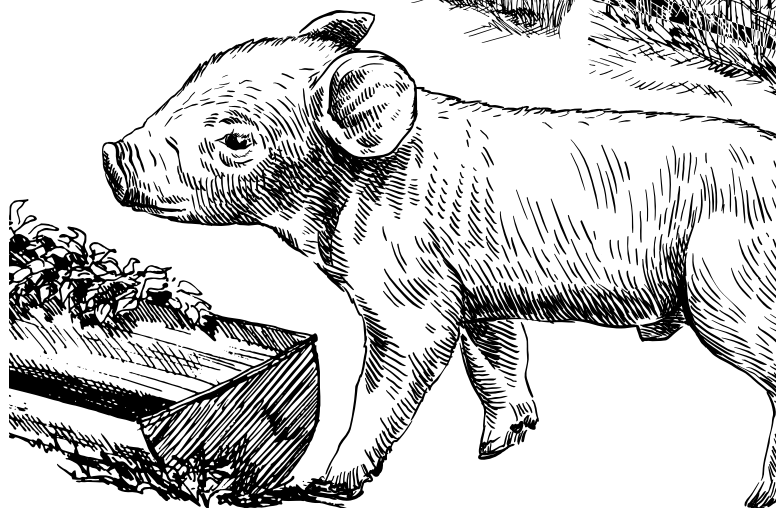




Progress towards  
systemic change

## Boom and bust

The recovery of the pig sector  
after African Swine Fever



*The pig sector has yet to achieve full systemic change, but there is certainly adequate progress. The sector is beginning to pick up as breed farms are restocking and farmers are reinvesting in piglets and feed. PRISMA has contributed to the recovery by initiating large-scale African Swine Fever (ASF) awareness campaigns and improving access to ASF-free live pig sources necessary for restocking farms.*

## Pigs sector in Indonesia

In late 2019, African Swine Fever (ASF) hit Nusa Tenggara Timur and decimated the pig population. The loss of pig stocks caused a significant decline in feed and pharmaceutical demand – 2 of PRISMA's main functional areas. PRISMA has refocused the pig strategy towards sector recovery by building and strengthening the breed and animal health management systems by partnering with the private and public sectors. This semester, the ASF cases in NTT declined, and the farmers and breeding farms are starting to restock; hence the demand for piglets, feed, and pharma products is increasing.



### PRISMA's sector vision

PRISMA supports the NTT government's plan to enable recovery in the pig sector. PRISMA has set itself a target of 10 percent recovery of the sector. The focus is on detection, response, prevention, and recovery from ASF by improving restocking, awareness, and information about animal husbandry practices. Sector resilience will focus on breed improvement by building the capacity of key market actors and by strengthening the regulatory environment.

# Pig business is big business

NTT has the largest pig population in Indonesia, contributing 30 percent of the national pig population. An estimated 900,000 smallholders in NTT are rearing, on average, 2 pigs for extra income and as a social safety net. Pigs are integral to the culture of NTT and are the most important livestock for smallholder farmers in NTT.

The cultural and religious traditions involving pigs keep the demand for pigs high. Pigs are also a critical source of protein for domestic consumption, and 91 percent of NTT's population of 5.39 million are non-Muslim and considered pork eaters. There is also high female involvement in the sector, with women spending considerable time collecting fodder, feeding, cleaning the pens, and controlling the health of pigs.



## Constraints to market growth

Despite the importance of pigs in NTT, the market is underdeveloped. Pig farmers in NTT have limited access to quality breeds and good husbandry practices, including farm and breeding management and AI. Farmers also have limited access to good quality feed and pig health products (vitamins, supplements, vaccines, drugs).

## From breeding to feeding

PRISMA's work in the pig sector began in 2014 and was focused on breeding since farmers mainly used local breeds instead of pure or crossbreeds. PRISMA partnered with 8 church-owned and private breeding farms to introduce better-quality pig breeds and improved fodder and rearing practices. Many farmers struggled to purchase high-quality piglets because of cost, but there was strong interest in the feed component of the interventions.

In late 2016, PRISMA shifted focus to promoting quality feed, which was highly successful. In 2014, 2 NTT companies supplied commercial pig feed at 8 MT/month. PRISMA partnered with these companies and convinced one more to enter the market.

In 2014, approximately 9,280 HHs used commercial pig feed and improved farm management practices. By late 2019, the feed business was booming, with 122,325 farming HHs using commercial feed and improved farming practices. Using commercial feed halved the fattening period for pigs, reduced feeding time and thereby allowed women free time, and increased farmer incomes by 415 percent.

PRISMA's initial partners (Charoen Pokphand, JAPFA, and Malindo) are now market leaders in NTT, and an additional 9 companies entered the market, 5 doing so independently. This is an excellent sign that, at that time, good progress was being made toward systemic change in the feed sector.

## And then the pendulum swung

In late 2019, ASF hit NTT and quickly spread through the islands. Waves of the disease over 2.5 years decimated the pig population by 50 percent. An estimated pig population of 1.7 million in 2014 rose to 2.2 million in 2019 due to improved feed and husbandry practices. By 2022, the number of pigs fell to 1.1 million. Two feed companies that had entered the NTT pig market in 2019 exited in 2022, and feed sales fell. ASF outbreaks continued without good animal health practices. It was time for a complete strategy change.



## Moving the pendulum back – from feed to breed

Recognising the need for longer-term strategies to strengthen the sector's resilience, PRISMA developed a recovery strategy prioritising breeding, animal health, and feed. Initially, PRISMA wanted to advocate for regulatory change to allow for the import of pig semen. However, the outbreak of FMD and fears of its spread to NTT kept the borders firmly shut.

In 2020, PRISMA partnered with 3 private breeding farms and an additional 6 farms in 2022, as well as the NTT provincial and district-level (Timor Tengah Selatan, Manggarai, Manggarai Barat, Lembata, Sumba Barat, and Rote Ndao) animal husbandry offices to improve biosecurity measures, implement breed recording systems, and start AI services.

PRISMA aims to help breed partners commercialise AI, which reduces the risk of disease transmission and introduces superior genes into sow herds. Among PRISMA's 9 private breeding partners, one partner, Happy Farms, is now a semen bank holder and will support the other farms in AI commercialisation.

Restocking after ASF has been hindered by the government banning the movement of pig products, including semen, due to FMD.



## Spreading the word

In August 2021, PRISMA supported the provincial government in launching an online ASF awareness campaign to increase farmers' knowledge of ASF and biosecurity measures, which are critical for preventing further outbreaks and helping the sector rebound. When movement restrictions due to COVID were lifted, PRISMA helped the government launch a new campaign in 2022 to reach a broader range of stakeholders and farmers across all 22 districts in NTT. An assessment of farmers using a snowball sampling methodology of 70 farmers has indicated that all farmers are now applying at least one or 2 biosecurity measures.

At the same time, PRISMA partnered with the NTT provincial animal husbandry office to support a comprehensive ASF prevention, detection, and surveillance strategy. PRISMA has helped build the capacity of government animal health workers and lab personnel on ASF prevention and surveillance. To date, PRISMA has trained 70 percent of all animal health extension workers.

There is only one laboratory in NTT that can undertake diagnostic services. PRISMA, in collaboration with the NTT government and AIHSP, procured 4 mobile diagnostic tools, which arrived in Indonesia in December 2022 and will be operational in early 2023 on each of the main islands.

# Preparing for further swings of the pendulum

PRISMA's experience in the pig sector highlights the need for market systems programs to think about medium and long-term strategies to achieve market resilience from the outset. PRISMA's initial focus on outreach narrowed the strategy to feed, and if breed and animal health had been addressed at an earlier stage, the sector would have been more ready to weather the ASF storm.

While ASF remains an ongoing challenge for the sustainability of the sector, if PRISMA had not worked in this sector, chances of recovery would have been much lower. PRISMA has contributed to the recovery by initiating large-scale ASF awareness campaigns and improving access to ASF-free live pig sources, which are necessary for restocking farms.

The pig sector has yet to achieve full systemic change, but there is certainly adequate progress. The sector is beginning to pick up as breed farms are restocking and farmers are reinvesting in piglets and feed. Because pigs are so integral to NTT, the government and the private sector are highly incentivised to bring the sector back. The pig sector will undoubtedly bounce back. What that looks like will depend on the degree to which PRISMA's breed partners can establish commercial AI services and maintain effective biosecurity measures in their facilities.



## Impact



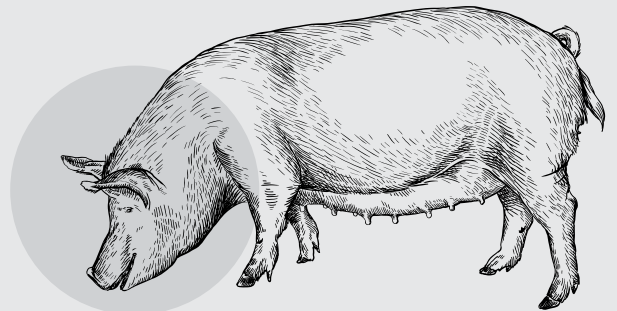
**28,313**

Households benefited



**37%**

Income increase



### About PRISMA

PRISMA is a partnership between the Government of Indonesia and the Government of Australia to increase the productivity and income of smallholder farmers. Increased productivity contributes to food security and builds farmer resilience to market and agricultural shocks, including climate change.

PRISMA is supported by the Governments of Australia and Indonesia and implemented by Palladium, with Technical Assistance from Swisscontact, Zurich.

Find out more:

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