

Strawberry Farms

The role of labor



Did You Know?

California grows about 90% of U.S. strawberries. Florida ranks 2nd.

Strawberry plants need a winter chill (34-55° F) to set fruit.

Strawberries don't ripen after picking, so they must be fully red before harvest.

Strawberry plants thrive in temperate climates with warm days and cool nights.

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Strawberries should be picked from the stem to avoid bruising the berry.

"June-bearing" strawberries produce one big crop in late spring and early summer.

"Everbearing" crops can fruit continuously in the correct temperatures.

The variety of climates in California helps keep strawberries in grocery stores year-round.



Physical Strain

- Workers spend hours bent over to pick ripe strawberries, which is hard on the back.
- Bending, standing, and lifting trays over and over can cause fatigue and body pain.



Weather

- High temperatures make harvesting tough for workers and shortens the life of the berries.
- Rain increases the risk of mold on berries, but sometimes workers still have to pick in wet weather to save the crop.



Demand

- Strawberry harvest only lasts part of the year, so workers don't have steady jobs year-round. Farmers also struggle to find enough workers during peak season.
- Many farms struggle to find enough labor, especially as fewer people are willing to do physically demanding agricultural work.



Strawberry Farm Income & Expense

Category	Cost Per Acre
Labor	\$25,000
Materials	\$10,000
Water/irrigation	\$3,000
Equipment Maintenance	\$2,500
Land Lease	\$5,000
Transportation Fuel and vehicles	\$2,000
Other Overhead Insurance, marketing, etc.	\$2,000
Total:	\$49,500



Commercial strawberry farms typically sell their berries by the tray. Each tray has 8 cell packs in it.



The average price of strawberries for farmers in 2025 was \$13 per tray.

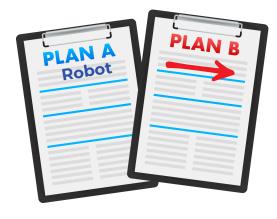
1 acre of strawberries can produce 4,000 - 4,200 trays of strawberries per year.

If we use an average of 4,100 trays at \$13 per tray we can calculate revenue at \$53,300.

\$53,300 - \$49,500 = \$3,800 profit per acre



There are strawberry picking robots, but so far they can't compete with the efficiency of human workers.



Since humans are better at picking strawberries than robots right now, a company developed a machine to make the work easier and faster for workers by decreasing how far they have to walk once they have filled their trays with strawberries.

See it in action on the Agrobot website:



Income & Expense with technology

Category	Cost Per Acre	
Labor	\$17,500	30% Savings withharvesting aidmachine
Materials	\$10,000	With 30% savings on labor with
Water/irrigation	\$3,000	the harvesting aid machine a strawberry farmer can estimate saving \$7,500 per year in labor
Equipment Maintenance	\$2,500	expenses.
Land Lease	\$5,000	It would take 10.6 years (without interest) to save
Transportation Fuel and vehicles	\$2,000	\$80,000 in labor expenses to pay for the harvesting aid
Other Overhead Insurance, marketing, etc.	\$2,000	machine. (without interest)
Agrobot Payment	\$12,600	Let's say the farmer makes a 20% down payment and
Total:	\$54,600	finances \$64,000. That makes a monthly payment of \$1050 for 6 years.

Estimated Yearly Revenue Expenses

\$53,300 - \$54,600 = **-\$1,300** per acre for the first 6 years until it is paid for.



Estimated Yearly Revenue Expenses

\$53,300 - \$42,000 = **\$11,300** profit per acre afterward



Does the machine improve circumstances for the farm's workers by decreasing physical strain?

Does the farm have savings to make the down payment and cover the payments/loss until the machine is paid for?