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Farmers Markets and Location Choice for Value Added Processing

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Farmers Markets and Location Choice for Value Added Processing

Andrea Bouma, Catherine A. Durham, Lisbeth Goddik

ABSTRACT

A less examined facet of the local foods movement is the impact of the location of the producer on the feasibility of operating as a local supplier. Obvious variables are labor hours in travel to regional markets and fuel expenditures. The costs these engender is strongly related to the density of customers that are willing or able to deal with smaller scale delivery. Whether supplying produce or a value-added food, the viability of an enterprise which hopes to diversify its markets or products through a local channel is dependent on that density. Furthermore the price received varies greatly depending on whether the customer is a farmers market consumer, a local grocer or restaurant, or-as those markets are exhausted-a distributor. With value-added products (28% of farms engaged in entrepreneurial activities are producing value–added products (Martinez 2010)) the availability of alternative channels and pricing received in them is particularly important due to the capital investment required for equipment.

Model Data and Development

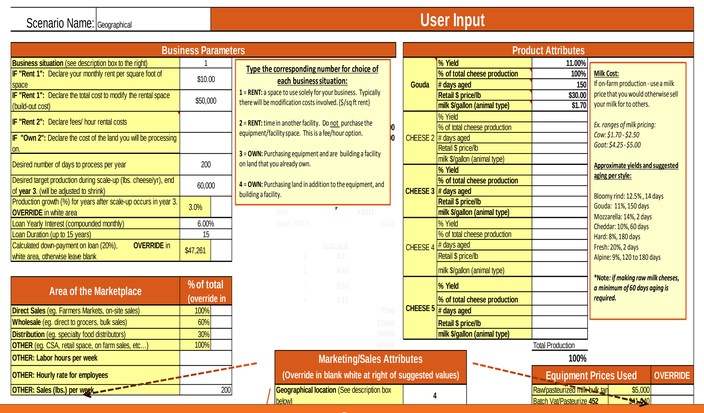
Data on fixed and variable costs for cheese production and business start-up for the model was collected in an in-depth survey of six operating artisan cheese firms. Supplemented with current information on equipment costs, retail space rental, and labor costs from business and governmental sources, a business model was designed within Microsoft Excel 2010 that effectively describes the business environment in which an artisan cheese company might exist. The model estimates size of the production and aging facilities and capital cost based on intended production volume and cheese types produced. Economic feasibility is measured through net present value (NPV) and Internal Rate of Return (IRR) of the investment, breakeven analysis is also included in the spreadsheet model utilizing Microsoft Excel Solver. To examine scenarios data is entered into the USER INPUT SHEET.

Among other variables, the tool allows the number of farmer's markets, the local grocers and restaurants within practical reach, and the average distance to these to be entered. To examine the impact of location on feasibility four scenarios (rural, semi-rural, sub-urban, urban) with respect to these market variables were designated and NPV for each examined across four final (post-startup) production volumes (7500, 15000, 30000, and 60000 pounds produced annually). To account for land cost differences, these scenarios assume processing facilities are rented and appropriate rental cost is used.

LOCATION ASSUMPTIONS

Location Name rent/sq.ft.	Assumptions	Production Thresholds: Direct -> Wholesale	Production Thresholds: Wholesale->Distributor
Rural ($0.20)	150+ miles away from a major urban[a] area; could have closer access to towns[b] but also could be isolated. Few retail outlets in the area to sell wholesale. Needs a distributor to gain a larger population of consumers.	52 days at Farmers Markets (FM) 2,600 lbs.	6 outlets + FM sales =total = 6,200 lbs.
Semi-Rural ($0.33)	150+ miles away from a major urban[a] area, closer access to cities[c]. Access to direct sales and wholesale revenues in cities. Dependent on distributors to gain large sales volume.	104 days at FM 5,200 lbs.	10 outlets + FM sales =total = 11,200 lbs.
Sub-Urban ($0.53)	Less than 150 miles away from large urban[a] area. Access to farmers markets and wholesales in urban areas, less need to go to distributor until higher production levels are achieved.	156 days at FM 7,800 lbs.	15 outlets + FM sales =total = 16,800 lbs.
Urban ($1.15)	Within the bounds of a major urban[a] area. Large potential of direct sales to consumers and wholesales through local retailers/ restaurants.	208 days at FM 10,400 lbs.	20 outlets + FM sales =total = 22,400 lbs.

[a] Urban ≥ 250,000 population, [b] Town ≤ 100,000 population, [c] City > 100,000 population, **50 lbs. per day at farmer's market 600 lbs. per year /wholesale outlet**

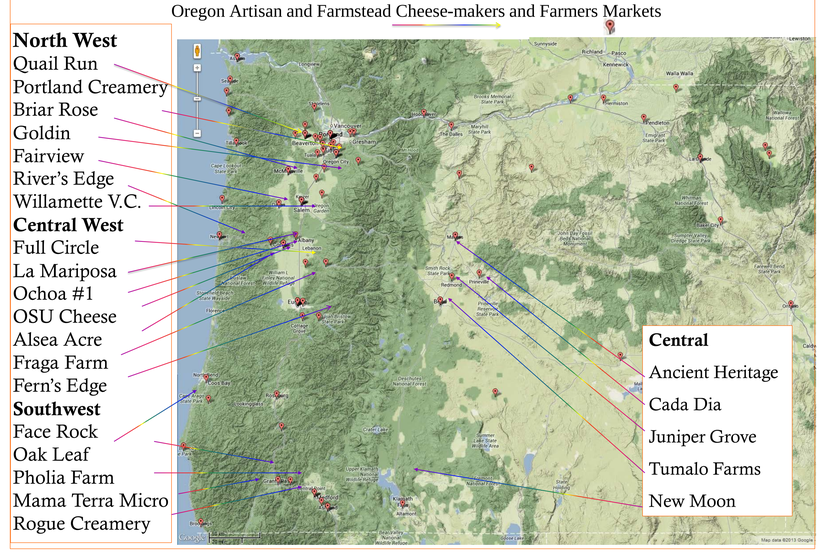


Marketing/Sales Attributes (Override in blank white at right of suggested values)

Geographical location (See description box below)	**4**
Wholesale Outlets: Average miles driven each week to deliver product	200
Wholesale Outlets: Suggested number of accessible outlets.	6
Farmers Markets: Average miles to each (round trip)	20
Farmers Markets: days at farmers markets can attend per year	52
Current gasoline $/gal	$3.50

OBSERVED LOCATIONS

Oregon Artisan and Farmstead Cheese-makers and Farmers Markets



CONCLUSIONS

The viability of an artisan cheese business is profoundly impacted by the location selected. Sensitivity analysis was undertaken across key revenue and cost variables, the most important being milk price, cheese style, product retail price, and geographical location of the creamery. Other variables examined include fuel cost, labor cost, distance to farmers markets, distance to wholesalers, cheese yield and aging time, processing days per year. Location produced a greater range in NPV than 25% swings in any of the other model variables except retail price.

CAVEATS

Marketing channels not included in the model include: Community Supported Agriculture systems (CSA), a retail space on site at the creamery, and direct sales through the internet. The first is limited, the second has potential, but probably will not see sufficient custom outside of an urban area to justify it economically. The most potential is in internet sales with mail distribution. However, it may require deep pockets, due to the need to establish the market and will need to have its own marketing costs, as with a distributor-internet marketing may require some time to establish and may be best suited to unique and well received cheeses which will benefit from broader distribution.

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