

MAKERERE

The African Union has awarded a research grant of USD 1,249,988 to a consortium of scientists led by the College of Natural Sciences (CoNAS) to implement a research project titled, 'Developing innovative and sustainable approaches to prevent the spread of African Swine Fever (ASF) in Africa (ASF-RESIST)'. Associate Professor Charles Masembe from the Department of Zoology, Entomology and Fisheries Sciences is the Principal Investigator. The implementation period is 3 years in Uganda, Nigeria, and United Kingdom.

The project objectives include: 1. To determine the phenotypic and genotypic features of pigs that survive ASF outbreaks; 2. To develop a community-based participatory biosecurity approach to control ASF outbreaks; 3. To evaluate ASF rapid diagnostics for use in resource constrained settings; and 4. To determine the full genome characteristics of circulating ASFV strains.

CoNAS, Makerere University; MRC – University of Glasgow, Centre for Virus Research – Scotland, UK; the National Veterinary Research Institute, Nigeria; BecA–ILRI Hub – Kenya; National Veterinary Institute – Sweden and the Regional Universities Forum for Capacity Building in Agriculture (RUFORUM) and will all work in partnership.

ASF is a highly contagious hemorrhagic disease affecting pigs (domestic and wild). This disease is a major constraint to pig production and the pork industry in many countries in sub–Saharan Africa, periodically killing 90–100% of affected animals; and has neither treatment nor vaccine. ASF is characterized by high fever, loss of appetite, haemorrhages in the skin and internal organs, and causing death in 2–10 days on average. This is a real threat to an industry that has become very attractive as a means of food, income and employment, since pigs are considered "walking banks" in the local communities. Smallholder pig keeping is a good opportunity for the predominantly rural African population to raise money quickly; given that pigs grow to maturity in a short time (8–12 months), they are raised successfully on food waste and other inexpensive fodder and can be sold with relative ease, including at markets in urban areas.