

Containing African Swine Fever in Papua New Guinea

PHAMA Plus Performance Story

African Swine Fever (ASF) is one of the most serious biosecurity threats facing Papua New Guinea's livestock sector. When ASF was confirmed in March 2020, it rapidly spread through the Upper Highlands, where pigs are commonly kept in low-biosecurity, free-ranging systems. Once introduced into these systems, the virus can spread quickly and is extremely difficult to eradicate.

In Papua New Guinea (PNG), pigs are the ultimate household asset – a literal “piggy bank”. They underpin food security, cash income and cultural obligations, and are central to social exchange, compensation payments and community life. The loss of pigs therefore has impacts that extend far beyond animal health, directly affecting household resilience and livelihoods.

At the time of detection, awareness of ASF among farming communities was extremely low. Many households had never encountered the disease, and early pig deaths were often attributed to *sanguma* (sorcery) rather than infection. This created additional barriers to reporting and compliance, increasing the risk of unchecked spread.

Working alongside the National Agriculture Quarantine and Inspection Authority's (NAQIA) government-led response, PHAMA Plus provided critical support to efforts to contain ASF and stabilise measures during a period of significant uncertainty. This contributed to protecting an

estimated AUD760 million in national pig assets and safeguarding the livelihoods of around 340,000 households, while reducing the risk of onward spread to coastal and disease-free regions. Beyond Papua New Guinea, the response also generated critical lessons and tools that were later translated into preparedness support for neighbouring Pacific countries.

What did PHAMA Plus do?

Throughout the response, NAQIA remained firmly in the driver's seat, with PHAMA Plus playing an enabling, catalytic role – supporting coordination, implementation and system strengthening rather than substituting for government leadership. PHAMA Plus worked in partnership with NAQIA, provincial authorities and regional technical agencies through:

- Emergency surge support, including logistics, mobility and Personal Protective Equipment (PPE), enabling rapid deployment of veterinary and inspection teams.
- Establishing a “virtual command centre” to provide real-time remote technical backstopping when international travel was restricted.
- Supporting movement controls and surveillance, including road checkpoints, zoning and delimiting surveys to contain ASF within the declared Disease Area.
- Funding a saturation-level “Stopim ASF” risk communications campaign to counter misinformation and promote reporting and compliance.
- Strengthening institutional capability, including diagnostics, workforce skills and information systems.
- Enabling in-country PCR diagnostic testing
- Working with The Pacific Community (SPC) to translate PNG's experience into ASF preparedness support for Fiji, Samoa and Solomon Islands, and discrete training and input supports for the Cook Islands, Kiribati, Niue, Tonga, Tuvalu and Vanuatu.



Results at a glance

- As of April 2024, NAQIA formally stood down the emergency response phase and transitioned to ‘normalcy’, with ASF managed under ongoing surveillance, zoning and risk management arrangements.
- ASF contained to date, with national biosecurity systems strengthened for ongoing management.
- Containment maintained within five Highlands provinces, protecting coastal and disease-free regions from onward spread under ongoing risk management and surveillance.
- An estimated AUD760 million in pig assets safeguarded, representing significant avoided losses and protecting the livelihoods of around 340,000 households.
- More than 275,000 households reached through intensive risk communication and awareness activities.
- In-country PCR diagnostic capability established, strengthening national response capacity
- Improved systems and practices informed regulatory reform, codified in the *Biosecurity Act 2025*.
- Regional spillover benefits, with neighbouring countries strengthening ASF preparedness using PNG-derived tools and lessons.



Stories from the field: Grace Mark, Pig farmer

Like other pig farmers in the Upper Highlands, Grace Mark from Anglimp, South Waghi District, Jiwaka Province, adopted the good husbandry practices critical for controlling the spread of African Swine Fever (ASF). A single mother with two children, Grace is also a coffee farmer but operates at a subsistence level and relies on income from pig sales to pay for school fees and cultural obligations such as bride price. Before the ASF outbreak, the price of an average pig ranged from PGK4,000 to PGK6,000, depending on size, making pigs a vital household asset.

Grace lost 6 of her 9 pigs to ASF, as did relatives and neighbours in her village and neighbouring communities in late 2020. Initially, she believed the deaths were caused by *sanguma* (sorcery), although she had also heard that a pig disease was circulating. After calling the ASF toll-free number, a NAQIA technical team visited her village, tested her pigs and provided advice on containment and husbandry practices. Grace has since fenced off her pigs and placed notices asking community members not to come too close, while actively raising awareness during gatherings. She now encourages others to apply the same practices and makes it clear that pig deaths are caused by an infectious disease — not *sanguma*.

Lessons Learnt

Containing ASF was not an end point, but the foundation for long-term management and system strengthening. As the response transitioned from emergency control to 'normalcy', attention shifted to consolidating gains and progressively strengthening the systems required for long-term management of ASF and other high-consequence diseases. Lessons learnt include:

Embedding sovereign capability was key for sustainability

A central lesson from the response was the importance of sovereign capability. Investments that enabled in-country PCR diagnostics, strengthened laboratory systems and supported legislative reform, including measures codified in the *Biosecurity Act 2025*, ensure Papua New Guinea can independently detect, diagnose and respond to biosecurity threats once emergency support reduces.

Maintaining targeted risk communications was central to success

The saturation-level "Stopim ASF" campaign demonstrated that sustained, practical risk communications can shift knowledge, norms and practices at scale. Continued, targeted communication remains critical to reinforce reporting, compliance and improved husbandry practices, particularly in high-risk areas and movement corridors.



Institutionalising lessons learned helped to strengthen systems for the long term

The response generated significant operational knowledge, including approaches to zoning, movement controls, surveillance and community engagement. Institutionalising these lessons into standard operating procedures, training materials and response frameworks reduces reliance on individuals and ensures that knowledge is retained within the system.

Proactive frontline defence offers regional benefit

Containing ASF in Papua New Guinea to date demonstrates the value of early, coordinated investment in biosecurity systems. PHAMA Plus's contribution was catalytic — supporting a government-led response, contributing to the avoidance of catastrophic losses, and leaving behind stronger institutions capable of managing future biosecurity threats. Through collaboration with SPC, PNG's ASF experience was also translated into preparedness and response planning for Fiji, Samoa and Solomon Islands. Packaging these lessons into ready-to-deploy tools strengthens regional biosecurity and reduces the risk of future incursions. The benefits extend beyond PNG, reinforcing regional biosecurity and protecting shared economic and food security interests across the Pacific, Australia and New Zealand.

