



# A 2018 Exploration of the Future of Vermont Agriculture

**Ideas to Seed a Conversation and a Call to Action**

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*Produced by University of Vermont Extension and the Vermont Housing & Conservation Board*

## Background

In spring 2018, a small group of people got together to grapple with the challenge of responding to ongoing trends in Vermont agriculture. The resulting paper, “A 2018 Exploration of the Future of Vermont Agriculture,” is our attempt to capture the assessment that emerged from several conversations. Our hope is that this paper will serve as a launching point for any number of conversations across the state, and we are eager to go investigate further some of the ideas that are emerging as critical approaches to protect our agricultural resources (new approaches and ongoing essential investments). We invite you to utilize the paper as appropriate in your work.

In summary, our analysis of this issue is that a variety of factors are combining that threaten VT’s economy, community, and culture. We see existing activities (e.g., land conservation easements and technical assistance) as highly valuable, but not sufficient to fully address anticipated trends. Therefore, we believe new approaches must be identified, evaluated, and implemented, in addition to sufficiently investing in existing high-impact approaches. We invite feedback on how to undertake such a process, and how to fund, administer, and coordinate implementation across our network.

## Participants

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## Introduction

Vermont's agricultural future is at an inflection point. The agricultural landscape, and the people who work that land, are essential to Vermont's communities, economy, and culture. However, these resources are at risk. We anticipate that a combination of unfortunate market forces and a generational transfer of assets will transform our agricultural sector in the next decade, in many ways that Vermonters will not like. The crisis is most visible in the state's conventional dairy industry, though vegetable and livestock farmers and organic dairy producers are also facing significant market-based challenges. In fact, nearly all farming sectors are confronted with downward price pressure on producers, increasing production expenses, a need for increased marketing and sales savvy in order to sell products in an increasingly competitive and complex marketplace, challenges in transitioning assets to a new generation of owners, and an ongoing shift in our economy and cultural traditions away from land based agriculture and towards processed, convenience foods.

A small group of colleagues came together in 2018 to discuss and articulate these current trends and upcoming challenges, and to begin a conversation about what actions might be taken to protect our agricultural assets (including soil, farmland, and farm and food infrastructure) through this potential transformation. It is our intention to recognize the trends and work to address them, rather than try to reverse them.<sup>1</sup>

We have a shared goal to support and invest in farmers, entrepreneurs, and innovators as they adapt and change to preserve and promote a prosperous working landscape for the future of Vermont, and to avoid a major loss of Vermont's agricultural resources – land, people, infrastructure, and farm equity.

Our objectives are to:

- Articulate the crisis and overall situation by documenting the current situation, trends, and risk with evidence-based information that challenges others to think broadly about the challenges and solutions;
- To find consensus across a number of stakeholder organizations and institutions; and
- To develop and assess a list of strategies and investments that can address the situation and set Vermont up for the best possible outcomes. (A preliminary list is included in this document.)

Our core principles are:

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<sup>1</sup> This document and effort between the organizations engaged thus far exists within a context of other organizational and statewide efforts and conversations articulating and addressing the current crisis in the dairy industry and in some cases the broader market and succession challenges facing Vermont farmers across agricultural sectors. The Vermont Dairy & Water Collaborative is a group convened over the summer and into this fall to identify strategies to address key challenges for the dairy industry; the Agency of Agriculture, Food & Markets is planning a conference for 2019 to bring creative thinking to the dairy crisis conversation; Agrimark is hosting a conversation to (re)consider supply chain management solutions; the Lieutenant Governor is currently hosting discussions to look at these challenges; and the Vermont Farm to Plate Initiative is taking stock of where Vermont's food system is at as it transitions from the current 10 year strategic plan and plans for what might come next. Many knowledgeable and caring individuals and organizations are engaged in these various conversations, and we expect there to be a strong set of conversations and ideas flowing – including with legislative and political leaders – as we head into 2019.

- Successful, profitable agricultural enterprises are essential to having a strong agricultural economy and protecting our farmland resources;
- Farmers and landowners should be compensated for the benefits that their stewardship of land, water, and soil provide to Vermont's people and economy; and
- There is no one best strategy to address the challenges to the agricultural economy; rather, a coordinated effort on a set of key activities and investments will be most successful.

The purpose of this effort is to invite a conversation and inquiry into those activities and investments.

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## Trends and Challenges

The mainstay of Vermont's agricultural economy for the last century has been the dairy industry. Dairy farms still contribute close to 70% of Vermont's farm sales (~\$1.3 billion annually), and manage over 80% of Vermont's open land<sup>2</sup>, making Vermont the top state in the U.S. in its dependency on a single commodity<sup>3</sup>. While the dairy industry significantly contributed to building a strong Vermont agricultural sector in the 1900s, structural challenges affecting the dairy industry are resulting in historic farm losses across the state, negative profit margins for many farms, and slow and steady declines in farm equity for many farm families. The outcomes of this process are consolidation and farm closures: the number of dairy farms dropped from about 1,100 in 2008 to 705 in October 2018.<sup>4</sup> Vermont lost 91 dairy farms since January 2018 alone, representing a 13% loss in the first nine months of the year.

Additionally, 92% of New England farmers 65 and older have no one under 45 working with them to succeed them<sup>5</sup>, and relatively few incoming farmers are interested or prepared to assume responsibility for large-scale operations (including the debt that may come with them). Although a reasonable portion (21.6%) of Vermont's agricultural land is conserved, we must confront the possibility that much of Vermont's agricultural land may be underutilized or at risk of being lost, potentially permanently, to development or alternative land uses in the near future.

Agriculture has changed globally, driven by technology, consolidation, consumer demand, federal policies, and international trade. In response, efforts to return to more local and regional food systems, and consumer interest and willingness to pay premiums for such products, have helped build new markets for smaller scale, niche businesses as well as

<sup>2</sup> Vermont Agency of Agriculture, Food, and Markets, 2015. *Milk Matters: The Role of Dairy in Vermont*.

[https://vermontdairy.com/wp-content/uploads/2015/12/VTD\\_MilkMatters-Brochure\\_OUT-pages.pdf](https://vermontdairy.com/wp-content/uploads/2015/12/VTD_MilkMatters-Brochure_OUT-pages.pdf)

<sup>3</sup> Parsons, Bob, no date. Vermont's Dairy Sector: Is there a sustainable future for the 800 lb. gorilla? Opportunities for Agriculture Working Paper Series, Vol. 1, No. 4. Food System Research Collaborative, UVM Center for Rural Studies. [http://www.uvm.edu/crs/reports/working\\_papers/WorkingPaperParsons-web.pdf](http://www.uvm.edu/crs/reports/working_papers/WorkingPaperParsons-web.pdf)

<sup>4</sup> Vermont Agency of Agriculture, Food, and Markets, 2018. Vermont Dairy Data – October 23, 2018.

<sup>5</sup> Land for Good and American Farmland Trust, 2016. <http://landforgood.org/wp-content/uploads/Vermont-Gaining-Insights-AFT-LFG.pdf>

wholesale and larger scale opportunities for Vermont farmers outside of commodity markets. While the majority of Vermont's agricultural products are still commodity dairy products, our agricultural economy has diversified widely over the past two decades, there is a more entrepreneurial spirit across the industry, and many young individuals are interested in diversified, rather than dairy, farming in our state and region.

Despite this innovation and diversification, the resulting agricultural activity is not happening at the scale necessary to utilize the vast acreage that is leaving dairy production. Some of the more profitable farm business models in Vermont today utilize less farmland than the traditional dairy farm model, including those that focus on on-farm dairy processing, vegetables, livestock production for beef or meat products, or downsizing a dairy herd and transitioning to organic. The number of agricultural acres in Vermont dropped from 1,315,315 in 1997 to 1,251,753 in 2012; over that same period of time, the number of farms in Vermont increased from 7,063 to 7,338.<sup>6</sup> Thus, we are seeing a trend towards smaller farm operations in terms of acreage in active production.<sup>7</sup> When small and mid-sized dairy farms sell their herds, we often see one of two outcomes: either a larger dairy farm leases the land for additional corn and/or hay acreage, or the farm is converted to a smaller farm that utilizes less acreage. We expect to see the latter trend grow over the coming years, and expect Vermonters to notice more fallow farmland.

**In our opinion, the magnitude of this issue may be historic: the marketplace has failed the farmer and in our lifetimes Vermont may lose the agricultural foundation of our working landscape, with all it means to our quality of life and the statewide value from agricultural exports (\$776 million annually), the agricultural economy (\$2.6 billion annually)<sup>8</sup>, the recreational economy (\$1.51 billion annually<sup>9</sup>), and the tourist economy (almost \$3 billion annually<sup>10</sup>). And this is occurring at a time when more consumers want to buy local and know where their food comes from, and are concerned with the safety of our food supply. It is also occurring at a time when climate disruptions may necessitate more local production for overall food security.**

Given these trends, public policy makers, organizations, and community members who care about our critical resources of land and soil, and wish to protect them for the future of Vermont, have the opportunity and obligation to determine how to support our agricultural enterprises as they work to adapt and innovate through what we anticipate will be a significant shift in the course of Vermont's agricultural economy. We believe the response should not be tied to any particular agricultural product, but should instead embrace the necessity of

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<sup>6</sup> We will gain a more recent picture of these trends when the 2017 Census of Agriculture data is released in February 2019.

<sup>7</sup> Average farm size dropped from 189 acres in 2002 to 171 acres in 2012; median farm size dropped from 100 acres in 2002 to 80 acres in 2012. Source: USDA National Agricultural Statistics Service, <https://quickstats.nass.usda.gov/>.

<sup>8</sup> VT Agency of Agriculture, Food, and Markets, 2016. *Agriculture in Vermont: Highlights*.

[http://agriculture.vermont.gov/sites/ag/files/pdf/news\\_media/VT%20Ag%20%26%20Agency%20Overview%20Final%202016.pdf](http://agriculture.vermont.gov/sites/ag/files/pdf/news_media/VT%20Ag%20%26%20Agency%20Overview%20Final%202016.pdf)

<sup>9</sup> Outdoor Industry Association, 2018. <https://outdoorindustry.org/press-release/outdoor-recreation-thriving-vermonts-large-congressional-district-1-51-billion-annual-resident-spending/>

<sup>10</sup> VT Tourism Research Center: <http://www.uvm.edu/tourismresearch/?Page=tourism.html>



conserving agricultural resources alongside the reality that Vermont agriculture may look different in the future than it does now. The question we wish to examine further is which combination of activities and investments are best suited to that purpose.

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## History of the Response

Simultaneous to the above-mentioned trends in commodity, wholesale, and direct market shifts, a plethora of technical and financial assistance has been directed to support entrepreneurs as they explore new technologies, new markets, diversification, and innovations such as robotic milking, value-added enterprises, and agritourism. In this way, many farming operations have successfully navigated the challenges, found creative ways to stay in farming and even add family members to their businesses, and have avoided the ongoing, downward price pressure and resulting loss of farm equity experienced by some of their peers.

An examination of the last 40 years of agriculture in Vermont shows a broad response from public policy, agricultural enterprises, and the nonprofit community:

- **Diversification and value-added products** to get out of the commodity economy where producers cannot control their price and compete for the bottom of the price market. In addition, value added production adds creativity to commodity markets, creates new products, and builds new markets and new jobs for the local and regional economy. Unfortunately, produce and diversified farms also feel many of the economic pressures experienced by the dairy industry. Although they do not operate under a commodity model, they face similar challenges related to covering their operation costs with the prices they are able to command in the marketplace, especially given increased market consolidation within distribution and retail. The market has mostly failed to support the social and environmental externalities that some farms attempt to internalize, such as livable wages (for farm owners and farm workers alike), animal welfare, and natural resource conservation practices (e.g., healthy soil, water quality).
- **Conservation easements** to inject funds into farm businesses and lower land cost for new farmers. Working lands conservation efforts have been highly successful in the state, with 21.6% of the agricultural landscape under conservation easement.<sup>11</sup>
- **Agronomic technical assistance**, provided by a wide variety of state, federal, and non-profit programs, directly informs decisions that farmers make about their production systems. For example, the majority of farmers who receive ongoing technical assistance on conservation practices (such as cover cropping, no-till, nutrient management planning, and improved soil management) subsequently adopt those practices on their land.
- **Business assistance** to mitigate risk and leverage investment capital. Various data demonstrate a correlation between access to business technical assistance and increased viability due to higher revenues and more full time employees, as compared

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<sup>11</sup> Vermont Land Trust, email communication dated September 18, 2018.

with businesses who have not accessed business assistance. For example, the Vermont Farm & Forest Viability Program found that for businesses with at least three years in production, two years of business planning generates a 62% increase in net income and significant improvements in entrepreneur business skills.

- **Use value taxation** through Vermont's Current Use program allows for a reduced tax rate on agricultural land and represents a significant value to producers by lowering the ownership costs of productive land. In 2017, this program provided a savings of \$60.9 million to enrolled landowners.<sup>12</sup>
- **Brand marketing** (and a premium price) for dairy and non-dairy agricultural and food products to insulate from the depressing influence of the regional market and allow local farmers to capture the production, processing and distribution parts of their value chain. While some local brands have succeeded, there has not been a unified and organized Vermont brand success. Many had hoped that a shift to organic production would help dairy farmers evade the large price swings in the commodity marketplace of often below the cost of production pay prices. However, organic milk prices have not been immune to declines since a 30-year high in 2015, although they are still substantially higher than conventional milk prices being paid to producers.
- **Supply management** to reduce milk supply and drive market prices to a sustainable level for farm viability. Sporadic efforts have been historically important but have not provided a system-wide solution over the long term. In contrast to the U.S. model, the Canadian system has succeeded in maintaining a pricing structure that offers stability and compensates farmers at a rate commensurate with their costs.<sup>13</sup>
- **Land use planning** at the local and regional level as a tool for agricultural land conservation.<sup>14</sup>
- **Farm to Plate Network** to increase collaboration and alignment between organizations, agencies, and businesses with the common goal of increasing sales of Vermont-produced food and agricultural products. Includes a variety of sub-networks, including those working on technical assistance, education, farm to institution, and consumer awareness.

These and other strategies have made a difference to Vermont producers and the retention of agricultural resources, but they have not been sufficient to prevent the situation we find ourselves in today, and they are unlikely to reverse the overall trend and prevent the impending drop in agricultural activity due to a massive loss of active farm operations and a trend towards smaller acreage farm models. We believe an increased commitment to some of the above strategies, combined with potentially new and different strategies, are necessary going forward.

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<sup>12</sup> Vermont Department of Taxes, 2018. Property Valuation and Review.

<https://tax.vermont.gov/sites/tax/files/documents/2018AnnualReportBasedon2017Grand%20List.pdf>

<sup>13</sup> See [https://www1.agric.gov.ab.ca/\\$Department/deptdocs.nsf/all/econ16453/\\$FILE/17Production.pdf](https://www1.agric.gov.ab.ca/$Department/deptdocs.nsf/all/econ16453/$FILE/17Production.pdf)

<sup>14</sup> See <http://www.vtfarmtoplate.com/resources/collections/agricultural-land-use-planning-modules>

## Exploring New Strategies

Over the coming year, the authors of this paper plan to engage in a series of conversations with stakeholders (including those participating in the parallel efforts mentioned on page 1) and experts (including those from other states with relevant experience or knowledge) to continue to collect ideas and assess the relative value each strategy provides. We expect this effort to be hosted in existing or new work groups within the Farm to Plate Network. We believe that a variety of approaches will be necessary to achieve the goal of maintaining a thriving agricultural landscape in our state, and one of the outputs of this upcoming inclusive process will be a list of priority investments informed by additional evidence and experience.

In addition to those listed above, we plan to explore the following strategies, which may exist at some level in VT, but which we believe warrant further examination:

- Programs that compensate farmers and landowners for the social and environmental benefits of responsible land stewardship. This will further enable them to maintain and invest in the working landscape, natural areas, healthy soils, and clean water.
- Alternative ownership models (e.g., public or nonprofit) for conserved agricultural land, to ensure long-term agricultural use and facilitate land access by new farmers.
- Programs that help farmers transition gracefully into retirement.
- Legal and tax structure support for farms to enable saving for retirement and to ease intergenerational transfers.
- Non-agricultural policies and programs that have implications for farmer well-being (and their subsequent decisions related to their land), including healthcare and housing policy. Working in coalition with organizations focused on those issues will advance policies that are in the best interests of farmers and, by extension, the land itself.
- Transitioning to grazing, grains, and livestock-based enterprises that focus on feed grown here in Vermont.

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## Join the Conversation

We invite interested individuals, organizations, producers, and communities to reach out to us to engage in this effort. We specifically seek input on:

- other strategies that support a thriving agricultural landscape that we may have omitted from this paper; and
- any data on the efficacy of any strategy, whether listed in this paper or not, especially as measured by the amount of financial investment required, the number of acres kept in agricultural production, and ancillary social and environmental benefits.

We believe that a collaborative effort between those who share our vision for the future of Vermont agriculture has the potential to change the trajectory of our working landscape. We look forward to doing this work in concert with our colleagues across the state.