Livestock (Pigs)

Thematic Paper

Why is MDF involved in the pig sector?

MDF supports the pig sector in Timor-Leste, where around 82 per cent of households raise pigs, and in PNG, where 47 per cent of rural households rear nearly 1.8 million pigs.

In both countries, pigs provide an important source of protein, hold important cultural value and contribute significantly to households' asset base. The sector has significant potential for inclusive economic growth and women's economic empowerment due to the widespread significance of pigs to rural livelihoods and growing demand for protein. MDF's overall vision for the pig sector is to see more smallholder farmers shift to dedicated, productive pig rearing, rather than basic, foraging-based production. Innovations in inputs, breed and animal husbandry have been shown to raise productivity, allowing smallholders to fill the growing gap between demand and supply, and generate higher returns from their pigs.

Since 2019, pig herds across the Indo-Pacific region have been increasingly threatened by the spread of African Swine Fever (ASF), a highly contagious pig disease. It is likely that a significant proportion of the pig populations in PNG and Timor-Leste have already died, with significant consequences for household livelihoods and the rural economy. There is no treatment for ASF, so prevention is key. In Timor-Leste and PNG, MDF plays an important role in supporting the Australian, Timor-Leste and PNG Governments' response to ASF. MDF is introducing biosecurity measures, such as keeping pigs in pens and avoiding contamination during handling and feeding, to keep the disease from spreading. These measures complement MDF's work to raise productivity.

Due to ASF, risks in this market system will continue to be high, but so are the opportunities. MDF has encountered substantial market interest in mitigating the impact of the virus and raising productivity. MDF is supporting the private sector to introduce practices that prevent the spread of the disease and increase the yields of pig farms.

What does MDF do in individual countries?

Timor-Leste

In **Timor-Leste**, MDF supports the pig industry by improving the availability and use of commercial pig feed, knowledge and practices about pig rearing, piglet availability, and meat processing. ASF has been devasting for many Timorese pig owners, and biosecurity has emerged as a critical issue. MDF has been the main vehicle for delivering the Australian Government's ASF response. In 2020, MDF implemented a nationwide animal health communications campaign, based on high-quality content produced in consultation with the Timor-Leste Ministry of Agriculture and Fisheries, the Australian Department of Agriculture and other experts. The campaign – which continues in 2021 – utilised television, radio, SMS, social media and a travelling cinema, and achieved high reach and uptake of key messages. The campaign sparked behaviour change among farmers, helping at least 54,000 pig farming households to avoid pig losses and sustain their remaining herds, with an expected surge in piglets starting 2021.

In 2021, MDF will:

- Scale up pig feed interventions, tripling the number of demonstration pig pens and agri-input partners
- Continue to integrate information-related activities into any intervention in pigs
- Support the establishment of Timor-Leste's first modern pork meat processing facility
- Extend the existing ASF communications campaign.

Papua New Guinea

In **PNG**, MDF focuses on improving farming inputs, including faster-growing breeds, feed, medicines and other farm requirements, as well as supporting information sharing. In response to ASF, MDF has widened its ambit of partners to include small and medium sized (SME) piggeries. For example, MDF partnered with an SME piggery to improve on-farm biosecurity and pig productivity by improving fencing, pig pens and water supply for the piggery and its network of satellite pig farmers. MDF is also supporting the partner to introduce extension services for its network of smallholders, in order to channel information on the nature of ASF and how better husbandry practices can simultaneously avoid infection and raise pig productivity. MDF will work with the Australian and New Zealand-supported PHAMA Plus program on the ASF effort, to ensure broad-based and complementary support to the PNG Government.

In 2021, MDF will:

- Replicate the SME piggery satellite model with other SME piggeries
- Develop other interventions in the pig sector, including local stockfeed alternatives, veterinary medicine and extension services
- Based on the successful awareness campaign in Timor-Leste, support the fight against ASF through effective communications and media.

What are the benefits of facility wide collaboration?

MDF is able to pool resources through a multi-country model in order to deliver insights, expertise and economies of scale. Knowledge and experience are transferred between countries through communications, publications, thematic groups and events, staff exchange and via the Shared Resources team.

Through MDF, Australia is supporting the fight against ASF in the Indo-Pacific region, utilising the program's technical expertise and presence on the ground. The Timor-Leste awareness campaign successfully triggered vital behaviour changes among pig farmers, leading to improved pig health and reduced mortality. Timor-Leste's experience was analysed at a facility level and the insights translated into learning and communications outputs. These lessons are now being transferred to PNG, to assist MDF's partners establish biosecurity protocols, helping

small and medium producers protect their farms from infection while increasing farm productivity through improved husbandry practices.

Cross-facility collaboration allows the program to transfer knowledge and lessons from practical experience, while taking care to adapt to local contexts.