

Potato Farming Cost and Profit Estimate Per Acre in Kenya

Potato farming is one of the most promising agribusiness opportunities in Kenya, especially in regions with suitable soils, reliable rainfall, and access to good markets. However, like any farming venture, profitability depends heavily on proper planning, quality inputs, good crop management, and realistic market expectations.

This article provides an estimated cost and profit breakdown for potato farming per acre. The figures are meant to guide farmers, investors, and agripreneurs when planning their potato farming budget.

Estimated Cost of Potato Farming Per Acre

Below is a sample budget estimate for one acre of potato farming.

Item	Estimated Cost (KES)
Land lease	15,000
Soil testing	600
Ploughing	3,500
Harrowing	2,500
Potato seed	80,000
DAP fertilizer	12,000
Potato planter	4,000
Seed and fertilizer loaders	2,000
Moulding	2,000
Herbicide	1,000
Spraying services	4,000
Fungicides and pesticides	10,250
CAN fertilizer	4,500
Top dresser fertilizer	4,500
Spreader	2,000
Water	200
Shredder/mower/slasher	2,000
Potato lifter	2,500
Labor	3,000

Item	Estimated Cost (KES)
Estimated Total Cost Per Acre	155,550

From this estimate, a farmer may require approximately **KES 155,550 per acre** to grow potatoes.

It is important to note that this figure may vary depending on location, land preparation method, seed variety, input prices, labor costs, and whether the farmer owns or hires machinery.

Expected Yield Per Acre

A well-managed potato farm can produce good yields, but the final harvest depends on several factors, including seed quality, soil fertility, disease control, rainfall, irrigation, and general farm management.

For this estimate, we shall use three possible yield scenarios:

Scenario	Estimated Yield Per Acre
Conservative	80 bags
Moderate	100 bags
Optimistic	150 bags

The optimistic estimate of **150 bags per acre** is possible, but farmers should not rely on it blindly. It requires excellent crop management, quality certified seed, timely spraying, proper fertilizer application, and favorable weather.

Estimated Revenue and Profit

Assuming different market prices and yield levels, the profit can change significantly.

Scenario	Yield	Price Per Bag	Estimated Revenue	Estimated Profit
Conservative	80 bags	KES 2,000	KES 160,000	KES 4,450
Moderate	100 bags	KES 2,200	KES 220,000	KES 64,450
Optimistic	150 bags	KES 2,500	KES 375,000	KES 219,450

From the table above, potato farming can be profitable, but the profit margin depends strongly on two things: **yield and selling price**.

For example, if a farmer harvests 150 bags and sells each bag at KES 2,500, the expected revenue would be:

$$150 \text{ bags} \times \text{KES } 2,500 = \text{KES } 375,000$$

After deducting the estimated production cost of KES 155,550, the estimated profit would be:

$$\text{KES } 375,000 - \text{KES } 155,550 = \text{KES } 219,450$$

This is an attractive return, but it should be treated as an optimistic projection rather than a guaranteed outcome.

Important Costs Farmers Should Not Ignore

Many farmers make the mistake of calculating production costs only and forgetting other expenses that may come later. These extra costs can reduce the final profit.

Some of the costs to consider include:

- Transport from the farm to the market
- Packaging bags
- Market cess or local county charges
- Broker commissions
- Storage losses
- Sorting and grading losses
- Post-harvest handling costs
- Unexpected disease or pest control expenses
- Price drops during peak harvest season

A farmer should always leave room for unexpected costs when preparing a potato farming budget.

What If You Farm 10 Acres?

If the same estimate is applied to 10 acres, the investment required would be much higher.

Item	Estimate
Cost per acre	KES 155,550
Cost for 10 acres	KES 1,555,500
Optimistic revenue per acre	KES 375,000
Optimistic revenue for 10 acres	KES 3,750,000
Optimistic profit for 10 acres	KES 2,194,500

While the numbers look very promising, farming 10 acres also increases the level of risk. A farmer needs strong management, reliable workers, proper disease control, enough capital, and a good market plan before scaling.

Key Factors That Determine Profitability

To improve chances of success in potato farming, farmers should focus on the following:

1. Use Quality Certified Seed

Seed is one of the biggest costs in potato farming, but it also has a major impact on yield. Poor quality seed can lead to low germination, disease problems, and poor harvests.

2. Test the Soil Before Planting

Soil testing helps the farmer know the right nutrients needed by the crop. This prevents wastage of fertilizer and improves crop performance.

3. Control Diseases Early

Potatoes are sensitive to diseases such as blight. Timely spraying and proper crop monitoring are very important.

4. Plan the Market Before Harvesting

A farmer should not wait until harvest time to start looking for buyers. It is better to identify potential buyers early, including traders, hotels, schools, restaurants, processors, and direct consumers.

5. Avoid Depending on One Price Estimate

Market prices can rise or fall depending on supply. A farmer should calculate profits using different price scenarios before investing.

Final Verdict

Based on this estimate, potato farming can be profitable in Kenya, especially when done professionally and with proper market planning.

The estimated cost of production is about **KES 155,550 per acre**. If a farmer achieves a good yield and sells at a favorable market price, the profit can be attractive. However, farmers should avoid assuming that high yields and high prices are automatic.

A realistic farmer should prepare for conservative, moderate, and optimistic outcomes before investing.

In short, potato farming is a good agribusiness opportunity, but success depends on planning, proper crop management, market timing, and disciplined cost control.

Disclaimer

The figures used in this article are estimates for planning purposes only. Actual costs and profits may vary depending on location, season, input prices, weather, farm management, and market conditions. Farmers are encouraged to do their own research and consult agricultural experts before investing.