

# Case Study: Results

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# Case Study Outline

- Case Study Overview
  - Initial Configuration
  - Opportunity Identification
  - Agronomic Potential
  - Used Models
- Results Analysis
- Further Work

# Case Study Overview

Opportunity Identification	Region Assessment	Yield and Price Estimates	Generate a Plan	Analyze and Deploy Decisions
<p>Market Intelligence</p> <p>Trends Identification</p> <p>Prices and Volumes Prediction</p> <p>Is the opportunity capturable?</p>	<p>Where can it be produced?</p> <p>Are there enough growers?</p> <p>Is the required logistics available?</p> <p>Are the resources available (capital)?</p>	<p>Consider climate conditions to <b>estimate yields</b></p> <p>Obtain <b>price estimates</b> for the opportunity</p> <p>Consider <b>complementary</b> producing regions</p>	<p>Run <b>optimization models</b> to determine:</p> <ul style="list-style-type: none"> <li>- Where to produce?</li> <li>- When to plant?</li> <li>- When to harvest?</li> <li>- How to articulate the logistics?</li> <li>- How to allocate resources/investment?</li> </ul>	<p>Analyze the plan</p> <p>Identify partnership candidates:</p> <ul style="list-style-type: none"> <li>- Growers</li> <li>- Transportation</li> <li>- Logistics</li> <li>- Consumers</li> </ul> <p>Negotiation and Coordination</p>

# Initial Configuration

## 5 Locations:

Phoenix, AZ

Tucson, AZ

Albuquerque, NM

Las Cruces, NM

Santa Fe, NM

## 4 Initial Crops:

Tomatoes

Lettuce

Green Beans

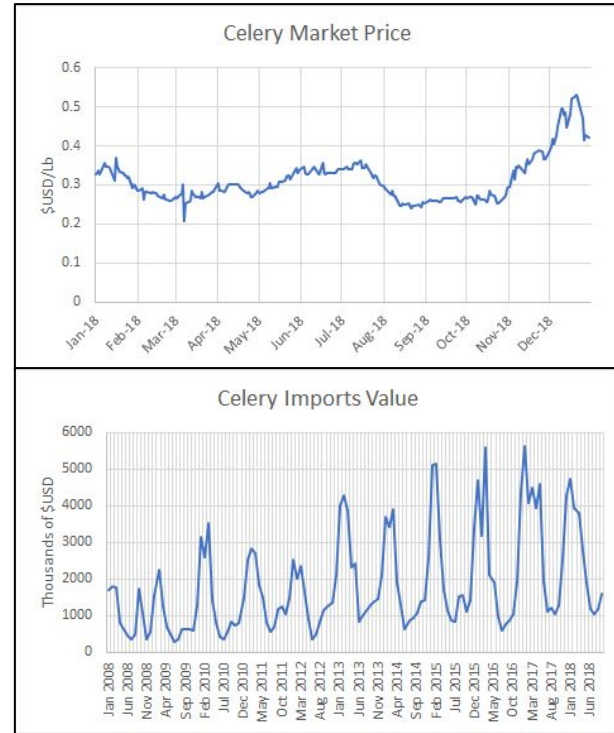
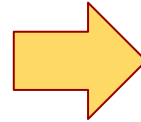
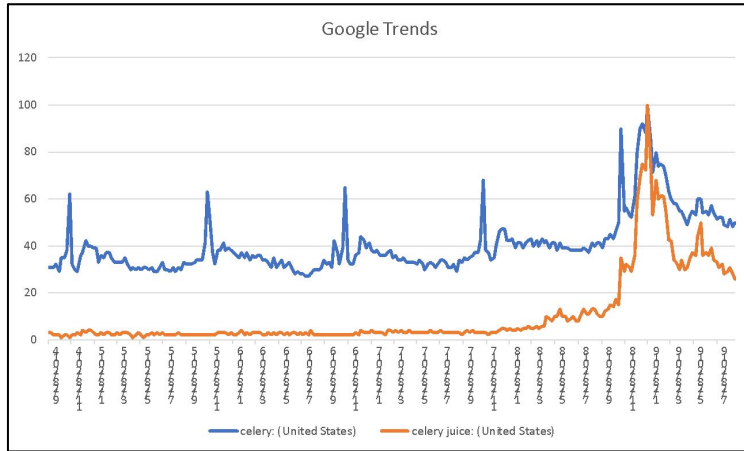
Bell Peppers

## Market Opportunity:

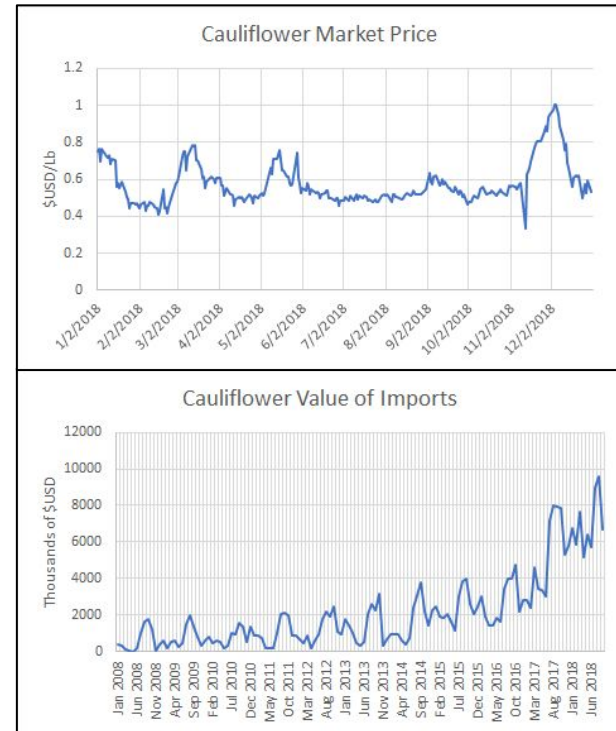
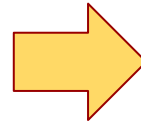
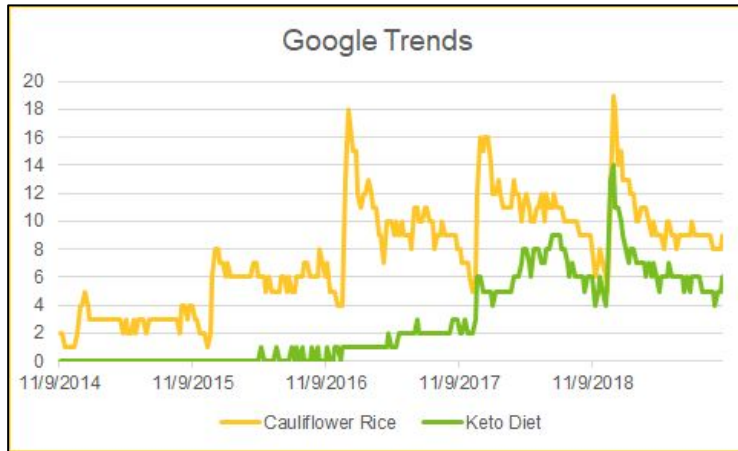
Two identified opportunities:

**Celery and Cauliflower**

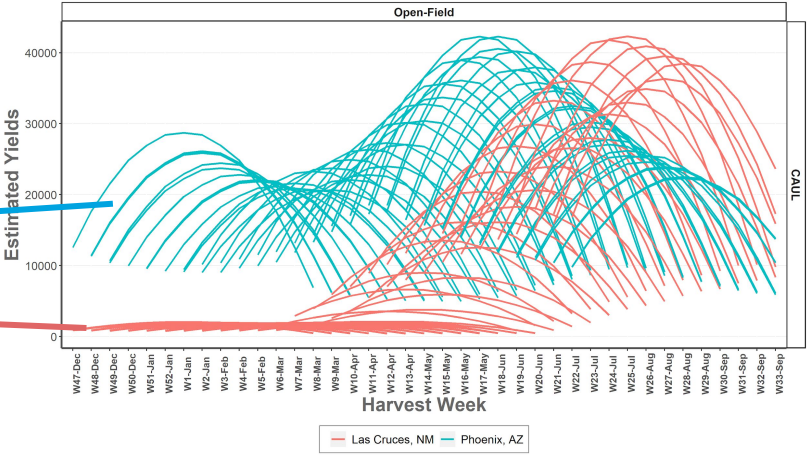
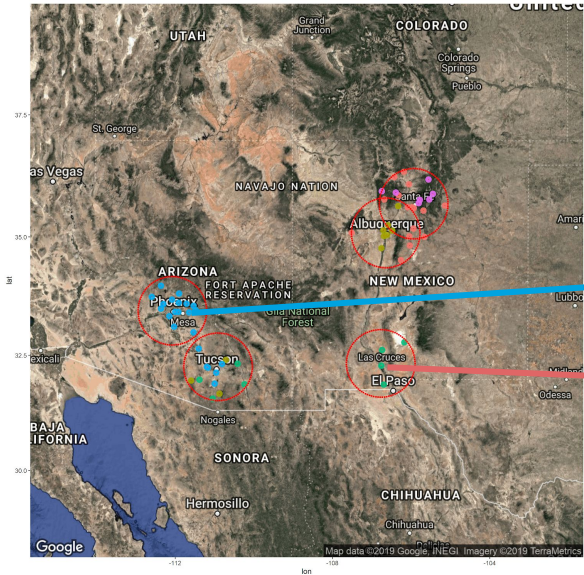
# Opportunity Identification: Celery



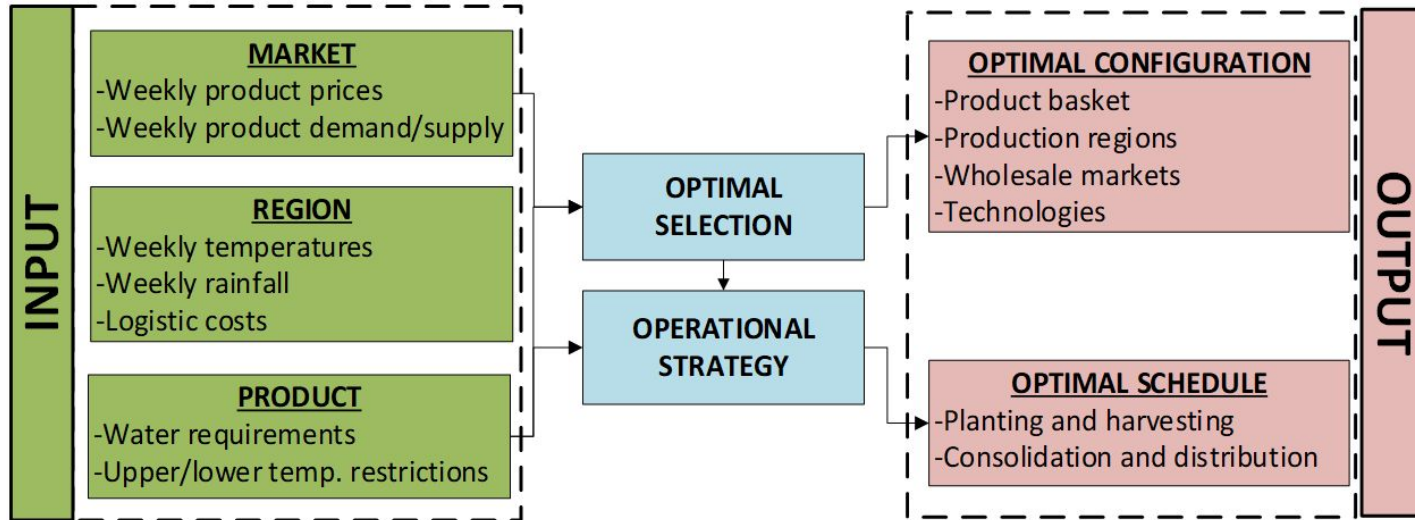
# Opportunity Identification: Cauliflower



# Agronomic Potential



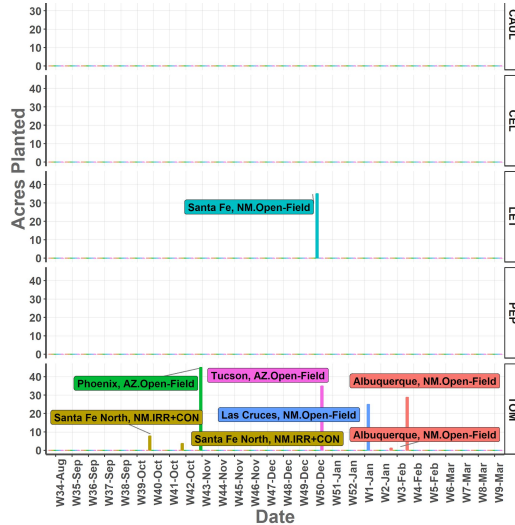
# Used Models



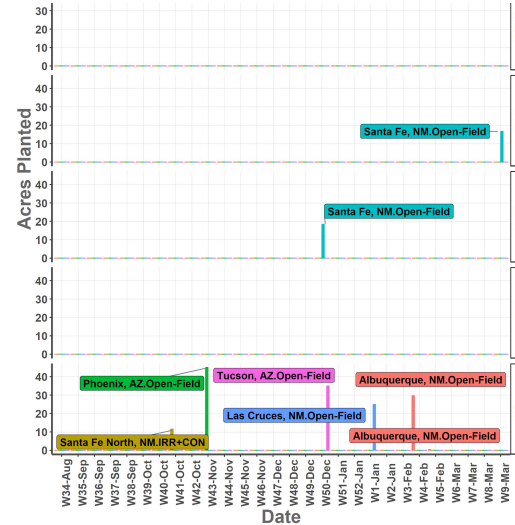


# Results Analysis: Planting Decisions

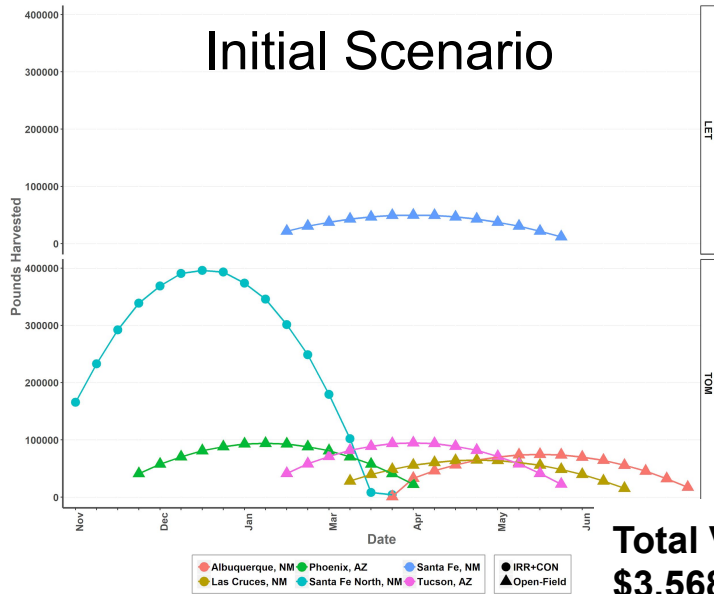
## Initial Scenario



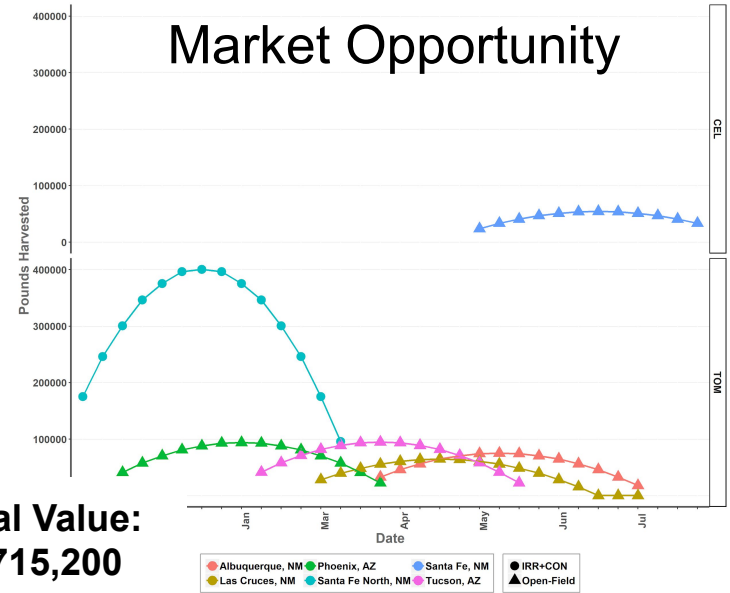
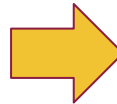
## Market Opportunity



# Results Analysis: Harvesting Decisions



**Total Value:**  
**\$3,568,738**



**Total Value:**  
**\$3,715,200**

# Further Work

- Improve Agronomic Potential Models
- Expand Market Intelligence Capabilities
- Develop Tools for Next Planning Stages
- Pilot Implementation

# Case Study: Results

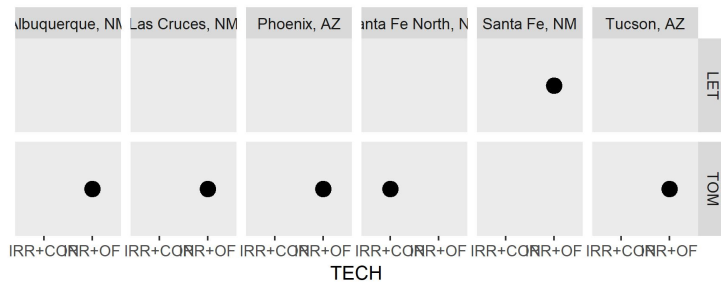
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# Results Analysis: Financial Aspects

Initial Scenario

**Total Value:**  
**\$3,568,738**



Market Opportunity

**Total Value:**  
**\$3,715,200**

