



Improving smallholder farmer incomes through strategic market development in mango supply chains in southern Vietnam

End of Project Review
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Title: Partial Processing trial – Frozen Mango

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Implementing Agency



Funding Agency



Australian Government
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Aim & Objectives


Key focus

Optimising the *return-for-effort* for smallholder mango farmers by utilising bulk freezing at the peak of the season for later on-processing, thereby minimising waste & increasing processing facility usage.

Research questions

- ▶ What processing innovations are likely to generate the most significant impacts to reduce losses, increase productivity and quality outputs that will improve returns directly related to smallholder incomes?
- ▶ What is the potential to increase farmer incomes from further developing access to processed fruit chains in the domestic market.

Overview

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- ▶ On season equipment & factory facilities are rarely able to cope with the significant influx of raw material (mangoes)
 - ▶ Off-season these same facilities are underused or idle
 - ▶ Partial processing at season for later use can reduce waste & optimize the use of expensive equipment
 - ▶ 3 freezing mango trials with the processors conducted

Benefits of change

What we learnt

- ▶ The Partial Freezing trial was undertaken
 - ▶ No statistically significant difference (95% confidence interval) was found when comparing the sensory scores for evaluation & overall acceptability between the two frozen methods
- ▶ A *Code of Practice* document was developed
- ▶ A *Recommended Procedure for Freezing* document was prepared



Thawed flesh-cut Cat Chu mangoes (Western Farm company)

Pathways to adoption

- ▶ Further studies into freezing mango & tropical fruit need to align with national government decrees
- ▶ Garnering industry & independent processor support & alignment of the area of development for training is needed as a first step
- ▶ Development & delivery of training that meets the needs of both southern & central tropical fruit processors is the next step
- ▶ Looking through a mid-term lens, the development & delivery of a course focused directly on building a *Standard Operating Procedure for frozen mango is needed*