

# Hazelnut Economics: Establishing an Equitable Lease



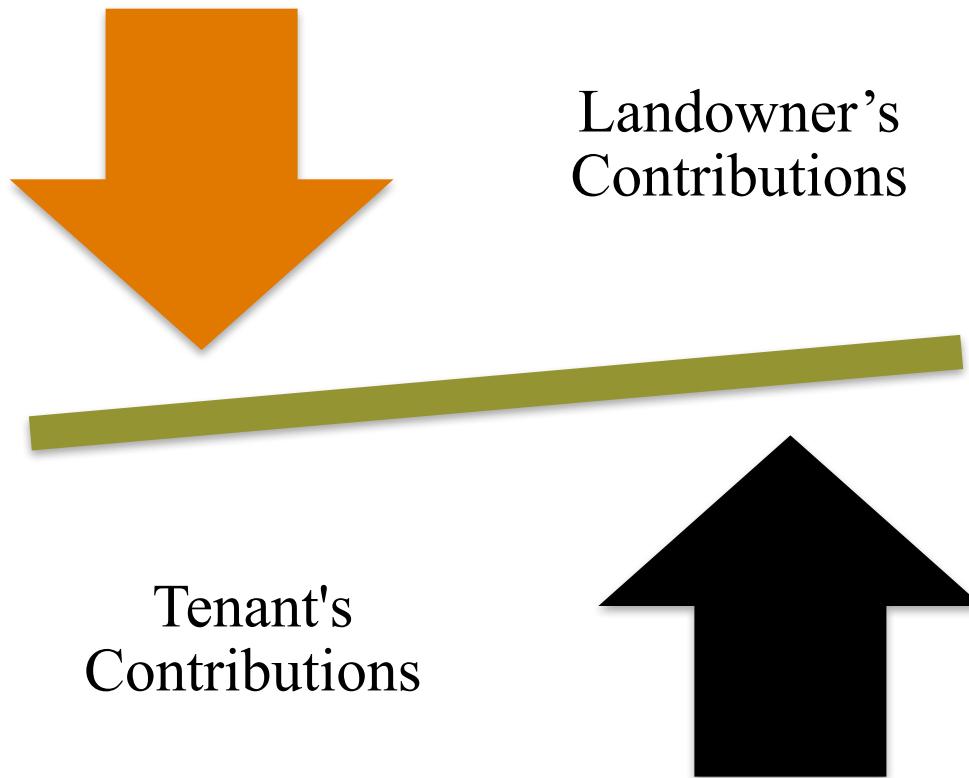
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[www.agbizlogic.com](http://www.agbizlogic.com)

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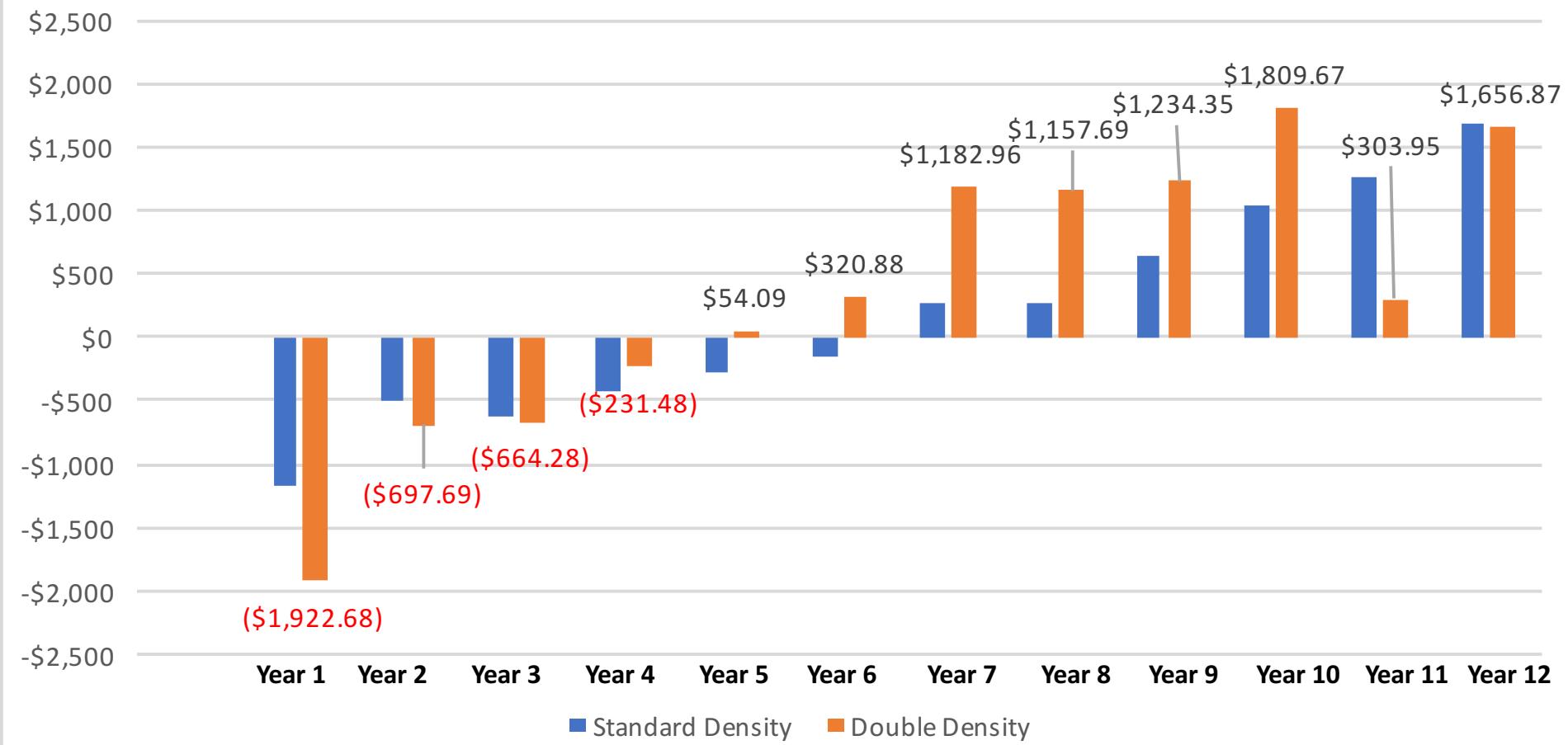
**An equitable lease is one that compensates the tenant and landowner proportional to their contributions to the production of a crop for the duration of a lease.**



## 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)

Perennial w/ a Long Establishment Period  
vs. 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)

Size and Grade Distribution  
vs.  
Tree Fruit



## Mechanization of Field Operations

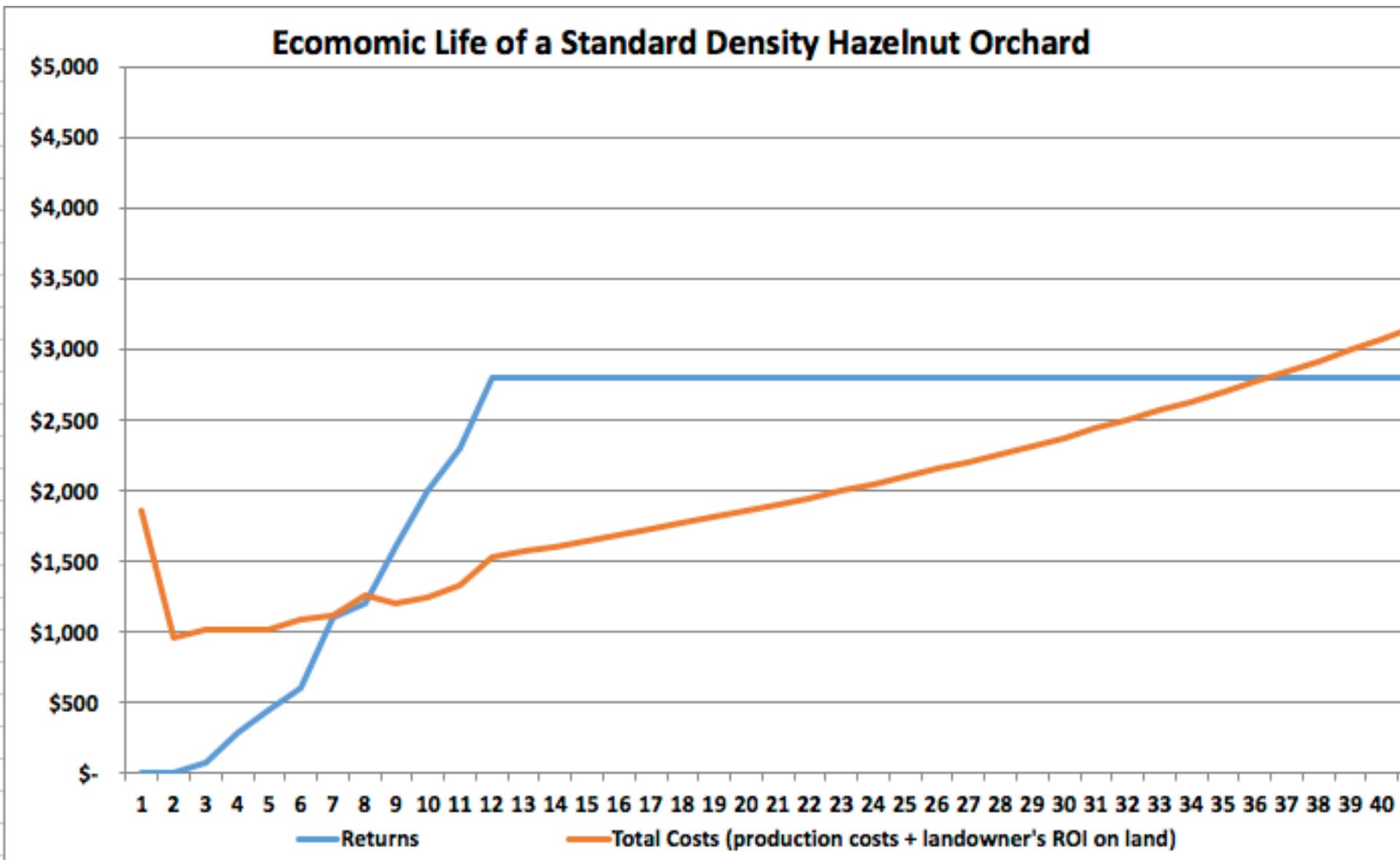
Combines, balers, etc.  
(Cereal Grains vs. Wine Grapes >200 hours of labor/acre)



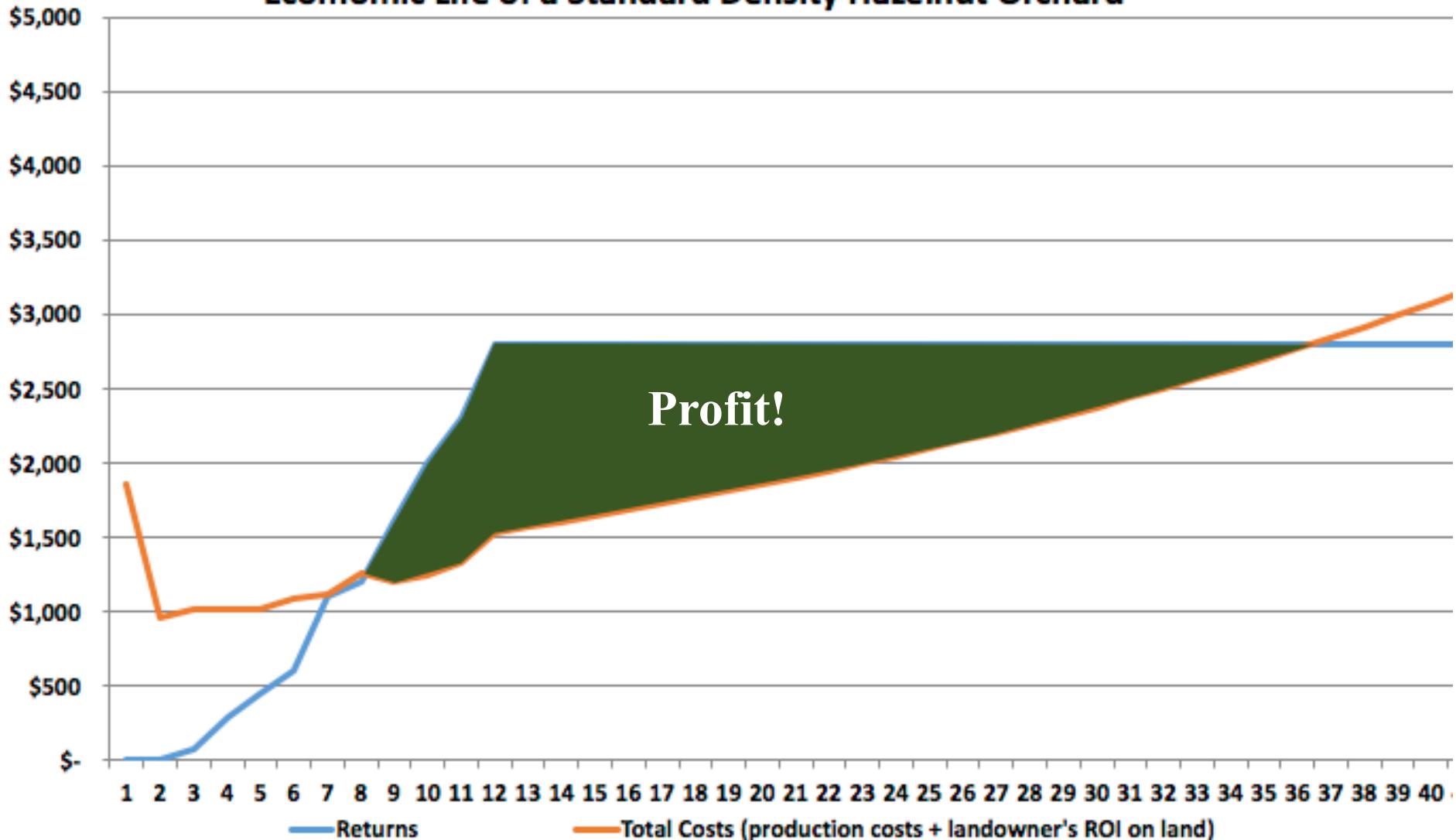
## **Procedures to Developing an Equitable Long-Term Hazelnut Lease**

- 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**

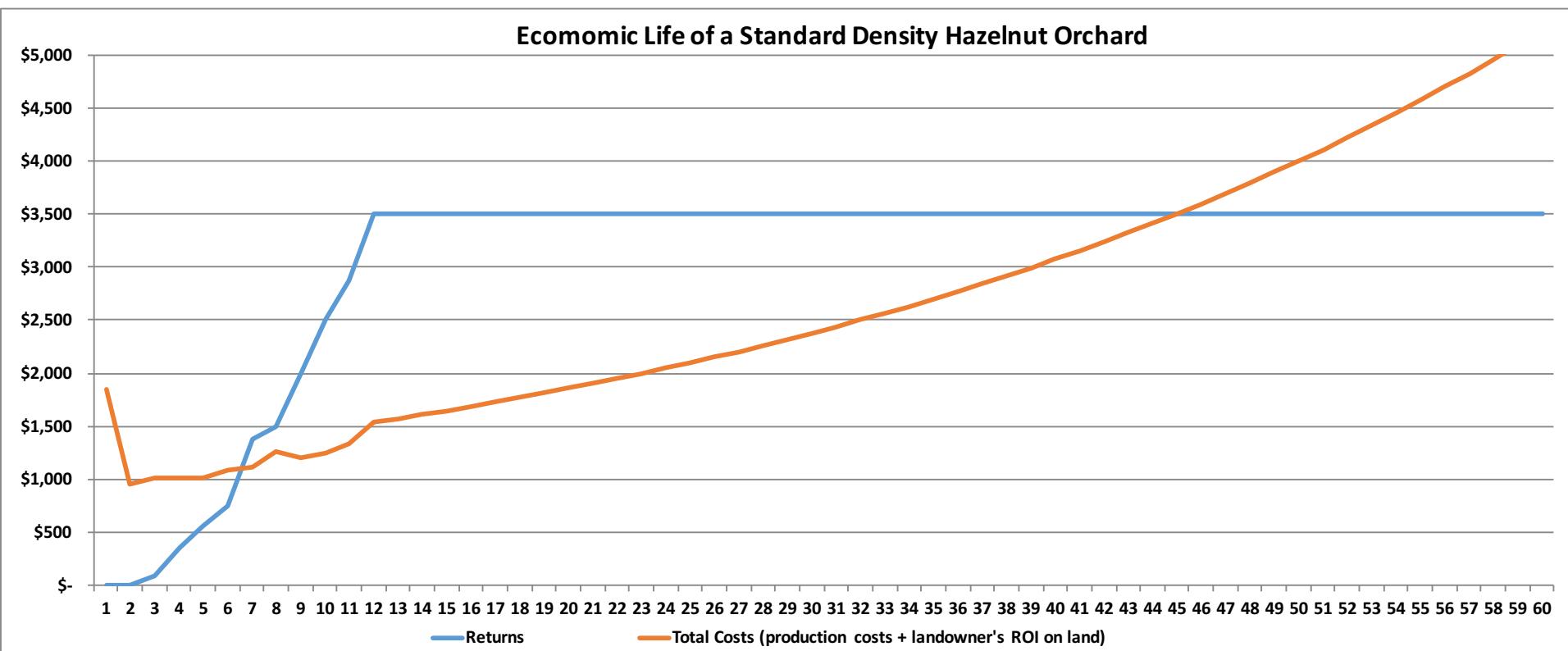
Assumed \$1.00/Lb Nuts, No Price Inflation, 3% Inflation on Costs; \$12,000/acre Land  
**Economic Life of Orchard = 36 Years**



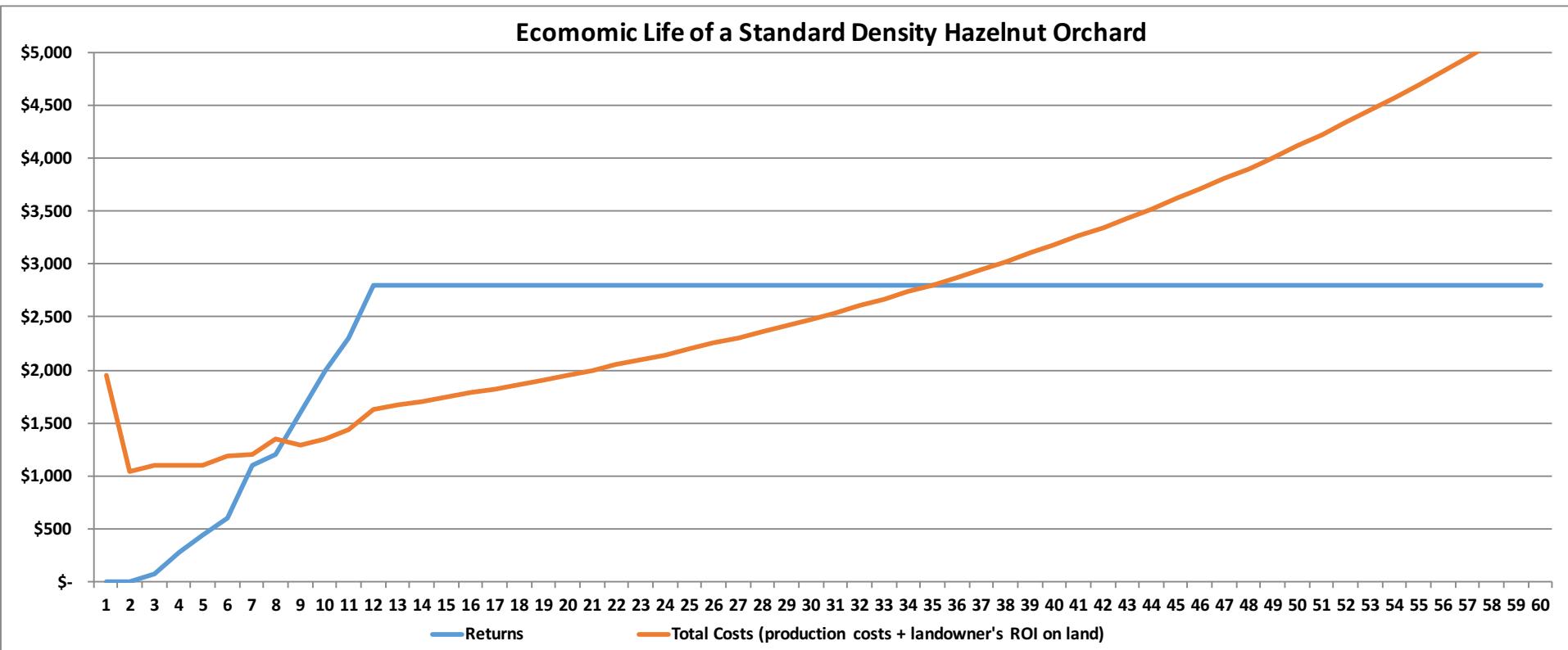
## Economic Life of a Standard Density Hazelnut Orchard



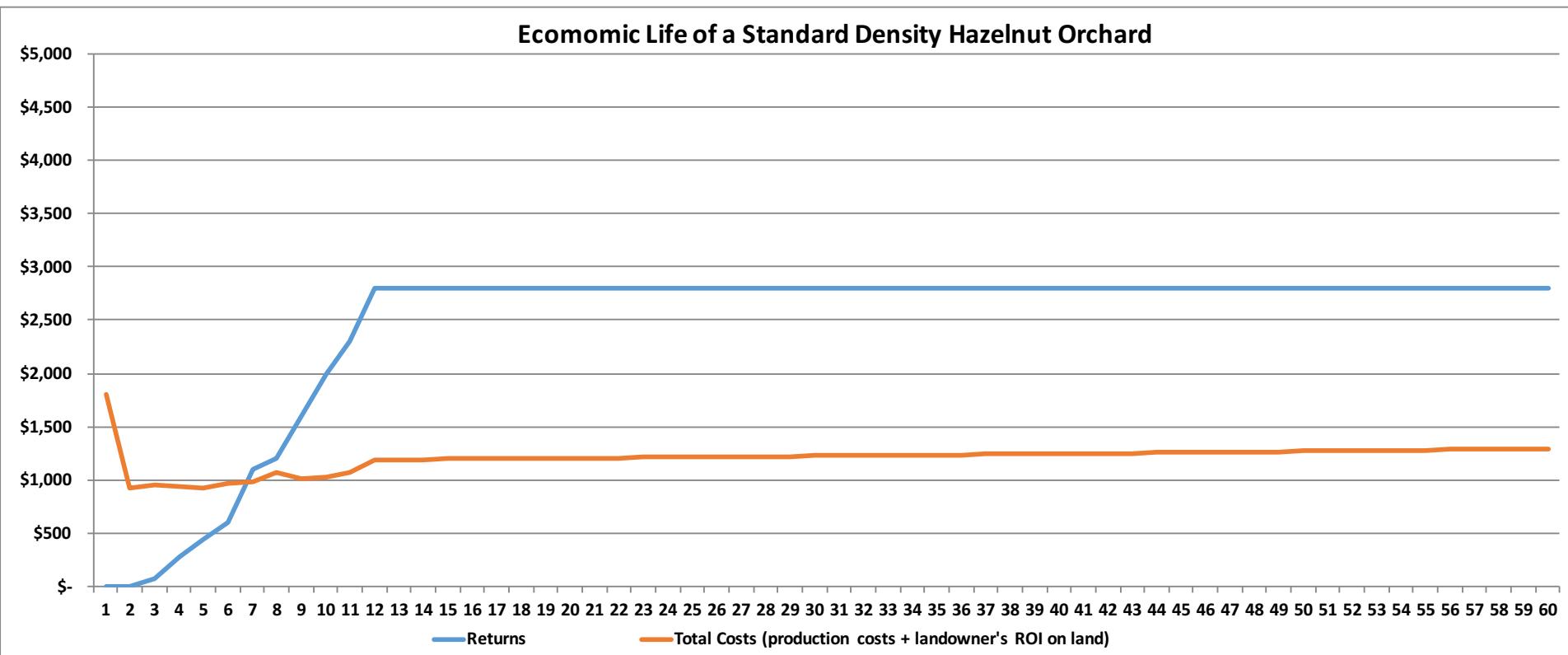
Assumed \$1.25/Lb Nuts, No Price Inflation, 3% Inflation on Costs; \$12,000/acre Land  
**Economic Life of Orchard = 45 Years**



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



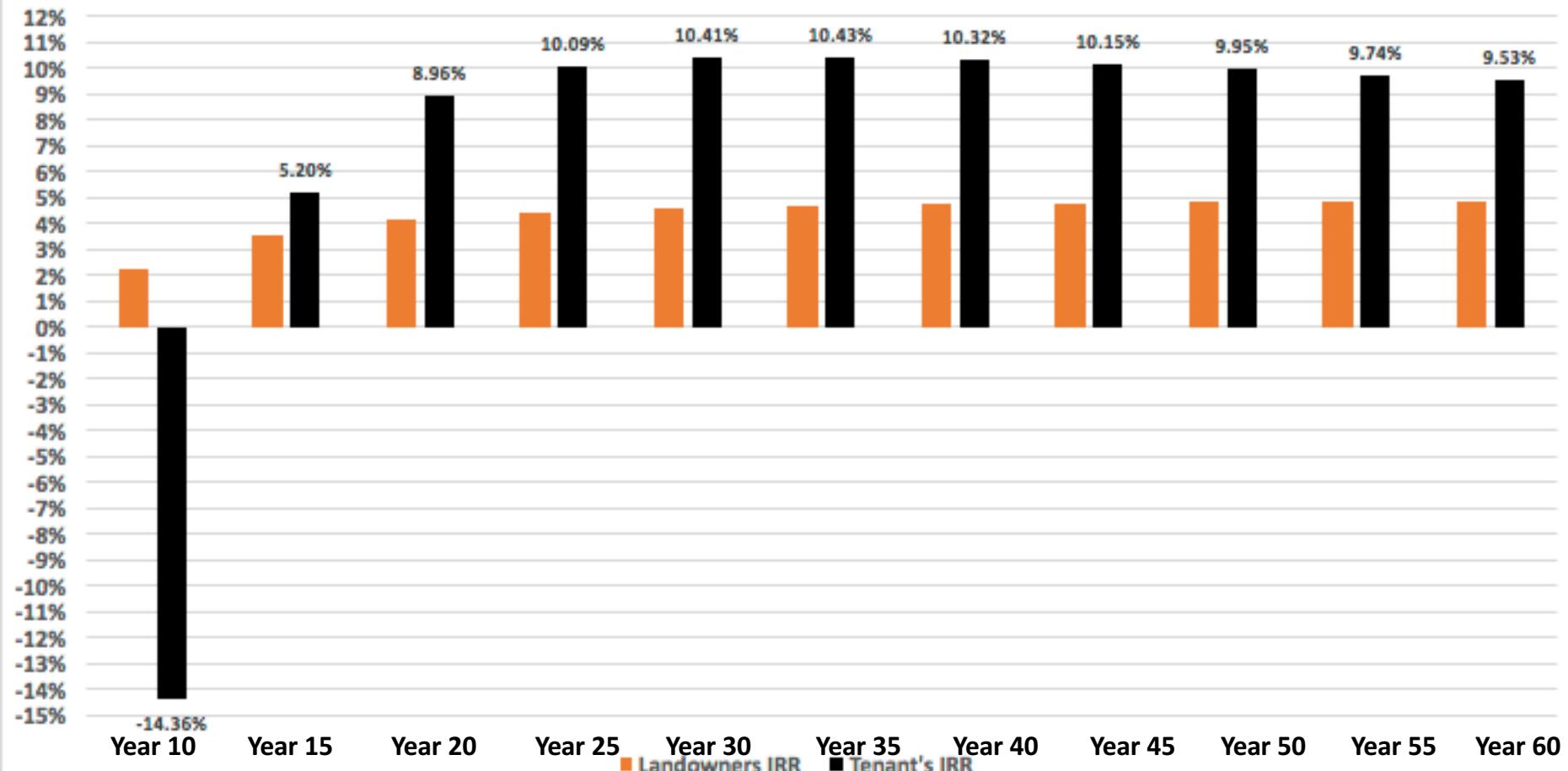
Assumed \$1.00/Lb Nuts, No Price Inflation, 0% Inflation on Costs; \$12,000/acre Land  
**Economic Life of Orchard = Infinity**



## **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

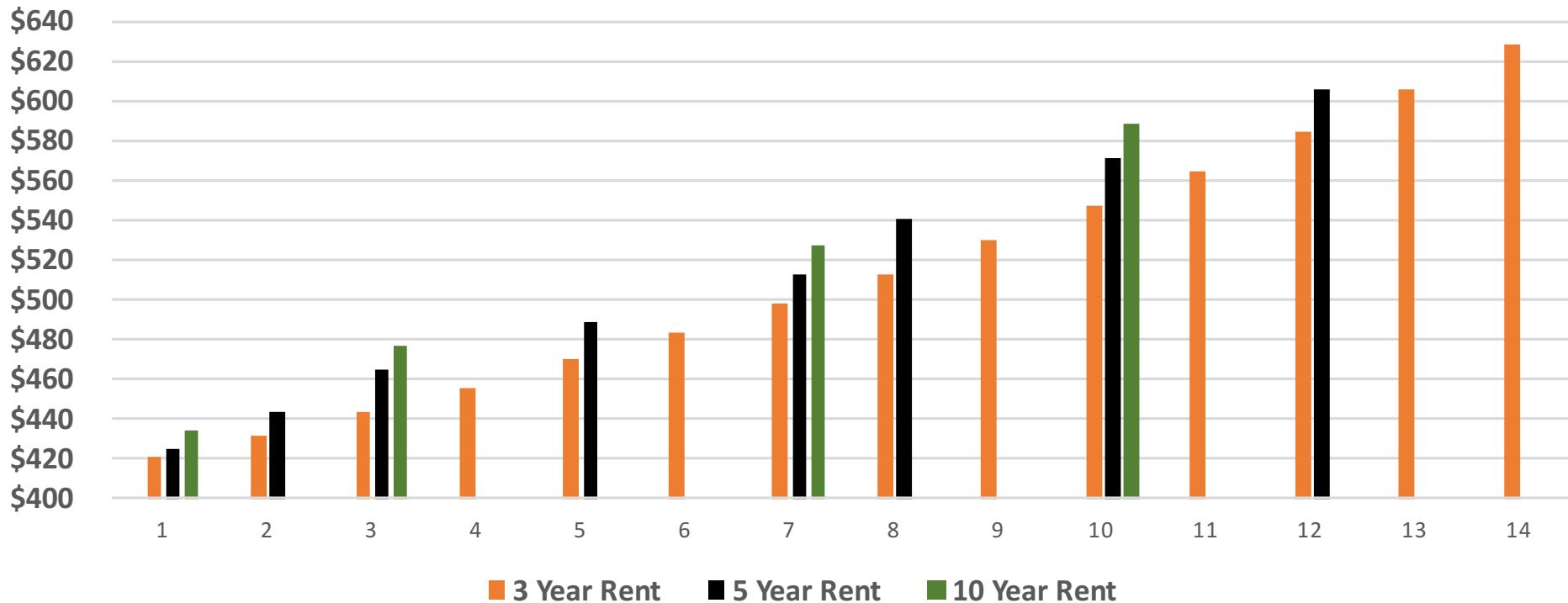
\$1.00/lb Nuts; No Price Inflation; 3% Cost Inflation; 35 Year Lease

Landowner Share	Tenant Share
<b>29.55%</b>	<b>70.45%</b>

## 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:	<b>8.43%</b>	<b>9.71%</b>

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





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# Data is always in Season

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.

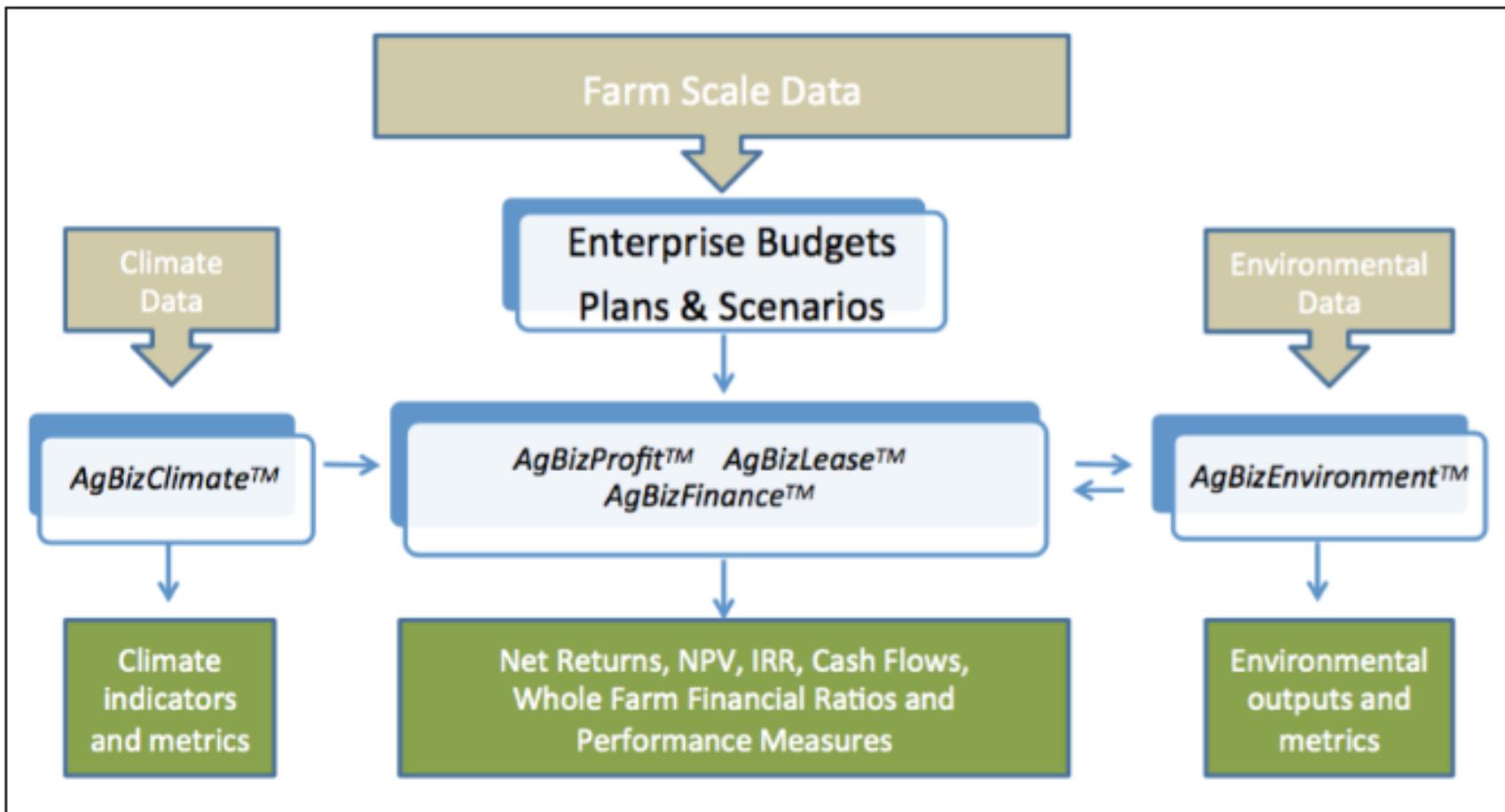
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# What is *AgBiz Logic*?

*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



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:

Line 1b. Cost or other basis of

livestock or other items:

Line 1c. Subtract line 1b from line

1a:

Line 2. Sales of livestock, produce,

grains and other products you

raised:

Line 3a. Cooperative distributions

(1099-PATR):

Line 3b. Taxable amount:

Line 4a. Agricultural program

payments:

Line 4b. Taxable amount:

# Data Collection – Schedule F



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 make changes, 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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- 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 – Import from Accounting System



Alpha 1.0 (pre-release)

YogiBerra ▾

## 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.

Mayberry Farms 2015 Expenses by Category

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

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# 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

# Business Allocation

## Income

Category	Total	Crop <small>?</small>	Livestock <small>?</small>	Whole Farm <small>?</small>	\$ or % <small>?</small>
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	%

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# 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
<b>Total</b>	<b>\$85</b>	<b>\$85</b>	<b>\$85</b>

## 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

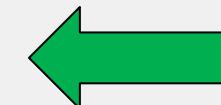
Select an Enterprise

Enterprise Type

Market

Crop

- 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

Crop

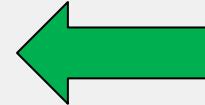
Enterprise Type

Nut Crops

Commodity

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

Market



### 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

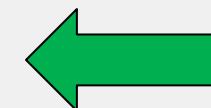
Select an Enterprise

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!

AgBiz Logic™ AgBizClimate AgBizProfit AgBizLease AgBizFinance AgBizEnvironment

## 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 Year

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	<button>Edit</button>
Total Gross Returns					\$2,800.00
<button>Add New</button>					

## General Cash Costs

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

## Totals

Total Gross Returns

Total Costs

Net Returns (income minus costs)

# *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	<a href="#">Edit</a> <a href="#">Add Variable Cost</a>
Depreciation and Section 179 Expenses	Acre	1	\$319.90	\$319.90	<a href="#">Edit</a> <a href="#">Add Fixed Cash Cost</a>
Fertilizers and Lime	Acre	1	\$262.36	\$262.36	<a href="#">Edit</a> <a href="#">Add Variable Cost</a>
Gasoline, Fuel, and Oil	Acre	1	\$96.34	\$96.34	<a href="#">Edit</a> <a href="#">Add Variable Cost</a>
Insurance (other than health)	Acre	1	\$50.35	\$50.35	<a href="#">Edit</a> <a href="#">Add Variable Cost</a> <a href="#">Add Fixed Cash Cost</a>
Interest on Loans and Mortgages	Acre	1	\$14.07	\$14.07	<a href="#">Edit</a> <a href="#">Add Variable Cost</a> <a href="#">Add Fixed Cash Cost</a>
Labor Hired (less employment credits)	Acre	1	\$103.46	\$103.46	<a href="#">Edit</a> <a href="#">Add Variable Cost</a>
Other Expenses	Acre	1	\$126.69	\$126.69	<a href="#">Edit</a> <a href="#">Add Variable Cost</a> <a href="#">Add Fixed Cash Cost</a>
Property Taxes	Acre	1	\$5.00	\$5.00	<a href="#">Edit</a> <a href="#">Add Fixed Cash Cost</a>
Repairs and Maintenance	Acre	1	\$78.82	\$78.82	<a href="#">Edit</a> <a href="#">Add Variable Cost</a>
Utilities	Acre	1	\$6.92	\$6.92	<a href="#">Edit</a> <a href="#">Add Variable Cost</a> <a href="#">Add Fixed Cash Cost</a>
<b>Total General Costs</b>				<b>\$1,104.39</b>	
<a href="#">Add General Cost</a>					

10100

01101

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# *Detail Inputs and Costs from the General Format*

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

?

Add

Add

Add

Add

Add

Add

Add

Cost

Cost

Add

# *Detail Inputs and Costs from the General Format*

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	<button>Edit</button> <button>Add Variable Cost</button>
Utilities	Acre	1	\$6.92	\$6.92	<button>Edit</button> <button>Add Variable Cost</button>
Total General Costs				\$1,104.39	

## Add Variable Cost item

Remaining amount for this sub-category: \$260.61

Category:

Pre-Harvest

Sub-category:

Fertilizer

Name:

Potash

Unit:

Pound

Quantity:

7

Pound

Price per Unit:

\$ 0.25

Total Cost:

\$ 1.75

Cancel

Save

# *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	<button>Edit</button>	<button>Remove</button>
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



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)

10100

# Data Collection – Import from Accounting System

Data is Always in Season.™

**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



**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:  Table, single plan & all years  Graph, single plan & all years  Table, all plans & single year  Graphs, 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**

Plan	Net Present Value (\$)
Plan 1	~\$12,000
Plan 2	~\$18,000
Plan 3	~\$22,000
Plan 4	~\$25,000
Plan 5	~\$28,000

**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:  Table, single plan & all years  Graph, single plan & all years  Table, all plans & single year  Graphs, 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**

Plan	Net Present Value (\$)
Plan 1	~\$12,000
Plan 2	~\$18,000
Plan 3	~\$22,000
Plan 4	~\$25,000
Plan 5	~\$28,000

SyncMaster SA150

## Profitability of Investments

**Forecasting & Planning**

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  Graphs, all plans & single year

Table, all plans & single year  Graph, all plans & single year  Table, all plans & single year  Graph, all plans & single year

**Investment Scenarios**

Select a measure: [Net Present Value](#)

< previous [Year 2](#) next >

**Net Present Values**

**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**

Plan	Net Present Value (\$)
Plan 1	~\$12,000
Plan 2	~\$18,000
Plan 3	~\$22,000
Plan 4	~\$25,000
Plan 5	~\$28,000



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



## Questions or Comments!