Participatory value chain risk assessment to guide interventions in disease control for smallholder pig systems in Uganda: Case of African swine fever

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Main message

Interventions to control African swine fever (ASF) through biosecurity measures should put more emphasis on postfarm nodes, especially trading, by catalyzing human behavioral changes, creating incentives to adopt technologies and capacity strengthening of value chain actors on disease control and good husbandry.



ASF is the most important disease constraining pig production. It leads to high mortality and morbidity rates. There is neither a vaccine nor a cure. The only way to prevent the disease is through proper application of biosecurity at farm and other value chain nodes.

No reporting of outbreaks

Poor disinfection of

equipment

Use of expired drugs

Poor quality of feeds

Input

suppliers

Purpose of study

Assess the perceptions of smallholder pig value chain actors on risks associated with the spread of ASF; their current practices that exacerbate the risks; and recommend sustainable disease control measures

Methods

17 focus groups discussions and 2 key informant interviews were carried out with pig value chain actors and stakeholders in 2 districts with high pig populations

Value chain nodes	Ranking
Input supply and services	5
Pig Production	4
Pig trading	1
Slaughtering	2
Retailing	3
Consumption	6

Ranking of value chain nodes according to the level of risk they represent in relation to the spread of ASF





supply

Production



Trading





Slaughter of sick pigs Sale of meat from sick pigs Absence of meat inspection Lack of reporting of outbreaks Poor disposal of offal's Poor self-hygiene during meat processing

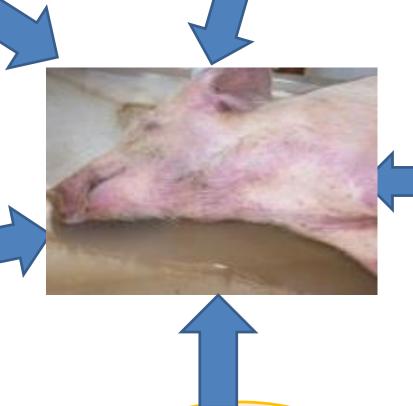
Sharing of farm tools

Poor hygiene on farm

Producers

Butcher/retailer

Presence of stray dogs



Poor food waste disposal Poor knowledge of ASF Presence of stray dogs

Consumers

Absence of movement permits Trade of sick pigs knowingly Purchase of pigs from outbreak areas Mixing of sick and healthy pigs Poor cleaning and disinfection of trucks/vehicles/clothing/shoes/boots Lack of capacity to identify sick pigs Poor knowledge about good biosecurity measures No disinfection of vehicles

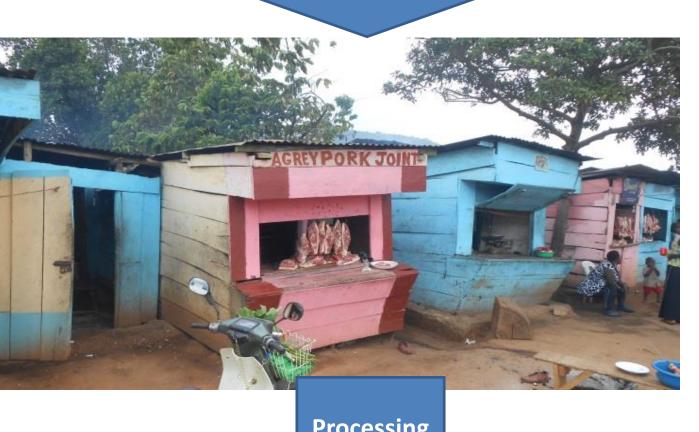
Traders

Main recommendations

- Empower actors through awareness campaigns and training on pig management and biosecurity measures.
- Centralize pig slaughters to facilitate meat inspection and proper waste management
- Establish pig markets where farmers can sell live pigs, limiting the movement of traders across farms.
- Create bylaws regulating pig movements during outbreaks of ASF.

Summary of key findings

- Transportation, slaughter and collection/bulking nodes are perceived as the highest nodes at risk for the spread of ASF.
- All value chain actors are aware of the disease and its consequences to the value chain, but there is inadequate knowledge on good pig husbandry practices and disease control.
- Biosecurity measures are poorly implemented at all nodes because there is low capacity and lack of incentives for adoption by value chain actors.
- There is poor enforcement of disease control policies and regulations



Processing











