African Swine fever (ASF)

Author: Dr Mary-Louise Penrith


MARKETING AND TRADE / SOCIO-ECONOMICS

Like all transboundary diseases, ASF is a highly trade-sensitive disease and, for a country that exports pork, there are serious economic consequences of an outbreak in terms of trade bans. For this reason the incursion of ASF into an area as distant from Africa as the Caucasus raised alarm about the possibility of it reaching Europe. Although ASF has been present within the EU, in Sardinia, since 1978, this is not regarded as a particular threat because it has remained confined to that island since its introduction. However, the great majority of countries where ASF occurs are not important exporters of pork, and the socio-economic consequences are at the level of households rather than governments. An exception occurred in Georgia and Armenia, neither of which export pork, but whose most important trading partners chose to ban all agricultural products, including wine, lest they were contaminated with ASF!

Most sub-Saharan African countries do not have highly developed pig industries. The great majority of pigs are kept by smallholders in traditional husbandry systems. Under these systems, pigs are at most confined seasonally, and are for at least part of the year able to find their own food. Although these animals are not accorded a high commercial value, they are generally valued by their owners as a source of food as well as a source of household income, being sold opportunistically when there is a demand for them. In the forested areas of West Africa, which are largely unsuitable for cattle production, pigs replace cattle as the ceremonial animal of choice. Pig production in these areas also serves to reduce the quest for ‘bush meat’ and thus contributes to the conservation of biodiversity. The loss of large numbers of pigs to ASF therefore has effects that range from inability to pay school fees or make the appropriate contributions to weddings and funerals in Africa to increased illegal hunting of rare wild species. The seriousness of these consequences should not be underestimated, and ASF should be prevented. At the same time it must be remembered that for poor pig owners the value of being able to retain pigs that survive ASF and even to eat the meat from pigs that die of it will outweigh the fear of perpetuating the disease, and therefore drastic control measures, unless prompt and acceptable compensation is assured, will be unwelcome.

The costs of an ASF outbreak in a high value pig industry can be astronomical. Apart from the producers, major losers in the industry are abattoirs, meat retailers, and feed manufacturers. There are also major
costs to the government for implementation of control measures and compensation for compulsory slaughter. In commercial industries producing millions of pigs the logistical challenges of stamping out and disposal of carcasses are already accepted to be insurmountable. The effects in smaller industries when calculated in terms of job losses and lost trade opportunities may be equally catastrophic, given that most of the people involved are not wealthy in the first place. For example, as a result of the outbreaks in Côte d’Ivoire in 1996, 300 women who made their living in the rural areas from slaughtering pigs were deprived of their only income.

When control measures are imposed, owners of healthy herds often suffer the most, as they are unable to move their pigs to the abattoir for slaughter and both feed costs and space become problematic. In the end more pigs may have to be killed on-farm and disposed of simply for welfare reasons. If at all possible, identifying healthy herds and allowing controlled movement to the abattoir for slaughter can assist control, because the availability of uninfected pork for legal sale may limit clandestine trade in pork of unknown origin that is likely to take place when pork becomes scarce.

ASF virus naturally infects only members of the pig family and humans cannot become infected

It has been noted that the economic effects of ASF may encourage transboundary spread of the disease. When pigs start dying, many owners are anxious to sell their pigs that are still apparently healthy before they die of disease, as well as the meat of pigs that have died. This often leads to a drop in the price of pigs and pork, making these commodities more attractive to neighbours. For example, pigs usually fetch a higher price in Benin than in neighbouring Togo, but when ASF broke out in Benin in 1997 the price dropped to below the price of pigs in Togo, and the first outbreaks there were traced to pigs bought in Benin, probably in the incubation phase of ASF.

Market forces are likely to prove important in controlling and possibly eradicating ASF from countries where it is endemic in domestic pigs. To break the circulation in domestic pig populations, a change from free-range husbandry to more conventional management systems is essential. This requires inputs from the owner in terms of housing, feed and provision of water that will not be affordable unless a good price can be obtained for the pigs. Apart from ASF, there are other problems that can be resolved if the pigs
are confined, notably porcine cysticercosis, which is currently the most important cause of epilepsy in human populations in sub-Saharan Africa, and there are initiatives to support a change in husbandry methods to eliminate this neglected zoonosis. However, efforts to train pig farmers are most likely to succeed if there are real economic benefits for them in improving their husbandry methods.