

Hazelnut Economics: Establishing an Equitable Lease

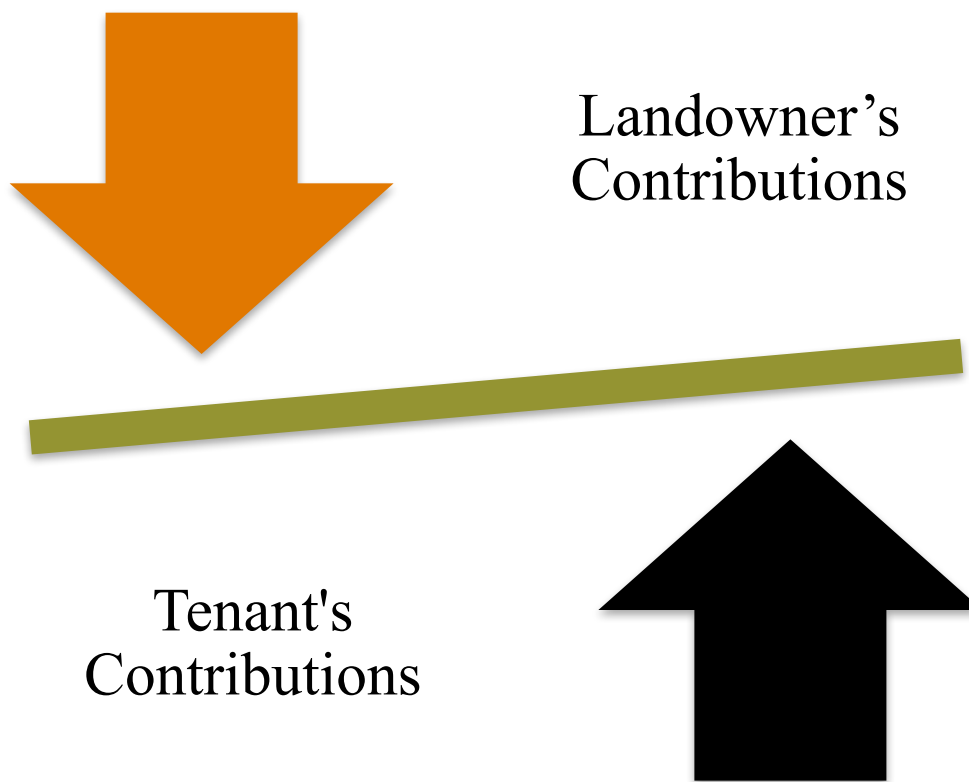


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www.agbizlogic.com

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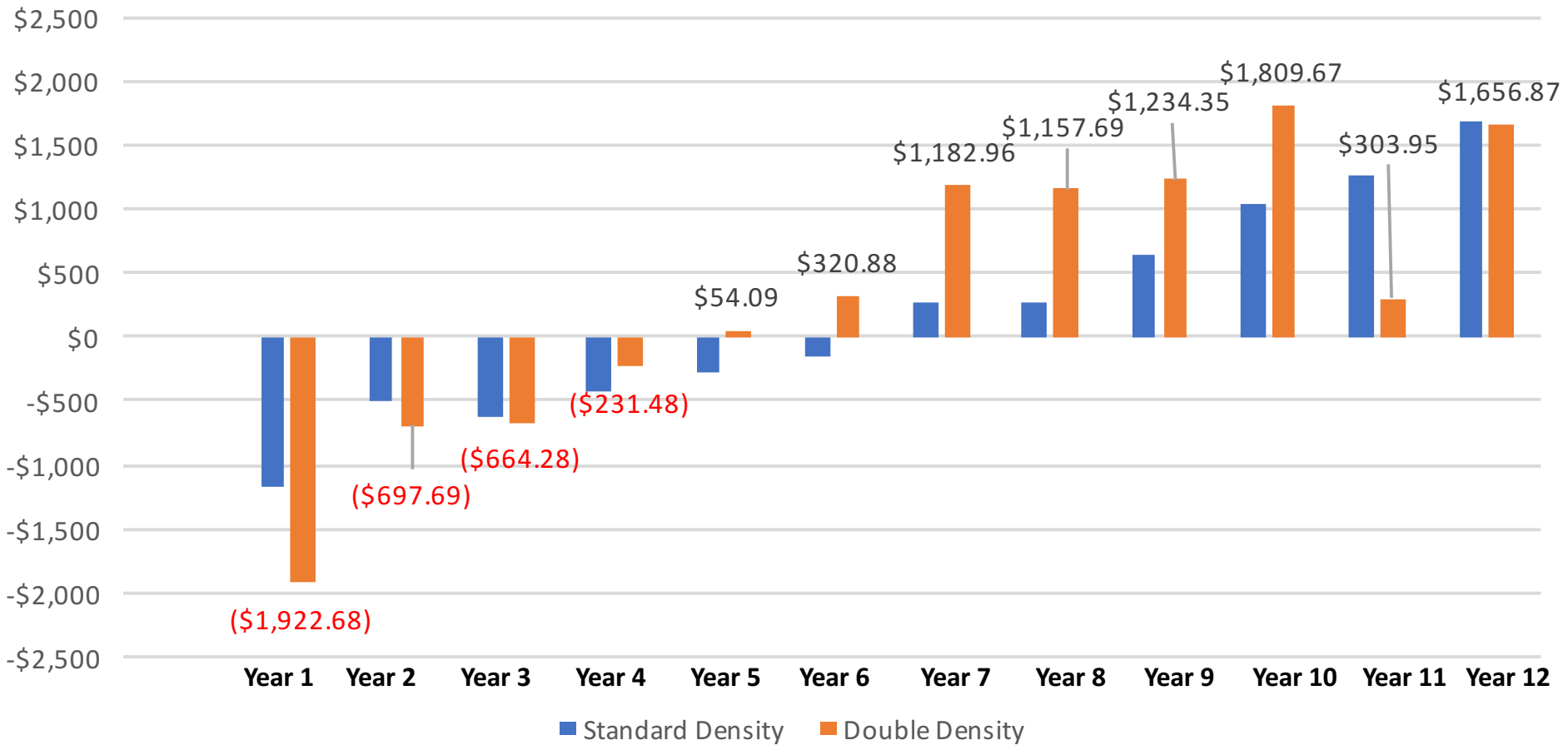
An equitable lease is one that compensates the tenant and landowner proportional to their contributions to the production of a crop for the duration of a lease.



Challenges to Estimating an Equitable Lease in Hazelnuts

- **High initial costs to establish before a cash flow break-even:
\$2,000 to \$4,000 per acre w/o land costs**

Net Returns of Establishing a Standard and Double Density Hazelnut Orchard



Challenges to Estimating an Equitable Lease in Hazelnuts

- Harvesting a commercial crop most times does not begin for up to three years or longer**
- Reaching full production can be as long as 12 years**
- Economic and productive life can be more than 40 years**
- Difficulty projecting costs for the length of the lease**
- Landowner's age and desired length of lease does not coincide with tenant's required return on investment**
- Miscalculations and inappropriate estimates can have large financial impacts to both parties**
- Who pays to remove the crop and prepare the land to original use at the end of the lease**
- Who pays for replacement plants during the lease**
- Should a lease be reviewed periodically, and if so how many years?**

Procedures to Developing an Equitable Long-Term Hazelnut Lease

1. Gather the cash, non-cash costs, and assets used in the lease

Total Costs of Establishing or Producing Hazelnuts

Costs/Value of Investment

Land

Property Taxes

Irrigation System/Assessment

Long-term Assets on the Land*

Buildings/Shop/Similar Assets*

Machinery and Equipment*

Trucks, Vehicles, ATV, etc.*

Production Inputs

***For assets used in the production of the crop for a lease only**

Difficulty in Establishing Leases!

85 percent of agricultural producers do not have adequate accounting data to complete an accurate, meaningful cost of production budget!

Complexity in Record Keeping

Cropping System

Annual Crop
(Cereal Grains) vs. Perennial w/ a Long Establishment Period
Hazelnuts (12 years to full production)



No. of Production Cycles to Initial Point of Sale

Single Phase
(Cereal Grains) vs. Multiple Phases
Greenhouse Nursery



How the Final Product is Sold

By Weight/Bushels
(Cereal Grains) vs. Size and Grade Distribution
Tree Fruit



Mechanization of Field Operations

Combines, balers, etc.
(Cereal Grains) vs. Manual Labor
Wine Grapes >200 hours of labor/acre

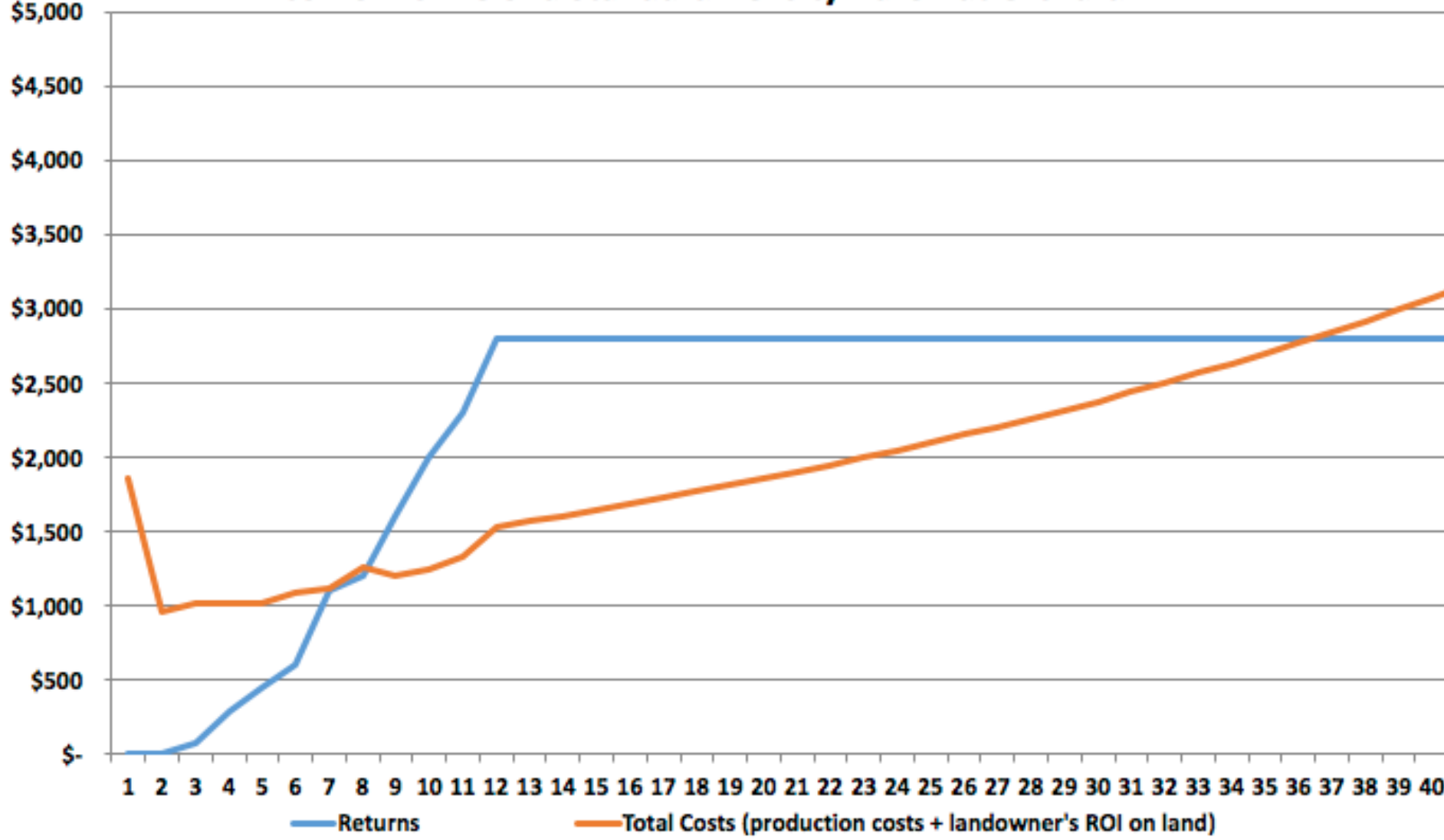


Procedures to Developing an Equitable Long-Term Hazelnut Lease

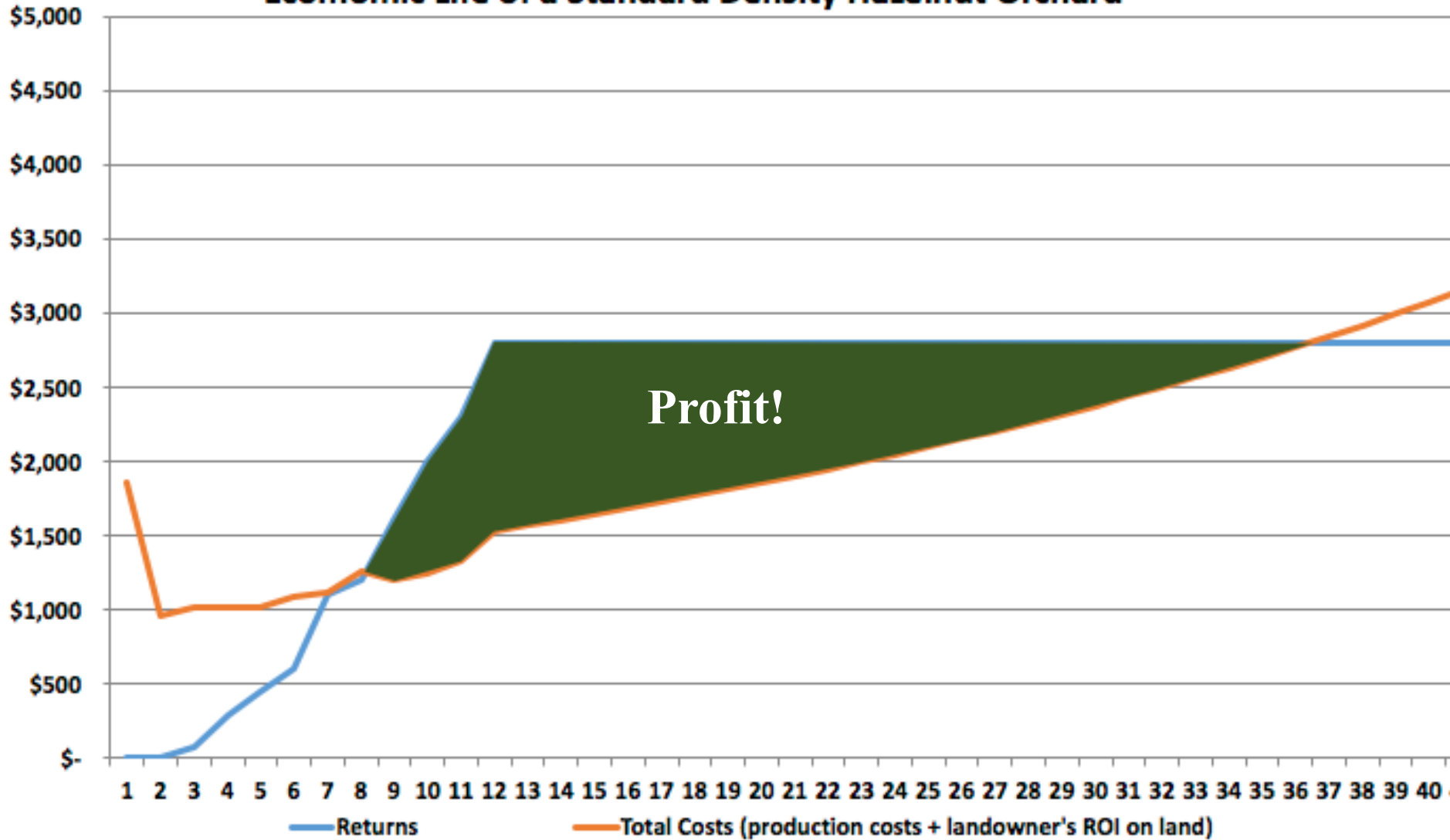
- 2. Estimate future yields and prices received for the crop**
- 3. Determine inflation rates for any price increases and input costs**
- 4. Determine the optimal length of the lease by estimating the economic life of the crop**

Assumed \$1.00/Lb Nuts, No Price Inflation, 3% Inflation on Costs; \$12,000/acre Land
Economic Life of Orchard = 36 Years

Economic Life of a Standard Density Hazelnut Orchard

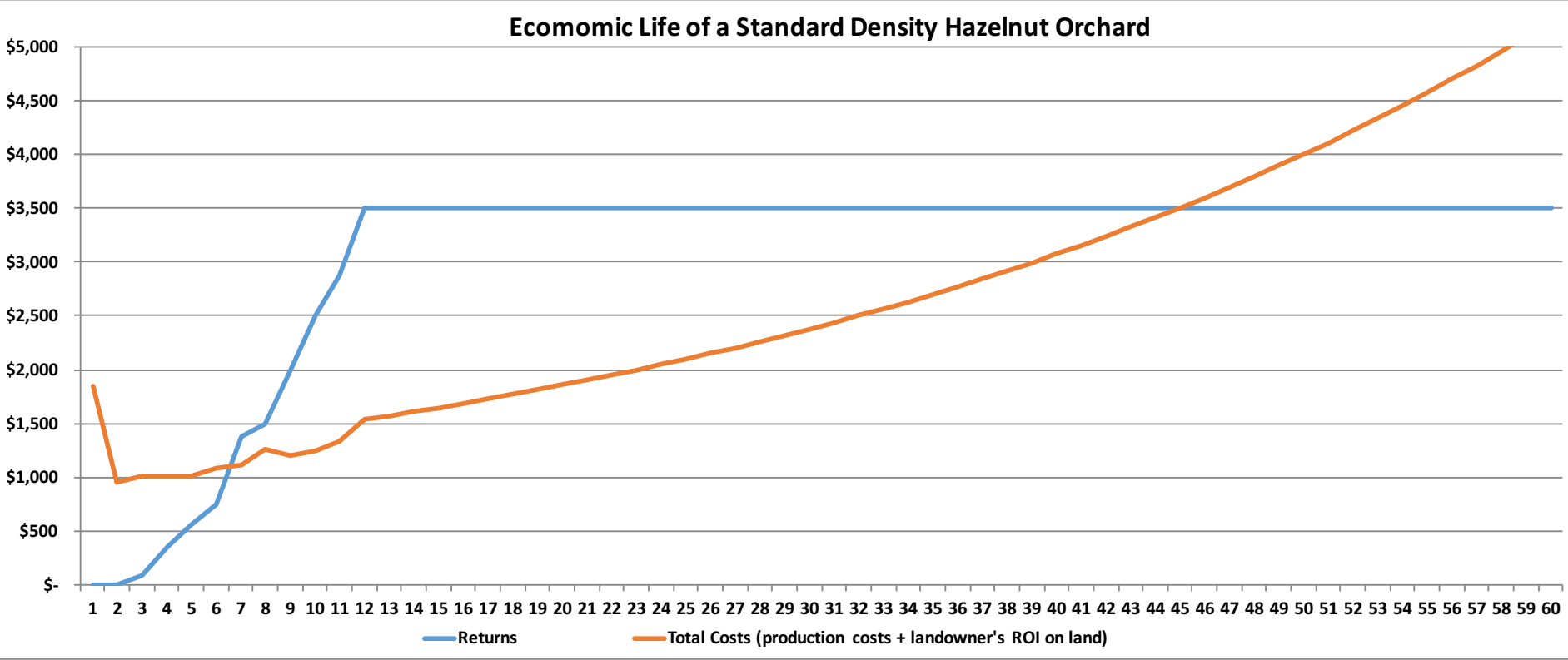


Economic Life of a Standard Density Hazelnut Orchard

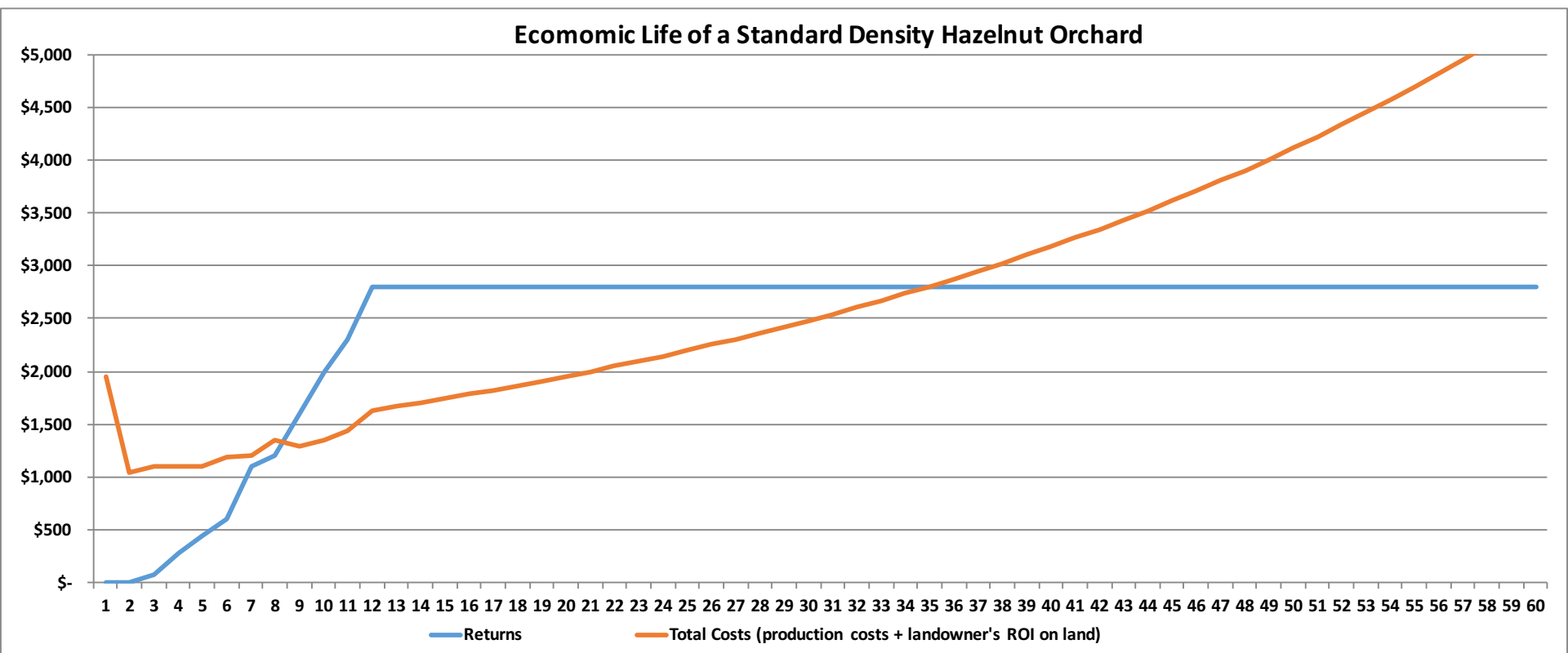


Assumed \$1.25/Lb Nuts, No Price Inflation, 3% Inflation on Costs; \$12,000/acre Land

Economic Life of Orchard = 45 Years

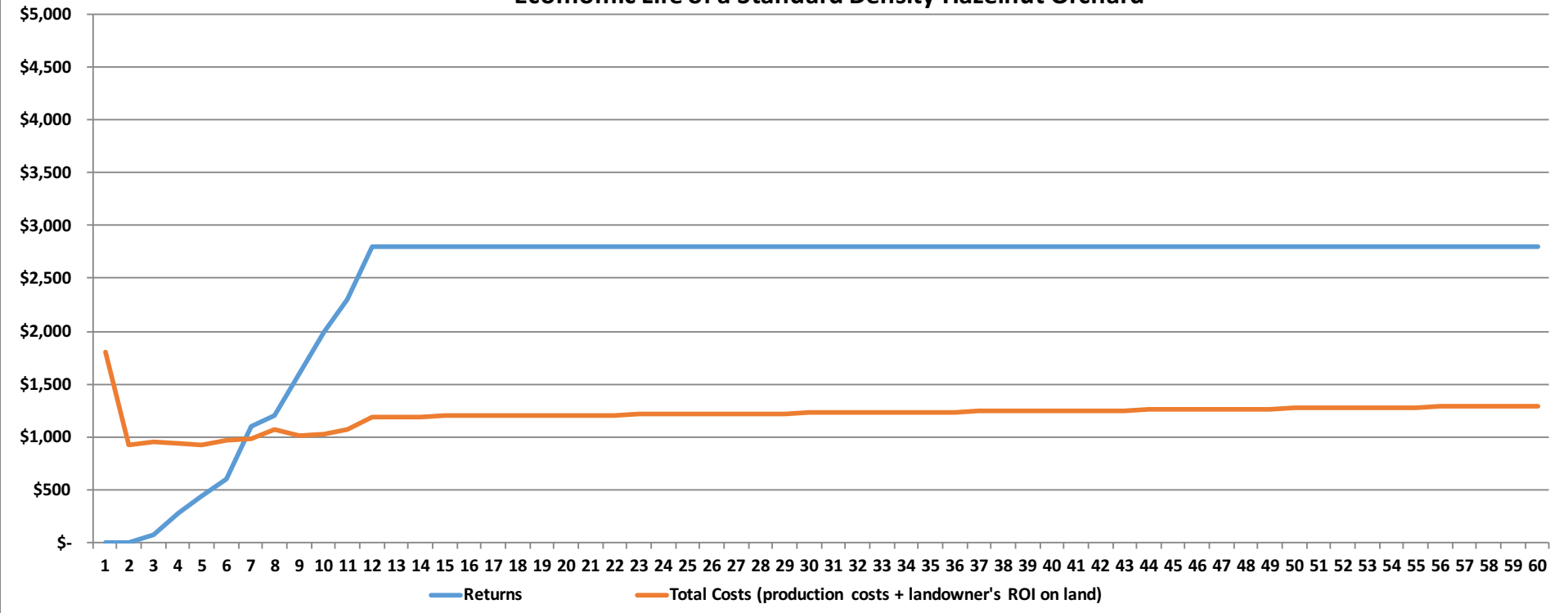


Assumed \$1.00/Lb Nuts, No Price Inflation, 3% Inflation on Costs; \$15,000/acre Land Economic Life of Orchard = 34 Years



Assumed \$1.00/Lb Nuts, No Price Inflation, 0% Inflation on Costs; \$12,000/acre Land Economic Life of Orchard = Infinity

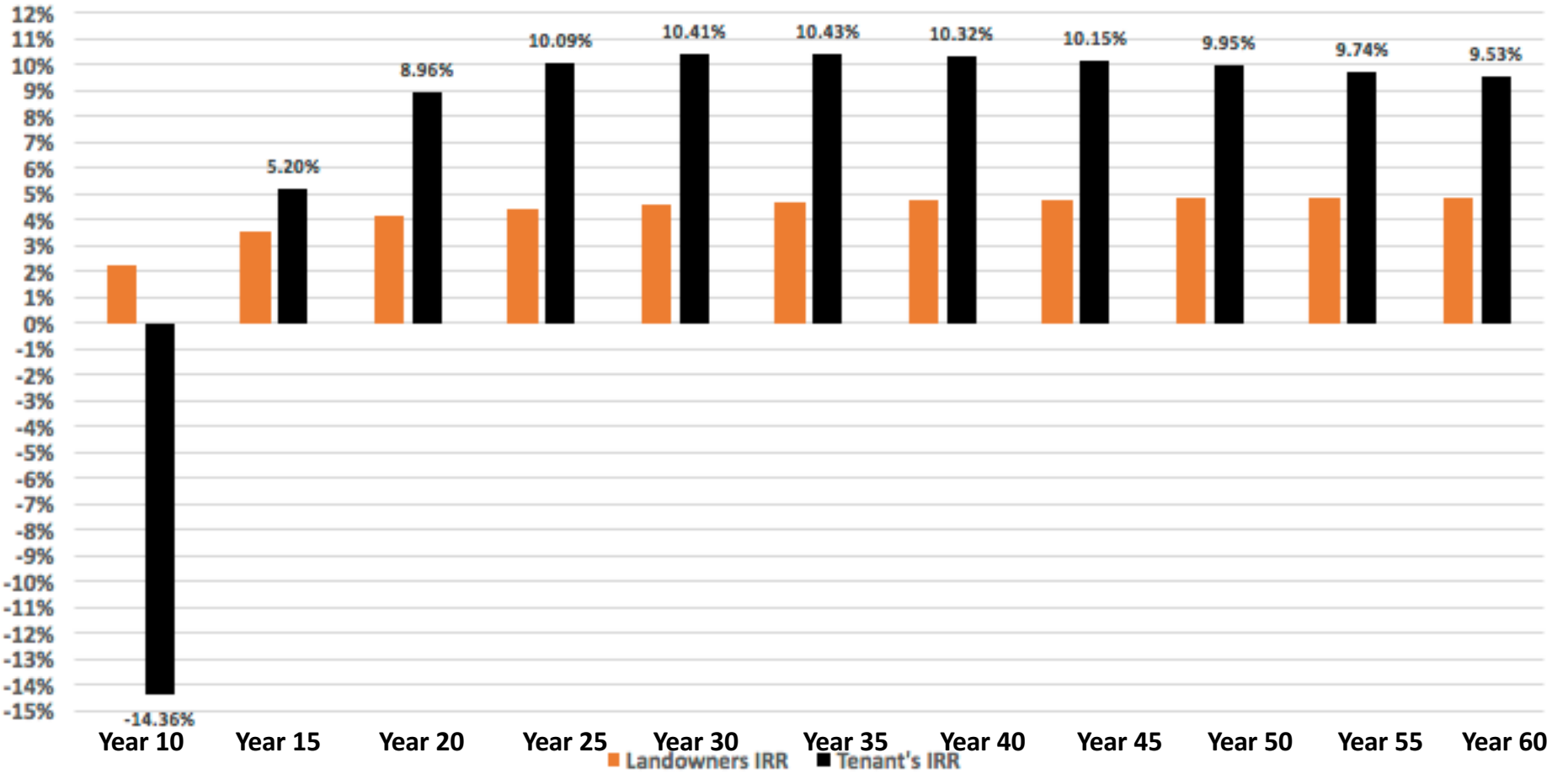
Economic Life of a Standard Density Hazelnut Orchard



Procedures to Developing an Equitable Long-Term Hazelnut Lease

- 5. Estimate the ROI/IRR for specific time periods during the economic life of the crop**
- 6. Choose the time period that returns the highest ROI/IRR for the tenant and reasonable ROI/IRR for the landowner and use that as the optimal length of the lease**

Internal Rate of Return (ROI) for Establishing a Standard Density Hazelnut Orchard for Landowner and Tenant, 60 Years



Procedures to Developing an Equitable Long-Term Hazelnut Lease

7. Determine which costs (cash and non-cash) each party will contribute during the length of the lease and in what year they are expected to occur

Total Costs of Establishing or Producing Hazelnuts

Costs/Value of Investment	Landowner's Share	Tenant's Share
Land	✓	
Property Taxes	✓	
Irrigation System/Assessment	✓	
Long-term Assets on the Land*	✓	
Buildings/Shop/Similar Assets*	✓	
Machinery and Equipment*	✓	✓
Trucks, Vehicles, ATV, etc.*	✓	✓
Production Inputs	✓	✓

***For assets used in the production of the crop for a lease only**

Procedures to Developing an Equitable Long-Term Hazelnut Lease

- 8. Determine an appropriate discount rate that future net returns will be discounted to present value.**
- 9. Calculate the total net present value (NPV) of all costs, the landowner's and the tenant's NPV of costs for the total number of years in the lease**

Most Common Types of Leasing Arrangements

<https://aglease101.org>

Crop-share Leases

Determine the percent of NPV of landowner's and tenant's costs to determine how future returns will be shared.

Annual cash rent lease

Use the NPV of landowner's and tenant's costs to determine the 1) landowners required rate of returns and 2) tenant's ability to pay.

Negotiate the annual cash rent payment between these two values, starting with the landowner's required returns.

Flexible cash rent lease

Base the cash rent on a ratio of actual and historic yields and/or prices.

Annual cash rent and crop-share lease combination

Insert the annual cash rent payment as a tenant's costs in the year paid and recalculate the percent of NPV of landowner's and tenant's costs to determine how future returns will be shared.

Hazelnut Crops

Mature Crops

- **Calculating the annual cash rent, flexible cash rent and crop share split is much the same way as in annual cropping systems**
- **The length of lease is also similar to annual cropping systems**

Landowner's Investment Parameters:

Value of land investment:	\$	10,000
Annual rate of land appreciation (%):		0.50%
Annual rate of return on investment (ROI) of land (%):		3.00%
Inflation rate for the improvements on the land (%):		2.00%
Beginning value of improvements on the land:	\$	-
Ending value of improvements on the land:	\$	(500.00)

Equitable Crop-Share Lease

\$1.00/lb Nuts; No Price Inflation; 3% Cost Inflation; 35 Year Lease

Landowner Share

Tenant Share

29.55%

70.45%


Financial Feasibility

	Landowner	Tenant
The year returns are greater than annual costs/investments:	9	9
The year returns are greater than total costs/investments of all previous years:	16	14
Total cash cost to implement:	\$ 2,180	\$ 3,380
Internal rate of return:	8.43%	9.71%

Annual Cash Rent Payments: Based on 3-Year, 5-Year and 10-Year Intervals





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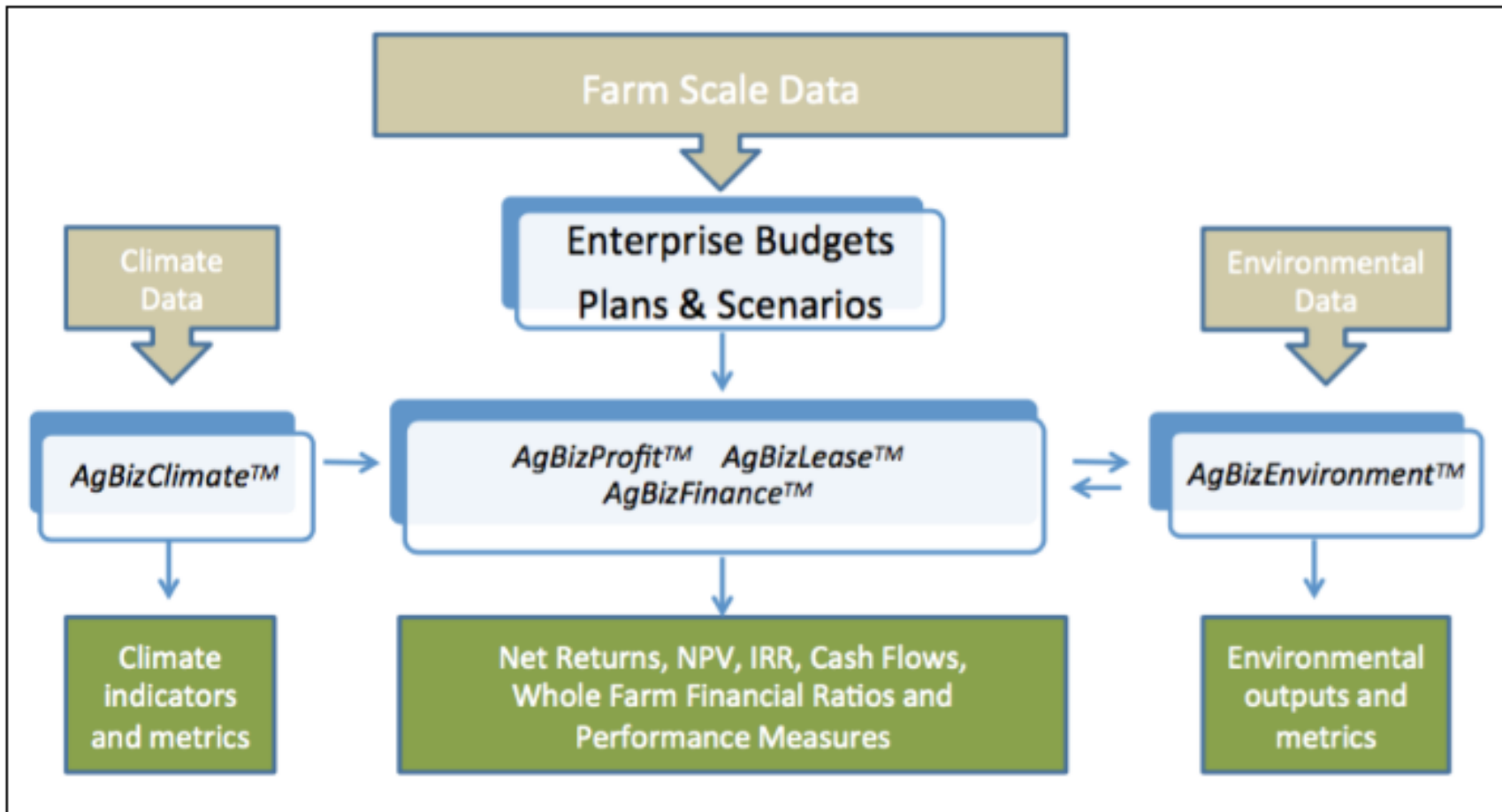
Thank you for visiting the *AgBiz Logic™* web site. This site is an economic, financial and environmental accounting decision tool to assist agribusinesses that grow, harvest, package, add-value, and sell agricultural products.

www.agbizlogic.com

What is *AgBiz Logic*?

AgBiz Logic (ABL) is a suite of economic, financial, and environmental decision-support tools that enable producers to increase or assess profitability while assessing environmental trade-offs.

AgBiz Logic Platform



Farm-level Data is “King” in *AgBiz Logic*

- Cost and return (enterprise) budgets are the foundation of *ABL*
- Three methods of data collection within *ABL*:
 - ✓ Schedule F (Form 1040) Federal tax returns
 - ✓ Import data from accounting system via .csv/.exe files
 - ✓ University & industry enterprise budgets

Data Collection – Schedule F



IAMTESTIN

Transfer your business data to AgBiz Logic

The first step toward utilizing AgBiz Logic decision tools is to populate AgBiz Logic with income and expense data generated from your business. Once this information is entered, you'll be able to allocate income and expenses to create enterprise budgets for personalized scenarios.

We provide three methods for collecting your business data. Select one from the list below, and proceed through the steps provided.

- Enter information from your Schedule F/Form 1040
- Import data from your accounting system or spreadsheet
- Select existing University Budget(s) (if you don't have your own data)

Data Collection – Schedule F



AgBiz Logic™

Alpha 1.0 (pre-release)

Enter information from your Schedule F (Form 1040)

Step 2 of 4

Next, enter data from: **Part I: Farm Income - Cash Method.**

Line 1a. Sales of livestock and
other resale items:

\$.00

Line 1b. Cost or other basis of
livestock or other items:

\$.00

Line 1c. Subtract line 1b from line
1a:

\$.00

Line 2. Sales of livestock, produce,
grains and other products you
raised:

\$.00

Line 3a. Cooperative distributions
(1099-PATR):

\$.00

Line 3b. Taxable amount:

\$.00

Line 4a. Agricultural program
payments:

\$.00

Line 4b. Taxable amount:

\$.00

Data Collection – Schedule F



AgBiz Logic™

Alpha 1.0 (pre-release)

Summary of information entered from Schedule F (Form 1040)

Step 4 of 4

Review the data you entered and confirm **Net Profit or Loss** in *AgBiz Logic* matches your Schedule F form. If you need to modify any data, click the **Back** button.

Gross Income:	\$ 4,224,000	.00
Total Expenses:	\$ 2,072,000	.00
Net Profit or Loss:	\$ 2,152,000	.00

Income

Line Category	Amount
Line 1a. Sales of livestock and other resale items:	\$350,000
Line 1b. Cost or other basis of livestock or other items:	\$50,000
Line 1c. Subtract line 1b from line 1a:	\$300,000
Line 2. Sales of livestock, produce, grains and other products you raised:	\$3,500,000
Line 3a. Cooperative distributions (1099-PATR):	\$3,000
Line 3b. Taxable amount:	\$1,500
Line 4a. Agricultural program payments:	\$60,000
Line 4b. Taxable amount:	\$60,000
Line 5a. Commodity Credit Corporation (CCC) loans reported under election:	\$0

Data Collection – Import from Accounting System



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Data Collection – Import from Accounting System

Convert your accounting data to AgBiz Logic

Drag income & expense items highlighted in green on the left to the AgBiz Logic standardized categories on the right, as demonstrated [here](#).

Note: Negative values convert to positive, per standard accounting practices.

Category	Total for Category
L-T asset replacement and section 179	\$250,000.00
Veterinary, breeding,	\$40,000.00
Utilities	\$40,000.00
Supplies	\$10,000.00
Storage and warehousing	\$25,000.00
Seeds and plants	\$60,000.00
Sales of livestock to be resold	\$350,000.00
Sales of grains and oil crops	\$3,500,000.00
Repairs and maintenance	\$30,000.00
Rent or lease: (land, animals, etc.)	\$150,000.00
Property taxes	\$9,000.00
Pension and profit-sharing plans	\$15,000.00
Other income	\$12,500.00
Other expenses: Other miscellaneous	\$50,000.00
Other expenses: miscellaneous	\$10,000.00
Mach, equip, vehicle: rent or lease	\$52,000.00
Labor hired (less employment)	\$200,000.00
Interest on loans and mortgages	\$350,000.00
Insurance (other than health)	\$50,000.00
Gasoline, fuel and oil	\$100,000.00
Freight and trucking	\$28,000.00
Fertilizers and lime	\$75,000.00
Feed	\$13,000.00
Employee benefit programs	\$300,000.00
Custom hire (machine work) income	\$150,000.00
Custom hire (machine work)	\$20,000.00
Crop insurance proceeds	\$200,000.00
Cost of goods sold	\$50,000.00
Cooperative distributions	\$1,500.00
Conservation expenses	\$25,000.00
Chemicals	\$160,000.00

Select an AgBiz Logic Income/Expense Category:

✓ Select your option

- Income
 - Sales of livestock, produce, grains and other products
 - Cooperative distributions received
 - Agricultural program payments
 - Commodity Credit Corporation
 - Crop insurance proceeds & federal crop disaster payments
 - Specified custom hire (machine work) income
 - Other income
- Expenses
 - Cost of goods sold
 - Car and truck expenses
 - Chemicals
 - Conservation expenses
 - Custom hire (machine work)
 - L-T asset replacement and section 179 expense
 - Employee benefit programs
 - Feed
 - Fertilizers and lime
 - Freight and trucking
 - Gasoline, fuel, and oil
 - Insurance (other than health)
 - Interest on loans and mortgages
 - Labor hired (less employment credits)
 - Pension and profit-sharing plans
 - Machinery, equipment or vehicle rent or lease
 - Land and animal rent or lease
 - Repairs and maintenance
 - Seeds and plants
 - Storage and warehousing
 - Supplies
 - Property taxes
 - Utilities
 - Veterinary, breeding, and medicine
 - Other expenses

Business Allocation



AgBiz Logic™

AgBizClimate

AgBizProfit

AgBizLease

AgBizFinance

AgBizEnvironment

Allocate your business information

To begin, select all enterprises that apply to your business:

Crop

Livestock

Nursery

Back

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Business Allocation

Income

Category	Total	Crop ?	Livestock ?	Whole Farm ?	\$ or % ?
Sales of livestock, produce, grains and other products	\$3,800,000	\$ 3,000,000	\$ 800,000	\$0	%
Cooperative distributions received	\$3,000	\$ 0	\$ 0	\$3,000	%
Agricultural program payments	\$60,000	\$ 60,000	\$ 0	\$0	%
Commodity Credit Corporation	\$0	\$ 0	\$ 0	\$0	%
Crop insurance proceeds and federal crop disaster payments	\$200,000	100 %	0 %	\$0	\$
Specified custom hire (machine work) income	\$150,000	\$ 0	\$ 0	\$150,000	%
Other income	\$12,500	\$ 0	\$ 0	\$12,500	%

Business Allocation

Summary

Here is a summary of your allocated business income and expenses.

	Income	Expenses		
Category	Crop	Livestock	Whole Farm	
Sales of livestock, produce, grains and other products	\$20	\$20	\$20	
Cooperative distributions received	\$15	\$15	\$15	
Agricultural program payments	\$15	\$15	\$15	
Crop insurance proceeds and federal crop disaster payments	\$15	\$15	\$15	
Specified custom hire (machine work) income	\$10	\$10	\$10	
Other income	\$10	\$10	\$10	
Total	\$85	\$85	\$85	

Summary

Here is a summary of your allocated business income and expenses.

	Income	Expenses		
Category	Crop	Livestock	Whole Farm	
Cost of goods sold	\$0	\$50,000	\$0	
Car and truck expenses	\$9,200	\$800	\$0	
Chemicals	\$160,000	\$0	\$0	
Conservation expenses	\$25,000	\$0	\$0	
Custom hire (machine work)	\$20,000	\$0	\$0	
L-T asset replacement and section 179 expense	\$187,500	\$62,500	\$0	
Employee benefit programs	\$270,000	\$15,000	\$15,000	
Feed	\$0	\$13,000	\$0	
Fertilizers and lime	\$73,500	\$1,500	\$0	
Freight and trucking	\$20,000	\$8,000	\$0	
Gasoline, fuel and oil	\$75,000	\$15,000	\$10,000	
Insurance (other than health)	\$40,000	\$0	\$10,000	

Enterprise Allocation



Allocate your enterprise information

Follow the prompts to specify your enterprises, assigning attributes such as Type, Class, and Commodity. You can add as many types of enterprises as needed by using the "Add" button.

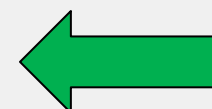
Choose your enterprise

Select an Enterprise

Enterprise Type

Market

- ✓ -Select-
- Berry Crops
- Cereal Grains
- Feed
- Legumes
- Nut Crops
- Oil
- Row Crops
- Seed
- Tree Fruit
- Vine Crops



Your enterprises so far:

Enterprise	Enterprise Type

Enterprise Allocation



Allocate your enterprise information

Follow the prompts to specify your enterprises, assigning attributes such as Type, Class, and Commodity.
You can add as many types of enterprises as needed by using the "Add" button.

Choose your enterprise

Select an Enterprise

Enterprise Type

Commodity

Market

- ✓ -Select-
- Almonds
- Hazelnuts
- Macademia Nuts
- Pecans
- Pistachios
- Walnuts

Your enterprises so far:

Enterprise	Enterprise Type	Production/Commodity Type	Class
------------	-----------------	---------------------------	-------

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Enterprise Allocation



Allocate your enterprise information

Follow the prompts to specify your enterprises, assigning attributes such as Type, Class, and Commodity.

You can add as many types of enterprises as needed by using the "Add" button.

Choose your enterprise

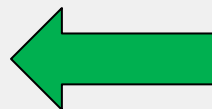
Select an Enterprise

Enterprise Type

Commodity

Market

- ✓ -Select-
- Conventional
- GMO
- Local
- Natural
- Organic
- Other



Your enterprises so far:

Enterprise	Enterprise Type	Production/Commodity Type	Class
------------	-----------------	---------------------------	-------

Back

Enterprise Budget for Hazelnuts, can be at the block level!

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Hazelnuts, Double-Density, Full Production

Please fill out the following information about this budget

Budget Name:

Hazelnuts, Double-Density, Full Production

State:

Oregon

County:

Willamette Valley

Budget Unit:

1 Acre

Length of Time for this Budget: 1

Year

Time Periods for this Budget: 1

1

Notes:

This enterprise budget estimates the typical per-acre costs associated with establishing and producing Hazelnuts in the Willamette Valley of Oregon. It should be used as a guide to estimate actual costs and returns and is not representative of any particular farm. Source: <http://arec.oregonstate.edu/oaeb/files/pdf/AEB0043.pdf> AEB 0043, November 2013. (copy of Hazelnuts, Double-Density, Full Production)

Gross Return	Unit Sold by/as	Quantity Sold	Price per Unit Sold	Total Value
Hazelnuts	Pound	2,800.00	\$1.00	\$2,800.00 Edit
Total Gross Returns				\$2,800.00

[Add New](#)

General Cash Costs

Name	Unit	Quantity	Price per Unit	Total Cost	Edit	Add Variable Cost	Add Fixed Cash Cost
Chemicals	Acre	1	\$40.48	\$40.48	Edit	Add Variable Cost	
Depreciation and Section 179 Expenses	Acre	1	\$319.90	\$319.90	Edit		Add Fixed Cash Cost
Fertilizers and Lime	Acre	1	\$262.36	\$262.36	Edit	Add Variable Cost	
Gasoline, Fuel, and Oil	Acre	1	\$96.34	\$96.34	Edit	Add Variable Cost	
Insurance (other than health)	Acre	1	\$50.35	\$50.35	Edit	Add Variable Cost	Add Fixed Cash Cost
Interest on Loans and Mortgages	Acre	1	\$14.07	\$14.07	Edit	Add Variable Cost	Add Fixed Cash Cost
Labor Hired (less employment credits)	Acre	1	\$103.46	\$103.46	Edit	Add Variable Cost	
Other Expenses	Acre	1	\$126.69	\$126.69	Edit	Add Variable Cost	Add Fixed Cash Cost
Property Taxes	Acre	1	\$5.00	\$5.00	Edit		Add Fixed Cash Cost
Repairs and Maintenance	Acre	1	\$78.82	\$78.82	Edit	Add Variable Cost	
Utilities	Acre	1	\$6.92	\$6.92	Edit	Add Variable Cost	Add Fixed Cash Cost
Total General Costs				\$1,104.39			

[Add General Cost](#)

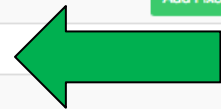
Totals

Total Gross Returns	
Total Costs	
Net Returns (income minus costs)	

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Detail Inputs and Costs from the General Format

General Cash Costs						
Name	Unit	Quantity	Price per Unit	Total Cost		
Chemicals	Acre	1	\$40.48	\$40.48	Edit	Add Variable Cost
Depreciation and Section 179 Expenses	Acre	1	\$319.90	\$319.90	Edit	Add Fixed Cash Cost
Fertilizers and Lime	Acre	1	\$262.36	\$262.36	Edit	Add Variable Cost
Gasoline, Fuel, and Oil	Acre	1	\$96.34	\$96.34	Edit	Add Variable Cost
Insurance (other than health)	Acre	1	\$50.35	\$50.35	Edit	Add Variable Cost Add Fixed Cash Cost
Interest on Loans and Mortgages	Acre	1	\$14.07	\$14.07	Edit	Add Variable Cost Add Fixed Cash Cost
Labor Hired (less employment credits)	Acre	1	\$103.46	\$103.46	Edit	Add Variable Cost
Other Expenses	Acre	1	\$126.69	\$126.69	Edit	Add Variable Cost Add Fixed Cash Cost
Property Taxes	Acre	1	\$5.00	\$5.00	Edit	Add Fixed Cash Cost
Repairs and Maintenance	Acre	1	\$78.82	\$78.82	Edit	Add Variable Cost
Utilities	Acre	1	\$6.92	\$6.92	Edit	Add Variable Cost Add Fixed Cash Cost
Total General Costs				\$1,104.39		
Add General Cost						



Detail Inputs and Costs from the General Format

Data is Always in Season.™

General Cash Costs	
Name	
Chemicals	
Depreciation and Section 179 Expenses	
Fertilizers and Lime	
Gasoline, Fuel, and Oil	
Insurance (other than health)	
Interest on Loans and Mortgages	
Labor Hired (less employment credits)	
Other Expenses	
Property Taxes	
Repairs and Maintenance	A
Utilities	A
Total General Costs	

Add Variable Cost item

Remaining amount for this sub-category: **\$262.36**

Category:

Pre-Harvest

Sub-category:

Fertilizer

Name:

- ✓ Select
- Ammonium nitrate
- Ammonium sulfate
- Anhydrous ammonia
- Aqua ammonia
- Blend
- Cal-nitro
- Calcium nitrate
- Compost
- Compost teas
- Diammonium phosphate
- Elemental sulfur
- Foliar Mn
- Foliar N
- Foliar Zn
- Liquid manure
- Manure
- Monoammonium phosphate
- Nitrogen
- Other
- Phosphorus
- Potash
- Potassium chloride
- Potassium hydroxide
- Potassium nitrate
- Potassium sulfate
- Sulfate of potash magnesia
- Triple superphosphate
- UAN32
- UN32
- Urea
- Zinc sulfate foliar

Detail Inputs and Costs from the General Format

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General Cash Costs

Name						
Chemicals						
Depreciation and Section 179 Expenses						
Fertilizers and Lime						
Gasoline, Fuel, and Oil						
Insurance (other than health)						
Interest on Loans and Mortgages						
Labor Hired (less employment credits)						
Other Expenses						
Property Taxes						
Repairs and Maintenance	Acre	1	\$78.82	\$78.82	Edit	Add Variable Cost
Utilities	Acre	1	\$6.92	\$6.92	Edit	Add Variable Cost
Total General Costs				\$1,104.39		

Add Variable Cost item

Remaining amount for this sub-category: **\$260.61**

Category:

Sub-category:

Name:

Unit:

Quantity:

Price per Unit:

Total Cost:

Detail Inputs and Costs from the General Format

Variable Costs

Parent Category	Category	Sub-Category	Name	Unit	Quantity	Price per Unit	Total Cost		
Fertilizers and Lime	Pre-Harvest	Fertilizer	Potash	Acre	1	\$0.25	\$1.75	Edit	Remove
Total Variable Costs							\$1.75		

Totals

Total Gross Returns	\$2,800.00
Total Costs	\$1,104.39
Net Returns (income minus costs)	\$1,695.61

Data Collection – Use an University Budget



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- Select existing University Budget(s) (if you don't have your own data)

Data Collection – Import from Accounting System

AgBiz Logic™ AgBizClimate AgBizProfit AgBizLease AgBizFinance AgBizEnvironment

Choose University Budget

Search

By Title:

By Enterprise:

By State:

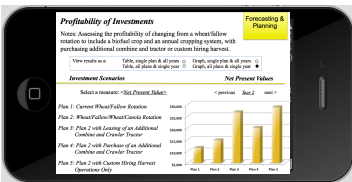
By County/Region:

Choose Budget:

- Douglas-Fir Christmas Tree, Year 1
- Douglas-Fir Christmas Tree, Year 2
- Douglas-Fir Christmas Tree, Year 3
- Douglas-Fir Christmas Tree, Year 4
- Douglas-Fir Christmas Tree, Year 5
- Douglas-Fir Christmas Tree, Year 6
- Douglas-Fir Christmas Tree, Year 7
- Fine Fescue Seed Production, No Burn Practices
- Fine Fescue Seed Production, Open Burn Practices
- Fine Fescue Seed, Establishment Year
- Fresh Strawberries, June bearing, Perennial Hill, Plasticulture System, Year 1
- Fresh Strawberries, June bearing, Perennial Hill, Plasticulture System, Year 2
- Fresh Strawberries, June bearing, Perennial matted row system, Full Production
- Hard Fescue Seed Production
- Hazelnuts, Double-Density, Establishment Year 1
- Hazelnuts, Double-Density, Establishment Year 10
- Hazelnuts, Double-Density, Establishment Year 11
- Hazelnuts, Double-Density, Establishment Year 2
- Hazelnuts, Double-Density, Establishment Year 3
- Hazelnuts, Double-Density, Establishment Year 4
- Hazelnuts, Double-Density, Establishment Year 5**
- Hazelnuts, Double-Density, Establishment Year 6
- Hazelnuts, Double-Density, Establishment Year 7
- Hazelnuts, Double-Density, Establishment Year 8
- Hazelnuts, Double-Density, Establishment Year 9
- Hazelnuts, Double-Density, Full Production
- Hazelnuts, Standard-Density, Establishment Year 1
- Hazelnuts, Standard-Density, Establishment Year 10
- Hazelnuts, Standard-Density, Establishment Year 11
- Hazelnuts, Standard-Density, Establishment Year 2
- Hazelnuts, Standard-Density, Establishment Year 3
- Hazelnuts, Standard-Density, Establishment Year 4
- Hazelnuts, Standard-Density, Establishment Year 5
- Hazelnuts, Standard-Density, Establishment Year 6
- Hazelnuts, Standard-Density, Establishment Year 7
- Hazelnuts, Standard-Density, Establishment Year 8
- Hazelnuts, Standard-Density, Establishment Year 9
- Hazelnuts, Standard-Density, Full Production
- Leaf Lettuce, Conventional, Fresh Market
- Leaf Lettuce, Organic, Fresh Market
- Marion Blackberries, Every Year Production, Year 0 Establishment
- Marion Blackberries, Every Year Production, Year 1 Establishment
- Marion Blackberries, Every Year Production, Year 2 Establishment
- Marion Blackberries, Every Year Production, Year 3 Full Production
- Marion Blackberries, Production in Alternate Years, Year 0 Establishment
- Marion Blackberries, Production in Alternate Years, Year 1 Establishment
- Marion Blackberries, Production in Alternate Years, Year 2 Establishment
- Marion Blackberries, Production in Alternate Years, Year 3 Establishment
- Marion Blackberries, Production in Alternate Years, Year 4 Full Production, Harvest Year
- Marion Blackberries, Production in Alternate Years, Year 4 Full Production, Non-Harvest Year
- Madroño Seed Production



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Forecasting & Planning

Profitability of Investments

Notes: Assessing the profitability of changing from a wheat/fallow rotation to include a biofuel crop and an annual cropping system, with purchasing additional combine and tractor or custom hiring harvest.

View results as a: Table, single plan & all years Graph, single plan & all years
 Table, all plans & single year Graph, all plans & single year

Investment Scenarios

Select a measure: <Net Present Value>

- Plan 1: Current Wheat/Fallow Rotation
- Plan 2: Wheat/Fallow/Wheat/Canola Rotation
- Plan 3: Plan 2 with Leasing of an Additional Combine and Crawler Tractor
- Plan 4: Plan 2 with Purchase of an Additional Combine and Crawler Tractor
- Plan 5: Plan 2 with Custom Hiring Harvest Operations Only

Net Present Values

< previous Year 2 next >

Plan	Net Present Value
Plan 1	~\$13,000
Plan 2	~\$16,000
Plan 3	~\$28,000
Plan 4	~\$21,000
Plan 5	~\$30,000



**Using *AgBiz Logic* to Make
Investment Decisions:
Establishing Equitable Leases**



Questions or Comments!