# Assessing the Viability of Food Hubs 

## Smithson Mills

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## Food Hubs are Businesses Operating in

 A Highly Competitive Market- Produce distribution is a multi-billion \$ industry
- Food Hubs compete against established, highly efficient commercial distributors
- Stringent quality control assurances are essential
- Distribution is a capital-intensive activity
- Profit margins are slim


## Physical Infrastructure

- Location
- Cold Storage
- Wash Lines
- Packaging Equipment
- Truck(s)


## What is the True Cost of Development?

| Expense | Estimated Cost |
| :--- | :--- |
| Facility acquisition and upfit | $\$ 150,000$ and up |
| Equipment | $\$ 40,000$ to $\$ 60,000$ |
| Project Oversight | $\$ 30,000$ to $\$ 50,000$ |
| Refrigerated Truck | $\$ 40,000$ to $\$ 60,000$ |
| Estimated development cost | $\$ 250,000$ to $\$ 400,000$ |

## Key Costs of Operation

- Personnel
- Utilities
- Goods purchased from farmers
- Packaging and Supplies
- Distribution
- Shrinkage


## Personnel

- General Manager (fixed cost)
- Warehouse Manager (fixed cost)
- Sales Agents (variable cost)
- Truck Drivers (variable cost)
- Grading and Packaging staff (variable cost)
- Administrative Support (fixed cost)


## Utilities

- Electricity
- Water
- Natural Gas or Propane
- Communications
- Security services


## Costs of Goods Sold

- Produce from Growers
- Goods distributed and sold
- Produce shrinkage
- Supplies
- Boxes, bags, pallets
- Utilities and gas
- Fuel for trucks
- Electricity in excess of normal fixed expenses
- Labor
- Grading and packaging
- Sales Agent
- Labor for distribution


## What Are Fixed Costs of Operations?

| Fixed Costs | Annual Cost |
| :--- | :--- |
| Facility lease or debt service | $\$ 0$ to $\$ 24,000$ per year |
| General Manager | $\$ 35,000$ to $\$ 50,000$ per year |
| Warehouse Manager | $\$ 25,000$ to $\$ 35,000$ per year |
| Base Utilities | $\$ 4,800$ per year (\$400/month) |
| Workers Comp | $5 \%$ of total wages |
| Unemployment Insurance | $3 \%$ of total wages |
| SS and Medicaid | $8.5 \%$ of total wages |
| Liability Insurance | $\$ 5,000$ per year |
| Payroll and Accounting | $\$ 6,000$ per year |
| Estimated Fixed Costs | $\$ 85,700$ to $\$ 127,175$ per year |

## What Are Variable Costs of Operation?

| Item Based on $\$ 1,000,000$ in Sales | Total Cost |
| :--- | :--- |
| Sales commissions (5\%) | $\$ 50,000$ |
| Truck Driver (.10 per mile, 30,000 miles) | $\$ 3,000$ |
| Additional personnel overhead | $\$ 10,335$ |
| Gas and Maintenance (30,000 miles) | $\$ 16,500$ |
| Produce bought from growers | $\$ 840,000(80 \%$ paid to growers) |
| Shrinkage of product | $\$ 40,000$ |
| Packaging (boxes) | $\$ 80,000$ (8\% of goods sold) |
| Utilities (over and above fixed minimum) | $\$ 3600(\$ 300 /$ month $)$ |
| Facility supplies (towels, mops, cleaning) | $\$ 2,000$ |
| Total Variable Costs | $\$ 1,077,800$ |

# Profit \& Loss on $\$ 1 \mathrm{M}$ in Sales (Based on 80\% Paid to Growers) 

| Item | Value |
| :--- | :--- |
| Personnel and overhead, all | $\$ 153,762$ |
| Utilities | $\$ 8,400$ |
| Product Liability Insurance | $\$ 5,000$ |
| Purchased goods for resale | $\$ 840,000$ |
| Boxes | $\$ 80,000$ |
| Gas and Maintenance | $\$ 16,500$ |
| Product Shrinkage | $\$ 40,000$ |
| Facility Supplies | $\$ 2,000$ |
| Gross Expense | $\$ 1,139,662$ |
| Gross Sales | $\$ 1,000,000$ |
| Sales Minus Expenses | $(\$ 145,662)$ |

## How Can We Make it Work?

- Reduce costs of operation and/or increase margins.
- The policy of returning $80 \%$ of sales to growers does not seem economically viable.
- Prices should vary according to markets.
- Growers should incur some expenses (boxes, shrinkage)


## Suggestions

- Pay growers a \% of estimated wholesale value of produce ( $70 \%$ ?) regardless of sales value realized;
- Develop varied sales channels with different price points (supermarkets, restaurants, etc);
- Do not purchase produce that does not meet wholesale quality requirements;
- Charge growers for boxes/packaging


## New P\&L for $\$ 1 \mathrm{M}$ in Sales

| Item | Value |
| :--- | :--- |
| Personnel and overhead, all | $\$ 153,762$ |
| Utilities | $\$ 8,400$ |
| Product Liability Insurance | $\$ 5,000$ |
| Purchased goods for resale | $\$ 740,000$ |
| Boxes (1/2 charged to growers) | $\$ 35,000$ |
| Gas and Maintenance | $\$ 16,500$ |
| Product Shrinkage (1/2 charged to growers) | $\$ 20,000$ |
| Facility Supplies | $\$ 2,000$ |
| Gross Expense | $\$ 974,662$ |
| Gross Sales | $\$ 1,000,000$ |
| Sales Minus Expenses | $\$ 19,338$ |

## Conclusions

- Food Hubs have difficulty establishing viable economic models;
- Food hubs that do succeed have unique characteristics, especially in product differentiation;
- Often operate as for-profit businesses;
- Usually receive some level of community support;
- Aggregate sales should be >\$1M.

