Feasibility Study:
Colorado Mushroom Farm (CMF)

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Executive Director, Rocky Mountain Employee Ownership Center (RMEOC)
Mission: Create a just and fair economic system by promoting employee ownership.

Programs:
- Coop Conversion
- Coop Incubation
- Education
- Research & Policy
Colorado Mushroom Farm (CMF)

Grew Agaricus Mushrooms

White, Cremini, and Portobello mushrooms (96.2%)

Six pounds of mushrooms per square foot (per harvest) & 15 million pounds of mushrooms annually.
Colorado Mushroom Farm LLC

**Timeline**

**1980-81**
- **The Farm**
  - The farm located in 10719 County Road 5 S Alamosa, CO, was built through funding from Farmers Homeland Administration and EDA. Sold shortly after its opening.

**1985**
- **Rakhra Mushroom Farm Corp.**
  - Baljit Nanda and his partners take over the farm, and Rakhra Mushroom Farm Corp. is born.

**1985-2010**
- **15 Years Under Nanda**
  - Nanda is highly involved in the farm through his engineering background. The farm makes $2M in profit per year.

**2010**
- **Nanda’s Departure**
  - In 2010, Baljit Nanda leaves the business to return to his family in Denver.

**2012**
- **Chapter 11 Bankruptcy**
  - Within two years under the partner’s control, the company collapses and files for chapter 11 bankruptcy. Over 200 employees lose their jobs.

**2014**
- **Nanda’s Return**
  - Baljit Nanda borrows money and reopens the farm. Colorado Mushroom Farm LLC is born.

**2014-2016**
- **The Good Years**
  - Colorado Mushroom Farm LLC does well under Baljit Nanda’s sole ownership. By 2016, 140 workers were rehired.

**2019**
- **Investments in New Equipment**
  - The company gets involved with Rabo Bank through a $5M investment to update the farm to the latest technology, the Dutch growing system.

**2020**
- **Covid-19**
  - The pandemic hits the company hard. Restaurant closures impact the company. New equipment can’t be installed due to travel restrictions. Employees get Covid-19. Pickers don’t go to work out of fear.

**2022**
- **The End**
  - While the impact of the pandemic slows down, the difficulty in acquiring raw materials persists. After years of struggling, the farm shuts down in September 2022.
Mushroom Workers

➢ About 90% of farm workers are Guatemalan immigrants who are descendants of Mayan.

➢ They speak the Mayan Indian language (Q'anjob'al).

➢ 80% (immigrants) vs. 20% (Citizens)
Nonpayment of Wages

- The total non-payment of wages for 44 CMF workers (53.5% of all workers surveyed) ranges from a minimum of $81,100 to $169,460 maximum.
Why Failed?

- Outdated Technology
- Covid
  - 135,000 pounds/week to 39,000 pounds/week
  - 52 batches of crops (before the pandemic) to 20 batches in 2020.
  - Declined Sales by 60%
- Labor Shortage
- Lack of professional management - water contamination
- Debts (20.5 mil)
Industry Analysis

Table 3.3 States that Produce the most Mushrooms

<table>
<thead>
<tr>
<th>Rank</th>
<th>State</th>
<th>Pounds</th>
<th>% of U.S. Production</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pennsylvania</td>
<td>446,585,765</td>
<td>65.7%</td>
</tr>
<tr>
<td>2</td>
<td>California</td>
<td>73,780,193</td>
<td>10.9%</td>
</tr>
<tr>
<td>3</td>
<td>Texas</td>
<td>41,781,853</td>
<td>6.2%</td>
</tr>
<tr>
<td>4</td>
<td>Maryland</td>
<td>41,082,370</td>
<td>6.0%</td>
</tr>
<tr>
<td>5</td>
<td>Oklahoma</td>
<td>25,793,520</td>
<td>3.8%</td>
</tr>
<tr>
<td>6</td>
<td>Tennessee</td>
<td>21,068,000</td>
<td>3.1%</td>
</tr>
<tr>
<td>7</td>
<td>Florida</td>
<td>11,593,000</td>
<td>1.7%</td>
</tr>
<tr>
<td>Total of Top 7 States</td>
<td>661,684,701</td>
<td>97.4%</td>
<td></td>
</tr>
</tbody>
</table>

Fig. 3.3 Fresh Mushroom Production and Consumption: 1970-2020

Source: USDA, Vegetables and Pulses Yearbook Tables
Market Analysis

• **Growing the meat-substitute market:**
  Will grow at a Compound Annual Growth Rate (CAGR) of 42.1% from 2022 to 2030, reaching $234.7 billion in total value.

• **Eco-Conscious Consumers on the Rise**
  - Does not require high levels of agricultural land, water, and pesticides (2 gallons to grow 1 pound of mushrooms/ 1.0 kilowatt hour (kwh) of electricity for 1 pound of mushrooms)
  - Mushroom farming also emits far lower levels of greenhouse gasses than the farming of other plants and animals
Fig. 4.1 Target Market B: 500-Mile Radius around Alamosa, CO

500-Mile Radius Report for Alamosa city, Colorado

<table>
<thead>
<tr>
<th>County (Metro/City)</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maricopa, AZ (Phoenix-Mesa-Scottsdale)</td>
<td>4,496,588</td>
</tr>
<tr>
<td>Salt Lake, UT (Salt Lake City)</td>
<td>1,186,421</td>
</tr>
<tr>
<td>Pima, AZ (Tucson)</td>
<td>1,052,030</td>
</tr>
<tr>
<td>El Paso, TX (El Paso)</td>
<td>867,947</td>
</tr>
<tr>
<td>Oklahoma, OK (Oklahoma City)</td>
<td>798,575</td>
</tr>
<tr>
<td>El Paso, CO (Colorado Springs)</td>
<td>737,867</td>
</tr>
<tr>
<td>Denver, CO (Denver-Aurora-Lakewood)</td>
<td>711,463</td>
</tr>
<tr>
<td>Utah, UT (Provo-Orem)</td>
<td>684,986</td>
</tr>
<tr>
<td>Bernalillo, NM (Albuquerque)</td>
<td>674,393</td>
</tr>
<tr>
<td>Arapahoe, CO (Denver-Aurora-Lakewood)</td>
<td>654,900</td>
</tr>
</tbody>
</table>
Fig. 4.2 Target Market A: 300-Mile Radius around Alamosa, CO

300-Mile Radius Report for Alamosa city, Colorado

Population in 2021: 8,378,556
10-Year Growth: 9.2%

Largest Counties by Population in 2021

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</tr>
<tr>
<td>Arapahoe, CO (Denver-Aurora-Lakewood)</td>
<td>664,900</td>
</tr>
<tr>
<td>Jefferson, CO (Denver-Aurora-Lakewood)</td>
<td>579,581</td>
</tr>
<tr>
<td>Adams, CO (Denver-Aurora-Lakewood)</td>
<td>522,140</td>
</tr>
<tr>
<td>Douglas, CO (Denver-Aurora-Lakewood)</td>
<td>368,990</td>
</tr>
<tr>
<td>Larimer, CO (Fort Collins)</td>
<td>362,533</td>
</tr>
<tr>
<td>Weld, CO (Greeley)</td>
<td>340,036</td>
</tr>
<tr>
<td>Boulder, CO (Boulder)</td>
<td>329,543</td>
</tr>
</tbody>
</table>
FINANCIAL MODELS: ASSUMPTIONS

- Farm is Sold to Employee-Owned Business
  - The financial models do not investigate the possibility of restructuring the existing debt and lending new capital that would allow the existing owner to continue farm operations.

- Installation of Dutch Growing System Ensures Robust Yields
  - The financial models assume five months of no production and revenues at start-up, followed by slow growth towards full growing capacity in years 4-5.

- Business expenses will Generally Align with Previous Farm
  - The financial models include the whole range of farm expenses: facility upgrades, costs of goods sold, direct and admin wages, maintenance/repairs, depreciation, interest, taxes, amortization, etc.

FINANCIAL MODELS: ASSUMPTIONS

- Debt Levels Range from $6.5 Million to $18.2 Million
  - Precise debt levels determined by three key variables in the models; the price point of farm purchase, the level of grant support, and the assumed price point of sold mushrooms

- Adequate Labor Force is Recruited and Maintained
  - Enthusiasm for the employee-ownership model and wealth-building opportunities is assumed to retain labor. With full harvest capacity, market share will grow.

- Facilities are Remediated
  - In addition to installing Dutch growing equipment, models assume $1.5 million in initial costs to remedy on site public drinking water problems and do other facility upgrades.
Advanced, state-of-the-art mushroom growing equipment (i.e., “The Dutch growing system”) will be installed to improve growing efficiency and increase yields at harvest.

An additional $2 million is needed to finish the installation of this equipment.
First 5 Months: 
No harvests and no revenue as farm relaunches. Substantial negative cash flow.

Remaining 7 months of Year 1: 
30% of growing capacity utilized—18,000 square feet

Year 2: 
55% of growing capacity utilized—25,000 square feet

Year 3: 
80% of growing capacity utilized—36,000 square feet

Year 4-5: 
100% of growing capacity utilized—45,000 square feet

Farm Purchasing price scenarios
2.5 mil
5.5 mil
9 mil
Model 2: $2.5 M Purchase Price; $4.9 M Capital Loan; $2 M Grant Mushroom Sales $1.70-$1.90 per pound
Model 3: $2.5 M Purchase Price; $6.6 M Capital Loan; $0 M Grant
Mushroom Sales $1.90-$2.05 per pound
Model 5: $5.5 M Purchase Price; $4 M Capital Loan; $2 M Grant Mushroom Sales $1.90-$2.05 per pound

Model 5: Net Revenue and Profit Rate

- 2024: Net Revenue ($), 0%
- 2025: Net Revenue ($), 10%
- 2026: Net Profit (%), 18%
- 2027: Net Profit (%), 22%
- 2028: Net Profit (%), 23%
Model 8: $5.5 M Purchase Price; $7.9 M Capital Loan; $0 M Grant
Mushroom Sales $1.70-$1.90 per pound

Model 8: Net Revenue and Profit Rate
Model 9: $9 M Purchase Price; $4.7 M Capital Loan; $2 M Grant
Mushroom Sales $1.90-$2.05 per pound

Model 9: Net Revenue and Profit Rate

<table>
<thead>
<tr>
<th>Year</th>
<th>Net Revenue ($)</th>
<th>Net Profit (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2024</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>2025</td>
<td>-2,000,000</td>
<td>8%</td>
</tr>
<tr>
<td>2026</td>
<td>-4,000,000</td>
<td>17%</td>
</tr>
<tr>
<td>2027</td>
<td>-6,000,000</td>
<td>21%</td>
</tr>
<tr>
<td>2028</td>
<td>-8,000,000</td>
<td>22%</td>
</tr>
</tbody>
</table>
Model 12: $9 M Purchase Price; $9.2 M Capital Loan; $0 M Grant
Mushroom Sales $1.70-$1.90 per pound
Employee Ownership Models

Worker Cooperatives
- 100% controlled by workers
- One person, one vote

ESOP (Employee Stock Ownership Plan)
- Controlled by the ESOP Trust
- Highiy regulated retirement plan governed by ERISA statutes.

EOT (Employee Ownership Trust)
- Perpetual Trust
- Annual Benefit for Workers
Worker Coops:
LCA (Limited Cooperative Association) & LLC (Limited Liability Company)

- Partners: Not employees
- Undocumented immigrants? YES

LLC

LCA
- Undocumented immigrants YES
- Investors can be the members of the Coop.
- The LCA would choose taxation as a partnership
ESOP (Employee Stock Ownership Plans)
Employee Ownership Trust (EOT)

- Perpetual
- Additional Annual Benefits
- Cheaper set-up fee
- Free for Workers
Things to Consider:

a. Which Model will include EVERYONE (including the Undocumented)?

- Worker Coop (LLC, Limited Coop Association (LCA))
  - YES

- ESOP
  - NO

- EOT
  - Yes/Maybe

b. Which model will benefit workers better in the long run?

C. Which model is better in terms of raising capital?
Future Plans to Leave Alamosa

- Yes: 17%
- No: 83%

Employees' Satisfaction With the Company (80 responses)

1 = Very Dissatisfied; 5 = Very Satisfied
“We know how to operate the mushroom farm because we worked there for long years. This is what we were good at: growing and picking mushrooms.”

-- CMF Farm Worker, Dec. 2022
Q. Who makes a decision?
Q. Who should be in the Committee?
“The company gave us a life. We were undocumented, but [the farm] gave us a chance to live. My father could buy a house in Alamosa. That is why I hope it is reopened again in the future.”

-- CMF Farm Worker, Dec. 2022