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African swine fever: responding to the global threat

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Substantially enhanced biosecurity along the pork value chain is currently the only effective way to prevent the introduction of African swine fever virus (ASFV). Compartmentalisation provides pork industry businesses that have the necessary means and motivation with the opportunity to safeguard their pork production, and benefit economically.

Background

The local and long-distance spread of ASFV is strongly influenced by pig and pig-farm density, as well as human behaviour associated with biosecurity along the pork value chain [1]. There are, at present, no control tools at the regional or national level that can reliably stop the spread of ASFV, once it has been introduced into countries that have a high percentage of small-to-medium-sized pork producers with typically poor biosecurity. These smaller producers with weak biosecurity are often linked into highly complex pork-value chains. It is therefore necessary to define risk management approaches that continue to allow pork production by businesses that are capable of implementing the high biosecurity standards required to control ASFV. This will allow the continuation as well as the recovery of pork supply.

Compartments versus zones or regions

Compartmentalisation usually focuses on single or multiple connected business entities with pork production facilities that (in epidemiological terms) are effectively isolated from the presence of ASFV in their geographical neighbourhood, through their management and husbandry practices [2]. In contrast, zoning or regionalisation requires that all pork production businesses within a particular geographical area, often bounded by mountains or a river, must operate at the same high biosecurity standard, and cannot have parts of their business outside the disease-free zone or region [2].

Rationale for compartments

A compartment needs an epidemiologically sound risk management and biosecurity plan, and has to involve government veterinary authorities as an accrediting and auditing partner [3]. The considerable investment required for compartmentalisation should be justified by its economic benefits. These include the ability to move and trade animals or animal products between countries, or between regions within countries, as well as the ability to recover rapidly after an outbreak within the compartment.

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DOSSIER

Compartmentalisation to facilitate pork production in high-risk environments for ASF

KEYWORDS

#African swine fever (ASF), #biosecurity, #compartmentalisation.

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