



Coffee

Mapping the shift from commodity to high grade coffee in PNG

MDF has been working in the PNG coffee sector since 2018, collaborating with multiple market actors – government, large-scale coffee exporters, industry associations, aggregators and smallholder farmers—on a range of market functions to support the industry to shift from commodity-grade coffee to high-grade coffee. PNG was not competitive in commodity coffee due to the high costs of production and the decline of the plantation sector. Additionally, due to low margins, exporters did not have the incentives to make the necessary investments in their supply chains to improve both the quality and quantity of coffee production from the disparate networks of smallholder coffee farmers in PNG.



Starting with information

MDF began working with coffee businesses to de-risk investment in establishing extension teams to service their smallholder farmer value chains and improve the provision of information and inputs. Coffee exporters such as Niugini Coffee, Tea and Spices (NCTS) and Monpi Coffee Exports Limited (MCEL) hired extension officers to train farmers on good agricultural practices, such as only picking ripe cherries. These investments saw significant returns for both farmers and coffee exporters. Larger businesses continued to maintain and expand their extension networks; for example, SMS

nearly doubled the size of its team post-MDF support. MDF has also observed value chains in Kainantu and elsewhere investing independently in extension. Smaller exporters who are unable to establish their own teams have also started to use service providers to ensure their farmers have access to information. With CBB ravaging coffee plantations, exporters in 2022 worked with MDF to also adapt extension networks to train farmers on pest management and distribute CBB management inputs such as traps.



Sealing premiums through certification

Certification of the higher-quality coffee supply chains presented an opportunity for PNG coffee to tap into niche, high-grade markets. Several well-recognised certification programs have emerged in recent years, allowing certified coffee traders to attract premiums for their produce in international markets. However, the certification process can be difficult and expensive to manage, especially for smaller businesses. MDF initially worked with individual businesses to certify smallholder value chains, developing internal processes and curriculums. MDF partners adopted this change independently, investing to maintain their certification beyond program support. Smallholder farmers were motivated to continue the good growing practices, encouraged by the continued premiums they received for their coffee.

In 2021, MDF began working directly with certifying agencies Fairtrade and NASAA to adapt their certification process, reducing the cost of achieving both Fairtrade and Organic certification and enabling smaller players to achieve both, increasing their access to high value markets. The industry is now showing signs of responding to this increased interest in certification; for instance, consultancies are now providing certification services to the industry. Coffee businesses such as Sucafina have also started leveraging these supply chains to add deforestation and carbon emissions verification.

These changes in certification and extension increased the number of farmers able to produce certified coffee in PNG, which created a need for the industry to invest in improved processing to ensure quality is maintained. MDF worked with New Guinea Highlands Coffee Exports (NGCHE) to invest in improved coffee processing and drying for two of its aggregators, the Kenta and Riverside coffee mills. These investments in drying infrastructure, water pumps and improved machinery improved both the quality and quantity of coffee. In response to this consistent flow of high-quality coffee from these mills, NGHCE is now exploring further investment in coffee roasting to capture more value from this coffee.

Financing change

All of these investments increase the value of the coffee produced and—at a time of high global market prices—put pressure on working capital across the supply chain, with aggregators sometimes running out of funds to buy all the coffee produced. This problem is particularly relevant in certified supply chains when farmers have invested time and energy in maintaining certifications to attract premiums and are now forced to sell to other buyers for a lower price, damaging the established incentive structure. In response to this liquidity challenge, MDF worked with coffee exporters to establish revolving funds, allowing the exporters to provide working capital loans to their value chains. Exporters adapted these funds to their own working capital needs, with some revolving the fund just between the aggregator and processor while others used it across their whole supply chain. Several of these exporters invested more money into these funds during the season or set up their own funds for additional supply chains outside of MDF support.

MDF's investments in these complementary market functions have begun to shift the industry from one built on commodity coffee to one built on high value specialty coffee. By the end of 2022, MDF's investments had benefitted over 20,440 coffee farmers, created over 50 jobs and led to an increased net additional income of USD594,223 (AUD888,491). Exporters are also benefitting, with the value of additional market transactions (VAMT) as a result of these investments reaching USD11.1 million (AUD16.5 million) in the same period, and MDF having confirmed the export of nearly 62,170 additional bags of green bean coffee from high value supply chains. Further assessments in 2023 are likely to see an increase in these results. MDF is seeing clear signs of our business partners maintaining and adapting these innovations to suit their contexts. Other players are also beginning to copy and respond to the innovations introduced by MDF. Despite the positive shifts within the system, challenges such as the outbreak of CBB and the ongoing impact of climate change will continue to affect the sector. Long-term investments in PNG's coffee value chain remain necessary to support the shift to a sustainable, high value coffee industry.



NCTS have replicated the intervention with new supply chains, with a value of PGK300,000 of their own money.

Sebastian Pako,
Regional Manager



With the revolving fund we can provide relatively new and upcoming supply chains with buying capital while coaching them in their business development. Although NGHCE remains, of course, very selective in “our” recipients of the funding, it remains, for us, “risk free”.

Joseph Stegman,
NGHCE Business Development Manager