Local Development Pressure and Land Use Decisions: Farmland Change in a Diversified Agricultural Sector

High land prices and development, a shift away from a dairy-based agricultural commodity economy and the explosion of the local food movement have contributed to the diversification of products and land use in Vermont. Many farmers have found economically viable niches in areas such as community supported agriculture, direct sales, organic products and specialty foods. The Center for Rural Studies (CRS) conducted a farm-level survey of members of targeted agricultural networks in conjunction with farmer interviews and conversations with key agricultural and planning stakeholders to determine how farmland is being used in the state and investigate the relationship between development pressure and land use.

The farmers were asked about their products, current and anticipated land use and their perceptions of development pressure and local government bodies' level of support for farmers and understanding of agricultural issues. The findings give insight into the current state of agriculture in Vermont and offer a glimpse at future trends. They also highlight the land-use and planning implications of the state's evolving agricultural economy.

CRS mailed self-administered questionnaires to all the farmer members of the Northeast Organic Farmer Association of Vermont (NOFA-VT), Vermont Fresh Network (VFN) and Women's Agricultural Network (WAgN) as well as farm stand owners all over the state. There were 474 valid responses. The results have a confidence interval of 95 percent and a margin of error of +/- 4 percent.

The main research findings are as follows:

Survey findings

- **Products.** According to the 474 farmer responses, the most common primary products were vegetables (38 percent), dairy products (23.9 percent), and fruit (19.2 percent). Animal feed, beef, other meat animals, maple syrup and horticulture were all in the 14 to 16 percent range. Fiber and eggs were the next most common products in the "other" category, with 5.7 and 4.6 percent, respectively. Not all products fell within specified categories. These niche products included compost, honey, worms, mushrooms, goat's milk soap, oilseed crops and lactofermented vegetables like sauerkraut.
- **Diversification.** Slightly more than half of respondents said they had two to four main products, compared to just under 40 percent who said they had one main product, 8.3 percent who identified five to seven different product categories and 1.1 percent who identified eight or nine categories. It is important to note that each respondent may have multiple items in each product category.

- **Dairy.** About 24 percent of respondents had dairy cows. Of these, slightly more than half also had non-dairy products.
- **Organic.** Slightly less than half of respondents' farms were certified organic, with 7.3 percent having only certain organic products.
- **Direct sales.** The majority of respondents (61.2 percent) sold their products from their farms. Wholesale, farmers' markets and local stores were the next most common sales outlets. The most common "other" outlets were craft shows and fiber events, co-ops, mail order and the Internet. Almost 60 percent of the respondents sold their products at more than one type of outlet, with 42 percent selling at two or three types and 17 percent selling at four to seven.
- Land ownership. Most of the respondents owned all or some of the land they used for farming or production. Seventy-two-point-five percent owned their land, while 14.1 percent used a combination of owned and leased land. The majority of respondents used less than 50 acres for farming and/or making their products, with 37.1 percent using less than 11 acres and 11 percent using less than one acre. In addition to working farmland, almost half of the respondents had forested land and 22 percent had conserved land.
- Land use. Most of the respondents cited a prior agricultural use for their land. The most common uses were pasture (42.4 percent), dairy (35 percent), cropland (28.7 percent) and forest (25.1 percent). About 27 percent of respondents have some type of conservation easement on all or part of their land, ranging from 1 to 4,500 acres. The majority (60 percent) of respondents with conservation easements said their land was conserved as working farmland.
- Plans to sell land. Almost a third of Vermont farmers surveyed plan to sell some or all of the land they use for farming. Most of these said they would sell in one to five years.
- **Plans to buy land.** Almost 40 percent of respondents said they plan to acquire more land for farming and/or production. Of those who did not plan to purchase more land, 43.7 said it was because they didn't need any more and 44.3 percent cited the cost of land, availability or a combination of the two as reasons that they did not plan to acquire more land.

• Development pressure.

- Farmers' decisions to purchase or sell their land (and likely continue or cease farming) is significantly linked to their perceptions of development pressure and local boards' support for agricultural operations. Also, the more development there is around a farmer's land, the less likely s/he is to feel that local boards understand agricultural issues or support agricultural operations.
- Slightly more than a third of respondents said they felt some pressure to sell or develop their land. Farmers' feelings of pressure to sell increased as the level of development around their farms increased. Meanwhile, 18.9 percent said they felt pressure from neighbors to change the way their farm operates.

- Farmers with conservation easements were less likely to feel pressure to sell or develop their land than those without easements. However, farmers with conservation easements felt slightly more pressure to change the way their farms operate than those without easements.
- Local support. Almost 80 percent of respondents said their local boards had some degree of understanding of agricultural issues and support for agricultural operations. About 10 percent of respondents said their local boards had no understanding of agricultural issues or support for agricultural operations. Slightly more respondents said their local boards supported agricultural operations than said their local boards actually understood agricultural issues.

General findings

- Vermont's farms are diversified. Historically, Vermont farms have found success in diversification. New trends in community supported agriculture, direct sales, organic products and specialty foods are bringing more success to the state's smaller, more diversified farms.
- There is increased public awareness of local food systems. Local food issues are high in the public awareness, as evidenced by regular media coverage, increased membership in "localvore" groups and a rising amount of local foods featured at retail and restaurant outlets. Numerous organizations and programs, such as the Intervale Center, Shelburne Farms, Vermont Food Education Every Day and the Vermont Fresh Network, are seeking to increase agricultural literacy by more directly linking local food consumers to local food producers.
- Vermonters value viable working farmland. Research continues to show that farming is a key aspect of rural life. Agriculture helps preserve open space, wildlife habitat and is an integral part of Vermont's history and culture. Respondents to the Center for Rural Studies 2007 Vermonter Poll said the most serious issue related to agriculture in Vermont is the loss of farms and farmland and the most serious issue related to Vermont farms is economic viability and the cost of farming. Respondents to the 2006 Vermont Land Trust Conservation Survey ranked having working farms and locally grown food in the state as first and third in importance, respectively, from a list of specific indicators.
- Vermont has a strong agricultural economy. The agricultural base is a source of jobs and income, a renewable use of local resources, an essential source for local foods, reinforces the connection between farmer and consumer and ensures a greater proportion of food dollars stay in a community. Vermont has the highest per capita direct farmer to consumer sales and a 41 percent increase over direct sales reported in 1997 (NASS, 2002). The broader economic impact includes other businesses, tourism and tax revenue from farmland. The market value of agricultural products in Vermont is \$473 million (NASS, 2003). However, using IMPLAN (Impact Analysis for Planning) software, the Vermont Sustainable Agriculture Council estimated that the total economic impact of Vermont agriculture is \$2.63 billion (2005). This model includes the value-added and indirect economic impacts.

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