

Lodi Growers Vineyard ROI Worksheet 2024 FOLLOW-ALONG EXAMPLE

based on 2021 UC Cost Study and updated for inflation; using Zinfandel on wire, under contract

This is a follow-along example so you can get used to the Return on Investment (ROI) Worksheet. Once you get the hang of it, start a new file and enter in your own farming information and numbers. There is a step-by-step training guide at the link in No. 1 below and you can call the Lodi Winegrape Commission with any questions.

Bolded terms below refer to the language in the ROI Worksheet. Values highlighted in yellow are your practice inputs. To locate a specific Cell, use the column letters across the gray top of the Excel file and the row numbers going down the gray left side (like the game Battleship). Use the arrow keys to easily move between cells.



1. Download the Lodi Growers Vineyard Return on Investment (ROI) Worksheet Excel file at lodigrowers.com/growereducation/roi/.
2. Save the Excel file as **ROI Worksheet Practice Run**.
3. Click on the **Income** Tab at the bottom in the gray area.
 - a. Enter the **Winegrape Revenue** information as follows:
 - i. In Cell A3: Type **Zinfandel** for the **Block/Variety** name. *After you finish typing in a cell, always press Enter on your keyboard to lock in the data.*
 - ii. In Cell B3: Enter a **Yield** of **8** TPA.
 - iii. In Cell C3: Enter **100 Acres**.

Total Production should auto-calculate as **800.00 tons** after you press Enter.

- iv. In Cell H3: Enter the **\$/Ton** as **700**.

Total Revenue should auto-calculate as **\$560,000.00** and the **Lodi Winegrape Commission Assessment Fees** (Cell L21) should auto-calculate as **(2,520.00)** after you press Enter.

- b. Enter the **Assessment Fees/Contra-Revenue** information as follows:
 - i. In Cell L22: Enter **-100** as the **California Air Resources Board Mitigation Plan Fee**. *The program will automatically change any negative dollar value to have parentheses around it.*
 - ii. In Cell L23: Enter **-500** for the **Irrigated Lands Regulatory Program**.
 - iii. In Cell L24: Enter **-100** for the **County Ag Commissioner Pesticide Storage Fee**.
 - iv. In Cell L25: Enter **-400** for the **3rd Party Inspection Fee**.
 - v. In Cell L26: Enter **-800** for the **Glassy Winged Sharpshooter assessment**.

The **Total Assessment Fees/Contra-Revenue** in Cell L34 should auto-calculate as **\$(4,420.00)**.

4. Click on the “**Input Costs**” Tab at the bottom in the gray area.
 - a. Enter the **Fertilizer Input Cost** information as follows:
 - i. In Cell A4: Enter **05-00-12** for the **Fertilizer Type**.
 - ii. In Cell B4: Enter **467.75** for the **\$/Acre** of fertilizer.
 - iii. In Cell C4: Enter **100** for the **Total Acres**.

The **Total Fertilizer Input Costs** in Cells D4 and D10 should auto-calculate as **\$46,775.00**.

- b. Enter the **Chemical Input Cost** information as follows:
 - i. In Cell A13: Enter **Herbicide** for the **Chemical Type**.
 - ii. In Cell B13: Enter **91.20** for the **\$/Acre** of herbicide.
 - iii. In Cell C13: Enter **100** for the **Total Acres**.
 - iv. Repeat for Insecticide: In Row 14, Enter **Insecticide** at **\$170.40/acre** for **100** acres.
 - v. Repeat for Fungicide: In Row 15, Enter **Fungicide** at **\$78/acre** for **100** acres.

The **Total Chemical Input Costs** in Cell D27 should auto-calculate as **\$33,960.00**.

5. Click on the “**Replant Costs**” Tab at the bottom in the gray area.
 - a. In Cells B-E3: Type **Block One** for the **Notes**.
 - b. In Cell F3: Enter **5,940** for **Replant Costs**.

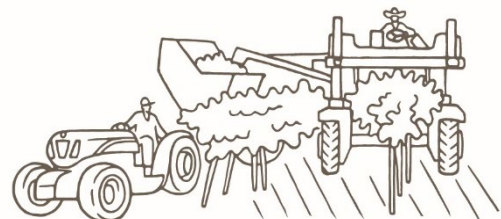
The **Total Replant Cost** in Cell F19 should auto-populate as **\$5,940.00**.

6. Click on the “**Variable Costs**” Tab at the bottom in the gray area.
 - a. Enter the **Labor Costs** information as follows:
 - i. In Cell F10: Enter **107,160** for **Total Generic Labor Costs**
 - ii. In Cell F15: Enter **44,880** for **Total Management Labor/Salary Labor Total Costs**.

The **Total Labor Costs** in Cell F16 should auto-calculate as **\$152,040.00**.

- b. Enter the **Contract Labor/Custom Hire** information as follows:
 - i. In Cells C-E20: Type **Machine Pruning** for the **Contract Labor/Custom Hire Notes**.
 - ii. In Cell F20: Enter **14,850** for the **Total Costs for Machine Pruning**.
 - iii. In Cells C-E21: Type **Petiole Tissue Analysis** for the **Contract Labor/Custom Hire Notes**.
 - iv. In Cell F21: Enter **660** for the **Total Costs for Petiole Tissue Analysis**.
 - v. In Cells C-E22: Type **Machine Harvest** for the **Contract Labor/Custom Hire Notes**.
 - vi. In Cell F22: Enter **46,750** for the **Total Costs for Machine Harvest**.
 - vii. In Cells C-E23: Type **Haul to Crusher** for the **Contract Labor/Custom Hire Notes**.
 - viii. In Cell F23: Enter **24,200** for the **Total Costs for Haul to Crusher**.

The **Total** in Cell F25 for **Contract Labor/Custom Hire Costs** should auto-calculate as **\$86,460.00**.



Variable Costs Tab continued:

- c. Enter the **Fuel Costs \$/Acre** information as follows:
- In Row 29: Enter \$**86.90**/acre for **100** acres of **Farm Diesel**.
 - In Row 30: Enter \$**18.70**/acre for **100** acres of **Farm Gasoline**.
 - In Row 32: Enter \$**15.40**/acre for **100** acres of **Other Fuel Type**.

The **Total Fuel Costs \$/Acre** should auto-calculate as **\$12,100.00**.

- d. Enter the **Irrigation Costs \$/Acre** information as follows:
- In Cell A38: Type **Water** as the **Irrigation Type**.
 - In Cells D38 and E38: Enter \$**301.40**/acre for **100** acres of **Water**.
 - In Row 39: Enter \$**9.00**/acre for **100** acres of **System Aids**.

The **Total Irrigation Costs \$/Acre** should auto-calculate as **\$31,040.00**.

- e. Enter the **Repairs & Maintenance** information as follows:
- In Row 47: Enter **Investment Repairs** for a **Total Cost** of \$**19,920**.
 - In Row 48: Enter **Other Repairs** for a **Total Cost** of \$**3,250**.

The **Total Repairs & Maintenance Costs** should auto-calculate as **\$23,170.00**.

- f. Enter the **Crop Insurance** information as follows:
- In Row 60: Enter **Zinfandel** in Cell A60 as the **Variety Type**, **80%** in Cell B60 as the **Coverage**, and **500** in Cell F60 for the **Total Costs**.

- g. Enter the **Other Variable Costs** information as follows:
- In Cell F86: Enter **1,800** for **Total Other Variable Costs**.

7. Click on the **“Fixed Costs”** Tab at the bottom in the gray area.

- a. Enter the **Land Rent – Owned Land or Land Debt Payment (\$/Acre)** information as follows:
- In Cell A4: Type **Farm Number 123** for the **Farm Number/Name**.
 - In Cell B4: Enter **50** for the **Acres**.
 - In Cell C4: Enter **450** for the **\$/Acre**.

The **Total Land Rent – Owned Land or Land Debt Payment Costs** in Cell D11 should auto-calculate as **\$22,500.00**.

- b. Enter the **Land Rent (\$/Acre)** information as follows:
- In Cell A15: Type **Farm Number 234** for the **Farm Number/Name**.
 - In Cell B15: Enter **50** for the **Acres**.
 - In Cell C15: Enter **500** for the **\$/Acre**.

The **Total Land Rent Costs** in Cell D32 should auto-calculate as **\$25,000.00**.

Fixed Costs Tab continued:

c. Enter the **Equipment & Vehicle Costs (\$/Unit)** information as follows:

- i. In Cell A36: Type **Tractor** for the **Equipment Name**.
- ii. In Cell B36: Enter **1** for the **Quantity**.
- iii. In Cell C36: Enter **6,000** for the **\$/Unit**.

d. Enter the **Utilities** information as follows:

- i. In Row 52: Enter **3,000** for the **Phone/Cell/Internet Total Costs**.
- ii. In Row 53: Enter **700** for the **Water Total Costs**.
- iii. In Row 54: Enter **850** for the **Electricity Total Costs**.
- iv. In Row 55: Enter **400** for the **Natural Gas Total Costs**.
- v. In Row 56: Enter **3,300** for the **Other Total Costs**.

The **Total Utilities Costs** should auto-calculate as **\$8,250.00**.

e. Enter the **Dues & Subscriptions** information as follows:

- i. In Row 61: Enter **3,000** for the **Farm Management Software Total Costs**.
- ii. In Row 62: Enter **2,000** for the **Accounting Software Total Costs**.

The **Total Dues & Subscriptions Costs** should auto-calculate as **\$5,000.00**.

f. Enter the **Professional Fees** information as follows:

- i. In Row 80: Enter **3,000** for the **Other Professional Fees Total Costs**.

g. Enter the **Miscellaneous** information as follows:

- i. In Row 85: Enter **17,160** for the **Miscellaneous Total Costs**.

h. Enter the **Insurance** information as follows:

- i. In Row 94: Enter **Liability** under **Type** and **650** for the **Total Costs**.
- ii. In Row 95: Enter **Property** under **Type** and **4,030** for the **Total Costs**.

The **Total Insurance Costs** should auto-calculate as **\$4,680.00**.

i. Enter the **Parts & Supplies** information as follows:

- i. In Row 103: Enter **Tying Materials** under **Type** and **1,500** for the **Total Costs**.

j. Enter the **Taxes** information as follows:

- i. In Row 112: Enter **Property** under **Type** and **45,630** for the **Total Costs**.

k. Enter the **Contributions & Donations** information as follows:

- i. In Row 121: Enter **School** under **Type** and **5,000** for the **Total Costs**.

Fixed Costs Tab continued:

- i. Enter the **Interest** information as follows:
 - i. In Cell A130: Enter **Truck** under **Loan Type**.
 - ii. In Cell B130: Enter **12,000** for the **Principal Amount**.
 - iii. In Cell C130: Enter **3** for the **Interest Rate**.
 - iv. In Cell D130: Enter **12** for the **Number of Payments** per year.
 - v. In Cell E130: Enter **1** for the **Payment Number**.
 - vi. In Cell F143: Enter **6,400** for the **Miscellaneous Interest Total Costs**.

The **Total Interest Costs** in Cell F144 should auto-calculate as **\$6,760.00**.

8. Click on the **“Income Statement”** Tab at the bottom in the gray area.
 - a. In Cell I18: Enter **25** for the **Price Changes**.

The **Profit Matrix Table** should now show **Prices per ton** ranging from **\$625.00** to **\$775.00** on the x-axis.

- b. In Cell I19: Enter **0.25** for the **Yield Changes**.

The **Profit Matrix Table** should now show **Yields** ranging from **7.00** to **9.00 TPA** on the y-axis. The Profit (in green) or Loss (in red) is per Acre.

Profit Matrix		Share							
		Total Cost	100% \$ 5,486.85						
		Price							
		\$ 625.00	\$ 650.00	\$ 675.00	\$ 700.00	\$ 725.00	\$ 750.00	\$ 775.00	
Yield (TPA)	7.00	\$ (1,111.85)	\$ (936.85)	\$ (761.85)	\$ (586.85)	\$ (411.85)	\$ (236.85)	\$ (61.85)	
	7.25	\$ (955.60)	\$ (774.35)	\$ (593.10)	\$ (411.85)	\$ (230.60)	\$ (49.35)	\$ 131.90	
	7.50	\$ (799.35)	\$ (611.85)	\$ (424.35)	\$ (236.85)	\$ (49.35)	\$ 138.15	\$ 325.65	
	7.75	\$ (643.10)	\$ (449.35)	\$ (255.60)	\$ (61.85)	\$ 131.90	\$ 325.65	\$ 519.40	
	8.00	\$ (486.85)	\$ (286.85)	\$ (86.85)	\$ 113.15	\$ 313.15	\$ 513.15	\$ 713.15	
	8.25	\$ (286.40)	\$ (80.15)	\$ 126.10	\$ 332.35	\$ 538.60	\$ 744.85	\$ 951.10	
	8.50	\$ (130.15)	\$ 82.35	\$ 294.85	\$ 507.35	\$ 719.85	\$ 932.35	\$ 1,144.85	
	8.75	\$ 26.10	\$ 244.85	\$ 463.60	\$ 682.35	\$ 901.10	\$ 1,119.85	\$ 1,338.60	
	9.00	\$ 182.35	\$ 407.35	\$ 632.35	\$ 857.35	\$ 1,082.35	\$ 1,307.35	\$ 1,532.35	

Price Changes	25.00
Yield Changes	0.25

Without Other Farm Income	
Yield	Breakeven
7.00	\$783.84
7.25	\$756.81
7.50	\$731.58
7.75	\$707.98
8.00	\$685.86
8.25	\$665.07
8.50	\$645.51
8.75	\$627.07
9.00	\$609.65