

Farm Inventory Accounting, Part 1: The Cost Method

Valuing inventories at cost helps you focus on true performance rather than short-term market price swings, but the recordkeeping involved can also be significant.

This is part one of our four-part series on inventory valuation. Be sure to also read part two [“The lower of cost and market method,”](#) part three [“The ‘farm-price’ method”](#) and part four [“The unit-livestock-price method.”](#)

Unlike most main street businesses, farmers often grow their own inventory, which can make accounting for it under an [accrual system](#) a challenge.

Inputs like feed and seed are sometimes purchased and produced at different prices, mingled together, then held for both resale and further use in the operation, making it difficult to come up with a balance sheet value for those items.

Under the cost method, items are valued at the cost of producing or purchasing them. While it might sound straightforward in theory, tracking costs for every single inventory item can also be a recordkeeping challenge.

So when should you use the cost method, and when should you opt for market value instead? Here's what you need to know.

What is the cost method of inventory valuation?

Agricultural producers that track inventory have numerous methods available to them for valuing that inventory on the [balance sheet](#).

Under the cost method of inventory valuation, inventory is recorded and reported on the balance sheet at its actual acquisition or production cost—i.e. the total of all expenditures necessary to bring the goods to their present location and condition for sale or use.

The Farm Financial Standards Council (FFSC) defines cost as “the original purchase price incurred to acquire an item, or the right to use an item, commonly adjusted for depreciation or other allocation.” For farm inventories this can include costs like:

- The original purchase price
- Direct production costs (e.g., seed, feed and fertilizer)
- Labor costs

- Overhead costs

The cost method is most practical when these costs can be [easily tracked and identified](#). For example, a small-scale livestock operation using [accrual accounting](#) might track all direct costs tied to a specific feeder cow, like veterinary care, vaccinations, feed, minerals and nutrients.

When should I use the cost method of inventory valuation?

Many farmers are familiar with the idea of valuing inventories at either their cost or market value, but aren't sure which method to choose for their operation.

As suggested by the Farm Financial Standards Council (FFSC), it can be helpful to separate farm inventories into four different categories:

1. Inventories raised/harvested for sale
2. Inventories raised/harvested for use in the production process
3. Inventories purchased for resale
4. Inventories purchased for use in the production process

The FFSC generally recommends the cost method for items that fall into category #4: inventory purchased for further use in the production process.

If you purchase feed, fertilizer, chemicals or any other inputs for further use without expecting to sell them any time soon, it makes sense that you should value those items at their cost rather than what you could currently sell them for on the market.

When should you use another method?

While valuing recently-purchased production inputs at cost makes sense, the cost method isn't always practical for other inventory types.

What happens, for example, when inputs you purchased are mixed together with inputs you raised or harvested yourself? And what about inventory you raised, harvested or purchased for resale—shouldn't that inventory be valued at market value instead?

For inventory that doesn't neatly fall into category #4 above, the FFSC generally recommends you use one of the following inventory valuation methods instead:

1. Net realizable value (NRV) or the 'farm-price' method

While the cost method can provide a solid foundation for inventory accounting, it's also difficult to implement when producers have large and complex inventories or herds to track costs for.

To help get around this problem, agricultural producers have another inventory valuation method available to them: the net realizable value (NRV) method, also sometimes referred to as the 'farm-price' method, or simply 'market value.'

NRV values inventory at current market prices less the estimated cost of completion, disposition, transportation and selling. This simplifies recordkeeping and aligns inventory values with current market prices.

The FFSC recommends using NRV when inventories have:

1. A reliable, readily determinable and realizable market price
2. Relatively insignificant and predictable costs of disposal
3. Are available for immediate delivery

Generally speaking, that means inventories from category #1, inventories raised/harvested for sale, should be valued at NRV.

According to the FFSC, NRV is also acceptable for inventories that fall into category #2 (raised/harvested for use in the production process) and #3 (purchased for resale), however the lower of cost and net realizable value method is recommended (see below).

To avoid reflecting "unrealized gains or losses," the FFSC also explicitly recommends against using NRV for raised feedstuffs and foodstuffs used to produce items that will eventually be resold (like finishing livestock, milk, eggs, etc.)

2. Lower of cost and net realizable value

To bring financial statements in line with Generally Accepted Accounting Principles (GAAP) and avoid overstating the values of their assets and income, the FFSC recommends that agricultural producers value certain inventories at either the lower of cost or net realizable value.

The FFSC recommends that the lower of cost and NRV method be used for inventories that fall into category #2 (raised/harvested for use in the production process) and #3 (purchased for resale).

What about the base value or 'unit-livestock-price' method?

Livestock producers have another method of inventory valuation available to them: the unit-livestock-price method, also sometimes referred to as the base value method.

Under this method, all of the livestock in the operation is grouped or classified according to kind, sex and age, and a standard unit price or "base value" per head—based on a reasonable estimate of the normal costs of raising that livestock—is applied to each class of animals.

This method bridges the gap between cash and accrual accounting, allowing farmers to reflect the growing or declining value of breeding livestock without having to track every individual cost (feed, labor, etc.) that went into raising them.

FFSC recommendations: a summary table

Here's a summary of the FFSC's recommendations for each inventory type:

	Inventory raised/harvested	Inventory purchased
For (re)sale	Net realizable value (NRV)	Lower of cost and NRV, but net realizable value (NRV) is also acceptable**
For further use in the production process	Lower of cost and NRV, but net realizable value (NRV) is also acceptable*	Cost method

*The FFSC generally recommends against using NRV for raised feedstuffs, as doing so could distort income by reflecting “unrealized gains or losses” on products that are not intended to be sold in their present form.

**Feed consumed by finishing livestock, or which will be converted into milk, eggs or other products, or any other feedstuffs used to produce items that will eventually be resold should be valued using the lower of cost and net realizable value method.