



Food and Agriculture
Organization of the
United Nations



©FAO/P. EKPEI

SEPTEMBER
2018

AFRICAN SWINE FEVER, A TRANSBOUNDARY THREAT THAT REQUIRES REGIONAL AND INTERNATIONAL COOPERATION

African swine fever (ASF) is a contagious viral disease that causes a haemorrhagic fever in domestic pigs and wild boar. It is characterised by high fever, internal haemorrhage and multiple organ failure with a lethality that approaches 100 percent. As a result, the backyard sector, with its low biosecurity, is particularly vulnerable. This not only threatens food security and the livelihoods of pig

producers and other actors along the supply chain, but can also have major repercussions on international trade.

The swine sector plays a key role as a source of animal protein. Pigs have become a crucial food source due to their fast growth, efficient feed conversion, quick turnover, and high reproduction.

ASF is currently widespread in sub-Saharan Africa, Eastern Europe,

the Caucasus, Russian Federation and the Italian island of Sardinia. Its arrival in the Caucasus in 2007 and its progressive advance through the Russian Federation into Eastern Europe, where it now seems established, demonstrated the high potential for transboundary spread of ASF. In August 2018, China reported the occurrence of ASF for the very first time.

AFRICAN SWINE FEVER NEW TO ASIA

The recent developments in Asia indicate that a further geographic expansion of ASF is likely to occur.

In this region, ASF was first detected at a pig farm in the Siberian region of the Russian Federation in March 2017.

In China, the virus was discovered in the country's northeast at the beginning of August 2018. With China relying heavily on the pork industry and owning almost half of the world's domestic pigs, the ASF incursion could have a catastrophic impact on trade and pig production, with serious implications for global food security.

FAO began working with China's Ministry of Agriculture and Rural Affairs a few years ago setting up an ASF contingency plan and developing diagnostic capacity. A Field Epidemiology Training Programme for Veterinarians was also developed to strengthen epidemiological investigation, disease situation tracking, risk assessment and emergency preparedness.

HOW TO PREVENT AND CONTAIN ASF

ASF is one of the more difficult transboundary animal diseases to control as no successful vaccine has yet been

KEY FACTS

AFRICAN SWINE FEVER

ASF IS A VIRAL HAEMORRHAGIC DISEASE OF SWINE CHARACTERIZED BY LOW TO MODERATE MORBIDITY AND HIGH FATALITY

ASF IS ENDEMIC IN SUB-SAHARAN AFRICA, THE ITALIAN MEDITERRANEAN ISLAND OF SARDINIA, AND PARTS OF THE CAUCASUS AND EASTERN EUROPE

THERE IS CURRENTLY NO EFFECTIVE VACCINE OR TREATMENT

PREVENTING THE ENTRY OF THE VIRUS THROUGH IMPROVED BORDER CONTROL OF SWINE AND PORK PRODUCTS, AWARENESS-RAISING, AND BIOSECURITY IS THE BEST STRATEGY AGAINST ASF FOR DISEASE-FREE COUNTRIES/ZONES

AWARENESS, IMPROVED BIOSECURITY, QUICK CONTROL OF OUTBREAKS THROUGH MOVEMENT RESTRICTIONS AND STAMPING-OUT POLICIES ARE ESSENTIAL FOR INFECTED COUNTRIES

MULTI-LATERAL AND INTER-GOVERNMENTAL EFFORTS ARE KEY TO PREVENT AND RESPOND TO OUTBREAKS OF ASF

FAO-AFRICAN SWINE FEVER

E-MAIL

Empres-livestock@fao.org

WEBSITES

<http://www.fao.org/food-chain-crisis/home/en/>

http://www.fao.org/ag/againfo/programmes/en/empres/disease_asf.asp

AFRICAN SWINE FEVER, A TRANSBOUNDARY THREAT THAT REQUIRES REGIONAL AND INTERNATIONAL COOPERATION



©FAO/J.S. PRICE

developed. The ASF virus has several wildlife reservoirs in Africa and can be transmitted via soft ticks (*Ornithodoros spp.*) in endemic areas of the region. Direct contact with infectious pigs and wild boars or their excrement or secretions as well as consumption of contaminated feed are the main transmission routes of ASF virus to domestic pigs. The ASF virus can last for long periods in contaminated environments or cured pork products.

In the absence of any effective vaccine or treatment, the best strategy against ASF is for veterinary systems to set up an early detection plan, coupled with an early response mechanism for outbreaks. Improved biosecurity, quick control of outbreaks through movement restrictions and stamping-out policies are essential for infected and endemic countries. The awareness and training of veterinary professionals and others who find themselves on the front line is crucial for effective control of ASF.

Prevention starts with stringent measures at the borders, biosecurity and raising awareness among all swine producers and allied industries involved.

FAO'S RESPONSE AND ACTION

FAO has developed a methodology to empower local communities to better prevent and respond to ASF in a sustainable and realistic manner, in particular when veterinary services have serious constraints to support farmers at the local level. The development of the strategies should be based on the collection of quantifiable and detailed information

on the different aspects of the pig sector and the marketing chain.

At regional level, FAO in collaboration with the African Union's Interafrican Bureau for Animal Resources and the United Nations and the International Livestock Research Institute developed an Africa-wide strategy for the prevention and control of ASF.

FAO has also established a database in EMPRES-i (EMPRES Global Animal Disease Information System) on host densities and disease outbreaks information reported by national authorities. This data will facilitate situation analyses and risk modelling for ASF spread and persistence.

Transboundary animal diseases are most effectively controlled through international and regional networks that can coordinate the activities of relevant stakeholders and provide a platform for knowledge exchange that leads to the development of common approaches towards sustainable control. Information sharing and coordinated action are essential to strengthen cooperation in ASF prevention and control.

In addition, FAO has developed manuals on ASF detection, diagnosis, preparation of contingency plans, and good practices for the swine sector, and conducted risk assessment and studies as well as trainings on ASF.

Following the outbreak of ASF inside China, an "Emergency Regional Consultation on African Swine Fever on Risk Reduction and Preparedness" (Bangkok, September 2018) was organized by FAO to review approaches for risk reduction and preparedness both at the regional and country levels.



Some rights reserved. This work is available under a [CC BY-NC-SA 3.0 IGO](https://creativecommons.org/licenses/by-nc-sa/3.0/igo/) licence