Food safety challenges in small holder pig value chains in Vietnam – from an assessment to feasible interventions using an integrated approach

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Pork represents more than 70% of meat consumption in Vietnam and pig production is growing fast. Its production delivers substantial benefits to the smallholders who supply 80% of the market. Yet, most smallholder pig farms lack technologies and disease control measures, which threaten food safety and environment conditions. While Vietnamese consumers have a strong preference for fresh, un-chilled pork sold at outlets supplied by smallholders there are increasingly concerns about pig diseases and food safety. However, “Farm to fork” approaches along various actors and/or including various disciplines are still lacking. Here we present the concept, selected results and the design of feasible interventions from an ongoing study involving two provinces of Vietnam (Nghe An and Hung Yen) that aims for improved food safety in smallholder pig value chains. Key components include an assessment phase followed by interventions. Addressing the need for an One Health approach expertises include economics, animal/public health and environmental experts. Involved actors and groups range from input suppliers, via producers, slaughterhouses/markets to consumers. Data collection comprises of quantitative (e.g. biological samples, questionnaires) and qualitative (e.g. FGD, Participatory Epidemiology) tools supported by a risk assessment. Various constraints have been identified in the key nodes along the value chain, e.g. on-farm and slaughterhouse hygiene being determined by presence of biological hazards. Currently the intervention phase is designed which targets the identification of “best bets”. Their selection is supported by a rigorous validation process, which includes cost-benefit analysis, system dynamics modelling, and stakeholder/targeted group consultations. The framework will be presented, furthermore initial results of the risk assessment including the high pathogen loads e.g. for Salmonella in slaughterhouses (carcass swab, 39%) or markets (pork cuts, 45%) and low levels of awareness about health risks in practices of pig production and pork processing. Finally examples for specific interventions are provided and discussed.

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