries** (e.g. forestry)
- Others including **strengthening of veterinary services** and relevant enabling environments including **compensation schemes**.



# Global Strategy for ASF Prevention and Control

Being drafted jointly by FAO and OIE

## The impact



**sustainable development of the global pig sector  
contributing SDGs**

## The outcome

**global pig sector and associated value chains  
resilient to high impact diseases**

# Global Strategy for ASF Prevention and Control

The Global Strategy is expected to achieve four outputs:

- Importance of ASF and its impact is ***recognized globally***
- ASF is ***controlled*** in most of countries and ***eradicated*** in some of countries not free today, while ***protecting free status*** of other continents/countries
- Prevention and control of ***other major diseases of swine*** are improved as a result of the ASF control strategy
- Established ***sustainable private-public partnership*** on disease prevention and control

# Global Strategy for ASF Prevention and Control

**Will operate according to the following principles:**

## Epidemiological principles:

- **Knowledge based approach**
- **Area/scenario specific approach**
- **Pig identification, farm/holdings registration and traceability of pigs, pork and pork products**
- **Wild boars** – mapping and population management

## Socio-economic principles:

- **Development of pig production sector and related value chain**
- **Research and innovations**
- **Public-private partnership**
- **Reduction of economic and biological/breed diversity losses:**



# Global Strategy for ASF Prevention and Control

## 6 Focused Areas:

1. Global multi-stakeholder platform to develop and harmonize ASF control strategies
2. Development and provision of tools and policies appropriate to control ASF
3. Support the implementation of sub-regional ASF prevention and control strategies
4. Awareness, advocacy, policy dialogue
5. Fund raising for ASF control
6. Re-enforcement of scientific research and its practical application

**3-5 Years**

***The draft will be jointly presented as “Technical Item” at the OIE General Session in May 2019.***

- **Objective: Strengthening regional cooperation and regional dialogue on ASF control**
  - Regular exchange of information on the ASF situation and control measures;
  - Regular review of national, regional and global control strategies;
  - Collaboration on laboratory diagnostics;
  - Collaboration in basic research;
  - Collaboration on awareness raising campaigns by exchange best practices and communication tools;
  - Collaboration on border control measures among countries in the region;
  - Regular communication on the outcomes of the group discussion to other countries in East Asia and South East Asia and the general public.
- **Members**
  - Countries at high risk, with value chain link to China and willing to participate
  - Experts (Epidemiologists, Laboratory, Biosecurity, Wildlife, ...)
  - International organizations: FAO, OIE, ...
- **First expert meeting:** 10 April 2019 in China

# International Cooperation and Transparency

- Effective, transparent Veterinary Services, meeting the OIE's quality standards
- Notification to OIE, FAO, regional economic organization and neighbouring countries

***Changing Mindset:***

***Those who report and take actions early must be seen as “heroes”***



# Conclusions and take-home messages

- ASF is an infectious disease whose control and prevention should be recognized as being a global public good
- Socio-economic studies to advocate more investment in ASF prevention and control
- Eradication of ASF is not feasible in short term perspective
- Efforts should be made to prevent further spread to free countries and ensure sustained pig production in endemic countries
- Global Strategy is to make transparent and available scientific knowledge for member countries to develop national and regional strategy and action plans to address ASF risks.
- Foster international transparency and cooperation
- Share and disseminate best practices
- Foster Public-Private Partnership for ASF prevention and control





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**THANK YOU  
FOR YOUR ATTENTION**