Sustainable Ag Council- Draft Report
Tuesday, August 14, 2007

Local Food Sales: Food Co-ops and Country Stores

Scope of Work

The "Wealth of the Land" report describes Vermont's diverse agricultural base, and growing direct sale market worth $9.5 million in 2002. However, among the 2006 Vermonter poll findings was that 22% of respondents said that local foods should be more readily available. Increasing opportunities to find local food in other retail outlets year-round may be part of the solution.

In 2006, the Council identified consumer co-ops and independent country stores as targets for further research in Vermont's local food market. It was suggested by Dave Timmons that the Council could study the opportunities for, and barriers to sourcing local products.

My research goals were to:

1. Measure the contribution to the local food market in Vermont by consumer co-ops and Vermont Alliance of Independent Country Stores (VAICS);
2. Identify the reasons for, and barriers to sourcing locally;
3. Identify the types of local products that are being sourced and with what frequency (seldom, seasonally, or always), and which are never sourced locally;
4. Identify areas in the state that had a dearth of local food outlets, and identify those areas that might be clusters of the local food market.

I prepared two surveys, one for co-op managers and one for VAICS members (see attached). The co-op surveys were sent to all co-ops in 13 northeastern states – a total of 67 co-ops, and follow-up conversations were had with all but ten co-op managers. A recent UVM graduate from the Geography department, Becca Grover, was hired to build the GIS map of local food sales in Vermont.

The definition of "local food" was based on Vermont's definitions of local and native: within 30 miles of the store AND/OR within the state.

<u>Summary of Findings:</u>

67 co-op surveys were completed and returned; 14 VAICS surveys were completed and returned.

Co-ops
An estimate of the contribution of all **VT co-ops** to the **VT local food market**, based on large, medium, and small co-ops' average percent locally sourced: (see table 1, also)

Very conservative: $3,990,105
Moderately conservative: $4,071,105

**For comparison, the VT SAC Report Summary from 2006 reported that the state's total agricultural economy was $2,615 million in 2000. The total in *direct* sales of local food – including all CSA farms, farmer's markets, and farm stands – in VT was $9.5 million, as reported by the 2002 Census of Agriculture.

An estimate of the contribution **of all northeastern co-ops**: (see table 1, also)
Very conservative: $22,015,000
Moderately conservative: $22,295.000

On Average, co-ops in the northeast source a little over 16% of their food products form local producers and regional distributors, and source from 40 farms. In Vermont, co-ops source from between 50 and 60 co-ops, while the Onion River co-op sources from over 200 local producers.

Reasons for sourcing locally: (see table 5, also)
The strongest reasons were environmental and relationships with producers. The cost of local and the supply of local food are the weakest reasons for sourcing locally. Other reasons that were mentioned by respondents included supporting a local economy, community building, preserving agricultural land, supporting local farmers, and the healthiness and freshness of the food.

No difference was found between co-ops of different states, different sizes, or different ranking (large, medium or small) in terms of their reasons for sourcing locally.

Barriers to sourcing locally: (see table 6, also)
The greatest barriers to sourcing locally were the supply of local goods and distribution and infrastructure. The least problematic were consumer demand and the quality of goods. Other barriers mentioned by respondents included the short growing season, vendor co-ordination, marketing, and vendor selection.

No difference was found between co-ops of different states, different sizes, or different ranking (large, medium or small) in terms of the barriers to sourcing locally.

What local food is sourced:
The most consistently sourced products are egg, syrup and honey, and baked goods. Nuts and fish were most often never sourced, presenting opportunities for diversification on some smaller operation. Over one-quarter of the co-ops do not source local preserves of any kind. Salsa was most frequently mentioned as a locally-made preserve, but there was a repeatedly a question as to whether all the ingredients were local.

No difference was found between co-ops of different states, different sizes, or different ranking (large, medium or small) in terms of what they sourced locally, and with what frequency.

General observations
Several co-ops have implemented mentorship programs to help new farmers to meet the co-op's criteria for delivery, and have implemented regular delivery schedules. Others have mediated with growers to establish who is responsible for which crop throughout the year.

Most co-ops mentioned that some items are simply not available in their region, while other co-ops do have local sources that are not strictly organic (many co-ops are committed to sourcing only organic goods). While Maine's co-ops communicate regularly, and share information like where to find local products, most states in the NE do not have such strong co-op networks. Many Vermont co-ops mentioned that searching for local sources was too time consuming, and that they did not communicate much with other VT co-ops to find sources.

VAICS
14 out of 50 VAICS surveys were completed and returned (28% response rate).

VAICS members reported sourcing between 1-5% of their inventory from local sources (mean: 1.85%, SD: 1.214).

Reasons for sourcing locally: (see table 8, also)
The strongest reason for sourcing locally was the relationship with producers, followed by the quality of local products and demand for local food. Political and environmental reasons the least important. Further reasons mentioned by respondents included freshness and reciprocity with vendors.

Barriers to sourcing locally: (see table 9, also)
Distribution and logistics proved to be the biggest barrier, followed by quality and consumer demand – unlike what co-op managers reported. Further barriers mentioned by respondents included excessive state regulations and regulation compliance, scheduling deliveries, locating sources, and inconsistent billing procedures (becoming time-consuming).

What local food is sourced: (see table 10, also)

Meat, eggs, milk and dairy were reported to be sourced year-round by all, and cheese, preserves, and baked goods year-round by almost all. Nuts were reported to never be sourced by any of the stores, while fruit, produce, and fish were reported to be sourced seasonally. The best-selling items were maple syrup, VT cheese, baked goods, milk, salsa and meat. They would like to find more consistent sources for produce.

Vermont Local Food Distribution Map

Attached is a portion of the GIS map designed by Becca Grover, a recent graduate of UVM's geography program. This map shows the distribution of consumer co-ops (yellow dots), farmer's markets (green dots), farm stands (pink dots), and CSA farms (purple dots). Each type of local food outlet is viewable on a separate overlay.

While no statistical analysis has yet been completed, by looking at the map two trends appear to emerge: consumer co-ops are present where other local food venues also exist; and some areas of the state appear to lack both direct local food sale options and consumer co-ops, most notably the Northeast Kingdom, and Bennington County.

The next step is to correlate the relative location of each co-op to the mean centers of local food activity (as calculated by the program ArcInfo), and to demographics including population density, median income, land-use, and business distribution.

For the purpose of my thesis, I will do a case study of two VT co-ops. I will make two more overlays, one for each co-op, showing the distribution of the farms that each co-op sources from. I will be able to calculate the distance that the food travels from each farm to its destination, and make further correlations with the responses made by these co-ops on the survey.

Recommendations and future studies

Recommendation:

-Each co-op or country store should report what it is searching for in terms of local foods, as well as it's criteria in terms of packaging, infrastructure limitations, and distribution requirements to a central overseer (NOFA, the Co-operative Grocer, a new entity, etc). Growers looking for market opportunities can consult this listing and determine whether a given co-op is a good fit.

-Formal networks should be created among co-ops of each state and within the region for sharing information with regards to sourcing locally. While the scale may vary among the different co-ops, they all seem to be affected by the same distribution barriers.

-Continue efforts to reestablish local and regional canning and preserving businesses. Many farmers are adopting season-extending methods, but preserving local foods for year-round consumption may result in an increase in local production by providing farmers with a new market.

Future studies:
- Similar analysis can be focusing other local food intermediaries such as restaurants, schools, universities, hospitals and prisons.

- As distribution appears to be the key barrier, feasibility studies of small-scale distribution run by farmers, run by local consumer co-ops, or run by 3rd party distributors could be fruitful.

- Continuing work with the state local food map: doing more case-studies of individual co-ops' local food sources, and including the local sources of other local food outlets (farmer's markets, restaurants, etc.)

Below are the more detailed results, including tables.

CO-OPS

Vermont Co-ops

Adamant Co-op
Brattleboro Food Coop
City Market- Onion River Coop
Buffalo Mountain Food Coop
Middlebury Natural Foods Co-op
Hunger Mountain Coop
Plainfield Co-op
Putney Food Co-op
Rutland Area Food Co-op
Springfield Food Co-op
St. Johnsbury Food Co-op
Upper Valley Food Co-op
South Royalton Market

Vermont Co-ops – General Demographics

Urban 5
Suburban 3
Rural 5

Table 1. Vermont consumer co-op by ranking size: average percent sourced locally, average number of farms sourced from, contribution to the local food market.

Co-op size	**Number**	**Average Local Purchase (percent)**	**Average Local Farms**	**Contribution to Local Food Market**
Small (<$1.2 million in sales)	8	18	69	$141,454 - $222,454 *
Medium (<$8.5 million in sales)	4	19	51	$873,651**
Large (>$8.5 million in sales	1	35	200+	$2, 975, 000***
VT Total	13	24	93.3	**$3,990,105 - $4,071,105**
NE Total	67	16.78	40.67	$22,015,000 - $22,295.000****

* As only two small co-ops were able and willing to share their income statements, this calculation is based on a $50,000 and also a $100,000 in total sales for the remaining six co-ops. Some may have lower total sales; most may have higher total sales, so these calculations are conservative estimates.
** As only one medium co-op was able and willing to share its income statement, this calculation is based on $1.2 million total sales for the remaining three co-ops.
***There is only one large co-op in Vermont, and the total sales was not available. This estimate is based on $8.5 million total sales.
****NE totals are based on 16%, 16% and 23% (small, medium and large, respectively) average local food purchase by co-ops, whereas VT total contributions are based on 18%, 19%, and 35% (small, medium, and large, respectively). As such, Vermont's contribution represents a little over 18% of the New England total.

Small VT co-ops purchase an average of 18% of their food products from local sources, source from an average of 69 farms each, and contribute between $141,454* and $222,454* to the local food market annually.

Medium VT co-ops purchase an average of 19% of their food products from local sources, source form an average of 51 farms, and contribute $873,651** to the local food market annually.

Large VT co-ops purchase an average of 35% of their food products from local sources, source from an average of 200+ farms, and contribute $2, 975, 000*** to the local food market annually.

An estimate of the contribution of all VT co-ops to the VT local food market is:
Very conservative: $3,990,105
Moderately conservative: $4,071,105

For comparison, the VT SAC Report Summary from 2006 reported that the state's total agricultural economy was $2,615 million in 2000. The total in *direct* sales of local food – including all CSA farms, farmer's markets, and farm stands – in VT was $9.5 million, as reported by the 2002 Census of Agriculture.

All Co-ops in the Northeast

Consumer co-ops sourcing locally – responses from 67 co-ops in the Northeast.
Please see the attached survey for exact wording and layout of questionnaire.

Table 2. The number and percent of sample of co-ops by state

State	Number of Co-ops	Percent of Sample
VT	13	19.4
ME	5	7.5
MA	8	11.9
NH	5	7.5
RI	1	1.5
CT	1	1.5
DE	1	1.5
NY	15	22.4
PA	5	7.5
MD	7	10.4
NJ	3	4.5
WV	1	1.5
VA	2	3

Table 3. Number and percent of towns by size

Town Size	Number of Co-ops	Percent of Sample
Urban	34	50.7
Suburban	17	25.4
Rural	16	23.9

Table 4. Number and percent of co-ops by rank

Rank	Number of Co-ops	Percent of Sample
Small (<$1.2 million)	35	52.2
Medium (<8.5 million)	23	34.3
Large (>8.5 million)	9	13.4

Table 5. Rating possible reasons for sourcing locally, percent of sample and mean response.

Reason	**Very Weak (1)**	**Weak (2)**	**Neutral (3)**	**Strong (4)**	**Very Strong (5)**	**Mean**
Consumer demand	1.5	1.5	21.2	33.3	42.4	4.06
Quality of goods	1.5	0	10.6	43.9	42.4	4.21
Supply of goods	1.5	16.9	41.5	18.5	21.5	3.29
Relationship with producers	1.5	3.0	9.1	28.8	57.6	4.31
Cost of goods	9.2	36.9	30.8	13.8	9.2	2.68
Ethical	3.1	0	10.8	29.2	56.9	4.24
Political	10.8	3.1	20.0	27.7	38.5	3.69
Environmental	0	0	6.1	21.2	72.7	4.60

The strongest reasons were environmental and relationships with producers. The cost of local and the supply of local food are the weakest reasons for sourcing locally.

No difference was found between co-ops of different states, different sizes, or different ranking (large, medium or small) in terms of their reasons for sourcing locally.

Other reasons that were mentioned include: (percent of respondents)
-Supporting a local economy, 34,5%
-Community building, 7.5%
-Preserving ag land, 6%
-Supporting local farmers, 6%
- Health, freshness, 3%

Table 6. Rating possible barriers to sourcing locally, percent of sample and mean response.

Barrier	**Not at all problem atic (1)**	**Not problem atic (2)**	**Neutral (3)**	**Problem atic (4)**	**Very Problem atic (5)**	**Mean Answer**
Consumer demand	57.6	18.2	16.7	7.6	0	1.72
Quality of goods	50.0	24.2	18.2	6.1	1.5	1.82
Supply of goods	6.3	17.2	29.7	28.2	18.7	3.19
Distribution and logistics	15.2	15.1	27.3	25.8	16.7	3.08
Cost of goods	25.8	25.8	33.3	10.6	4.5	2.37
Working with numerous vendors	25.0	20.3	32.8	20.3	1.6	2.42

The greatest barriers to sourcing locally were the supply of local goods, distribution and infrastructure. The least problematic were consumer demand and the quality of goods.

No difference was found between co-ops of different states, different sizes, or different ranking (large, medium or small) in terms of the barriers to sourcing locally.

Other barriers mentioned included: (percent of respondents)
-Short growing season, 14.9%
-Vendor co-ordination, 13.4%
-Marketing, 4.5%
-Vendor selection 3%

Several co-ops have implemented mentorship programs to help new farmers meet the co-op's criteria for delivery, and have implemented regular delivery schedules. Others have mediated with growers to establish responsibility for each crop throughout the year.

Most co-ops mentioned that some items are simply not available in their region, while other co-ops do have local sources that are not strictly organic (many co-ops are committed to sourcing only organic goods). While Maine's co-ops communicate regularly, and share information like where to find local products, most states in the NE do not have such strong co-op networks. Many Vermont co-ops mentioned that searching for local sources was too time consuming, and that they did not communicate much with other VT co-ops to find sources.

Table 7. Sourcing local food by type of food, percent of sample and mean response

Category	Never (0)	Seldom (1)	Seasonally (2)	Always (3)	Mean
Fruit	3.1	1.5	78.5	16.9	2.02
Nuts	84.6	6.2	7.7	1.5	0.26
Produce	0	0	66.2	33.8	2.27
Meat	18.5	3.1	0	78.5	2.3
Fish	81.5	0	4.6	13.8	0.47
Eggs	0	1.5	3.1	95.4	2.85
Milk	25.0	6.3	1.6	67.2	2
Cheese	15.4	3.1	0	81.5	2.39
Other Dairy	20.0	1.5	1.5	76.9	2.27
Syrup/Honey	3.1	1.5	3.1	92.3	2.76
Preserves	26.2	7.7	9.2	56.9	1.91
Baked Goods	6.2	3.1	0	90.8	2.67

The most consistently sourced products are egg, syrup and honey, and baked goods. Nuts, fish were most often never sourced, presenting opportunities for diversification on some smaller operation. Over one-quarter of the co-ops do not source local preserves of any kind.

No difference was found between co-ops of different states, different sizes, or different ranking (large, medium or small) in terms of what they sourced locally, and with what frequency.

Vermont Alliance of Independent Country Stores (VAICS)

There are 50 registered VAICS members; 14 responded to the survey (28% response rate).

Q.1: Please rate the following reasons for sourcing locally from 1-5 (1= very weak reason; 5= very strong reason), according to your store's experience.

Table 8. VAICS reasons for sourcing locally, percent of respondents by answer; mean response, and standard deviation.

Reason	**1 v. weak**	**2 weak**	**3 neutral**	**4 srtong**	**5 v. strong**	**Mean response**	Standard Deviation
Consumer demand	0	21.4	7.1	42.9	28.6	3.79	1.12
Quality of local products	0	0	33.3	41.7	25	3.92	0.79
Supply of local products	23.1	0	15.4	30.8	30.8	3.46	1.56
Relationship with producers	0	0	30.8	38.5	30.8	4.00	0.82
Cost of local products	15.4	23.1	30.8	15.4	15.4	2.92	1.32
Ethical reasons	15.4	15.4	23.1	30.8	15.4	3.15	1.13
Political reasons	61.5	0	7.7	23.1	7.7	2.15	1.57
Environmental reasons	46.2	0	23.1	15.4	15.4	2.54	1.61

The principal message here is that the respondents have noted that there is consumer demand for local products. The strongest reason for sourcing locally was the relationship with producers, followed by the quality of local products and demand for local food. Political and environmental reasons the least important.

Further reasons mentioned by respondents:
- Freshness
- Reciprocity with vendors

Q.2: Please rate the following barriers to sourcing locally from 1-5 (1= Not Problematic; 5= Very Problematic), according to your store's experience.

Table 9. VAICS barriers to sourcing locally, percent of respondents by answer; mean response, and standard deviation.

Barrier	**1 not at all**	**2 not**	**3 neutral**	**4 strong**	**5 v. strong**	**Mean**	Standard Deviation
Consumer demand	53.8	30.8	15.4	0	0	3.79	1.12
Quality of local products	25.0	33.3	41.7	0	0	3.92	0.79
Supply of local products	0	33.3	16.7	33.3	16.7	3.46	1.56
Distribution and logistics	20	20	20	20	20	4.00	0.82
Cost of local products	0	38.5	15.4	7.7	38.5	2.92	1.32
Multiple vendors	16.7	41.7	16.7	8.3	16.7	3.15	1.13

Further barriers mentioned by respondents:
- Excessive state regulations, and regulation compliance
- Scheduling deliveries
- Locating sources
- Inconsistent billing procedures (becomes time-consuming)

Table 10. Sourcing local food by type of food, percent of sample and mean response

Category	Never (0)	Seasonally (1)	Always (2)	Other	Mean (SD)
Fruit	0	100	0	0	1 (0.0)
Nuts	100	0	0	0	0 (0.0)
Produce	0	90.9	9.1	0	1.09 (0.3)
Meat	0	0	100	0	2 (0.0)
Fish	20	40	40	0	1.2 (0.84)
Eggs	0	0	100	0	2 (0.0)
Milk	0	0	100	0	2 (0.0)
Cheese	0	7.1	92.9	0	1.93 (0.27)
Other Dairy	0	0	100	0	2 (0.0)
Syrup/Honey	0	0	100	0	2 (0.0)
Preserves	8.3	16.7	75	0	1.67 (0.65)
Baked Goods	0	0	91.7	8.3	1.93 (0.27)

VAICS members reported sourcing between 1-5% of their inventory from local sources (mean: 1.85%, SD: 1.214).

VAICS Best-selling items:
- Maple syrup (5)
- VT cheese (3)
- Baked goods (2)
- Milk (2)
- Salsa (1)
- Meat (1)

Would like to find sources for:
- Produce
- Strawberries

One respondent's comment: "Our policy is to buy all we can locally, given reasonably good price and quality because 1. Our customers want locally grown food, and 2. The local producers are also our customers."