Orchard Business Analysis How-to Guide

Postharvest Expenditure

AgFirst Consultants, July 2026

Why understanding postharvest expenditure matters

Postharvest expenditure summarises the costs incurred from orchard gate to the point at which fruit arrives in market. It is proportionally the largest expenditure category for an orchard business, sitting at around 40% of total production expenditure for APAL's 2025F Orchard model, and is therefore an important part of orchard business analysis.

Postharvest charges may be incurred differently by a grower supplier using a third-party postharvest provider, compared to a vertically integrated business. However, for all growers, understanding postharvest expenditure alongside their production outcomes, helps support clear benchmarking, allows for more accurate analysis of variety profitability and enables growers to ask the right questions of the postharvest facilities. Quantifying postharvest expenditure also helps identify where any orchard-level quality improvements could be made, enabling postharvest expenditure to be spread across a higher volume of Class 1 fruit.

Vertically integrated vs grower supplier businesses

The grower panel that contributes to APAL's Orchard Business Analysis includes both grower suppliers and vertically integrated businesses. The panel makeup means the OBA outcomes provide an overall view of industry postharvest expenditure. When benchmarking against this data, growers should consider whether costs are being reported as direct third-party charges, internal business costs, or a combination of both.

The aim is to collect and interpret data in a way that makes comparisons meaningful, particularly when benchmarking costs on a per hectare, per gross kg, per Class 1 kg or per bin basis.

Table 1 Comparison between grower packer and grower supplier businesses

Business Type	What data helps with
Integrated grower-packer	Postharvest expenditure summarised alongside the orchard growing business can support internal reviews of postharvest efficiencies. This helps identify where costs are increasing and whether those increases are linked to volume, packout, storage decisions or market requirements. This can guide decisions regarding targeted capital investment, labour efficiencies or system improvements.
Grower supplier using third party	Postharvest expenditure helps growers understand the difference between orchard gate return and return at the point of sale. It also improves transparency enabling growers to compare facilities or service models where appropriate, ask more informed questions of their packers, and benchmark their orchard performance.

Postharvest expenditure categories

Some grower suppliers may receive returns reported at an orchard gate level, after postharvest charges have already been deducted. In these cases, it may be difficult to see the cost of packing, packaging, coolstorage, freight and other postharvest services separately. Where possible, growers should request a breakdown of postharvest charges or refer to their postharvest contract, so expenditure can be categorised consistently with the OBA chart of accounts, as per Table 2.

Table 2 Postharvest Chart of Accounts categories

	Chart of Accounts category	Data definition and notes
Postharvest expenses	Packing and packaging	Includes labour, running costs, materials and similar packing costs.
	Coolstorage	Storage costs including dipping and bin charges.
	Freight to point of sale	Cartage/Freight from orchard gate to packhouse and freight from packhouse to market.
	Other postharvest costs	Includes treatments such as SmartFresh and other postharvest services not captured elsewhere. Includes bin hire charges.
	Total postharvest expenses	

Growers with coolstorage or packing facilities can also use this data to analyse where efficiencies may be driven in the value chain, using the data definitions to allocate their own postharvest expenditure into comparable chart of accounts categories.

Where growers are using multiple postharvest facilities, this data can support facility comparison, while keeping in mind the balance between performance, quality outcomes, service model and price.

How to get started

To get started with collecting postharvest expenditure, first confirm whether postharvest charges are visible, or whether you are receiving an Orchard Gate Return with these charges already taken off. Where possible, separate packing, packaging, coolstorage, freight and other postharvest charges (e.g. SmartFresh).

If using a third-party provider, consider reviewing the following data sources to align with the Post Harvest chart of accounts categories in Table 2:

- Postharvest contracts
- Returns statements (highlighting charges deducted)

You may need to request this information from your postharvest facility.

If your company is vertically integrated, postharvest expenditure will need to be separated from from orchard production costs, using consistent cost allocation that aligns with the postharvest chart of accounts categories in Table 2. Be sure to include costs such as packhouse and/or coolstore electricity, labour or R&M which is attributed to the facility, so this is fully costed.

Considering expenditure on both a per gross kg and per Class 1 kg basis

Once postharvest expenditure has been appropriately allocated, be sure to benchmark the results in the context of production volumes and fruit quality. Postharvest expenditure should be considered against both a gross production basis and a Class 1 production basis.

- Cost per gross kg or per bin shows the cost of handling the whole crop in a given financial year.
- Cost per Class 1 kg shows how costs are carried by the saleable, high quality fruit, highlighting how orchard-level improvements can influence postharvest outcomes.

Where packouts are lower, the same postharvest cost is spread across fewer Class 1 kilograms, increasing the cost carried by each saleable kilogram. Despite this, growers still incur handling, bin tipping, bin storage and freight charges for the proportion of gross volume that isn't Class 1 and generates a lesser return. The following example in Table 3 shows how packout influences total postharvest expenditure.

In this simplified example, both blocks have the same gross production and total postharvest cost. However, Block B has fewer Class 1 kilograms to spread these costs over, increasing the postharvest cost per Class 1 kg from $0.81 to $1.22. This means that 40% of the crop is incurring the initial postharvest charges but not generating that Class 1 return.

Table 3 Simplified example of packout influence on total postharvest expenses

	Block A	Block B
Gross production	100,000 kg	100,000 kg
Class 1 packout	90%	60%
Class 1 kg	90,000 kg	60,000 kg
Total postharvest cost	$73,000	$73,000
Postharvest cost per gross kg	$0.73	$0.73
Postharvest cost per Class 1 kg	$0.81	$1.22

Reviewing postharvest expenditure on both a gross and Class 1 basis helps growers understand whether changes in postharvest costs are being driven by the gross harvested fruit, or the proportion of fruit packed as Class 1, or a combination of both. This is particularly useful when comparing varieties, blocks, seasons or postharvest providers.

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