

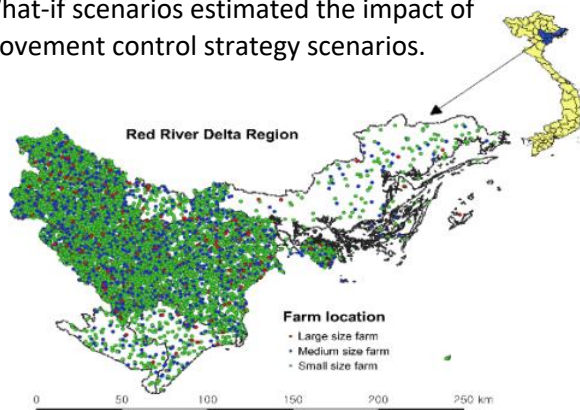


## Context

- In Vietnam, the first African swine fever (ASF) outbreak was in backyard pig farms reported in February 2019. Since then, the disease has spread countrywide and caused ongoing.
- The main reason for the rapid spread was low biosecurity at farm level and poor management.
- Simulation models are a useful tool for decision-makers to evaluate the impact of outbreaks as well as to identify and evaluate cost-effective control strategies.

## Our innovative approach

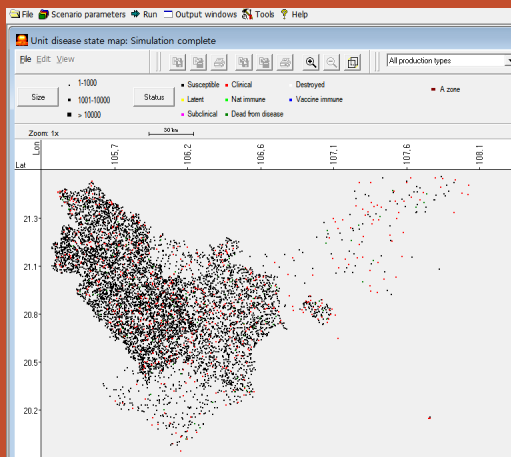
- We modelled ASF transmission in domestic pigs in the Mekong Delta Region, Vietnam using different scenarios by adjusting model parameters.
- What-if scenarios estimated the impact of movement control strategy scenarios.



## POVERTY REDUCTION, LIVELIHOODS & JOBS

### A simulation model for African swine fever (ASF) in domestic pigs and evaluation of movement control strategies in Vietnam

- This study offers valuable insight into how ASF virus can be transmitted via direct and indirect contact and controlled
- Strict movement control and high standards of biosecurity can contribute to the reduction of disease spread



Screenshot of simulation model



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LIVESTOCK HEALTH

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## Outcomes

- The enforcement of movement restrictions is an effective control measure if implemented as soon as outbreaks are confirmed.
- To be effective, movement restrictions need to reach at least between 50% and 75% of the population, and they need to be applied in a timely manner.

## Future steps

- The findings of this study provide the basis for a cost-benefit analysis of control strategies in Vietnam
- This simulation model can be applied to other regions or countries with modified parameters

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## Partners



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