



TAX PLANNING FOR FARMS

Optional and Mandatory Inventory Adjustments

Using inventory adjustments as part of a tax
planning strategy that stabilizes your farm income





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CONTENTS

Introduction	4
An Overview of Inventory Adjustments	5
Optional Inventory Adjustment (OIA)	6
Mandatory Inventory Adjustment (MIA)	10
Advantages and Disadvantages of OIA	18

INTRODUCTION

Whether it's a record-breaking harvest or a heart-wrenching year, farmers are known for taking it all in stride. They understand perfectly what they can and cannot control.

Even the most seasoned farmers, however, may find the wild income swings that come with a life in agriculture stressful come tax time.

While a good year – especially on the heels of a bad one – means more income, it also means paying higher taxes. On the other hand, a bad year where you can't deduct your loss against other non-farm income has no tax advantage either. Plus, it could mean missing out on valuable tax credits to boot.

The good news is that if your farm uses the cash accounting method, you can average out these income fluctuations by using two inventory adjustment tools:

- 1 Optional Inventory Adjustments (OIA)
- 2 Mandatory Inventory Adjustments (MIA)

AN OVERVIEW OF INVENTORY ADJUSTMENTS

Cash-accounting farms only claim income when they sell and are paid for their inventory. As such, they are not required to claim any unsold inventory at the end of the year. It is this unclaimed and unsold year-end inventory that creates the opportunity to use inventory adjustments.

With Optional Inventory Adjustments (OIA), a cash-based accounting farmer can *optionally claim* an income amount against the year-end inventory they have on hand. This essentially pulls future income from future sales into the current tax year to boost their income level.

With Mandatory Inventory Adjustments (MIA), a cash-based accounting farmer in a loss position is required by law to add the cost of purchased year-end inventory on hand to their income in order to increase it up to the point where the loss is eliminated. Regardless of when they purchased the inventory, the purchased inventory value is used to limit the amount of a loss a farmer can deduct.

Below, we will go into greater detail about each of these tools, their benefits and drawbacks, how to calculate the value of the inventory, and give you practical examples to show how they work. But first, a quick note about farm losses and inventory adjustments.

Farm losses and inventory adjustments

The extent to which farm losses are fully deductible, partially deductible, or non-deductible from other non-farming income depends on the nature of your business.

According to the [CRA](#), the amount of the net farm loss you can deduct depends on the nature and extent of your business. Your farm loss may be:

- Fully deductible – If farming was your chief source of income.
- Restricted (partly deductible) – If farming was not your chief source of income.
- Non-deductible – There was no intent to make a profit, like in the case of a hobby farm.

If farming is not your chief source of income, but your farm is still operated as a commercial business, your losses are still partially deductible. The portion of the loss that you cannot deduct becomes a [Restricted Farm Loss](#) (RFL).

A RFL after 2005, can be carried back 3 years or forward 20 years to be applied against farm profits.

If farming is your main source of income and you have a loss, the CRA has imposed tax rules through the Mandatory Inventory Adjustment (MIA) to limit how much of a loss you can claim, given your year-end inventory situation.

When it comes to applying adjustments or losses, it's good practice to get advice from a tax expert that could run various tax scenarios and help determine your best course of action.

OPTIONAL INVENTORY ADJUSTMENT (OIA)

How does OIA work?

An income-averaging tool, OIA puts you in the driver's seat when it comes to being taxed on your unsold inventory.

Spread over a two-year tax cycle, the process balances out your present tax owing with the future tax you will be required to pay when your income is higher due to selling your inventory.

Here's how it works:

Year one

In the first tax year, a cash-accounting farm claims any amount up to the full Fair Market Value (FMV) of their unsold, year-end inventory as income.

The CRA defines FMV as "generally, the highest dollar value you can get for your property in an open and unrestricted market between an informed and willing buyer and an informed and willing seller who are dealing at arm's length with each other."

Although you can use OIA to boost your income level, if you keep it within the lowest tax bracket, you will be taxed at the federal marginal rate of 15%.

Year two

In the second tax year, the same amount is deducted from a cash-accounting farm's income whether or not the inventory is sold.

Although your income is higher from the sale of your farm inventory in year two, the OIA deduction lowers your income, so you are taxed less.

If your farm is in a loss position and you have no other taxable non-farm income against which you can apply the loss in order to reduce your overall tax burden, using an OIA could be beneficial.

At the end of the following tax year, you can look at your position after the previous year's deduction has been applied. Depending on the results, you can again decide if you want to add in a new OIA amount for that year. This trend can continue until the year that there is no closing inventory value.

OIA can be part of a successful short- and long-term tax planning strategy. Just remember, whatever amount of OIA you claim in the first tax year must be deducted in the following tax year.

Additional benefits of OIA

OIA's main benefit is building up a deduction to offset the higher income level in the year you sell your inventory. However, there are some other advantages to consider when determining how much OIA you want to claim.

Tax deferral when selling the farm

OIA is essentially a tax deferral. As such, you may want to consider building up your OIA before you sell your farm or retire, as that will likely be your highest income-earning year. If you do so, then the OIA could lower your overall tax burden.

Claiming non-refundable tax credits

OIA can help boost your taxable income in years where you wouldn't otherwise qualify for non-refundable tax credits, such as basic exemption, age exemption, spousal exemption, disability and medical.

Many of these tax credits cannot be carried forward so you must use them in that tax year, or lose them forever.

Increased Registered Retirement Savings Plans (RRSPs) contribution room

When using OIA to increase your income, you may want to consider bringing it up to the higher end of the lowest tax bracket to increase your Registered Retirement Savings Plan (RRSP) contribution limit.

Because it is calculated as 18% of your previous year's earned income up to the maximum contribution limit, the more income you earn, the higher your contribution limit will be (up to the yearly maximum).

Even if you cannot afford to put money into your RRSPs right away, the contribution limits are cumulative and be carried forward indefinitely. In fact, you can contribute to RRSPs until December 31st of the year you or your spouse/common-law partner turns 71 years old, so there is plenty of time to make use of extra contribution room.



Demonstrating farm income and the pursuit of profit

In order to separate hobby farms that are run for personal benefit from part- or full-time farms that are run for profit, the CRA follows specific criteria that define farming and farm business.

For the CRA's purposes, farming activities include plowing, sowing and raising crops, raising or exhibiting livestock, raising poultry, dairy farming as well as fruit growing and beekeeping. These activities must have economic value and show potential for making a profit.

According to the CRA, a taxpayer claiming farm income must be "actively engaged in either the management or day-to-day activities of earning income from the business to be considered in the business of farming."

In order to determine if a farm business exists, the CRA considers additional factors like gross revenue and income, or losses generated by the farm in the past. They will also compare your farm to other operations of a similar kind, size, and location.

The CRA wants to ensure a farm and its activities are being run as a commercial venture with the goal of making a profit. In general, they don't like to see losses.

Utilizing OIA to generate farm income in a low-income year can help illustrate the viability of your farm by showing a profit rather than a loss.

This in turn may also help designate the farm as qualified farm property which is necessary to qualify for the \$1 million Lifetime Capital Gains Exemption (LCGE) for farm property.

Provincial farm programs and benefits

Many provinces also have income thresholds and other criteria around farm status in order to qualify for certain programs and services, such as grants and fuel benefits.

An example of this is the Alberta Farm Fuel Benefit (AFFB) Program. This program allows eligible producers to receive a 9-cent-per-litre provincial fuel tax exemption on the purchase of purple-dyed gasoline and diesel, commonly called "purple gas." However, they must:

- Be actively and directly farming by controlling farming assets and making day-to-day management decisions (*Note: this is similar to the CRA's criteria to determine farm income*).
- Have annual farm commodity production worth at least \$10,000, or \$5,000 to \$9,999 if the only other significant sources of income are Canada Pension Plan or Old Age Security.

To learn about whether your farm may qualify for provincial programs, consult your provincial ministry of agriculture. Commissions, farming co-ops, and other ag groups can also be great sources of information.

Example: Total payable tax with and without OIA

As a reminder, OIA allows cash-based accounting farmers to “optionally” claim an income amount against their year-end inventory on hand.

The amount they can claim as income would be the lesser of what the CRA calls the “cash cost” – the amount paid for the inventory – and the “Fair Market Value” – the amount you would get for the inventory on the open market.

Below, we show the impact on taxes payable with and without an optional inventory adjustment applied.

In this example, our farmer has \$10,000 in farming income in 2021 and \$100,000 in 2022. They operate their farm in the province of Ontario and are not incorporated, so they would be subject to personal tax rates.

Without applying OIA, the total tax would be \$20,153 over those two tax years. However, if he claims \$30,000 in OIA in 2021, his total tax payable over those two years would be \$17,387. By comparing the two-year tax cycle with OIA and without OIA, you can see that using OIA results in a total savings of \$2,766.

Again, it’s worth it to consider bringing your current year’s income up to the higher end of the lowest tax rate bracket (15% federal marginal rate for taxable incomes under \$53,359 for 2023). This will allow you to increase your RRSP contribution room and take advantage of non-refundable tax credits.

The following example illustrates the potential benefits of using OIA. As always, seeking tax advice from an expert may help you determine the best course of action for your farm and specific tax situation.

Without optional inventory adjustment			
	2021	2022	Total tax payable
Farming income	\$10,000		
Farming income (based on year-end inventory)		\$100,000	
Tax payable	\$(1,521)	\$21,674	\$20,153

With optional inventory adjustment			
	2021	2022	Total tax payable
Farming income	\$10,000	\$100,000	
OIA	plus \$30,000	less \$30,000	
Adjusted income	\$40,000	\$70,000	
Tax payable	\$4,863	\$12,524	\$17,387
Total tax savings using OIA			\$2,766

MANDATORY INVENTORY ADJUSTMENT (MIA)

As the name implies, MIA is not optional and must be applied when a farm is in a loss position and there is purchased inventory on hand at the end of the year.

The government created MIA to block potential tax avoidance by inflating inventory numbers at year-end to falsely create a loss against other income, including other employment or investment income.

With MIA, the cost of any purchased inventory on hand must be added to farm income up to the point where the loss is eliminated.

Important CRA definitions and terms

To value your year-end inventory, it's beneficial to understand the [CRA's definition](#) of the following terms:

Inventory

A group of items that a business holds and intends to consume or sell to its customers.

Farm inventory

A tangible property that is either:

- Held for sale, such as harvested grain,
- Used in the production of saleable goods, such as seed and feed, or,
- In the process of being produced, such as standing crops or feeder livestock.

Purchased inventory

Inventory you have bought and paid for, regardless of the actual year of purchase.

The idea is that you cannot create or increase a loss through purchased inventory.

The value of purchased inventory includes pre-purchased crop inputs, purchased livestock in your herd, purchased feed and pre-purchased fuel.

Specified animals

These are horses. You may also elect to designate cattle you registered under the Animal Pedigree Act as specified animals.

Cash cost

As mentioned above, the amount you paid to buy your inventory.

Fair market value (FMV)

As mentioned above, generally the highest value you could get on the open market.

Additional notes on inventory for OIA versus MIA

According to the CRA, seed that is already planted and fertilizer/chemicals that are already applied are not considered part of your inventory. However, they are included in the value of the standing crop that may be included in the OIA.

For the purposes of OIA, the inventory does not have to be purchased inventory – it is the entire inventory you still have at year-end. For example, the harvested grain sitting in your bins qualifies as inventory even though you didn't purchase it.

Calculating MIA

MIA is only considered when the cash profit is a loss; MIA is added in until the loss is reduced to zero.

Before you can calculate MIA, however, you need to know the total cost of purchased inventory on-hand at the end of the year. This cost is the maximum MIA that can be included to take the loss to zero.

As a reminder, specified animals are considered horses, and cattle that you registered under Animal Pedigree Act.

Inventory *without* specified animals

Except for specified animals, must value any purchased inventory you acquired before or during your current fiscal period and use the lesser of these two amounts:

- **Cash cost** – What you paid to acquire your inventory regardless of the year in which you did so, OR
- **FMV** – What you would get for the inventory on the open market today

Specified animals acquired *within* your current fiscal period

If you acquired specified animals within your current tax year and you still have them at the end of the same fiscal period, you must value them at one of these amounts:

- Cash cost
- 70% of the cash cost
- Any amount between these two amounts

Specified animals acquired *before* your current fiscal period

For specified animals you acquired before your current tax year, but you still have on hand at the end of the current fiscal period, you must value them as one of the following amounts:

- Cash cost
- 70% of:
 - the value of the specified animals for MIA purposes as determined at the end of your previous fiscal period; plus
 - any amounts you paid in your current fiscal period toward the purchase price
 - any amount between these two amounts

Additional notes on MIA calculations

As you would with OIA, you deduct the same amount of MIA from your farm income in year two that you added to your net loss in the previous year (year one).

The MIA amount you add to income is the lesser of:

- The amount of the loss to income (including recaptured depreciation and capital cost allowance), OR
- The Fair Market Value of purchased inventory such as livestock, feed, fertilizer, fuel, and other supplies on hand.

As mentioned previously, specified animals are valued at their original purchase price less 30% per annum on a diminishing balance basis – unless you elect to value them at a greater amount not exceeding their original cost.

To get more information and examples of MIA use with specified animals, visit the [CRA website](#). To help calculate your MIA, you can also use one of the [blank charts](#) provided by the CRA.

Examples: Application of MIA

In the following section, we will run through a series of MIA scenarios to help demonstrate how MIA works.

For the purposes of these scenarios, we will assume that the net loss is \$20,000 for one year and the following year’s income is \$25,000. We are varying these to demonstrate the different ways you can apply MIA and OIA, depending on your tax strategy.

SCENARIO 1 – PURCHASED INVENTORY VALUE OF \$15,000

In the first tax year, the purchased inventory value is \$15,000 which is lower than the loss amount of \$20,000. Therefore, the maximum MIA that must be applied is \$15,000.

The MIA is then deducted from the \$25,000 income for the next year bringing the adjusted income to \$10,000.

You can see that even with the maximum amount of MIA applied, there is still a loss in the first tax year with the adjusted farm income sitting at a loss of \$5,000.

2022		2023	
Income	\$(20,000)	Income	\$25,000
Purchased inventory value	\$15,000	MIA (2022)	less \$15,000
MIA	plus \$15,000	Adjusted income	\$10,000
Adjusted income	\$(5,000)		

SCENARIO 2 – PURCHASED INVENTORY VALUE OF \$43,000

In this case, even though the purchased inventory value is \$43,000, the maximum MIA that can be applied is the lesser of the income loss and the inventory value. In this case, it's \$20,000.

The MIA is then deducted from the \$25,000 income for the following year bringing the adjusted income to \$5,000.

2022		2023	
Income	\$(20,000)	Income	\$25,000
Purchased inventory value	\$43,000	MIA (2022)	less \$20,000
MIA	plus \$20,000	Adjusted income	\$5,000
Adjusted income	0		

SCENARIO 3 – APPLICATION OF MIA AND OIA ON PURCHASED INVENTORY VALUE OF \$43,000

As with the previous scenario, even though the purchased inventory value is \$43,000, the maximum MIA that can be applied is the lesser of the income loss and the inventory value. In this case, \$20,000.

Since you have additional inventory value and are not in a loss position, you can add up to \$23,000 as income to bring your 2022 adjusted income to \$23,000.

The MIA and OIA are then deducted from the \$25,000 income for the next year bringing the adjusted income to a loss of \$18,000.

2022		2023	
Income	\$(20,000)	Income	\$25,000
Purchased inventory value	\$43,000	MIA (2022)	less \$20,000
MIA	plus \$20,000	OIA (2022)	less \$23,000
Adjusted income after MIA	\$0	Adjusted income after MIA + OIA	\$(18,000)
OIA	plus \$23,000		
Adjusted income after MIA + OIA	\$23,000		

SCENARIO 4 – APPLICATION OF OIA WHEN APPLICATION OF MIA STILL RESULTS IN A LOSS

In this case, the purchased inventory value is \$10,000 and the total inventory value is \$45,000. The maximum MIA that can be applied is \$10,000 (the lesser of the income loss and the inventory value).

Since you have additional inventory value and are still in a loss position, you can add up to \$35,000 in OIA as income to bring your 2022 adjusted income to \$25,000.

The MIA and OIA are then deducted from the \$25,000 income for the next year bringing the adjusted income to a loss of \$20,000.

2022		2023	
Income	\$(20,000)	Income	\$25,000
Purchased inventory value	\$10,000	MIA (2022)	less \$10,000
Total inventory value	\$45,000	OIA (2022)	less \$35,000
MIA	plus \$10,000	Adjusted income after MIA + OIA	\$(20,000)
Adjusted income after MIA	\$(10,000)		
OIA	plus \$35,000		
Adjusted income after MIA + OIA	\$25,000		



SCENARIO 5 – MIA AND OIA AND THE IMPACT ON A SALE OF LAND OR CATTLE IN FUTURE

Here we'll show how carrying forward MIA and OIA may impact you when you sell off land or a herd of cattle in the future. We'll go through tax years 2022–2025 using the two tables below.

Table 1 – 2022 and 2023 tax years

2022		2023	
Income	\$(20,000)	Income	\$25,000
Purchased inventory value	\$10,000	MIA \$10,000 (2022) OIA \$58,000 (2022)	less \$68,000
Total inventory value	\$300,000	Adjusted income after MIA + OIA	\$(43,000)
MIA	plus \$10,000	Purchased inventory value	\$20,000
Adjusted income after MIA	\$(10,000)	Total inventory value	\$310,000
OIA	plus \$58,000	MIA	plus \$20,000
Adjusted income after MIA + OIA	\$48,000	Adjust income after MIA	\$(38,000)
		OIA	plus \$86,000
		Adjusted income after MIA + OIA	\$48,000

2022

Table 1 shows a 2022 purchased inventory value is \$10,000 and a total inventory value of \$300,000. This means that the maximum MIA that can be applied is \$10,000 – the lesser of the income loss and the inventory value.

Since you have additional inventory value and are in a loss position, you can add in OIA to bring your 2022 adjusted income to \$48,000 (here it keeps your income in the lowest tax bracket)

2023

The next tax year, the total MIA and OIA are then deducted from the \$25,000 income for the next year bringing the adjusted income to a loss of \$43,000.

Your purchased inventory value is \$20,000 and your total inventory value is \$310,000. Since you're in a loss position and have purchased inventory, you must add it back into your income bringing it up to a loss of \$38,000.

Because you have a total inventory value of \$310,000, you can add in an optional inventory adjustment to bring you out of a loss position for the year. Again, we brought the income up to \$48,000 by adding in an OIA of \$86,000.

Table 2 – 2024 and 2025 tax years

2024		2025	
Income	\$(40,000)	Sale of herd	\$350,000
MIA \$20,000 (2023) OIA \$86,000 (2023)	plus \$106,000	MIA 2022	less \$12,000
Adjusted income after MIA + OIA	\$(66,000)	OIA 2022	less \$102,000
Purchased inventory value	\$12,000	Adjusted income	\$236,000
Total inventory value	\$320,000		
MIA	plus \$12,000		
Adjusted income after MIA	\$(54,000)		
OIA	plus \$102,000		
Adjusted income after MIA + OIA	\$48,000		
<div>2024</div> <p>Referring to Table 2, in 2024, your net farming income is a loss of \$40,000. Your carry-over MIA and OIA adjustments from 2023 are \$20,000 and \$86,000 respectively. This brings your adjusted farming income to \$(66,000).</p> <p>Your purchased inventory value is \$12,000 and the total inventory value is \$320,000. Therefore, the maximum MIA that can be applied is \$12,000 (the lesser of the income loss and the purchased inventory value).</p> <p>Since you have additional inventory value and are still in a loss position, you can add in OIA to bring your 2024 adjusted income to \$48,000. While it brings your income up, it is still well within the higher end of the lowest tax bracket and charged a tax rate of 15%.</p>		<div>2025</div> <p>This tax year, you sell off your herd for \$350,000. You're able to deduct the combined MIA and OIA of \$114,000 from 2024, bringing your income down to \$236,000.</p> <p>Between MIA and OIA, we've built up \$114,000 in deductions to apply to the sale. Assuming tax rates in 2025 are the same as they are today, you'll save approximately \$15% or \$17,000 on the \$114,000 deduction.</p> <p>In this scenario, you end up paying approximately 25% tax on the \$114,000 instead of the 40% you would have paid in this tax year without the MIA/OIA. This translates to approximately \$17,000 in savings.</p> <p>MIA and OIA allow you to use the low tax bracket to minimize tax in low-income years to save when you're in a high tax bracket in your high-income years.</p>	



A final word of caution

Since MIA is mandatory, you have no choice but to apply it when you have a loss, but also have purchased inventory on hand at the end of the year.

When it comes to OIA, however, it is best to exercise a little caution about how you use it as a strategy and calculate your numbers. Here is a review of the advantages and disadvantages of OIA.

ADVANTAGES AND DISADVANTAGES OF OIA

Advantages of OIA

You're in control – This tax deferral option allows you to use as much or as little inventory as you want in order to create the best tax scenario for your farm.

Income stability – Stabilizing your income allows you to have more predictability when it comes to your farm operation.

Non-refundable tax credits – There are many non-refundable tax credits that you can only claim if you have income, such as spousal, tuition credits, and medical. Many of these credits are not carry-forward, so you need to use them or lose them.

Demonstrating a profitable venture – To be a farm, you need to have farm income and demonstrate that your farm is a commercial venture. Using OIA to increase income in loss years may help solidify your qualified farm status. It may also help you qualify for provincial farm programs and benefits.

Selling the farm/retirement – Consider building up your OIA before you sell your farm/retire as that will likely be your highest income year and the OIA could lower your overall tax burden.

Disadvantages of OIA

Administrative burden – Using OIA only works if you keep good tax records and ensure the correct amount is being deducted in year two. If you have continuous use of OIA and MIA each year, it can be a challenge to keep track of them all.

Tax knowledge – While any cash-based accounting farm can use OIA, optimizing this tool takes a solid understanding of the tax code as well as farm tax planning experience.

Changing tax rates – Tax rates can change unexpectedly. You cannot necessarily assume application of OIA will provide you with tax savings in the future, especially when planning a tax strategy over several years.

When creating a tax strategy for your farm, it's usually best to maintain the lowest possible tax rate each year and spread your liabilities over time. Timely use of OIA can definitely help with this.

Plan for the best outcome based on the information you actually have, but ensure you use numbers based on current market trends and not wishful thinking.

A man with a beard, wearing a light-colored cowboy hat and a brown quilted jacket over a plaid shirt, is carrying a large log on his shoulder. He is wearing black gloves. The background is a blurred outdoor scene with mountains and a clear sky.

YOU WORK HARD FOR YOUR MONEY. WE HELP YOU KEEP IT.

For more than 70 years, FBC has helped Canadian farmers pay less tax and get all the tax benefits to which they're entitled.

Your Local Tax Consultant will learn first-hand about the details of your farm operation, to make sure you benefit from every potential tax savings opportunity available to you.

If you have any questions about MIA, OIA, or just want a second opinion on your tax situation, consider booking a free consultation today.

[Book a free consultation today.](#)



For more free tax and business resources, please visit www.fbc.ca/learn
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