Chenango County Agriculture & Farmland Protection Plan

To ensure and advance the economic, social, and environmental fundamentals of agriculture in Chenango County for present and future generations.



Chenango County Agriculture & Farmland Protection Board

Update – 2021

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CHENANGO COUNTY AGRICULTURE & FARMLAND PROTECTION PLAN - 2021

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Chenango County Agriculture & Farmland Protection Board

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Background

Agriculture and Markets Law Section 3 "Declaration of policy and purposes" opens with the following statement, "the agricultural industry is basic to the life of our state". In the remainder of the section's introductory it explains that it is the State's responsibility to safeguard and support a viable and efficient agricultural industry for current and future generations. Section 3 can be found in the Appendix. Additionally, the Agricultural Districts Law, Article 25AA speaks to both state and county efforts to preserve and strengthen the development of agricultural lands as they are the basis to the state's natural resources.

Introduction

Agriculture is an ever-changing practice that is of vital importance to the economy and lifestyle of Chenango County. In Chenango County, the nature of such changes are impacted by both internal and external forces. Forces such as, development of prime farmland for other uses, commodity prices, lack of succession and property taxes. As well as social pressures such as, environmentally sustainable farming practices can contribute to the changes seen in the county. Some of these forces and pressures extend beyond what a local government can control and go directly to State, Federal, and often-global economic policies. The need to protect local agriculture and its farmland base from the effects of these pressures has become pronounced.

Additionally, loss of the farmland base, declining active production and diminished long-term commitment by farmers creates ripple effects on the agriculture industry in Chenango County. This causes allied agribusiness to become less abundant which transforms farm operations to become less economical and viable, impacting all county residents. One method for farmers to continue their production base is actively renting ground to non-farmers. Farmers would be able to afford all the land they own while still protecting it. Another method involves New York State's support of cultivating the industrial hemp market, which is used to manufacture an estimated 25,000+ products, provides an opportunity to upcoming and established farmers. ¹

Furthermore, with increasing consumer demand for healthier alternatives in public school lunches, as well as State and Federal funding to bring "local food" in schools, markets for locally grown food has skyrocketed. Funding such as United State Department of Agriculture's (USDA) Farm to School Grant Program² and New York State's Farm-to-School Program³ helps to connect schools with local food.

¹ Empire State Development, 2019

² (USDA, 2019)

³ (NYS Ag & Markets, 2019)

In response to the above opportunities and challenges, The Chenango County Agriculture and Farmland Protection Board (AFPB) recognized the need to update the Agriculture and Farmland Protection Plan adopted in 2012. The purpose of this update is to reassess the County's farmland and agricultural resources and establish initiatives to enhance the profitability of agriculture in the County by identifying opportunities, issues for agricultural and farmland preservation, formulate strategies and recommendations for implementation.

Part I

ACTIONS TAKEN TO RECOGNIZE AND PROTECT AGRICULTURE AND FARMLAND

Plan Update Process

Purpose of the Plan

The Chenango County Agriculture and Farmland Protection Plan Update - 2021 was developed to ensure long-term growth of the agricultural industry in the County. Chenango County has adopted numerous plans over the years that either directly relate to or have sections relating to agricultural protection. These plans include the 2016 Chenango County Comprehensive Plan, Chenango County Agriculture and Farmland Protection Plans of 1998 and 2012 and the Chenango County 2020 Vision.

Planning for Agricultural Protection

The 2016 Chenango County Comprehensive Plan was developed to provide guidance toward future growth and development through the identification of key policies and goals of County residents with respect to public health, safety, and general welfare. The plan is used to guide all major decisions in pursuit of what the County wants to become in the future.⁴ From the Comprehensive Plan five main economic development goals were established. They include:

- 1) Ensuring Chenango County is a safe, healthy, and stable community to reside.
- 2) Enhance and maintain a safe and efficient network of infrastructure.
- 3) Enjoy the diverse historic, cultural, recreational opportunities available to residence and visitors.
- 4) Align education and workforce to foster economic development.
- 5) Limit the impact of natural disasters and mitigate climate change.

As part of Chenango County's 2020 Vision Planning Project in 1991, County residents emphasized the importance of preserving the rural landscape, clean air, relaxed lifestyle, and sense of tranquility. However, the County's valued rural atmosphere is being gradually lost as farming activities and farmland areas diminish due to a variety of complex influences. The presentation of its report by the 2020 Vision Commission to the County Board of Supervisors

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⁴ Development, 2016

included the following statements that are evidence of the need and support for protection of agriculture and farmland. The main points of the plan regarding agriculture include:

- "The rural, small town agricultural profile so cherished can only be protected by planning for the wise use of land in our communities and countryside."
- "The County should develop broad brushed generalized development policies and a County plan identifying areas best suited for agriculture, residential, recreations, commercial, industrial, and open space uses"
- "Comprehensive strategies to prevent further loss of farmland should be developed. These strategies could include encouraging the adoption of agriculturally oriented local land use regulations to supplement the limited protection provided by the Agricultural District Law. Mechanisms for purchase of transfer or development rights to provide compensation to farmers for permanently maintaining farmland could also be investigated along with the potential for use of conservation easements tailored to the specific resources the landowner wishes to protect."
- "The Commission strongly encourages local acceptance of limited subdivision control in some of the more rural areas."
- "Many localities have not established guidelines for future land use and development decisions; some see planning as a process to be avoided. Most towns in the County have not used their authority to control the subdivision of land within their borders. This situation has potentially disastrous effects on the County, particularly on the agricultural resources that provide the context for much of the County's appeal and economic base. Continued production of forage, fiber, livestock, timber, and other products is critical to the long term social and economic viability, but farmland will continue to experience increasingly intense competition from non-agricultural land use." ⁵

2012 Agriculture and Farmland Protection Plan Summary of Findings and Recommendations

Chenango County has completed two (2) Agriculture and Farmland Protection Plans (AFPP), the first in 1998 and the other in 2012. Many of the issues discussed in 1998 and 2012 are very similar to the issues presented in this iteration, including the loss of farms and farmland, aging of farmers, development pressures and high property taxes on production land.

Both 1998 and 2012 AFPP have recognized the importance of agriculture to the local economy and quality of life. Farming contributes to the local economy in the form of employment, revenue, and protection of open space. Agricultural land requires fewer services than residential developments, contributing to local government budgets. Agricultural land contributed to the

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⁵ (Chenango County 2020 Vision Commission, 1992)

general quality of life by providing open space, wildlife habitat, buffer zones for sensitive areas and preserving the County's rural character.

The recommendations in the 2012 plan centered on four (4) main goals:

- 1) Promote Agricultural Economic Development
- 2) Assist Agricultural Producers with Cost-Control Measures
- 3) Encourage the Proper Use of Land and the Monitoring/Reporting of Changes`
- 4) Educate Producers, Consumers and Policy Makers

In conjunction with the stated goals, the AFPB felt that coordination and cooperation between organizations and businesses would be essential to achieving the goals. The goals could be achieved if:

- 1) Farmers make commitments to utilize the opportunities and support offered.
- 2) Town Boards fulfill their role in implementation of this Protection Plan and other land use strategies available to them.
- 3) Town Assessors apply State policies and procedures that assess farmland and its facilities at its "current use", not "highest and best use". Code properties accurately and promote agricultural exemptions.
- 4) Chenango County Planning Board pursues efforts to establish Comprehensive Planning that supports and protects farmland in all municipalities of the County.
- 5) Chenango County Board of Supervisors supports the economic needs of agriculture to the extent that it does for other economic sectors.
- 6) Chenango County Board of Supervisors encourages local Boards to support agriculture though the strategies in this plan, giving special consideration to land use planning that can retain the desirable rural atmosphere cited in the 2020 Vision Plan.
- 7) Cornell Cooperative Extension and Other Ag Support Agencies emphasize agriculture education and adoption of conservation practices for improved profitability and sustainability of all sizes of farm operations.
- 8) Consumers acknowledge the interdependence of the agriculture industry with their own well-being and quality of life by supporting County farmers through purchase of locally grown food and urge local government decisions that protect agriculture and farmland.
- 9) New York State government honors the letter and spirit of the Declaration of Policies and Purposes of the Agriculture & Markets Law of 1927.

In addition to the progress made towards the AFPP, municipalities have updated their comprehensive plans and/or passed a Town Right to Farm Law. With this updated AFPP, AFPB members and other interested parties and agencies, the County continues to complete a strategy for protecting farmland and enhancing the agriculture industry.

Public Participation

The Agriculture and Farmland Protection Board (AFPB), as part of the public participation section of the report decided to develop a survey. The survey questions are broken down into three (3) sections which are 1) land use description, 2) economics of the farm and 3) agriculture in Chenango County. The surveys were sent to 542 landowners within an agricultural district in July of 2020. As of December 2020, there were 85 applicable surveys returned. Results were

tabulated and organized. The survey questions and results can be found in the Appendix. Members of the AFPB also completed a C.OW.S. analysis on January 15, 2021 to identify challenges, opportunities, weaknesses, and strengths pertaining to agriculture in Chenango County.

In addition to the survey, from June 15th to July 15th, 2021 the Draft Plan was made available to the public on the Chenango County Department of Planning & Development website to allow the public to provide additional feedback regarding the plan. A press release was published in The Evening Sun to alert the public of this opportunity.

During this time period, no comments were received.

2020 Survey Conclusion

As a result of the 2020 survey, it was mainly

concluded that due to development pressures, commodity prices, and the lack of contiguous high-quality farmland; farmers are cautious of purchasing property, expanding operations, or starting new capital investments. Due to regional economics, young upcoming farmers are often discouraged by high property taxes, startup costs, commodity prices, low investment returns and inability to secure loans. Furthermore, even though farmers are experiencing the pressures stated above there is a very low number of respondents that stated they actively take advantage or would take advantage of farming related assistances such as farm budgeting, crop management, or dairy management.

The following conclusions have been determined from the respondent's answers and elaborated with potential actions to take to ensure and advance the economic, social, and environmental fundamentals of agriculture in Chenango County for present and future generations.



Chenango County agriculture and farmland protection board asks for public input

CHENANGO Chenango County Agriculture Chenango County Agriculture and Farmland Protection Board (AFPB) is asking for public input on an updated Chenango County Agriculture and Farmland Protection Plan. The AFPB, with support from the Chenango County Planning Department, has been weeking to under the

Planning Department, has been working to update the plan since Fall 2019.

"This plan will guide the development and policy of agriculture and farming in Chenango County for the next five to ten years, so it is important to get as much public feedback as we can to formulate a well-rounded and accurate plan. We have an idea of where farming will be in the

future, but we want addition-al feedback from residents to at feedback from residents to make sure they agree," said Chenango County Director of Planning Shane Butler,. In July 2020, a survey was sent to over 500 landowners selving questions on a variety

asking questions on a vari-ety of agriculture, farm, and ety of agriculture, farm, and development related topics. Utilizing survey responses, additional research, knowl-edge by those on the board, and data from the USDA Ag Census, the plan was updat-ed with current information, trends, new markets and more. The draft plan can be accessed on the county web-sites ways on chenange on yus/

site: www.co.chenango.ny.us/

lanning/agriculture/.
The public is asked to read

the plan and send comments by mail to Chenango County Department of Planning and Development, 5 Court Street, Norwich, NY 13815 or by email planning@co.chenango. ny.us.

Comments will be accepted until 5 p.m., July 15.

Once comments are incorporated, the plan will be reviewed by the AFPB one more time before sending it on to the Chenango County Ag, Buildings and Grounds Committee, and the Chenango County Board of Supervisors for adoption.

- From Chenango County Planning Department

- 1. The overall largest enterprise undertaken is hay and most farms currently do not have animals.
 - a. There is opportunity to undertake new plant products on the same land after slight alteration, that current products grow on such as hemp and hops. (see section Diversification and Emerging Markets).
 - i. Concluded from answers in questions 4 and 5.
- 2. There was uncertainty from respondents if they knew that they were in a State Certified Agriculture District. An overwhelming amount answered that the Districts are "very valuable" for farmland.
 - a. This plan will clearly inform farmers of the process and benefits of having their land in an Agriculture District. (see section Evaluation of Potential Agricultural Land Protection Strategies).
 - i. Concluded from answers in questions 10 and 11.
- 3. Large number of respondents answered that they are not receiving an agricultural assessment on their land and that high taxes is the greatest issue facing farmers.
 - a. This plan will explain how and why farmers can receive the Assessment to aid with their finances (see section Issues Facing Long-Term Viability of Agriculture).
 - i. Concluded from the answers in questions 12 and 58.
- 4. Most of the net income that directly comes from the farm was less than 25%. Additionally, respondents stated, over the last year profits are equally remaining steady and declining, but sales are overall remaining steady. Over the last five (5) years profits are overall declining but sales are overall remaining steady. Respondents also stated that in the next five (5) years they would sell the farm, after answering none of the above. Most respondents also answered that farmland in the County is not affordable. Lastly, an overwhelming number of respondents answered that they would not use any type of assistance on their farm, nor do they currently use any.
 - a. Over the next five (5) years the number of farms and local agriculture community in Chenango County could continue to decrease as they have been since 2002 unless new solutions are proposed, and farmers actively take advantage of them. Nor are farmers looking to expand their farms due to financial barriers.
 - b. This plan will provide extensive information farmers can utilize to protect and secure their farmland such as the "Right to Farm" Law. As well as lease payments and diverse crop production (see sections, Diversification and Emerging Markets, Evaluation of Potential Agricultural Land Protection Strategies, Land Use Controls Available for Farmland Protection and Agricultural Support Agencies and Organizations).
 - i. Concluded from answers in questions 18, 33-36, 39, 46, 47, 49 and 60-67.

- 5. According to the respondents, development of farmland for non-agricultural use is both an opportunity and problem for farmers and the most important step to take is to preserve farmland as economically productive land.
 - a. This plan will provide information to famers so they can take steps to increase their financial security and stability on their farm by exploring alternative methods which serve as an economically productive opportunity (see sections Diversification and Emerging Markets and Agriculture Support Agencies and Organizations).
 - i. Concluded from answers in questions 51-57.

2021 C.O.W.S. Analysis Results

In agreement with the 2020 survey conclusions the C.OW.S. results have the following conclusions regarding agriculture in Chenango County.

- 1. Challenges include increased labor and land costs, low commodity prices, better opportunities outside of farming, maintaining profitable enterprises with a return on investments.
- 2. Opportunities include proximity to larger markets such as New York and the East Coast with dairy and beef production. And ability to diversify into profitable emerging markets through maple products, grass-fed milk, Christmas trees, and various land leases.
- 3. Weaknesses include limited trust on governmental support for farms, accepting help and services when needed, lack of a product hub to send products to larger markets, and shifts in farming practices due to climate change.
- 4. Strengths include open land for grazing animals, grass and hay production, relatively unlimited supply of freshwater, abundance of sugar maple trees, ag-experienced workforce, and strong resiliency.

2021 Plan Position Statement

In response to the conditions and trends affecting the County's agriculture industry, the Agriculture & Farmland Protection Board (AFPB) of Chenango County established this Position Statement on August 15, 1997, reaffirmed on October 29, 2010, and reaffirmed again on April 16, 2021.

The Agriculture & Farmland Protection Board AFPB of Chenango County has found that:

• Farmland and its active use for agricultural production contributes to the well-being of residents of the County through provisions of food, jobs, taxes, wildlife, clean water, scenic vistas, recreation, tourism appeal and overall quality of life,

- Farming activities contribute significantly to the economic activity of Chenango County,
- Actively used farmland acreage and commercial farmland has reduced for several decades and will continue if no changes are made,
- Fewer young farmers are encouraged to enter agricultural occupations,
- Some County and Town policies create disincentives for continuation of farming commitments and operations,
- Some of the most productive and profitable farmlands are in intense adverse competition with other land uses, such as residential and commercial development,
- Random patterns of rural residential and recreational growth fragment the agricultural land base and produce conflicts between farmers and non-farm residents,
- Speculation about development opportunities for farmland reduces commitments to farm investments,
- Public cost of providing extended community services for residents throughout the County increases budget pressures for Town governments and creates disproportionate tax burden on farmland owners.

In consideration of the foregoing and the interests of Chenango County residents, both present and future generations, it is the position of the AFPB to:

- Develop a Protection Plan for Agriculture & Farmland that encourages retention and use
 of active agricultural land and supports continuing commitments for agricultural activity
 on these lands,
- Actively seek economic support for agricultural enterprises that is comparable with other sectors in the State and County,
- Create viable options for present and future farmers in agricultural enterprises and occupations,
- Educate public officials on the long-term risks of taking no supportive action for the County's agricultural land base and agriculture industry,

- Encourage and provide methods to strengthen local public policies that support ongoing farming activities,
- Find ways to support shared values of farmers and non-farmers in their rural communities and to provide for land use needs of each.

PART II

UNDERSTANDING THE IMPORTANCE OF PROTECTING AGRICULTURE AND FARMLAND

County Profile

Location

Chenango County is located on the northern edge of the Southern Tier Region of New York State, approximately 50 miles southeast of Syracuse with an area of approximately 910 total square miles. Chenango County is divided into 21 towns, 8 villages, and 1 city, bordered by Madison County to the north, Otsego and Delaware Counties to the east, Broome County to the south and Cortland County to the west.

The County has many rural landscapes, residential areas, business districts, minimal industrial areas, educational facilities various transportation systems, and various natural features including four rivers over 148,000 acres of agricultural land, and over 112,700 acres of forested land.

Geologic Features

The County's soils, and terrain are indicative of a land use best suited for animal and grassland agriculture. Precipitation is well distributed throughout the year and is almost always adequate for crops, however, recent changes to the climate has had an impact and is discussed later in the report. Topography varies from rolling to steep, wide ridge tops and nearly flat-topped hills. The major river valleys are quite broad despite the steepness of the topography. Elevations in the major river valleys are in the range of 900ft to 1000ft above sea level. Nearly half of the County is above the 1500ft level and about a quarter is above 1800ft.

The USDA defines prime farmland as land that is best suited to producing food, feed, forage and oilseed crops. It has the soil quality, growing season, and moisture supply needed to produce sustained high yield crops when it is treated and managed properly. Prime farmland is located throughout the County (Figure 1), with a majority of prime farmland located in the river valleys. However, a great amount of prime farmland can be found in hills as well.

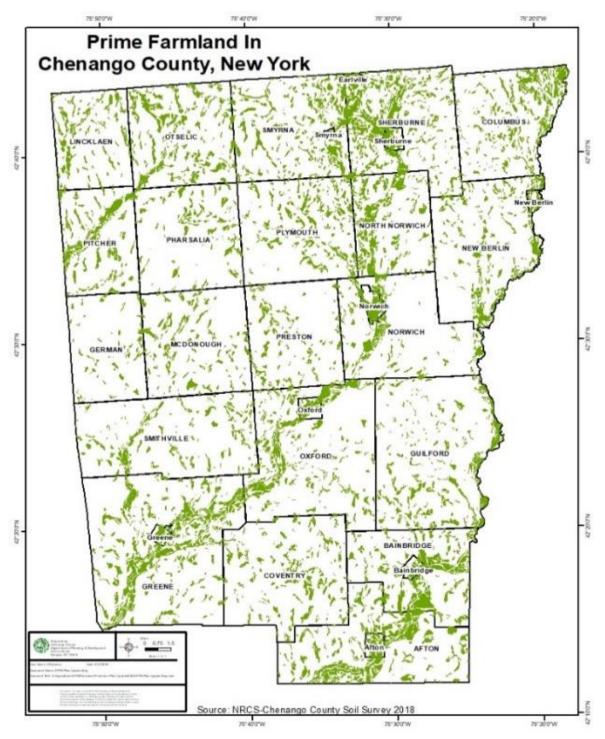


Figure 1. Prime Farmland in Chenango County, New York.

Lands to be Protected

Under NYS Agriculture and Markets Law Article 25AAA §324, County Agriculture and Farmland Protection Plans shall include the location of any lands or areas proposed to be protected.

There are three categories of agricultural lands that Chenango County wishes to protect:

- All areas currently viable for agricultural production with increased options for grazing and other activities for which most of our lands are suitable.
- Prime soils and soils of statewide importance located within the three primary river valleys and scattered throughout the County.
- Agricultural lands located along the main transportation corridors of NYS Routes 7, 8, 12 and 26, Interstate 88 and the Delaware and Hudson Railroad.

County lands currently viable in agricultural production are important to our farmers and residents for both economic and aesthetic reasons. Upland farms, where prime soils are less common, are well suited for increased grazing options such as raising cattle, horses, and sheep. In many locations, these farms are also suitable for growing crops such as corn, hay, soybeans, and oats, as well as small to medium scale fruit and vegetable production. These farms also provide the rural landscape and open space desired by residents.

Soils of statewide importance are located within the three primary river valleys and scattered throughout the County (Figure 2). Protection of these lands is due to the high quality of the soil as well as the locations for which they are found. Prime soils are excellent for growing corn and hay, and essential for the dairy industry.

Allowing agricultural lands to stay in agriculture provides a natural flood control measure. Flooding has been an increasing problem in recent years, including two record setting floods in 2006 and 2011. Keeping development out of these areas and allowing for agricultural uses instead, could lessen some of the negative effects of flooding. In February 2020, Chenango County partnered with Tetra Tech, a consulting and engineering services firm, to update the County's Hazard Mitigation Plan. This update is another step the County has taken to mitigate the impacts of natural hazards. Hazards such as flooding are being evaluated along with corresponding preventative actions for areas of risk throughout the County. As a result, this plan in accordance with preservation of agricultural lands will aid to lessen the impacts of hazards in Chenango County.

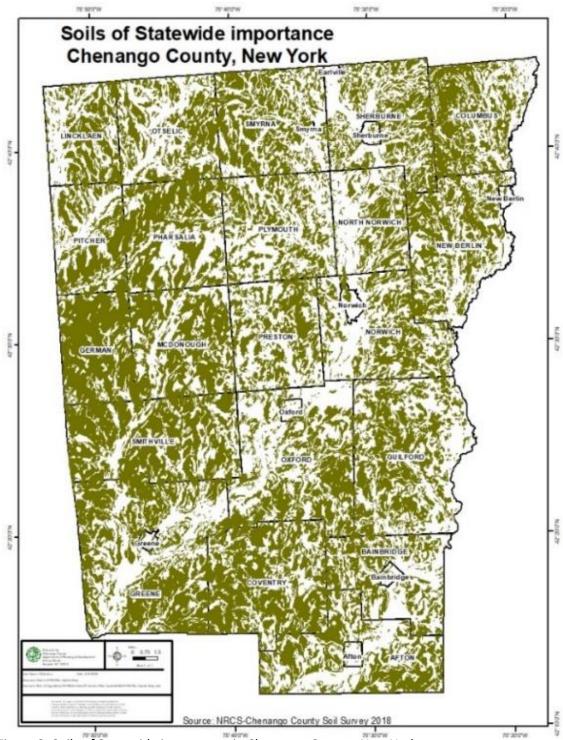


Figure 2. Soils of Statewide importance in Chenango County, New York.

Chenango County also wishes to protect agricultural lands located along the main transportation corridors of NYS Routes 7, 8, and 12, Interstate 88 and railroad rights-of-ways. These corridors are particularly vulnerable to commercial and industrial development due to the level plane, well-drained nature of the land, its proximity to population centers, and availability of easy transportation routes. Although commercial and industrial development is necessary for strong communities, a balance is needed between protecting valuable farmlands and promoting economic development outside of agriculture. Development should complement agriculture; not replace it. Alternate sites (non-agricultural land sites) for industrial development should be the first choice for industrial development.

Threats to agricultural lands come from two primary directions:

- 1. The lack of economic/marketing opportunities for farm products.
- 2. Industrial development on prime agricultural sites specific to regions close to major highways and the Delaware and Hudson Railroad.

To minimize these impacts and protect the valued agriculture and farmland, the Chenango County AFPB wishes to:

- 1. Include agricultural land protection with other industry development planning.
- 2. Provide assistance with market research and marketing of farm products including online markets.
- 3. Expand access to regional markets from Central New York to the Eastern Seaboard.
- 4. Encourage the utilization and expansion of the local Farmers Markets.
- 5. Develop a mechanism to monitor rural development and provide for uniform reporting to County Government by Towns regarding applications for and approvals of agricultural land use changes.
- 6. Educate Town and County Boards on creating comprehensive land use plans and the application of legal mechanisms for protection of farmland.

Farming in Chenango County

Farming practices have been fundamental in shaping the economy, environment, and lifestyle in Chenango County. Farmland makes up for 148,982 acres in the County and supports consumers

at a local and statewide level providing fresh and highquality products.

The 2017 USDA Ag Census indicates that the number of farms in Chenango County has reached 770. This is a decrease from 828 in 2012, 908 in 2007 and 960 in 2002. This decrease reflects issues that farmers are currently facing. From results of the of the 2020 Chenango County Protection Plan Survey famers indicated that high



taxes, low profits, and lack of interest for someone to take over the farm are the three greatest pressures that are facing. Other examples of challenges that are confronting farmers are the costs of labor, fluctuating dairy prices and commercial development because of farmland abandonment.

The County's 2020 Protection Plan Survey also showed how diverse agricultural products of the County are and how the climate in this area can support a variety of needs. This is an advantage for farmers in the future to preserve farmland and values while shifting the range of their goods.

Value of Agriculture to the Local Economy

Products and their Economic Value

Despite media reports and popular belief that farm production has been in steady decline, total market value of Chenango County farm products (\$67.9 million in 2017) has steadily climbed for several decades (Figure 3). With an economic multiplier of 1.43, the economic impact of farming in Chenango County is approximately \$97.1 million.⁶ An economic multiplier is an economic tool used to show how far every \$1 is recirculated in a local community. Therefore,

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⁶ (Schmit, 2016)

the market value of Chenango County farm products (\$67,900,00) multiplied by the economic multiplier of 1.43, (\$67,900,000 x 1.43) is \$97,097,000.

Farming supports supply and service businesses for agricultural equipment and supplies, for electric energy, fuel, insurance, banks (loan interest), construction, hardware, equipment, and many other business-related needs of farm operations. Over \$7.1 million of farm labor payroll and the self-employment of nearly 568 farmers (full-time and part-time) make a significant contribution to the County consumer spending power.⁷ Farm businesses and families provide economic activity that supports rural towns and villages.

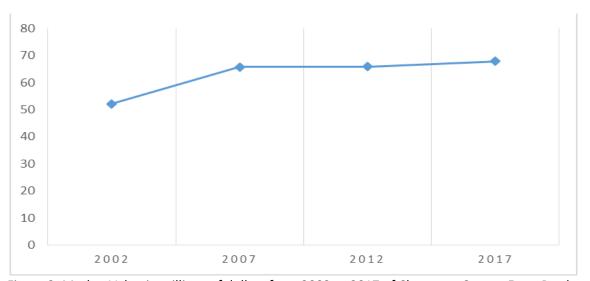


Figure 3. Market Value in millions of dollars from 2002 to 2017 of Chenango County Farm Products.

Economic Opportunity

Agriculture is an important source of economic opportunity for the County. To realize this potential, there needs to be new initiatives and commitments by farmers, support agencies and organizations, as well as established economic development leaders. The market value of agricultural products sold in 2017 was \$67,923,000 for Chenango County, an increase of \$1,989,000 from 2012.⁸ Vitality in the agriculture industry is attainable through diversification in types of production, and beyond production, to the undertaking of added value processes, and the development of new markets and marketing strategies. The transition into diversified production and added value enterprises faces a major challenge due to the limited experience of farm operators with other products and markets. Yet technical and financial assistance,

⁷ (USDA, 2019)

^{8 (}USDA, 2019)

while available, is apparently underutilized, and perhaps under-coordinated to stimulate new patterns of thinking and action.

Agriculture in Chenango County requires the economic development resources enjoyed by

other industries and protection of the farmland base upon which successful farming depends. New York State and federal programs have offered economic development support for non-agricultural industries for decades and local and county governments have encouraged and promoted the growth and investment



in infrastructure in those industries. Agriculture can benefit from the same kinds of support. Other counties and states have encouraging examples of successful adaptation to new opportunities with the help of a full complement of community resources.

In this area, there is evidence that small and medium size farms can be profitable. New feed cost management practices, such as intensive grazing, are bringing down production costs for many farmers. Some farmers have taken new directions into diversified products

and alternatives to a total dairy focus. Innovation and experimentation with market niches and products are evident.

Cost to Community

Communities and local governments often evaluate the impact of land use development on local budgets. These studies help to project the public cost through taxes and revenue from different land use practices such as residential, business/commercial, and agricultural. The studies generally show that residential development is a net fiscal loss. ⁹ This is

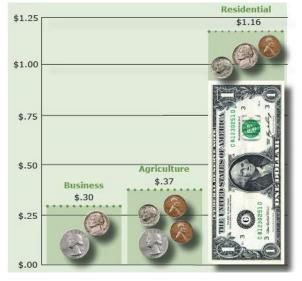


Figure 4. Median cost to provide public services for each dollar of revenue raised.

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⁹ (American Farmland Trust, 2016)

due to the amount of public infrastructure and services needed in a residential area like power, sewer, and water. Farming contributes to the County economy with payment of \$4.6 million of property taxes. While manufacturing, services, and retail trade have surpassed agriculture in terms of total employment and personal income, agriculture remains an important contributor to the County's economic base (Figure 4).

Scattered land development frequently causes traffic congestion and air and water pollution, while loss of open space increases demand for costly public services resulting in higher taxes for communities. While residential land results in a loss, farmland generates a fiscal surplus which helps offset the cost of residential land.¹¹ This means that the more farmland a community has the lower the cost of public services.

Value of Farmland to the Community

Food Supply

Consumers have found more convenience and variety in supermarkets without much concern for the source, quality, or safety of food. Consequently, local marketing opportunities for locally grown and produced food have been nearly eliminated over many decades. That is now changing.

In Chenango County, the change has come in part because of local businesses and organizations encouraging consumers to buy local. Local programs have played their part in helping producers market their products. Programs funded by NYS Ag and Markets such as "Buy Local" and "Pride of New York" have assisted local producers, retailers, and farmers markets. This has been done by promoting local products using



marketing and promotional strategies and technical assistance.

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¹⁰ (USDA, 2019)

¹¹ (American Farmland Trust, 2016)

The quality, quantity, and prices of food into the next century, even the next twenty-five years, are not as assured as in the past or present. Global population growth rates and rising economic capacity of third world nations who seek more complex diets are increasing the projected demand for food into the twenty-first century. Some studies estimate that farm production will have to increase by 25%-70% to meet global food demand by 2050¹². In the United States, major commodity producing states are confronting reduced productivity gains due to limited water resources and environmental problems from concentrated high intensity production practices. We should recognize our dependence upon distant and foreign sources of our food and energy, the increased limitations of food production levels elsewhere and the heightened concern and attention to food quality.

Quality of Life

Farming has been the mainstay of rural communities for many decades through the purchasing of supplies and services, payment of taxes, provision of jobs, participation in community organizations and public affairs, involvement with schools and social events, and in many other areas of the County. This heritage continues, but as the number of farms and farm families diminish, these contributions to the quality of rural life are increasingly at risk of being weakened or lost.

Quality of life contributions of farming extend beyond the local rural communities to the Villages and City of Norwich where employment is concentrated. Many residents of the County enjoy rural lifestyles of country living while working in urbanized locales. The appeal of country living is an attractive consideration for corporation's retention and recruitment of their employees.

Considerable economic and quality of life losses lie ahead for the County and its citizens if nothing is done to address the need for strengthening and protecting farming and the farmland base upon which these attributes depend. Once farmland holdings have been fractured, they are not easily put back together. Management of the reduced and scattered farmland holdings becomes more complex and less efficient.

Environment

Benefits of a healthy agriculture industry come from the maintenance of agrarian landscapes, environment and biodiversity of beneficial plant and animal species. Our local environment is undergoing a transformation from loss of field and meadow habitats to increased areas of woodland environments that already cover 65.5% of the County's land area.

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¹² (Hunter, Smith, Schipanski, Atwood, & Mortensen, 2017)

This transformation will change the existing balance of plant and animal life as biodiversity is reduced. Best practiced agriculture is a favored use for protecting natural resources and cycles such as pollination, nutrient cycling, pest control, soil and water conservation and climate regulation. As farmland conversion continues, a study by The American Farmland Trust found that the loss of farmland increases the amount of carbon dioxide in the atmosphere due to

sequestered carbon in farmland. The study suggests that if conversion to residential development was cut by 80% it would be equivalent to removing more than 1 million cars from the road. New York has been proactive in the fight against climate change.



Encouraging good stewardship of the land and encouraging responsible development changes can help New York meet its energy climate change objectives. To meet certain energy standards, renewable energy development is becoming common on agricultural lands. Maintaining a balance between solar and wind developments and preserving farmland is key to the future of energy in New York.

Farming practices have become increasingly sensitive to conservation of the environment through erosion control, reduction of chemical usage, rotational cropping, and a resurgence of interest in rotational grazing. It is in farmer's best interests, as well as the broader environmental values, that they continually follow practices to preserve the productive health of soils, crops, and animals. Farmers have maintained open space through continuous active farming of their land. Through these practices New York can meet its climate change objectives while protecting natural landscapes.

Current Conditions and Trends in Agriculture

Dairy Farm Production

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¹³ (Arjomad & Haight, 2017)

Chenango County agriculture, with 61.2% of its income from strictly milk from cows, has a heavy dependence upon the controlled price of raw milk.¹⁴ While prices of nearly all farm products are determined largely by national and regional market conditions, raw milk pricing is set by a complex process. Chenango County dairy farmers are trying to increase the profitability of their farms to assure long term success. Unfortunately, few dairy farms in the northeast United States have operated profitably on a continuing basis for the past few decades. According to the 2017 Ag Census Chenango County has 150 dairy farms, a loss of 34 farms from the 184 dairy farms in 2012 (Figure 5).¹⁵

If milk production continues to exceed demand, the prospect for improved raw milk prices and for sustained profitability is not encouraging. Continued major dependence on raw milk

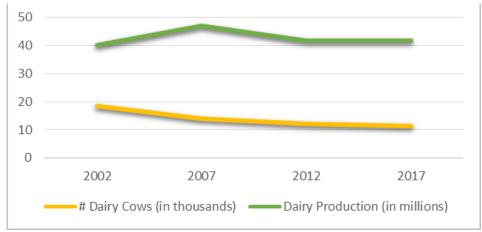


Figure 5. Trends in Chenango County dairy production from 2002 to 2017.

production in Chenango County will substantially influence the viability of its agriculture industry and the fate of its farmland. Chenango County dairy farmers can increase their income an additional 10% to 20% since typically other enterprises are undertaken on dairy farms. Other possible niche markets are currently being researched for future income.

Crop Farming

Most crops grown in Chenango County are for direct use as dairy feed, although other uses are being considered such as crops for fiber production. Corn production is the prominent crop in Chenango County although crops such as soybeans, grains and hay are also grown (Table 1). Although very little crop production is sold outside of the county, most of what is sold goes to contiguous counties.

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¹⁴ (USDA, 2019)

^{15 (}USDA, 2019)

Crop	Year					
	2002	2007	2012	2017		
Corn	342,097	627,006	776,215	581,562		
Soybean	14,460	NA	13,372	35,198		
Grain (Oats)	56,710	42,684	42,870	24,721		
Hay	146,186	134,930	106,195	112,027		

Table 1: Type of crop and quantity in tons harvested from 2002 to 2017 in Chenango County.

Livestock and Livestock Products

Cattle and calves are the second largest category of farm products in Chenango County with

10.1% of total market value. ¹⁶ In the State, Chenango County ranks 21st in number of beef cows. As dairy farms close, there is a tendency to move to beef. Other livestock and livestock products, hogs, sheep, lambs, and wool contributed to only 1.8% of total market value of products in 2017. ¹⁷ Inspected livestock processing facilities are becoming available for utilization by farmers and landowners alike.



Vegetable and Fruit Production

¹⁶ (USDA, 2019)

¹⁷ (USDA, 2019)

Consumer awareness about nutrition, food quality and safety, and production practices have been growing. The rediscovered advantage of buying locally grown food includes a desire for freshness and assurances of greater safety. In 2017, 17.9 % of County agriculture product value came from vegetable, fruit, nut, and berry crops. The quality of locally grown foods set them apart from distant fresh food products delivered through the commodity food marketing and distribution system.

Nursery and Greenhouse Products

This category is one that usually responds to expanded area residential growth, and the market

value of nursery and greenhouse products has increased substantially since 1992. In 2007 it made up .92% (\$611,000) of annual agricultural production. However, in 2017 .08% (\$59,000) nursery and greenhouse products were sold. 19 Changes to the production



could be attributed to loss of businesses and change in agricultural production.

Forest Products

With 65.5% of the land base in woodland, managed forests offer significant opportunities for supplemental income to owners. Good forest management creates diverse ecosystems, protects soil and water, and promotes recreational opportunities. Timber management and recreational opportunities are restricted where land holdings of forest land are fragmented in the same manner as farmland. There is also a statewide concern about the emerald ash borer as well as tent caterpillars and their effects on timber.

Amish

¹⁹ (USDA, 2019)

¹⁸ (USDA, 2019)

Amish and conservative Mennonites make up what is referred to as "plain sect" communities. These groups are united however by the common desire to be set apart from the modern world in some fashion and all vary in their use and acceptance of technology. They typically settle in intentional communities with abundant farmland.

As in other places, the population of the Amish in New York State continues to grow. Today New York State has the fastest growing Amish population and the 5th largest overall with an estimated population of 18,575 Amish in 146 Church districts in 2017.²⁰ ²¹ Establishing new settlements happens for a variety of reasons. They include:

- Fertile farmland at a reasonable price
- Nonfarm work in specialized occupations
- Rural isolation that supports traditional lifestyle
- Social and physical environments conducive to their way of life
- Proximity to family or other similar church groups
- A way to resolve church or leadership conflicts

The actual population of Amish in Chenango County is unknown. Due to a limited amount of information available for Chenango County an interview was conducted. Mr. Rich Taber the Grazing, Forestry, Ag Economic Development Specialist of Chenango County Cornell Cooperative Extension has firsthand knowledge and experience with Amish communities in Chenango and Madison Counties. According to Mr. Taber's best estimate, there are ten families of New Order Amish in the Chenango County. They are mostly centered in the Town of Guilford. However, there are a few Old Order Amish located in the Town of Smyrna who are part of the Lebanon and Georgetown settlements, and the Town of New Berlin. The population is slowly growing due to kids growing older and getting married. Additionally, each year one family will move in from another state.²² Most Amish farmers in the area operate grass fed organic dairies.

Amish farmers are no longer a niche or novelty of the landscape. Over the last 50 years they have become the predominant face of commercial agriculture throughout the Mid-Atlantic and Mid-West states. This trend is especially true when it comes to dairy and produce industries. The small farms, innovative marketing, and value-added enterprises enables them to easily capitalize on the growing demand for locally grown foods.²³ In Pennsylvania, it has been observed that as general farmer numbers drop, the percentage of plain sect growers increases as these farmers buy farms as they become available. As more farmland becomes available and less

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²⁰ (USDA, 2019)

²¹ (USDA, 2019)

²² (USDA, 2019)

²³ (USDA, 2019)

people continue to peruse farming as a business venture. It could be the local and incoming Amish population and other plain sect communities that keep the land in agriculture.

PART III

OBSTACLES AND RESOLUTIONS FACING AGRICULTURE AND FARMLAND

Issues Influencing Long-Term Viability of Agriculture

Property Taxes

Tax relief is an important issue for farmers. Farms need land to operate and typically large amounts of it. Property taxes are a considerable expense, not only do they add significant business costs, but farmers tend to pay more in property taxes than they require in public service. According to the 2017 Census of Agriculture – State data, New York farmers pay \$34.43 per acre, significantly higher than the national average of \$10.46. Chenango County farmers pay \$30.74 per acre, slightly lower than the state average. This disproportionate burden puts New York farmers at a severe disadvantage among its farming competitors. Other studies on the Cost of Community Services in relation to property tax payments reveal comparable results. Typically, farmland received about \$0.25 to \$0.30 for every dollar paid in property taxes, while residential properties receive about \$1.27 for every dollar paid.

Increasingly, state, and local governments recognize that keeping farmland in production helps to control the cost of providing expensive community services. Therefore, the state has available programs that offer property and sales tax relief for farmers (Table 2).

Program Purposes	Agricultural Assessment	Farm Building Exemption	Farmers' School Tax Credit	Forestland Exemption	Historic Barns Rehabilitation Tax Credit	Orchard Vineyards Exemption	Sales Tax Exemption	NYS Conservation Easement Tax Credit	Renewable Energy Systems Tax Exemption
Reduce taxes on farm or forested land	х		x	х		х		х	
Reduce taxes on farm buildings		Х							
Reduce Sales tax							х		
Reduce costs of farm building restoration						Х			
Real property tax exemption for properties with renewable energy systems or farm waste energy systems									X

Table 2: Tax Reduction and Exemption Programs for New York State Farmers.

Agricultural Assessment:

Agricultural assessments provide "use value" assessments for eligible farmlands. This allows farmland to be assessed based upon its agricultural value, rather than full market value. The assessment is automatically applied to county, town, city, village, or school district taxes; however, the assessment must be adopted locally by special taxing jurisdictions such as fire or ambulance districts. To qualify for the assessment:

• Land generally must be a minimum of 7 acres and farmed by a single operation.

- Land must be used for crop production, commercial boarding of horses or livestock production.
- Farm operation must gross an average of \$10,000 or more in sales per year.
- Parcels fewer than 7 acres may qualify if the operation has an average gross sales value of \$50,000 or more per year.

Supported land or land set aside in federal conservation programs or farm woodland may qualify. Landowners who rent land to farmers are eligible if the property satisfies the acreage requirements. The farmer renting must meet the gross sales requirements and have a written lease agreement. To inquire more information about Agricultural Assessments, contact your local assessor, the Soil and Water Conservation District, or NYS Office of Real Property Services-agricultural unit.

Farm Building Exemptions:

There are several provisions in New York States Real Property Tax Law to provide exemptions for farm buildings from property taxes. They include:

- Section 483: Exempts new or reconstructed agricultural buildings such as barns or
 work housing from any increase in assessed value the results from the improvement.
 The application must be made to the local assessor within one (1) year following the
 completion of construction. The exemption continues automatically for 10 years as
 long as the building is being used for farming.
- Sections 483-a, 483-c, and 483-d: permanently exempts from taxation certain agricultural structures. These include silos, grain storage facilities, bulk tanks, manure facilities, temporary greenhouses, and farm worker housing or commissaries/food preparation facilities. Structures must be located on parcels of at least 5 acres used for profitable Ag production. Structures that do not qualify include structures for processing, retail merchandising, personal use or residence of applicants and their immediate families. The owner of the structure must file an exemption application form RP-483 with the local assessor. Section 485-b provides a 10-year exemption for farm processing and marketing buildings.

To inquire about more information about Farm Building Exemptions, contact your local tax assessor or NYS Office of Real Property Services-agricultural unit.

Farmers' School Tax Credit

Qualified farmers may obtain a state income tax credit for school taxes through the Farmers' School Tax Credit. The credit is not a real property tax exemption and does not diminish local school revenue. To be eligible:

• Farmers must receive at least two-thirds of their federal adjusted gross income from farming for the tax year of for the average of the tax year and two consecutive years preceding the tax year. The farmers can either be individual or corporate entities. Rented lands do not qualify.

The credit equals the amount of school taxes paid on the first 350 acres of qualified land. On any additional acreage, the credit equals 50% of school taxes paid on the land. If a farmer's New York adjusted gross income exceeds \$200,000, the credits become limited and phase out completely at \$300,000. To inquire more information about Farmers' School Tax Credit, contact NYS Department of Taxation and Finance or a local tax preparer.

Forestland Exemption

To encourage long term ownership of forested lands, Real Property Tax Law Section 480-Aallows for eligible owners of forested lands to receive reductions in their tax assessment. To be eligible:

- Landowners must own a minimum of 50 acres of contiguous forested land and be willing to commit the land to forest crop production.
- Must follow a forest management plans prepared by a qualified forester and approved by the NYS Department of Environmental Conservation.

Owners of lands certified by the DEC must apply annually to the local assessors for the exemption. Landowners must comply with the program for a 10-year period after obtaining each annual exemption. Penalties can be imposed for failure to follow management plans or land conversions. To inquire more information about Forestland Exemption, contact NYS Department of Environmental Conservation.

Historic Barns Rehabilitation Tax Credit

The Historic Barns Rehabilitation Tax Credit is available for individuals or corporations who have restored a barn built before 1936. The tax credit may equal up to 25% of the rehabilitation costs. To be eligible:

- The barn must be built to house farm equipment, livestock or Ag products.
- The barn must meet the tax definition of income producing.

To inquire more information about Historic Barns Rehabilitation Tax Credit, contact a local tax preparer or NYS Department of Taxation and Finance.

Replanted or Expanded Orchards and Vineyards Exemption

Owners of orchards or vineyards can receive a partial tax exemption for newly planted or expanded orchard or vineyard lands. To be eligible:

- Must be used solely for replanting or expansion of orchard or vineyard.
- Eligible lands cannot exceed 20% of the orchard's or vineyards total acreage (unless otherwise located in a disaster emergency area).

The orchard or vineyard is exempt from taxation for up to six successive years. To receive the exemption the landowner must apply for the agricultural assessment and attach form RP-305-e to that application. To inquire more information about Replanted or Expanded Orchards and Vineyards Exemption, contact a local tax assessor or NYS Office of Real Property Services-agricultural unit.

Sales Tax Exemptions

New York State tax law exempts certain items used for farm production from state and local sales and use tax. The eligible items:

- Must be used predominantly (more than 50%) for farm production to qualify.
- Exempt items include:
 - o Personal property used for production/operation.
 - Building materials used for farm buildings or structures; services to install, maintain or repair farm buildings or structures.
 - o Motor vehicles used predominantly for production/operation; and fuel, gas, electricity, refrigeration, or steam used for production/operation.

Form ST-125 must be presented to the vendor within 90 days of purchase. The form can be used for a single purchase or for any purchase from the same vendor any time thereafter.

Even though there appears to be progress in the area of property tax relief, the long battle for an equitable farm property tax program continues. Not only must farmers be encouraged to take advantage of new property tax provisions, but they also along with local officials must continue to develop a strategy for implementation of a countywide agricultural value assessment program. Many of the discussed strategies have requirements that are difficult and time consuming to follow. Also, many of the strategies require annual application to receive benefit. Making the process even more difficult for farmers with other required documentation. To inquire more information about Sales Tax Exemptions, contact NYS Department of Taxation & Finance.

Renewable Energy Systems Tax Exemption

As renewable energy installations continue to increase in New York State, the Real Property Tax Law § 487 provides exemption from taxation for certain solar or wind energy systems or farm waste energy systems. To be eligible:

- Must be a property located in New York State.
- Real property which includes the following when satisfying guidelines established by NYSERA:
 - Solar or wind energy system
 - o Farm waste energy system
 - Micro-hydroelectric energy system
 - o Fuel cell electric generating system
 - o Micro-combined heat and power generating equipment system
 - o Electric energy storage equipment and electric energy storage system
 - o Fuel-flexible linear generator electric generating system

The solar market in New York State has been steadily growing and is project to continue its increase offering all types of landowners new opportunities for their land. This exemption is for a period of fifteen years and does not exempt landowners from all property taxes. Two copies of Department of Taxation and Finance Form RP-487 must be filed with each assessor the application is not filed with the Office of Real Property Tax Services. To inquire more information about Tax Exemption from Solar, Wind, or other Energy Systems, contact a local tax assessor or NYS Department of Taxation and Finance.

Dairy Pricing

The dairy industry is the largest segment of New York State's Agricultural Industry. The State is the fourth largest producer of milk and the largest producer of yogurt, cottage cheese and sour cream. In Chenango County the income from sales of milk from cows represented 61.2% of farms sales or \$41,601,000.²⁴ Prices for milk and dairy products are often fluctuating and change on a weekly or monthly basis. While federal and state governments regulate many agricultural products, none is more regulated than milk.²⁵ This is not uncommon, as most governments in major milk-producing countries take an active role in regulating milk production and marketing. Before the Great Depression, federal and state governments were not directly involved with regulating the dairy industry. However, once tangled in the regulation of the dairy industry, political inertia eliminated any possibility for separation from the federal government.

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²⁴ (USDA, 2019)

²⁵ (Ebra & Novakovic, 2005)

Milk pricing begins with the supply of milk. The USDA provides estimates for the number of milking cows and yield per cow for the 23 major dairy producing states. Cow numbers are determined by the number of live cattle imports, replacements, death loss and slaughter. There could be a 12 to 18-month lag between a change in milk prices and a change in cow numbers.²⁶ Imports can also affect the supply of milk and dairy products. The U.S. imports



processed dairy products that are mostly ready for retail sale. These imports can potentially compete directly with domestically produced dairy components and finished dairy products.

Federal milk marketing orders (FMMO) are government programs that set a minimum process for what processors should pay dairy farmers for their products. Minimum prices are set monthly and are based on mathematical formulas that account for monthly market dairy prices, other fixed factor that reflect estimated processing costs, yield factors and location factors. These prices move directly with dairy products' pricing: minimum prices rise if dairy production process rise and fall if production prices fall. FMMO's regulate U.S. milk prices in specific geographic areas. There are currently 10 federal orders that regulate roughly 85% of the nation's milk supply.²⁷ FMMO systems use classified milk pricing and pooling as main building blocks. Processors are required to pay minimum prices based on the end use, or class of the milk. Currently there are four classes of milk:

- Class I: milk products intended to be used as fluid or beverage milk
- Class II: fluid cream and other cream products, cottage cheese, yogurt, and frozen desserts
- Class III: hard cheeses and cream cheese
- Class IV: butter and milk products in dried form²⁸

²⁷ (Baily, 2017)

²⁶ (Baily, 2017)

²⁸ (MacDonald, Cessna, & Mosheim, 2016)

Chenango County agriculture has a heavy dependence upon the controlled price of raw milk. The

interaction from government, private industry, and milk cooperatives, introduces substantial complexity and disagreement about the fair pricing of raw milk. Another significant factor is that milk consumption trends have stabilized, and market size has grown very slowly. The tendency of the dairy industry to over-supply market demands continues to exacerbate the problem, despite the substantial



reduction in the number of farms producing milk during recent decades.

Chenango County dairy farmers are trying to increase the profitability of their farms to assure long term success. If milk production continues to exceed demand, the prospect for improved raw milk prices and for sustained profitability is not encouraging. Continued major dependence on raw milk production in Chenango County will substantially influence the viability of its agriculture industry and the fate of its farmland.

Labor Costs

Farm employee compensation is a topic of interest to farm operators, employees, and other stakeholders. New York State has passed a minimum wage hike to \$15.00 an hour to be phased in by 2021. The State has also passed a new regulation on overtime for farm workers. These increased labor costs could affect farms financially and affect future decisions to expand and modernize. An underlying issue for agriculture when faced with significant increases in labor costs is one of competitiveness. Farmers compete in national and international markets and have limited power to increase prices. As agricultural markets have become more global, farm prices have become more unreliable.

The USDA's Agricultural Statistics Service (NASS) publishes an annual statistical bulletin each fall. The Northeast report is the combined statistics from New York and the New England area combined. For the 2017/2018 report, the October 2017 dollars per hour for field workers was \$13.49, and livestock workers was \$12.33.²⁹ The hourly wage rate does not reflect the value of any bonus pay or benefits provided to employees such as housing. A 2018 study by the Cornell Agricultural Workforce Development program conducted a benchmark study to better

²⁹ (USDA National Agriculture Statistics Service, 2018)

understand how farm employees are compensated. The study was not designed to be random or encompassing of all New York farms, but it does shed light on the typical compensation packages, average hours worked, and calculated total compensation received by full-time frontline employees and managers (Table 3)³⁰.

Farming by nature is dependent on weather conditions for successful production. Fruit crops such as apples and grapes are ready at optimal times, when the weather is right, growers must harvest no matter how many labor hours it takes. Dairy farms that grow crops to feed their cattle must work long days when weather and crop schedules permit. To meet these timelines employees often must work overtime. Given the seasonal demands of many farm products, many farm employees work more than 40 hours per week and would be affected by overtime regulations. Without a change to overtime hours, employees will receive higher income under mandatory overtime. However, if farms decrease hours through downsizing, mechanization or hiring additional employees, the impact of mandatory overtime on take-home wages is unclear. A recent study by Farm Credit East estimated that farm income could decline over 23 percent due to combined minimum wage and overtime rules.³¹

The agricultural workforce is extremely diverse across a variety of aspects. These include culture, linguistics, education, skills, residence, work schedules and work seasons. However, all

	Employee Type	
	Frontline employees	Managers
Tenure with current employer, years	7.2	11
Annual Wages	\$38,250	\$47,881
Bonus or incentive	\$1,440	\$2,561
Total value of benefits	\$6,758	\$9,387
Total compensation	\$46,399	\$59,764
Total hours worked	2,787	2,696
Wages per hour	\$13.93	\$17.93
Total compensation per hour	\$16.90	\$22.48

sectors of agriculture share a common difficulty in securing, retaining, and compensating

³⁰ (Cornell Agricultural Workforce Development Program, 2019)

^{31 (}Farm Credit East, 2019)

employees. Recent Federal and State regulations on employment have taken an industry that is already frail and made attaining success more difficult. No farmer wishes their employee to struggle financially and typically offers compensation in many forms to retain an employee. Although recent changes will increase the take home pay of farm employees, it does so by reducing the income of the employer. Which is most likely to implement cost saving measures such as hiring more employees to reduce number of hours worked or mechanizing practices.

Workforce

The agricultural workforce is of vital importance to the current and future agricultural industry and rural communities in New York State. The agricultural workforce is diverse with people from different cultures, languages, experiences, and educational backgrounds. Modern agriculture depends on people to make it run. Farms vary on the types of jobs they offer. The jobs vary depending on size and type of products produced.

While many farms are family owned, the family members do not provide all the required labor. Like other businesses, farms grow over time to stay competitive and help meet business goals. This growth creates jobs and stimulates the economy, a critical process for rural communities such as Chenango County with few employment generators (Table 4).³²

Table 4: Hired farm labor in Chenango County (USDA, 2019).

Labor Type	Number of Farms	Number of Workers
Hired farm labor	184	568
Hired workers employed 150 days or more	107	254
Hired workers employed less than 150 days	117	314
Migrant labor on farms with hired labor	8	52

Note: Migrant farm labor means the employee required travel that prevented the worker from returning to his/her permanent residence on the same day.

Local labor is a very important part of the agricultural workforce. Many farms hire local employees for frontline and middle manager jobs. According to the USDA 2017 Ag Census,

^{32 (}Stup, 2019)

24% of farms in Chenango County hire farm labor.³³ Farm organizations such as Future Farmers of America (FFA) create interest among young people in agriculture and build a pipeline of new employees. In Chenango County, there are multiple schools that offer FFA and, or 4-H programs for all education levels that could aid in careers for young people. County schools include, Afton, Otselic Valley, Oxford, Sherburne-Earlville, Unadilla Valley, DCMO BOCES and SUNY Morrisville Norwich Campus. Chenango County along with much of Upstate New York has seen a population decrease especially in its young workforce population. Due to the stigma in popular culture, many young people are not interested in "trade" jobs. Even though these jobs do not require higher education, they still provide a living wage and future economic opportunity.

Without a strong local workforce, farmers must turn to unauthorized labor, temporary/seasonal labor, and temporary nonimmigrant workers (H-2A labor). However, these solutions are not always practical and come with their own set of challenges. The H-2A program for example provides only lawful admission to the U.S. for temporary, nonimmigrant seasonal agriculture workers. However, requirements such as documentation of labor shortage, state inspections of employee housing, cost of recruitment, mandated minimum wage rate, provided housing and transportation costs make the program difficult for farmers. In recent years, numerous factors have made it difficult to retain qualified, productive farm employees. Supporting the agricultural industry and the employees who earn their livelihoods from it is critical to the well-being of agriculture in Chenango County and New York State.

Aging Farmers

As farmers become older and are planning for retirement it is important for a new generation of farm workers to fill the void (Figure 8).³⁴ However, many farmers lack a succession plan for their farm operations. Keeping farms in family operation becomes increasingly difficult as younger generations' interests are elsewhere. In New York State, farmers age of 65 and older own or manage nearly 30% of farms, most are doing so without a young farmer alongside them.³⁵

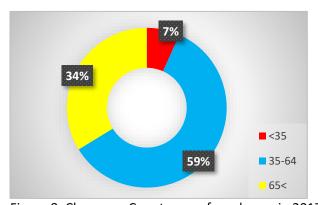


Figure 8: Chenango County age of producers in 2017.

^{33 (}USDA, 2019)

^{34 (}USDA, 2019)

^{35 (}American Farmland Trust, 2016)

Without an influx of young farmers, much of the farmland and buildings will become deteriorated or be subdivided for residential use. Senior farmers in New York steward 30% or 2.1 million acres of land in farms and own more than \$5.3 billion in land and farm buildings.³⁶ As the future of farming changes both in its definition and its economics it is important to remember and understand the changes to those who own and manage farmland.

Chenango County is no different from the rest of New York who are experiencing an aging farm sector. Chenango County producers between the ages of 35 and 65 make up most producers in the County with the average age being 58 years old.³⁷ Out of 1,280 total producers, 98 or 7.6% were classified as young producers.³⁸ This does not mean that the young farm sector could not grow. However, as farmers age and look for retirement options it is important that resources are available for up-and-coming farmers to take over. Otherwise, farmland that is not used for farm operation will become residential housing or fallow land.

Many farmers would like their land to stay in agricultural production through either a family operation or another farm operation. Within the next 10-20 years, roughly 30% of New York's current farmers will likely exit farming.³⁹ In doing so, senior farmers will need increased opportunities to secure retirement options that do not sacrifice their farms and the new or next generation farmers. As new and next generation farmers prepare to take over, they will need improved access to farmland and capital to support their farm businesses.

Business Management

Given the pressures of competition from national and global markets, the importance of business management practices in farming is significant. Evidence of management skill levels among Chenango County farms is available from interviews of support agency staff who deal regularly and directly with the needs of area farmers. Most observations indicate that, too often, the pressures of everyday routines and problems leave little time or energy for many farmers to develop or upgrade essential business management skills.

Financial information that is usually required by lenders and Cooperative Extension Area Specialists is frequently not available from farmers' records or is inadequate to provide sound advice or usefulness in analyzing financial circumstances. Where good records are kept and evaluation is a high priority, profit gains are being made through significant cost controls. Financial management skills are essential to evaluate costs and profit margins.

38 (USDA, 2019)

³⁶ (American Farmland Trust, 2016)

^{37 (}USDA, 2019)

³⁹ (American Farmland Trust, 2016)

The existence of profitable dairy farms with herds of around 50 cows is evidence that potential exists where debt loads are minimized, cost controlled feeding practices are emphasized and upto-date planning and business practices are applied. Farmers who are utilizing the knowledge of Cornell Cooperative Extension Area Specialists in dairy, livestock and field crops are gaining advantages. Workshops and special courses are being well attended.

Expansion of Urban Areas

Home to New York City, the largest city in the United States and arguably the most famous in the world, New York State is a highly diverse landscape. Upstate New York is home to agricultural diversity across the state from dairy farms, apple orchards, wineries, and maple syrup. Much like most of the United States a deep heritage and tradition of agriculture exists.

New York State, as the rest of the Unites States, has experienced a population growth over the last fifty years. This population growth has resulted in a migration of people from the cities and suburbs into less populated areas. The movement of these populations has resulted in farmland being redeveloped for housing purposes and lost forever. In New York State 5,000 acres of farmland are lost to real estate development, about one farm a week. An increasing demand for land can put a strain on a community and local farmers to educate incoming population on local laws and agricultural practices.

In Chenango County, and in many others, an increase in "Right to Farm" cases have occurred. Finding a solution to these issues could prove difficult. Small farms are heavily impacted by development and land allocation issues emerging from the spread of city populations into the

countryside.
Farmland in
Chenango
County
accounts for
26% of land.⁴⁰
According to
landowner data
from the



Chenango County Tax Department approximately 201,979 out of 571,896 acres or 35.3% of land is owned by non-Chenango County residents. Agriculture for Chenango County is a sense of societal identity. With the increase in urban sprawl Chenango County and other small rural communities are at risk of losing their agricultural identity.⁴¹

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⁴⁰ (USDA, 2019)

⁴¹ (Johnson, 2019)

Rural Broadband

As technology becomes more immersed in our lives, our dependence on it for our needs has grown. In the past, where brick and mortar stores provided us with goods and services, many of those same products are now available online. This has resulted in a shift away from physical store locations and into online shopping. As a result, products and services are marketed on a global stage with more competition. E-commerce provides producers the ability to access new customer channels, market products and shape demand. Web-enabled direct to customer sales enable producers to shorten supply chains, develop customer relationships and retain more revenue. For example, online cattle auctions allow cattlemen to save on travel costs while still participating in transactions.⁴² For small businesses, web sales provide an opportunity to reach more customers without the financial cost of a typical storefront. However, areas without broadband development struggle to compete in the new e-commerce economy.

Farmers can implement technologies, as many other modern businesses must enhance decision-making, automate processes and efficiency, improve production, and create new markets. Precision agriculture is revolutionizing the way producers collect, organize, and make decisions. Before, those with long-term experience had a competitive advantage. With volume data, it is possible to accelerate the learning curve and allow for better adaption to market trends. Precision Agriculture helps make farm operations run more efficient by minimizing raw materials and labor while maximizing products. For example, a USDA ERS report on *Farm Profits and Adoption of Precision Agriculture* found that 40% of fields are over fertilized; this influences production costs and results in 15%-20% yield loss from improper fertilization.⁴³ For these new technologies to work and for farmers to take advantage of them a strong broadband network is needed.

In today's economy, high-speed broadband access is necessary to run a successful business. A USDA analysis estimates that connected technologies are poised to transform agricultural production and create a potential \$47-\$65 billion in annual gross benefit for the United States. In 2015, Governor Andrew Cuomo announced \$500 billion for the NY Broadband Program to expand broadband development in New York State. This initiative resulted in the expansion of broadband in New York for some areas. According to the USDA 2017 Ag Census, 76% of farms in Chenango County have internet access. Better access to broadband allows Chenango County's Farmers to better market their products, increase production through innovative technologies and have better access to higher education and farm trainings. Without these resources, Chenango County Farmers are at a disadvantage when compared to other Farms in

⁴² (Gee, 2016)

⁴³ (Schimmelpfennig, 2016)

⁴⁴ (USDA, 2019)

⁴⁵ (USDA, 2019)

New York State and the United States as a whole. However, areas showing coverage on the NYS Broadband Programs Office maps are not always accurate and areas shown as covered are sometimes not. In addition, the bandwidth available may not be large enough to support the farmer's needs. For future farm businesses to be successful broadband accessibility is paramount.

Water Quality

Chenango County encompasses an area of 582,528 acres (i.e., 910.2 square miles) of which over 98% drains ultimately into the Chesapeake Bay (CB) catchment to the south. The very small remaining area located in the Town of Afton's southern edge flows into the Delaware River catchment to the southeast. The county is in the glaciated Allegheny Plateaus. Generally, there are ample quantities of soil moisture for growing traditional crops of corn and hay in the average year, as precipitation is evenly distributed over the months.

However, significant variations from the norm at critical points in the growing season can result in increased water stress of plants either from excess or deficiency. Irrigation is employed very little and almost solely on high value crops (fruit, vegetables, and horticultural plants). Larger upland farms which rely exclusively on groundwater as a supply for their operation may experience shortages where daily needs outstrip moderate to low yielding wells.

Starting in 2011 the EPA initiated Total Maximum Daily Load (TMDL) regulations for all land draining into the Chesapeake Bay, covering almost all of Chenango County. TMDL identifies the maximum amount of pollutant a body of water can receive while still meeting water quality standards. Despite general water quality being high relative to other major portions of the Bay, the EPA has established extremely low allocations for the targeted pollutants (nitrogen, phosphorous and sediment).

While this affects all aspects of New York State communities within the CB basin, agricultural operations in particular bear the brunt since they are required to install many Best Management Practices (BMPs) to contribute towards attaining the reduction goals. There are certain restrictions (e.g., no land application of manure during winter and mandatory manure storage), that can negatively impact the options for and viability of farm enterprises, in particular smaller ones.

On the other hand, there are options for landowners to implement BMPs as long-term investments for the quality of their farmland and surrounding natural resources. Through state and local programs, landowners can receive funding and technical assistance to improve their BMPs while improving their TMDL and water quality in their catchment. For example, the New York State Department of Agriculture



and Markets offer the Agricultural Nonpoint Source Abatement and Control Program (AgNPS) to specifically aid farmers with their BMPs and investing in actions such as riparian buffers. The photo above shows a recent riparian forest buffer project in Chenango County. For more information refer to the Agriculture Support Agencies and Organizations section and its sub-section of Soil and Water Conservation District on page 64.

Changes in Weather and Climate

Agricultural production is highly sensitive to changes in weather and climate. In the future, farming and food production could be impacted by severe weather, including warmer winters

with more lake-effect snowstorms, hotter summers with droughts or more intense storms with heavy rainfalls and high winds. As severity and frequency of natural disasters increase, the devastation and cost do as well. A changing climate will have both beneficial and harmful effects on agriculture. Longer frost-free growing seasons and higher



concentrations of atmospheric carbon dioxide (CO₂) would increase yields for many farm crops. However, increasingly hot summers are likely to reduce corn yields and dairy production.

Changes in climate display differently based on regions of the globe. Therefore, local agriculture production is closely tied with local environmental conditions and is affected differently from place to place. Chenango County and New York State have already experienced climate impacts in the form of flooding and extreme storms. The photo to the right shows a flood event in spring of 2021 on a new seeding in Oxford, New York. In 2011 NYSERDA developed ClimAID: The Integrated Assessment for Effective Climate Change in New York State to provide decision-makers with information on the State's vulnerability to climate change. Each New York State Region defined by ClimAID has characteristics that will be affected differently by climate change. Chenango County is part of Region 3, Southern Tier. In this region, issues that are expected due to climate change include:

- Loss in milk production.
- Increase flooding in Susquehanna River.
- First part of the State hit by invasive insects, weeds and other pests moving north. ⁴⁶
 Some predicted climate impacts on agriculture in New York State include:
 - Increased spring flooding, leading to delays in planting or fieldwork.
 - Increased soil erosion from heavy storms.
 - Increased risk of short-term summer drought.
 - Heat stress on cool-season crops, such as apples or maple syrup.
 - Heat stress on animals, such as dairy cows.
 - More weeds and insects due to warmer winters.
 - Invasive pest species from warmer climates. ⁴⁷

Farm characteristics such as farm size, productivity, and production costs will likely play a role

in which farms and regions are most vulnerable to negative effects from climate change. Unprecedented challenges are likely to occur due to climate change impacts. The image below demonstrates the impact a severe flood can have on a farm's landscape.



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⁴⁶ (NYSERDA, 2011)

⁴⁷ (Arjomad & Haight, 2017)

However, there will likely be new opportunities and emerging markets for new crops that take advantage of longer growing seasons and warmer temperatures. These adaptations will not be cost or risk free and will require strong capital investment and strategic planning. While large farms with more capital to invest in alternative farm strategies like stress-tolerant plant varieties. Small farms will be particularly vulnerable due to lack of investment capital for alternative farm strategies.

Renewable Energy Development

The balance between renewable energy and agriculture is both a development opportunity and pressure for landowners in Chenango County. Farmland with open fields, high southern exposure, and near three phase or high voltage transmission lines are prime locations for renewable energy development (Figure 9). Lease payments from solar and wind energy projects on agricultural land can provide an additional source of income that can allow landowners to keep land in agricultural production that would otherwise not be economically viable. However, development should be considered carefully with emphasis on protecting viable farmland.

As of January 31, 2021, the New York State Energy Research and Development Authority (NYSERDA) showed 11 completed commercial solar projects in Chenango County expected to produce 23 GWh annually. 48 There are 126 completed small scale projects for homeowners and businesses. Five (5) projects are listed as in development in the County with an expected production of 36 GWh annually. ⁴⁹ Most solar projects in New York State fall between 2 and 20 MW of electrical production. For this development, a 2 MW solar installation would require around 12 acres of land while a 20 MW facility would require approximately 120 acres. ⁵⁰ Currently there are no completed large-scale wind projects in Chenango County; however, a proposed large-scale wind project in the Town of Guilford was approved by the siting board on Mach 11, 2021. A survey conducted by the National Renewable Energy Laboratory (NREL) of large-scale wind facilities in the U.S. require between 30 and 141 acres per MW of capacity as a project area, with an estimated permanent land disturbance of less than one acre per MW. 51 When developing these projects, it is important that landowners and municipalities are informed of both economic opportunities and impact to agricultural resources. Therefore, it is important that municipalities ensure the projects are sited appropriately with minimal disturbance to viable agricultural land. It is important that municipalities and landowners discuss what will happen at the end of the project cycle and how the site will be decommissioned.

⁴⁸ (NYSERDA, 2019)

⁴⁹ (NYSERDA, 2019)

⁵⁰ (The Nature Conservancy, 2017)

⁵¹ (The Nature Conservancy, 2017)

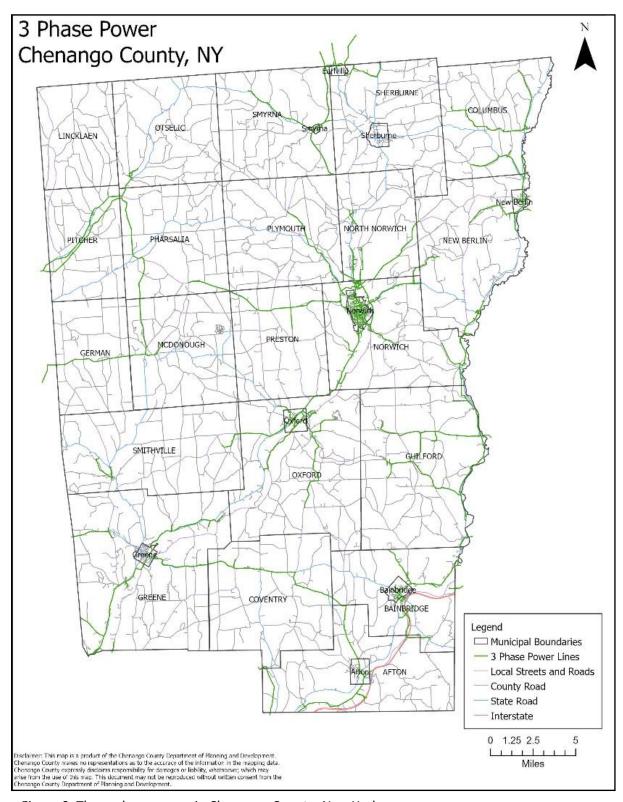


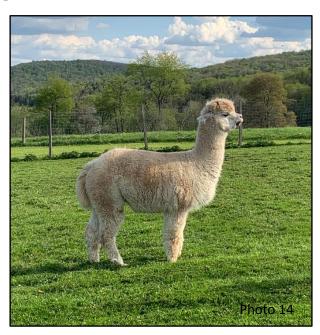
Figure 9. Three phase power in Chenango County, New York.

For rural Chenango County, many municipalities lack land use regulations that would require project requirements (see page 84 for land use laws the impact to viable agricultural land are mitigated to ensure farmland is still available for agricultural use in effect). To meet New York States Clean Energy Standard goals, greater solar and wind development is expected to mitigate the impacts of climate change. It is important that while these projects are developed, the agricultural profile in Chenango County remains while shifting to new resolutions.

Diversification and Emerging Markets

Diversification

With diversification and integration, farmers can take advantage of opportunities beyond the traditional dairy farming, livestock, and feed crops to expand their financial opportunities. Some county farms have ventured into organic production of milk, beef, lamb, poultry and eggs, fruits, and vegetables. According to the 2017 Ag Census, 37 farms in Chenango County produce organic products, an increase of 17 farms from the 20 organic farms reported in the 2012 Ag Census. ⁵² Products such as aquaculture, herbs, alpacas, emus, and



honeybees are a few examples of less familiar farming practices that attract interest and has limited market opportunities in this area.

Chenango County farmers have traditionally had two markets into which to sell raw products: wholesale and direct-to-consumer. These markets reach residents and business in Chenango County and the metropolitan area. Sale of farm products directly to Chenango County consumers is becoming a more frequent occurrence due to new opportunities. One example is farmers markets. Farmers markets bridge the gap between consumer and farmer while offering the season's freshest products. Chenango County has active farmers markets in the City of Norwich and Villages of Oxford and New Berlin. Neighboring municipalities with farmers markets include Cincinnatus, Earlville, Hamilton, and Sidney. Another example of a popular market is U-pick Farms. This

⁵² (USDA, 2019)

direct-to-consumer technique offers farmers the financial opportunity the sell their products at all quantities without inquiring additional expenses. Chenango County has



active U-pick farms located in South Otselic, Afton,
Bainbridge, Coventry, and
Oxford, these farms most
commonly offer blueberries and
strawberries, a blueberry bushes
from a U-pick farm are seen in
the photo to the right.
Additional opportunities
include, roadside stands, farm
fresh bottled milk, freezer trade
for beef, pork and lamb, and the

more recent concept of Consumer Supported Agriculture (CSA) which have been relatively limited in this County historically. The main concept of CSA is to improve the relationship between customer and farmer while securing a market and an income for the farmer, and locally grown high quality products for the customer.

Adding value to farm products is of growing interest among farmers and the Chenango County Agriculture and Natural Resources Development Council. The council allows

farmers to capture higher profit margins through products sold directly to County consumers, institutions and local or regional processing facilities. Cooperative ventures can support larger scale production for export from the County and provide additional profits to farmer-owners. These approaches remove some of the dependence of area farmers on a pricing and market system that pays them inadequately for the costs of production alone. A resource that the Council provides is an interactive map that allows County residents to find local farms



and farmers markets to purchase farm-fresh products. These local programs will aid farmers to diversify their market capabilities and opportunities.

Securing a farm's finance future of a farm is important. Renewable energy in the form of wind and solar have been expanding throughout Chenango County within recent years and can provide a variety of benefits to the agricultural industry and the surrounding area. Solar installments are considered "on farm" equipment and therefore are protected under the Agricultural Districts Law if the farmland owner choses to apply to be in an Agricultural District. A solar installation could aid in the application for the farmland owner if they choose to apply. Lease agreements with solar developers are also a viable option, but the rates and the extent of construction can vary for each project so research specifically pertaining to one's farm should be conducted. Wind projects on farmland are most commonly in the form of a lease. In this form of agreement, the project only occupies a small portion of the landowner's land which allows most original farming practices to continue while the farmland owner receives additional payment.⁵³

Economics

- Aid farmers' finances with lease agreements
- Additional income
- Getting a full use out of the land, farmer's practices can continue alongside of the wind project
- Create a stable income and long-term stability of that farm or land for the life of the wind project and keeping the number of farms stable
- Contribute to local revenues through tax collections

<u>Hemp</u>

After a long hiatus of almost 45 years, industrial hemp production in the United States has begun to rise due to recent law changes potential alternative cash crop for farmers. Hemp is a versatile plant with many potential end-uses such as food from hemp seed, fiber from hemp stalks and oil from the flowers and seeds. According to the USDA, State pilot programs saw an increase of 0 acres in hemp production in 2013 to over 90,000 acres in hemp production in 2018. This represents the largest U.S. hemp acreage since the 146,200 acres grown in 1943.⁵⁴

In New York State \$10 million in grant funding was awarded to the hemp industry. Funding was split into two \$5 million components first, for research and production and second, for capital grants. In Broome County, a cannabis company called Canopy Growth unveiled a \$150 million dollar facility in Kirkwood, New York. ⁵⁵ The facility could help Chenango County farmers through land leases and local producers of the hemp crop. The

^{53 (}NYSERDA, 2020)

⁵⁴ (Mark, et al., 2020)

^{55 (}Vincente, 2019)

2018 and 2019 Farm Bill made changes to both U.S. narcotics control laws and trade of hemp products, making it easier to both produce and sell hemp.

Despite these advancements in legislation and markets, challenges still exist. Hemp is a derivative of the marijuana plant and must be tested for THC, the psychoactive compound in marijuana that gives the *high* sensation, levels for compliance. Other issues include:

- Competition from conventional field crops and marijuana (in States where it is legal) for acreage,
- Well-established foreign competitors for hemp product markets,
- The ability to decrease production and pricing uncertainty through transparency and risk management, and
- Continued market development.⁵⁶
- Variation in THC levels.

Cannabis

As of March 31, 2021, Governor Andrew M. Cuomo signed legislation legalizing adult-use cannabis in New York state, the bill is an amended version of the Marijuana Regulation and Taxation Act. The development of this bill has the potential to create new markets and increase economic activity for all New Yorkers including New York farmers.

For the state of New York, it is estimated, based on the latest National Survey of Drug Use and Health, that sales in the legal market would increase from \$566 million in the first fiscal year of 2023 to \$2.6 billion in 2027. Additionally, based on the Governor's proposed sales tax it is estimated that sales will generate \$25 million in local sales taxes in 2023 and will increase to \$114 million in 2021. The success of cannabis products in New York will reply on the small-scale farms. It is estimated that an addition of 40,000 to 50,000 jobs will be created in the next few years. Locally grown cannabis will promote farmers, support gardening and agricultural suppliers, and generate economic growth at local and state levels.⁵⁷

Legalization of recreational cannabis has a lot of potential as a market for New York farmers. It has the potential for new growth in economic development, social equity, employment

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⁵⁶ (Mark, et al., 2020)

⁵⁷ (Parrott & Mattingly, 2021)

opportunities, and tax revenue generation. Adversities face this new market such as the rise of large firms to small areas, but the list of benefits to rural communities are growing. Cultivating cannabis will not occur for another year or two but planning is key for local governments and farmers.

Maple Products

The maple syrup industry is of great economic and cultural significance in the United States with Vermont being the country's top producer. New York ranks second in maple production with Maine in third. In 2019, Vermont produced



2,070,000 gallons of maple syrup while New York produced 820,000 gallons.⁵⁸ Maple syrup production in New York tends to be more traditional and an independent operation than the larger commercial operations found in Vermont. Maple in Chenango County has grown in popularity. According to the 2017 Ag Census Chenango County produced 25,622 gallons of maple syrup compared to 10,044 gallons in 2012. Maple producing farms also increased with 41 farms in 2017 compared to 23 in 2012.⁵⁹

In the future, maple product production rates can face challenges as the climate continues to change and freeze-thaw cycles are altered. Currently, many local farmers use maple syrup as an alternative crop with few using it as sole production. However, it represents a significant alternative crop for farmers.

⁵⁸ (National Agricultural Statistic Service, 2019)

⁵⁹ (USDA, 2019)

Honeybees and Beekeeping

Honeybees can produce a variety of products, such as honey, beeswax, pollen, and royal jelly. However, they are more valued for their role as a pollinator of agricultural crops. Without the use of honeybees to pollinate the cost of many fruits, vegetables, legumes, nuts, and seeds would be much more costly. While other pollinators exist, such as other insects, birds and bats,



keepers have little control over the actions or numbers with these pollinators. Honeybee colonies can be easily moved and placed wherever and whenever needs arise.

The National Agricultural Statistics Service (NASS) Bee and Honey Program has provided honeybee colony and honey production data for decades. The data is collected through the Census of Agriculture that takes place every five years and from annual surveys. The Unites States had 2.88 million honeybee colonies in 2017, a 12 percent decrease from the

record high of 3.28 million is 2012. Between 2017 and 2018 the prices of honey declined from \$2.20 per pound, the highest ever, to \$2.16 per pound. Chenango County saw an increase in honeybee colonies, with 43 in 2017 and 30 in 2012. New York State also saw an increase in honeybee colonies over the same time, with 1,774 in 2017 and 1,168 in 2012.

Honeybees are subject to certain disease, parasites, predators, and pests. Most pests and predators are typically easy to control. Diseases and two recently introduced parasitic mites represent a threat to the industry. In 2018, Varroa mites were the largest stressor in every quarter. 62 The brownish red mite feeds on the blood of both larvae and



⁶⁰ (National Agricultural Statistic Service, 2019)

⁶¹ (USDA, 2019)

⁶² (National Agricultural Statistic Service, 2019)

adult bees. This results in bee mortality, weakening of colonies and death. Despite these challenges beekeeping represents a growing market for the agricultural industry. Not only are honeybee products in great demand from consumers, but farmers' needs for pollinators is of value.

Organic

The USDA defines organic as "a production system that is managed to respond to site-specific conditions by integrating cultural, biological, and mechanical practices that foster cycling resources, promote ecological balance, and conserve biology". ⁶³ Organic farming in the United States has been growing rapidly. The organic industry is the fastest growing segment of United States agriculture, with total food sales and non-food products reaching \$47 billion in 2016. ⁶⁴ The substantial market for organic products makes it a great alternative from traditional farming practices.

The number of total acres in organic farm production has risen in New York State. Due to consumer interest, New York State has seen a 56% increase in organic sales from 2008 to 2014. 65 According to the 2017 Census of Agriculture New York State had 1,330 farms registered as organic, representing \$206,462,000 in total sales. Chenango County has seen an increase in organic farming production. In 2017 Chenango County had 37 farms registered as



organic, an increase from 20 in 2012. Total organic sales in the County in 2017 was \$3,770,000 an increase from \$2,161,000 in 2012. 66 Most of the organic farming in the County comes from growing vegetables and fruits, pictured below is a blueberry bush on an organic farm in Coventry.

Agriculture has played an important part of New York State's and Chenango County's economy. Increasing organic sales and farms both nationally and locally makes organic

⁶³ (SARE, 2003)

⁶⁴ (National Institute of Food and Agriculture)

⁶⁵ (Office of Budget and Policy Analysis, 2016)

⁶⁶ (USDA, 2019)

farming an integral part of the agricultural economy. Increasing interest in purchasing organic products is expected to drive the continuing growth of the organic sector.

Hops

New York State had an important hop industry at one time. In 1880, New York produced 21 million pounds of dried hops, which was most of the U.S. crop. ⁶⁷ However, due to disease and pests, production moved west amidst the disease pressures. This made commercial hop production in New York all but extinct. What little farming was left virtually disappeared at the start of prohibition. Due to the dramatic drop in the price of hops, most of the hops that were left were pulled from the ground.

Presently, commercial hops growing has started to come back to New York in recent

years. Industry in the Northwest has developed strong plant breeding, IMP research and development of new varieties with disease resistance. 68 These same varieties developed in the Northwest are now producing well in New York. Advances in pest management, both chemical and cultural, have come a long way in the last hundred years. Those advancements mentioned above made commercial hops production viable in New York State.

Consumer demand for IPA's and craft beers have helped with the development of micro-breweries and brew houses. According to the 2017 Census of Agriculture, New York State had a total of 145 farms that harvested 322 acres of hops. An



increase from 12 farms and 19 acres harvested in 2012.⁶⁹ As consumer demand grows for craft beers so will the need for hops. In 2013 New York State started to issue a new type of brewing license. Known as the "Farm Brewery" license, it requires a

^{67 (}Miller, 2018)

⁶⁸ (Miller, 2018)

⁶⁹ (USDA, 2019)

certain percentage of the beer to be made with locally grown farm products. The percentage of locally grown farm products used in production increases every year until 2024 when 90% of hops and other ingredients must be grown in New York State. To Growth of farm brewing and hops farming in New York has been dramatic. Challenges still lie ahead for producing and farming hops and the associated products. However, with growing consumer demand and craft beer popularity it represents a possible alternative crop.

<u>Barley</u>

A short-season and early maturing crop, barley is likely the world's oldest cultivated grain. Inexpensive and easy to grow, barley can be used for erosion control, nutrient recycler, weed suppressor, nurse crop, pest suppressor and to improve tilth organic matter. As a cereal grain barley is used for livestock feed, human food and malt production. For each use of barley, a specific variety is grown for that need. Due to its use in malt production, barley is grown in many areas of the world.

Demand is high for barley and hops as an ingredient for beer. New York State is ranked second for the highest number of breweries in the U.S., representing a total economic impact of \$5.4 billion in 2018.⁷¹ As part of the 2012 Farm Brewery Bill, New York's craft brewers are steadily increasing the amount of state-sourced ingredients used in beer production. However, when the law was passed in 2012, no malting barley was being grown in New York. Unlike malting barley which has not been grown since the U.S. prohibition, barley for animal feed has been grown in New York for many years. In 2016, Cornell developed a malting barley variety that is suited for New York's climate. Malt made from this group of barley should be available to brewers by fall of 2021.

As demand and the state-sourced ingredient requirement grow, so will the need to increase malting barley production. According to the Farm Brewery Bill, 90% of brewer's ingredients will need to be from state sources in 2024. To meet this goal more barley will need to be farmed for beer production. Currently, only around 30 farmers are using malting barley varieties developed by Cornell. As seed storage grows more farmers will be able to produce barley.

Willow

Willow is a fast growing, woody crop that produces large amounts of hardwood biomass quickly. Well known for its flexible and vigorous growth, willow is popular for its use in

⁷⁰ (Farm Brewery, n.d.)

⁷¹ (Empire State Development, n.d.)

basket and furniture making. One planting of willow can be harvested up to seven times on a three- or four-year rotation cycle. Willow can be grown on idle or marginal lands, stimulating rural economic development while producing numerous environmental benefits. Other uses include erosion control, pollution mitigation, wildlife habitat and bioremediation. Its fast growth cycle makes willow a popular landscape ornamental, as well as a potential bioenergy crop.

Commercial production of willow crops in New York State is being prompted by the Unites States Department of Agriculture Biomass Crop Assistance Program (USDA BCAP). The BCAP was created by the 2008 Farm Bill and reauthorized with modifications in 2014.⁷² The program is part of the national strategy to reduce U.S. reliance on forging oil, improve domestic energy security and reduce carbon pollution. BCAP provides funds to assist farmers and forester landowners with growing, maintaining and harvesting biomass that can be used for energy or biobased products. Most of the new willow crops (about 70%) were established in 2013, with the remainder established several years earlier.⁷³ This provides a range of crop ages and the opportunity to harvest willow biomass every year in the future.

In New York State, there are currently over 1100 acres of willow crops enrolled in the BCAP program. These crops are spread across the counties of Jefferson, Lewis and Oneida and are situated around two biopower facilities owned by ReEnergy Holdings LLC. The enrollment period for the BCAP funding to establish willow biomass in New York State has expired. However, more funding opportunities may become available again soon. Research at the State University of New York- Environmental Science and Forestry (SUNY-ESF) is currently being furthered by commercial production, innovations, and collaborations with stakeholders. Increasing commercial production also spurs innovation, awareness, and adoption of the new crop.

Evaluation of Potential Agricultural Land Protection Strategies

Agricultural District Program

The Agricultural District program allows farm and ranch landowners to form special areas where commercial agriculture is encouraged and protected. New York State enacted its Agricultural District Law (ADL) in 1971 with the passage of the ADL under section 308 of Article 25-AAA.

^{72 (}Farm Service Agency, 2016)

⁷³ (Heavey & Volk, 2014)

⁷⁴ (Heavey & Volk, 2014)

The program is authorized by New York State law but often implemented at the local government level. Local governments are required to review and approve landowner applications to the programs. The program is meant to be a comprehensive response to threats facing agriculture and the land agricultural production depends on.

The County Board of Supervisors is responsible for the creation, review, and management of its Agricultural Districts. The Chenango County Department of Planning and Development manages the Agricultural District review period and the 30-day enrollment process. Following completions of the district creation, eight-year review process, or annual inclusion process, the County Board of Supervisors submits the plan to the Commissioner of New York State Agriculture and Markets for certification. Chenango County currently has three (3) active Agricultural Districts (Table Central Figure 10) To The number of districts has reduced in recent years due to the loss of farmland from development pressures. To maintain the required 50% or more of land in farms, the districts were reviewed and consolidated starting in 2012 and completed in 2016. Chenango County currently has 308,413 acres enrolled in the agricultural district program

District	Certified	Towns Included	# Acres in District	# Acres in Farms*
#1A	4/30/1980	Afton, Bainbridge, Coventry, Greene, Guilford, Norwich, Oxford, and Smithville. Villages of Afton, Bainbridge, Greene, Oxford and City of Norwich	167,035	101,637
#2A	4/12/1982	Lincklean, Otselic, Pitcher, Pharsalia, German and McDonough	46239	32,893
#3A	1/10/1977	Smyrna, Sherburne, New Berlin, North Norwich, Columbus, Plymouth and Preston	95,139	68,013
	Total 308,413 202,54		202,543	

^{*} Acres in farms represents the sum of acres owned by farmers and rented by farmers.

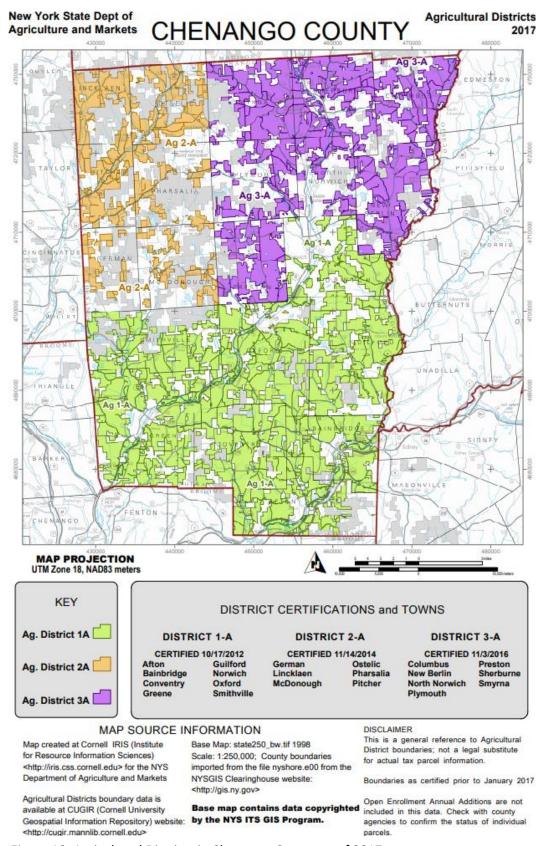


Figure 10. Agricultural Districts in Chenango County as of 2017.

The ADL recognized agricultural land as one of New York State's most valuable and irreplaceable resources. Additionally, the affect non-farm development has on farmland. The law seeks to create an economic and regulatory incentive that encourages farmers to continue farming (Table 6). Benefits of the Agricultural District Program include:

- Mandates state agencies, as a matter of policy, to encourage the maintenance of viable farming in agricultural districts;
- Limits eminent domain and other public acquisitions and the advance of public funds for certain construction activities.
- Limits siting of a solid waste management facility on land in agricultural production.
- Limits on the power to impose benefit assessments, special ad valorem levies, or other rates or fees in certain improvement districts or benefit areas;
- Requires local governments, when developing and administering comprehensive
 plans and local laws, ordinances, rules, or regulations do so in a manner that realizes
 the intent of the Agricultural Districts Law and not unreasonably restrict or regulate
 farm operations;
- Requirement that applications for certain planning and zoning actions affecting a
 farm operation within an agricultural district or on lands within five hundred feet of a
 farm operation within an agricultural district, include an agricultural data statement
 designed to allow the review agency to evaluate the possible impacts of the proposed
 action on the functioning of the farm operation.⁷⁵

In 1992, New York State amended its ADL to reconstitute and strengthen local agricultural advisory committees, add new right to farm protections, and require local governments to recognize the agricultural district program when making local land use decisions. In 1988, a nuisance disclaimer was added and a requirement for enrolled farmers to adopt sound conservation practices.⁷⁶

Table 6: Agricultural Districts benefits and drawbacks.

Agricultural Districts:	
Benefits	Drawbacks
 Are voluntary and popular with farmers 	Do not prevent conversion of enrolled land
 Support a favorable operating environment for farms 	Have several provisions that are reactive rather than pro-active

⁷⁵ (NYS Department of Ag & Markets)

⁷⁶ (American Farmland Trust, 2016)

- Help stabilize large blocks of land to keep farming viable ⁷⁷
- May lose non-farm support for programs as right to farm protections are exercised ⁷⁸

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Local "Right to Farm" Law

The Agricultural District Law establishes New York's Right to Farm protections from private nuisance suits. Where the law is in effect, it can provide legal help and representation through New York State Ag and Markets from nuisance lawsuits brought by neighbors and serve as an educational tool for the non-farming community. A local "Right to Farm" law guides local policy in support of farming which uses defined "generally accepted agricultural practices". Typically, the law includes language that farm practices include odors, noise and other activities that may not be desirable to non-farm residence (Table 7). The law establishes a process for determining when a farmer is due protection from nuisance suits. These steps include:

- Assessment of whether the farmer is using sound agricultural practices.
- Is the agricultural practice part of the farms Agricultural Environmental Management Program (AEM).

The determination is made by State and local agencies that are involved in agriculture. Once these determinations are made the State will issue an opinion which can be challenged within 30-days. If there is no challenge to the decision the practice is deemed sound and cannot legally be considered a private nuisance. However, if the challenge continues, the Right to Farm Law authorizes recovery for the costs with defending the suit.

The Right to Farm statute provides a structured process for intermediating the results and reducing costs of constant legal challenges to farming activities. Chenango County adopted a "Right to Farm" law in 1991 as authorized by the NYS Agricultural and Markets law. Currently ten (10) municipalities out of thirty (30) have adopted local "Right to Farm" laws (see page 84 for land use laws in effect). A model Right to Farm law is provided in Appendix 114 and 116.

Table 7: Right to Farm Law benefits and drawbacks.

Right to Farm Law	
Benefits	Drawbacks

⁷⁷ (Haight, 2011)

⁷⁸ (Haight, 2011)

Help maintain a supportive operating environment for farms	May have limited impact unless law and despite resolution process are widely promoted
Publicly support agriculture	
Can guide future local government policies	Do not directly prevent farmland conversion ⁷⁹
Supplements the New York State Agricultural District Law	
Are relatively inexpensive ⁸⁰	

Agricultural Conservation Easements

A conservation easement is a deed restriction that is voluntarily placed by landowners on their property to protect resources such as productive agricultural land, ground and surface water, habitat, historic sites or scenic views. The landowner ("grantor") allows a qualified conservation organization or public agency ("grantee") to monitor and enforce the restrictions set forth in the agreement. ⁸¹ The landowner works with the grantee to develop an easement on what activities should be limited to protect the specific resource. Easements are often flexible documents to fit each specific property and landowner needs. Agricultural Conservation Easements (ACE) are designed to keep productive agricultural land available for farming (Table 8). Historically ACE are a cornerstone tool used to protect farmland.

Generally, ACE's place limits on subdivisions, non-farm development, and other land uses inconsistent with agriculture. Most easements are permanent; however, term easements impose restrictions for a specific number of years. Regardless of duration, the agreement is legally binding for the agreed upon time. This agreement includes any present and future landowners. ACE's can be modified or terminated by a court if the land or the surrounding area changes and the easement's objectives become impossible to complete. Landowners retain the title to their property and can still restrict public access, farm the land, use it as collateral or sell the property.

⁷⁹ (Haight, 2011)

^{80 (}Haight, 2011)

^{81 (}American Farmland Trust, 2016)

^{82 (}Dempsey, 2017)

Table 8: Agricultural Conservation Easements benefits and drawbacks.

Agricultural Conservation Easements:		
Benefits	Drawbacks	
Permanently protect important farmland while keeping the land in private ownership and on local tax rolls	Donating an easement is not always a financially viable option for landowners	
Are flexible documents that can be tailored to meet the needs of individual farmers and ranchers and unique properties	Monitoring and enforcing conservation easements require a serious commitment on part of the easement holder	
May provide farmers with several tax benefits including income, estate, and property tax reductions	Future landowners are not always interested in upholding easement terms ⁸³	
May help farmers and ranchers transfer their operations to the next generation ⁸⁴		

Chenango County does not have an active ACE program of its own. However, programs are available through the New York State Farmland Protection Program, the Agricultural Conservation Easement Program (ACEP), the USDA Natural Resource Conservation Service (NRCS) and other agencies. Multiple land preservation programs can work in conjunction to preserve Chenango County's farmland from further development.

<u>Transfer of Development Rights</u>

Transfer of Development Rights (TDR) programs enable the transfer of development potential from one parcel of land to another. A TDR is also known as a transfer of development credits (TDC) or Transfer of Development Units (TDU). TDR is often used to shift development pressure from agricultural land to designated development zones located closer to municipal services. When applied to farmland protection, TDR programs transfer development pressures away from agricultural areas to other parts of the community. TDR programs require zones

84 (Haight, 2011)

^{83 (}Haight, 2011)

^{85 (}American Farmland Trust, 2008)

designated as "sending" and "receiving" areas in order to transfer development from one part of the community to another. Sending areas are defined as parts of the community that will be the focus of land conservation efforts. Receiving areas are the areas where development is focused and concentrated. An effective TDR program helps facilitate transactions between landowners and developers.

The program allows landowners to separate from their other property rights, and to sell, the right to develop land. TDR's offer less protection than a conservation easement due to possible changes in local land use laws. Changes that could alter the rules for determining the proper sending area sites. Places where large blocks of land remain in agriculture are the most suitable for a TDR program. Currently TDR programs have had limited success in New York State (Table 9). This is due to the State's town level planning structure, challenges in developing viable markets for purchase and sale of credits, and the complexity of establishing and running effective TDR programs. ⁸⁶

Table 9: Transfer of Development Rights benefits and drawbacks.

Transfer of Development Rights		
Benefits	Drawbacks	
Provide alternate source of funding to protect farmland	Depend on real estate market for land protection, so must have demand from both sending and receiving areas	
Complement Purchase of Development Rights programs and other conservation options that rely on public funds.	Can be difficult to identify receiving areas interested in and capable of handling more intense development	
Are Voluntary ⁸⁷	Require staff and resources to manage effectively	
	Raise property tax concerns if sending and receiving areas are in different taxing jurisdictions	

^{86 (}Haight, 2011)

^{87 (}Haight, 2011)

Are complex programs, taking time to explain to public landowners 88

Purchase of Development Rights

Purchase of Development Rights (PDR) or Purchase of Agricultural Conservation Easement (PACE) is a voluntary approach to protecting farmland that compensates landowners for permanently protecting their agricultural land. The PDR pays landowners to give up their rights to develop on their land while retaining ownership. The program places a deed restriction, commonly known as a conservation easement on the property. ⁸⁹ PDR's are popular with many landowners because the payment is financially competitive with development offers.

A PDR program can be an important tool to counterattack land development. This is especially true in communities with high development pressures. In these areas, farmland protection alternatives that are financially competitive with development proposals are required. If used properly a PDR can help a community permanently protect significant blocks of agricultural land. However, a PDR program will not solve all the challenges to local farms (Table 10).

Purchase of Development Rights	
Benefits	Drawbacks
Protects farmland permanently, while keeping it in private ownership	Are expensive
Are voluntary programs	Are difficult to fund adequately; demand for the programs is far greater than available funds
Allow farmers to transform land assets into liquid assets that can be used for other purposes	Will not protect some important farms that choose not to participate

^{88 (}Haight, 2011)

^{89 (}Haight, 2011)

Can protect a variety of agricultural and natural resources	Are complex and time consuming
Help keep agricultural land affordable for farmers 90	Require an ongoing investment of time and resources to monitor and enforce conservation easement 91

Municipalities considering a PDR program should consider what types of land they wish to protect, how to determine protection priorities, and how the projects will be funded.

Land Use Controls Available for Farmland Protection

The following examples of land use controls are vital to farmland protection. Municipalities can act through land use planning and regulation to preserve and plan specific agricultural land for the future.

Zoning

Zoning allows governments to regulate and control land development. Zoning laws specify and restrict development and land use into certain zoned districts. Most zoning codes focus on residential, commercial, and industrial development. This focus is problematic for agriculture due to municipality adoption of zoning designed for urban and suburban land uses. Zoning ordinances and laws can touch upon agriculture in a variety of ways (Table 11). Zoning laws can specify where and how farms and related agricultural businesses can operate in a community. ⁹² Zoning ordinances are not the answer to all land use development pressures. Property owners could be granted a variance by the Zoning Board of Appeals (ZBA) which could weaken the zoning law over time.

Zoning laws or agricultural zoning districts intended to support agriculture and protect farmland typically have some of the following objectives:⁹³

- Support a farm-friendly business environment
- Stabilize larger blocks of agricultural land

91 (Haight, 2011)

^{90 (}Haight, 2011)

^{92 (}Haight, 2011)

^{93 (}Haight, 2011)

- Reduce the likelihood of future conflicts between farmers and non-farm neighbors by managing new development patterns and providing for growth in appropriate areas
- Prevent the conversion of the municipalities most productive farmland or division of the land into tracts that are too small to farm profitably
- Keep land more affordable for farmers to purchase

Zoning: To Stabilize Agricultural Land Base		
Benefits	Drawbacks	
Is a relatively easy concept to understand and administer	May reduce land values and decrease landowners' equity in land	
Is comparatively inexpensive for the public to implement	Can be politically difficult to set lot sizes and use restrictions that provide meaningful support for sustained agricultural use	
Can be implemented quickly when compared with other farmland protection tools	Setting minimum lot size, such as one residential unit per five (5) acres, may result in parcels of land that are "too big to mow but too small to farm"	
Can be flexible, changing as local conditions evolve	May create a market for larger acreage "farmettes" in areas with high levels of development pressure if a lower density lot size (such as one residential unit per 20 acres) is set without restrictions. While the resulting parcels could potentially be farmed, the agricultural use of such large rural lots could be threatened when non-farmers are willing to pay higher land values than farmers can afford ⁹⁴	
Is well-suited to more rural communities with lower development pressure 95		

^{94 (}Haight, 2011)

⁹⁵ (Haight, 2011)

Table 11: Zoning as a tool to Stabilize Agricultural Land Base benefits and drawbacks.

A list of Municipalities with zoning regulations can be found in Table 14.

Comprehensive Plans

As the foundation for local planning efforts, a comprehensive plan represents a community's vision for the future and helps guide development. Developing a comprehensive plan can be challenging but should be a beneficial opportunity to discuss and debate the future of a community. Comprehensive plans often include:

- A vision statement describing a community's long-term goals.
- Maps identifying different natural and community resources, infrastructure, and land uses.
- Research regarding a towns' citizens, land uses, businesses, and natural resources.
- Feedback from citizen via surveys, public meetings, focus groups and other public participation vehicles.
- Recommendations to achieve a community's stated objectives. 123

Agriculture is often treated favorably in comprehensive plans. It is often included in sections regarding open space, natural resources or the environment to describe the role of farms in defining a community's landscape. Other sections may connect the value of farm buildings, rock walls, and pastoral landscape as part of the community's history. Others could include sections on the importance of farming to the community's economy, employment, and businesses (Table 12).

Table 12. Comprehensive Plans benefits and drawbacks.

Comprehensive Plans	
Benefits	Drawbacks
Engage farmers and non-farmers in discussions about a community's future	 Involve a lengthy process that can drain personal, financial, and political resources and reduce enthusiasm for plan implementation
 Set the stage for future town efforts to support local farms 	 Lack a meaningful impact without subsequent town actions ⁹⁶

⁹⁶ (Haight, 2011)

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- Articulate reasons why a town should support agriculture
- Are Less expensive than some other farmland protection tools ⁹⁷

Unfortunately, few comprehensive plans capture the many benefits farms bring to a community or the unique nature of farms as a business and

land use. As such, many comprehensive plans fail to prepare a community to work proactively to create a future for local farms. It is important when developing a comprehensive plan to engage farmers and landowners early in the process. One way to do this is by setting up an agricultural advisory committee to ensure the unique needs of agriculture are included in the comprehensive plan.

A list of Municipalities with comprehensive plans can be found in Table 14.

Subdivision Ordinances

A subdivision ordinance regulates the division of larger land parcels into smaller land parcels. This law provides the municipal planning board or other boards that oversee land use regulations to review and make decisions on proposed subdivisions. These reviews are to ensure the protection of public interests, in addition to the new subdivision not accelerating flooding or erosion, traffic problems, noise pollution and other negative impacts. Subdivision ordinances often require a plat or sketch identifying the proposed locations and dimensions of new roads, lots and other landscape features. These features may include wetlands, floodplains, large trees, other natural resources, utility lines and easements. Some criteria that municipalities can require include:

- Consistency with municipalities Comprehensive Plans.
- Compatibility with New York certified Agricultural Districts in project areas.
- Identification of growth-inducing aspects of the projects that may require additional public services or have future impacts on community interests.
- Analysis of potential impacts to:
 - o Prime, statewide important or other productive agricultural soils
 - Nearby farm operations (with an emphasis on farm buildings and infrastructure, particularly livestock) and the viability of commercial agricultural in the area
 - o On and off-site drainage patterns, particularly field tiling and ditching
 - Historic structures and sites
 - Visual character of the area

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^{97 (}Haight, 2011)

- Capacity of existing roadways, fire protection, and other public services such as water and waste disposal
- Traffic generated and compatibility with local roadways
- o Land values and land speculation⁹⁸

In terms of protecting agriculture, a Subdivision Ordinance can require the review of potential impacts of the new subdivision on productive farmland and nearby farm operations (Table 13). The ordinance can stipulate design standards to help reduce potential impacts on farms and farmland. Municipalities should also require copies of agricultural data statements for land use determinations affecting property within 500 feet of a farm operation or state certified agricultural district. The notice of intent (NOI) filing for public projects can be required to determine the impacts of proposed projects on agricultural districts. County agricultural and farmland protection boards and the New York State Department of Agriculture and Markets (NYSDAM) review NOI filings. To review subdivisions effectively, it is important that municipalities have review criteria specific to agriculture.

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Table 13: Subdivision Ordinance benefits and drawbacks.

Subdivision Ordinance							
Benefits	Drawbacks						
Support informed municipality decision making	May not prevent farmland conversion						
 Help limit the impacts of new subdivisions on nearby farm operations 	 Have limited ability to prevent future farm/neighbor conflicts 						
 Can steer new development away from productive farmland 	 May be opposed by landowners who dislike land use regulations ¹ 						

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^{98 (}Haight, 2011)

 May reduce likelihood of future farm/neighbor conflicts ¹ Subdivision and Site Plan review laws exist in most municipalities throughout Chenango County. These

laws, if utilized properly along with a Master or Comprehensive Plan, can help decrease the amount of unwanted development on agricultural land. Chenango County, along with the City of Norwich, Towns of Bainbridge, Columbus, Greene, New Berlin, Oxford, Sherburne and Smyrna, and Villages of Bainbridge, Earlville, Greene and Oxford, all have Master or Comprehensive Plans. County efforts to introduce comprehensive land use planning date back to 1976 when a Land Use Plan was developed by the Planning Department and Planning Board. Later in 1996, the Chenango County Planning Board approved a Land Use Position Paper which was built upon the 2020 Vision Report in response to emphasis on the need for land use planning. Opponents of county comprehensive planning are said to prefer individual town initiatives rather than a County one. Yet, Planners and County Supervisors report that there is very little support in the municipalities for land use planning or regulation.

				Land Use F	Plans a	nd Regul	ations i	n Effect	t						
Municipality	County Building & Fire	Local Building & Fire	Floodplain Law	County Floodplain		Junk Storage	Mobile Home			Telecommunicat	Road use	Site Plan Review	1	Local Right to	Comprehensive

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City of Norwich		х	x		х		х	x	х			х	х	х		х
Villages																
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Bainbridge	х		х	х	х		х	х	х	х		х	х	х		х
Earlville		х	х	х	х											х
Greene		х	х		z		z	х	х	х		х	х	х		х
New Berlin	х		х	х	х		х	х	х	х		х	х	х		
Oxford	х		х	x	z		z	х	х			z	х	х		х
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^{** -} Subdivision Regulations addressed in Site Plan Regulations

A list of Municipalities with subdivision regulations can be found in Table 14 on page 31.

With the rural atmosphere and the agriculture industry under their domain, the towns within Chenango County hold a pivotal position. Town governments' role is to review regulations, ordinances, policies, and practices for consistency in the protection and support of agriculture – the industry that maintains the valued rural atmosphere and economic framework of rural

Z - Refer to Zoning Ordinances (For Copies of these regulations, please contact the Town/Village or City Clerk)

A - Refer to Agreement

communities. New York State reserves the powers of Home Rule and land use control to its towns.

Town officials should learn and adhere to the provisions of the Agriculture Districts Law and thoughtfully consider the impacts on agriculture activities from their decisions on land use and development of land. The New York State Agriculture and Markets Law Article 25AAA §324-a, protects farmers against local laws which unreasonably restrict farm operations located within an agricultural district (Figure 8). Towns have the ability and are encouraged to develop their own Municipal Agriculture and Farmland Protection Plans in cooperation with Cooperative Extension and other organizations including local farmers. NYS Agriculture and Markets Circular 1500 explains the information that shall be included in such plans. Towns are eligible for State Grants to develop such plans up to \$25,000 or 75% of the cost of such plan (whichever is less).

Need for Additional Land Use Planning

A prevailing low level of support for land use planning in the municipalities of Chenango County has allowed various problems to take root and spread in rural areas. Some of these are: (1) scattered rural residential development and extensive substandard housing quality; (2) complaints against farmers for reasonable and normal agricultural activity; (3) the eruption of conflicts from controversial or undesirable developments or unexpected behavior and uses and (4) increased costs to the County, Towns and School Districts by the need to service widely scattered populations with public services and school busing.

In a County where a relatively slow pace of rural development has been experienced, some people question the need for land use planning. Evidence in favor of planning is the proximity of incompatible types of development, neighbor complaints after development has occurred, the scattered and random fragmentation of good farmland areas and concerns about unbridled freedom to ignore the needs of others.

Results of "Is your town planning a future for farms"

At the request of Chenango County Agriculture and Farmland Protection Board (AFPB) a survey by American Farmland Trust entitled "Is Your Town Planning a Future for Agriculture?" was shared with the twenty-three (23) Town Supervisors in Chenango County. The survey composed of twenty-four (24) questions asking towns to review the local policies they have currently in place. Questions were broken down into sections, such as, understanding agriculture in your town, creating a supportive business environment for farming, supporting appropriate tax policies for farmland and buildings, developing strategies to protect your town's best farmland, and limiting the impacts of new development on agriculture. The figure on the next page (Figure 9) shows how the scoring works. The lower the score the worse off the town is regarding

policies in place for supporting agriculture. Out of the twenty-three (23) surveys sent to Town Supervisors, only six (6) were returned for a response rate of 28.57%. The towns that responded are Coventry, Greene, McDonough, Preston, Sherburne and Smithville. The average score for the towns that responded was 9.7. The town with the highest score was Sherburne with a score of thirteen (13). The town with the lowest score was Coventry with seven (7).

This section will show the breakdown of the questions in the survey.

Total Your Score!

Your results...

Yes on 20-24

Your town is very active in supporting a future for faming!

Yes on 15-19

Your town knows that farmers are good neighbors who provide lots of benefits to your quality of life, but you may need help in proactively supporting them.

Yes on 10-14

Careful! Your town may be less supportive of farms than you think—even unfriendly, perhaps inadvertently.

Yes on 5-9

It's time to get to work on understanding farmers in your town and how you can help support their business and land use needs.

Yes on 0-4

Yours is not a farm friendly town, but there is still hope. Seek help immediately from farmers, farm groups and related organizations.

This questionnaire was developed based upon a section of *Preserving Rural Character through Agriculture*, written by Gary Matteson for the New Hampshire Coalition for Sustaining Agriculture.

Have a detailed section in agriculture in the town's comprehensive plan?

2 Yes; 4 No

Have a consistent approach for local procedures that deal with agriculture?

3 Yes; 3 No

Have any visible demonstration of the value of local farms?

2 Yes: 4 No

Have farmers serving on local planning boards, zoning boards, or local economic development committees?

4 Yes; 2 No

Publicize where to go to get advice and assistance on farm questions?

0 Yes: 6 No

Allow agriculture uses in more than one zoning district?

5 Yes; 1 No

Figure 9: Scoring method of the
American Farmland Trust survey.

Allow flexibility in regulations to accommodate the unusual need of agriculture businesses?

5 Yes; 1 No

Allow farms stands to sell produce purchased elsewhere?

5 Yes; 1 No

Allow rural businesses compatible with agriculture in farming areas?

6 Yes; 0 No

Work to pro-actively address trespassing on farmland?

1 Yes; 5 No

Have business infrastructure that supports modern farms?

3 Yes; 3 No

Properly assess specialized agricultural structures?

6 Yes; 0 No

Recognize the property tax benefits of farmland and support tax policies that are fair to farmland owners?

5 Yes; 1 No

Act as a resource for information about property	tax reduction programs	aimed at farmers and
other farmland owners?		

Identify areas where it wants to support agriculture over the long-term?

Have policies aimed at retaining large blocks of farmland that are able to support a variety farm businesses?

Limit expansion of infrastructure in areas where it wants to support agriculture over the long-term?

Have a strategy for protecting its best farmland?

Encourage the use of conservation easements on farmland?

Have policies aimed at limiting the impact of new development on productive farmland?

Require buffer zones between farmland and residential uses?

0 Yes; 6 No

Have an "agricultural zone" that limits the impacts of new developments on farms?

0 Yes: 6 No

Have planning tools that are supportive of New York State Ag Districts?

2 Yes; 4 No

Have policies to mitigate conflicts between farmers and non-farm neighbors?

2 Yes; 4 No

The survey sample size was too small to show the impact of legislation on farmers with County perspective. One reason for the lack of responses could be from the survey being long and semicomplicated, or questions being not applicable. The questions required a lot of knowledge and research into the town's policies. The question size of twenty-four (24) and the large text blocks for the questions made the survey more time consuming than it probably should have been. For towns in Chenango County, only one (1) has zoning, thirteen (13) have site plan review, nine (9) have a comprehensive plan, seventeen (17) have subdivision review and nine (9) have a right to farm law. For many towns, the local laws the questions referred to do not exist. For some questions, the local Farm Bureau, Cornell Cooperative Extension and New York State Ag and Markets may already offer protection/services for the town.

Agriculture Support Agencies and Organizations

Various agencies and organizations are available, providing important programs and services for farmers. Interviews conducted with representatives reported that not enough farmers are aware of the help available or are reluctant to inquire or follow up. Some cross referencing of farmer inquiries and needs between organizations does occur but is not coordinated or given a high enough priority. Some of the following resource groups shared the opinion that better coordination among them would be helpful for the benefit of

the agriculture industry. This list of support organizations and agencies serving the Chenango County region summarizes the types of services available.

Commerce Chenango

Commerce Chenango is the lead business organization and County advocate for businesses in Chenango County. Its entities include, the Chamber (a 501c6) a membership organization, Development Chenango Corporation (the economic development arm of Chenango County), Chenango Tourism (Tourism Promotion Agency for the County), the Chenango Foundation (501c3) and the County Industrial Development Agency (IDA).

Agricultural resources are available through the Development Chenango Corporation and the IDA in the way of business planning, site selection assistance, project guidance, tax incentives and workforce development resources. Specifically, they offer access to low-interest revolving loan funds such as Bridge loans, Agriculture Revolving Loan Funds and Business Assistance Loan Funds.

For more information, please call (607) 334-1400, or visit their website at https://www.commercechenango.com/economic-development/

Cornell Cooperative Extension (CCE) of Chenango County

The CCE plays a major supportive role in research and education through the Land Grant University system. The Chenango County office offers educational and technical assistance programs including dairy, livestock, and field crop production, nutrient management, Integrated Pest Management, farm business, and resource management, farm estate planning, marketing, horticulture, fruit and vegetable production, rural land management, and environmental and business management. Additionally, there are a variety of opportunities The CCE office also offers an extensive collection of bulletins and literature on a wide range of topics involving agriculture, horticulture, natural resources, and nutrition.

For more information, please call (607) 334-5841 or visit their website. http://ccechenango.org/

<u>Chenango County Soil and Water Conservation District</u> (SWCD)

The Soil and Water Conservation District (SWCD) offers a variety of services and products to private landowners and municipalities on a voluntary basis in helping them more effectively manage the natural resources of their real property in a sustainable manner to reach their land use objectives. Improving and protecting water quality and controlling soil erosion are at the core of most SWCD services. While all landowners in Chenango County can avail themselves of SWCD services, commercial farmers are the primary clientele.

Services fall into one of three types: information, technical and financial assistance. The spectrum of technical assistance includes providing progressive help in planning, design, layout, oversight of installation, and verifying at completion the work is consistent with existing conservation practices standards. Though much of this service is associated with projects which are partially paid from one or more sources of government funding, technical assistance is available to any landowner regardless how the work is paid.

The umbrella program for which the SWCD prioritizes agricultural work is the Agricultural Environmental Management Program (AEM). The District follows a 5-year strategy to prioritize resource concerns, agricultural operations, and locations to address water quality and soil erosion concerns. Using the AEM process, the District then works with farms to plan, design, implement and certifies best management practices (BMPS).

New York State, the federal government and other non-profit organization offer several grant programs to provide cost share directly to farms to help implement BMPs. Primarily, the District applies for money through these grant programs on behalf of the landowner, using the AEM process.

Another farm related service unique to the SWCD is completing "Soil Group Worksheets" which is one required step if a landowner is applying to the local town/village assessor for property tax relief through an agricultural exemption. One worksheet is filled out for each tax parcel which includes agricultural production ground, be it owned by the farmer or rented out. By enrolling in this program, landowners commit that portion of their land granted the exemption to remain in active agricultural production for a rolling eight years.

By coordinating with neighboring counties & organizations, the SWCD can gain access to rental field equipment for Chenango County farmers. To date, this has included no-till seeder and fence post driver.

When farmers need to secure a permit from NYS Department of Environmental Conservation (DEC) or the US Army Corps of Engineers (COE) for work in and around

streams, the SWCD will help obtain the necessary detailed information and guide the farmer through the application process.

While the Natural Resources Conservation Service (NRCS) and Farm Service Agency (FSA) are the federal agencies which primarily carry out the USDA farm bill programs, the SWCD also contributes local input on specific priorities and technical assistance to participating farmers.

Products that have a conservation purpose and are not normally available locally from private retailers are stocked or ordered and offered for sale to the public by the SWCD. This includes such items as bare root tree and shrub seedlings, fish, fingerlings, drainage tile animal guards, herbaceous seed mix and USGS topographic maps.

For more information, please visit their website at <u>www.chenangoswcd.org</u> or call the office at 607-334-8634 ext. 5.

Natural Resource Conservation Service (NRCS)

The NRCS provides technical assistance for engineering and design phases of the EQIP program and cost-shared assistance in barnyard improvements such as milk house waste, farm drainage, and manure management. With the FSA, provides technical assistance for the Wetlands Reserve program and the Conservation Reserve program. In cooperation with the FSA, NRCS provides technical assistance for the Conservation Reserve Program (CRP), Wetland Reserve Program (WRP), Grassland Reserve Program (GRP) and Farm & Ranch Lands Protection Program (FRPP), the latter three involve establishing a conservation easement in perpetuity on land enrolled. Also administers the Emergency Watershed Protection program with the provision of technical and cost-sharing assistance after natural disasters. The NRCS also assists SWCD with engineering and technical support for the design and implementation of Best Management Practices.

For more information, please call (607) 334-4632 or visit their website at www.ny.nrcs.usda.gov

<u>United States Department of Agriculture (USDA)</u>

The USDA provides leadership on food, agriculture, natural resources and related issues based on sound public policy, the best available science, and efficient management. For more

information, please call (202) 720-2791 or visit their website. http://www.usda.gov/wps/portal/usda/usdahome

American Farmland Trust (AFT)

Founded in 1980 by a group of farmers and conservationists concerned about the rapid loss of farmland to development, American Farmland Trust (AFT) is a nonprofit membership organization dedicated to protecting our nation's strategic agricultural resources. Working with farmers and ranchers, political leaders and community activists, AFT has helped to permanently protect more than two million acres of America's best farm and ranch lands. AFT's New York office is in Saratoga Springs with additional staff and consultants working in central and western New York. Since 1990, AFT has been a leader on farmland protection issues in the state, developing effective public education programs and advancing agricultural and land conservation policies at all levels of government. AFT's work in New York focuses on three areas:

- Protecting farmland from poorly planned development,
- Promoting environmental stewardship on farms, and
- Strengthening the economic viability of agriculture.

Through research, educational programs and advocacy, AFT helps farmers, public officials and the public strengthen the future for farming in New York. For more information contact the New York office at (518) 581-0078 or visit their website http://www.farmland.org/newyork.

Farm Service Agency (FSA)

Program areas for the Farm Service Agency include low interest loans, dairy price support programs, fruit and vegetable crop insurance, Conservation Reserve Program, crop price support programs, disaster emergency recovery and other opportunities authorized by the Farm Bill. For more information, please call (607) 334-3231 or visit their website www.fsa.usda.gov or www.farmers.gov.

<u>Central New York Resource Conservation Development</u> (CNYRCD)

Program areas for the CNYRCD include enterprise development and diversification, entry

into farming, market development, value-added product development, conserving natural resources, youth and adult natural resource and agriculture education. For more information, please call (607) 334-3231 ext. 4 or visit their website.

http://www.cnyrcd.org/

New York State Department of Agriculture and Markets

This department administers the Agricultural Districts program and provides important protection and support, such as agricultural assessment benefits on farmland, local government restrictions on certain kinds of development, right to farm protection, and disclosure to purchasers of rural property of protected practices in agricultural districts. For more information, please call (518) 457-7076 or visit their website.

http://www.agmkt.state.ny.us/

New York State Department of Environmental Conservation (NYS DEC)

The NYS DEC has several divisions which are beneficial to agriculture and farmland. Each division specializes in a variety of topics and provides information and guidance on a number of valuable agrarian topics including animals, plants and aquatic life, chemical and pollution control, energy and climate and lands and waters. For more information, please call (518) 402-8013 or visit their website. http://www.dec.ny.gov/

SUNY-Morrisville

SUNY Morrisville offers Bachelors and Associates Degrees in a variety of agriculture related programs including Agriculture Business Development, Equine Science, Horticulture Business Management and more. SUNY-Morrisville has a campus in the City of Norwich that can be utilized by local students for college courses and credits. For more information, please call (607) 334-5144 or visit their website. http://www.morrisville.edu/

SUNY-Cobleskill – College of Agriculture & Technology

SUNY Cobleskill offers Associates degrees and a four-year Bachelor Degree program, for the full-time or part-time farmer. Continuing education courses and degree programs are available through affiliated SUNY campuses, including Morrisville. For more information, please call (518) 255-5700 or visit their website.

http://www.cobleskill.edu/

Goals and Implementation Measures

<u>Introduction</u>

Local governments are limited on what influences they have on national and international trends in agriculture. In many cases they cannot ensure their own economic viability of agriculture. However, this plan anticipates that agriculture can continue to be a major and valuable economic sector and land use practice in Chenango County. Farmers who continue to farm should be provided with any support the County can provide. This support is influential in the long-term viability of agriculture. Although this plan identifies agricultural lands that warrant priority protection, it recognizes that all agricultural lands in the County are critical farmland and agricultural resources. The implementation measures apply to all agricultural lands, businesses and producers within the County.

Goals and Implementation Measures

An effective plan for the future of agriculture has a set of clear and concise goals and implementation measures that provide an overall framework for actions and policies. Goals are generally statements of a desired outcome, based on the values held by a community at large. Implementation measure actions or policies are taken to further the goals of a plan. Usually progress toward completing actions or enacting policies and furthering the goals of the plan, can be measured in some manner. The following goals and implementation measures address specific issues related to agriculture in Chenango County, and are intended to further the vision set forth. The goals listed below are organized in a table that identifies key players, time frames and possible funding sources.

Goal: 1 Promote Agricultural Economic Development

Implementation Measure 1.1	Include agricultural land protection with other industry development planning.
Why:	Marketing products can increase the sales potential for farms.
How:	1. Update guidebook for local producers on where existing markets are located either in or out of state. 2. Assist producers with marketing through social networks. 3. Develop a website for local farms to market their products.
Timeframe:	Annual Planning Meeting
Responsible Agencies:	Agricultural and Farmland Protection Board, Chenango County Planning Board, local land use boards
Potential Funding:	County Appropriations, Agriculture and Natural Resources Development Council, Cornell Cooperative Extension, USDA

Implementation Measure 1.2	Encourage agricultural retail and service providers to locate in Chenango County.
Why:	A lack of agricultural retail and service providers exist within Chenango County requiring farmers to travel longer distances for needed parts/services. (Ex. Large animal vet and large equipment sales/service.)
How:	1. Create a list of all potential suppliers with overnight mailing and post a listing within the offices of Agricultural Agencies. 2. Encourage farmers to join "buying cooperatives".

Timeframe:	Starting in 2012 and currently ongoing
Responsible Agencies:	Agricultural and Farmland Protection Board, Cornell Cooperative Extension, Farm Bureau
Potential Funding:	County Appropriations, Agriculture and Natural Resources Development Council, Cornell Cooperative Extension, Agricultural and Farmland Protection Board, Chenango County Planning Department

Implementation Measure 1.3	Support custom agricultural services in cropping such as haying, combining, plowing, etc.
Why:	Cooperation between farmers can encourage cost-savings.
How:	Create a list of available services offered and costs within the county.
Timeframe:	Currently ongoing
Responsible Agencies:	Agricultural and Farmland Protection Board, Cornell Cooperative Extension, Farm Bureau
Potential Funding:	County Appropriations, Cornell Cooperative Extension, Chenango County Planning Department

Implementation Measure 1.4	Promote and explore opportunities for diversification of local and regional food processing, products and services.
Why:	Diversification of what processing capabilities are available allows farmers more opportunities to produce value-added products.

How:	1. Improve the farmers market 2. Develop a local USDA certified slaughterhouse. 3. Explore and promote alternative crops and uses for them (Ex. Oil-seeds, CBD oil, hemp) 4. Promote the use of a commercial kitchen, cold storage facility, and food hub for farm products.
Timeframe:	Annually
Responsible Agencies:	Agricultural and Farmland Protection Board, Cornell Cooperative Extension, Farm Bureau, Agriculture and Natural Resources Development Council, Chenango County Planning Department, SUNY Morrisville
Potential Funding:	County Appropriations, Morrisville College, USDA Grants and Rural Venture Fund.

Implementation Measure 1.5	Encourage the utilization and expansion of the local Farmers Markets.
Why:	Farmers Markets can provide additional income to farmers, benefit the local economy and health of residents.
How:	1. Continue to implement a system to utilize food stamps at the farmers market. 2. Research the feasibility of a year-round farmers market.
Timeframe:	Currently ongoing
Responsible Agencies:	Agricultural and Farmland Protection Board, Cornell Cooperative Extension, Agriculture and Natural Resources Development Council, Chenango County Planning Department
Potential Funding:	USDA Farmers Market Promotion Program, Fresh Connect Program

Implementation Measure 1.6	Provide assistance with market research and marketing of farm products.
Why:	Marketing products can increase the sales potential for farms.
How:	1. Update guidebook for local producers on where existing markets are located either in or out of state. 2. Assist producers with marketing through social networks. 3. Develop a website for local farms to market their products.
Timeframe:	Annual program
Responsible Agencies:	Agricultural and Farmland Protection Board, Cornell Cooperative Extension Development Specialist and Grant Coordinator, Chenango County Planning Department, Commerce Chenango
Potential Funding:	County Appropriations, USDA Farmers Market Promotion Program

Implementation Measure 1.7	Provide focused support for new and existing dairy farmers.
Why:	Dairy is the largest industry in Chenango County and promotes local economic development.
How:	 Research the feasibility of a PILOT program for farmers. Research the feasibility of a Heifer Program to offer livestock to beginning farmers. Help dairy farmers gain access to a milk market.
Timeframe:	Currently ongoing
Responsible Agencies:	Agricultural and Farmland Protection Board, Cornell Cooperative Extension, Chenango County Planning Department

Potential Funding:	County Appropriations
T unumg.	

Implementation Measure 1.8	Expand access to regional markets from Central New York to the Eastern Seaboard.
Why:	To increase the sales and profitability of farms.
How:	1. Educate farmers on how to market their products using social media. 2. Encourage the development of CSA's.
Timeframe:	Currently ongoing
Responsible Agencies:	Agricultural and Farmland Protection Board, Cornell Cooperative Extension, Farm Bureau, Chenango County Planning Department
Potential Funding:	SARE Grants and Cornell Small Farms Grant

Implementation Measure 1.9	Continue to develop a constructive connection with the incoming Amish and Mennonite farmers with the rest of the agricultural community.
Why:	Farming methods used by the Amish and Mennonite help to preserve agriculture and farmland and can increase tourism and availability of locally produced products and services.
How:	1. Encourage the Amish and Mennonite families to participate in local farmers markets. 2. Educate residents, code enforcement officers, and government officials how to effectively interact with the Amish and Mennonite cultures.

Timeframe:	Currently ongoing
Responsible Agencies:	Agricultural and Farmland Protection Board, Cornell Cooperative Extension, Farm Bureau, Chenango County Planning Department, Local Governments
Potential Funding:	County Appropriations

Implementation Measure 1.10	Encourage and support development cellphone coverage.
Why:	Cellphone access is important for the health and safety of rural farmers. Many new technologies to increase farm operations need a cellphone network. Easier to promote farm location and products through cellphone networks.
How:	1. Apply for grants to better fund cellphone expansion in the County. 2. Develop maps and other data to show where service is lacking. 3. Encourage use of new technologies to provide coverage.
Timeframe:	Currently ongoing
Responsible Agencies:	Chenango County Emergency Management
Potential Funding:	Chenango County appropriations, Federal grants, State grants, private investments

Implementation Encourage and Support Broadband development. Measure 1.11

Why:	Internet access is vital to marketing of products in today's economy. The popularity of online shopping makes it difficult to find parts needed for farm repair at local stores. Access to internet service can help develop new technology.
How:	1. Apply for grants to better fund broadband expansion in the County. 2. Develop maps and other data to show where service is lacking. 3. Encourage use of new technologies to provide coverage.
Timeframe:	Currently ongoing
Responsible Agencies:	Chenango County Planning Department, Commerce Chenango, Chenango County IDA, Southern Tier 8
Potential Funding:	Chenango County appropriations, USDA grants, State grants, Appalachian Regional Commission

Goal 2	Assist Agricultural Producers with Cost-Control
	Measures

Implementation Measure 2.1	Promote the benefits of grazing.
Why:	Grazing animals is easier for beginner farmers, can cut feed and equipment costs for farmers, improve the health of livestock, improve quality of life and keep farmland open
How:	Increase the capabilities of the grazing services offered by the Chenango County Soil and Water Conservation District and National Resources Conservation Service and Cornell Cooperative Extension

Timeframe:	Currently ongoing
Responsible Agencies:	Chenango County Soil and Water, NRCS, and Cornell Cooperative Extension
Potential Funding:	NRCS, USDA, SARE and Cornell Small Farms Grant.

Implementation Measure 2.2	Investigate the use of alternative energy sources. (ie. Wood, solar, natural gas and wind.).
Why:	Alternative energy sources can have potential cost savings benefits.
How:	1. Encourage and promote the proper use, development, siting, and decommissioning of renewable energy 2. Acquire an oil-seed press to promote the use of biodiesel. 3. Encourage municipalities to adopt their own renewable energy laws that promote proper development, retain open space, and proper decommissioning.
Timeframe:	Currently ongoing
Responsible Agencies:	Agricultural and Farmland Protection Board, Cornell Cooperative Extension, Farm Bureau, Chenango County Planning Department
Potential Funding:	NYSERDA, SARE and Rural Venture Fund.

Implementation Measure 2.3	Advise farmland owners and assessors to verify the correct property classification of their farmland and become familiar with and utilize available property tax exemptions.
	available property tax exemptions.

Why:	Classifying lands properly and utilizing property tax exemptions can account for better tracking of farmland acreage and cut property tax costs for the farmer.
How:	1. Continued training of assessors every three years. 2. Education of property owners. 3. Development of a countywide Agricultural Value Assessment Program.
Timeframe:	Every three years and annually
Responsible Agencies:	Agricultural and Farmland Protection Board and Chenango County Tax Department.
Potential Funding:	County Appropriations

Goal 3	Encourage the Proper Use of Land and the
	Monitoring/Reporting of Changes

Implementation Measure 3.1	Develop a mechanism to monitor rural development and provide for uniform reporting to County Government by Towns regarding applications for and approvals of agricultural land use changes.
Why:	To better track trends in the gain or loss of agricultural lands.
How:	1. Encourage municipalities to report land use development changes in agricultural districts to the County Planning Department. 2. Encourage the County Clerk's office to report all land use changes to the County Planning Department.

Timeframe:	Currently ongoing
Responsible Agencies:	Agricultural and Farmland Protection Board, Chenango County Planning Department, Chenango County Clerk's Office, and Local Governments.
Potential Funding:	County Appropriations

Implementation Measure 3.2	Encourage proactive preparation to meet Chesapeake Bay, SRBC and DRBC Water Standards
Why:	Being proactive can lessen future costs and benefit water quality in the area.
How:	1. Research the impacts of new requirements on farmers. 2. Encourage conservation practices through the Chenango County Soil and Water Conservation District.
Timeframe:	Currently ongoing
Responsible Agencies:	Agricultural and Farmland Protection Board, Chenango County Soil and Water Conservation District, Cornell Cooperative Extension
Potential Funding:	NRCS, USDA, SRBC, Chesapeake Bay, Upper Susquehanna Coalition

Implementation Measure 3.3	Help landowners preserve existing agriculture infrastructure including barns, fences, ponds, open land, etc.
Why:	Keeping agriculture infrastructure in good shape will allow farming to continue more efficiently.

How:	1. Financial and technical assistance offered by the Chenango County Soil and Water Conservation District through the USDA Conservation Program, Agricultural Environmental Management Program and Agricultural Non-Point Source Pollution Abatement and Control Program. 2. Educating farmers on available tax exemptions including the Ag Building exemption. 3. Update New York State Fencing Laws. 4. Research the loss of farmland from solar development and advocate for proper siting and decommissioning. 5. Research Impacts of renewable energy development on farmland.
Timeframe:	Currently ongoing
Responsible Agencies:	Agricultural and Farmland Protection Board, Cornell Cooperative Extension, Farm Bureau, Real Property Tax, and Chenango County Soil and Water
Potential Funding:	Agricultural Environmental Management Program, SARE Grants, NRCS, SWCD and USDA

Implementation Measure 3.4	Educate Town and County Boards on creating comprehensive land use plans and the application of legal mechanisms for protection of farmland.
Why:	Proper land use planning will protect agriculture and farmland from being developed for other uses.
How:	1. Conduct workshops and informational meetings to educate local governments on the benefits of land use planning. 2. Research the benefits of utilizing PDR's and Conservation Easements as tools to keep land in agricultural use. 3. Look for grants to implement a program. 4. Identify blocks of active Ag land to be protected in order to strengthen the Ag Industry. 5. Encourage municipalities to adopt their own renewable energy laws that promote proper development, retain open space, and proper decommissioning.

Timeframe:	Currently ongoing
Responsible Agencies:	Agricultural and Farmland Protection Board, Cornell Cooperative Extension, Farm Bureau, Real Property Tax, and Chenango County Soil and Water
Potential Funding:	Agricultural Environmental Management Program, SARE Grants, NRCS, SWCD and USDA

ucers, Consumers and Policy Makers	Goal 4
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Implementation Measure 4.1	Promote Agriculture to younger generations and beginner farmers
Why:	To expand the agriculture industry in Chenango County and replace retiring farmers, new farmers need to be added.
How:	Promote the 4-H, FFA, Beginning Farmer, and BOCES New Visions programs to encourage younger persons to begin farming as a career.
Timeframe:	Currently ongoing
Responsible Agencies:	Agricultural and Farmland Protection Board, BOCES, Cornell Cooperative Extension, FFA, 4-H, Farm Bureau, and School Districts
Potential Funding:	County Appropriations, USDA, and CCE

Implementation Measure 4.2	Promote educational programs offered by agriculture organizations.
Why:	To educate farmers on better business practices to make them more profitable and to encourage younger generations to start farming.
How:	Promote Farm Succession Planning, Beginner Farmer and other educational programs offered by Cornell Cooperative Extension, Farm Bureau, and Future Farmers of America.
Timeframe:	Currently ongoing
Responsible Agencies:	Cornell Cooperative Extension, Farm Bureau, and FFA
Potential Funding:	County Appropriations

Implementation Measure 4.3	Promote educational programs offered by educational institutions.
Why:	To educate farmers on better business practices to make them more profitable and to encourage younger generations to start farming.
How:	Promote Agriculture Business Development, Animal Science, Dairy Management, Horticulture, and other programs offered by educational institutions such as SUNY Morrisville and DCMO BOCES.
Timeframe:	Currently ongoing
Responsible Agencies:	DCMO BOCES, and SUNY Morrisville

Potential	In-House
Funding:	

Implementation Measure 4.4	Create an informational video relating to farming in and around Chenango County.
Why:	Educate legislators and residents on the benefits of farming around Chenango County.
How:	Support programs offered by Cornell Cooperative Extension, Commerce Chenango, Farm Bureau, and NBT Bank.
Timeframe:	Currently ongoing
Responsible Agencies:	Agricultural and Farmland Protection Board, and Cornell Cooperative Extension
Potential Funding:	County Appropriations

Implementation Measure 4.5	Provide education and assistance with farm business plan development and expanded farm business skills.
Why:	To help farmers better manage their business.
How:	Support programs offered by Cornell Cooperative Extension, Commerce Chenango, Farm Bureau, and NBT Bank.
Timeframe:	Currently ongoing

Responsible Agencies:	Agricultural and Farmland Protection Board, Cornell Cooperative Extension, Commerce Chenango, Farm Bureau, and NBT Bank
Potential Funding:	County Appropriations

Implementation Measure 4.6	Hold the Ag Tour for Legislators as an annual event.
Why:	To educate legislators and residents on the benefits of agriculture businesses in Chenango County in order to prevent bad legislation against farms and continue the funding of farm related programs and services.
How:	1. Schedule a tour of agribusinesses every year. 2. Each year pick a different section of the county.
Timeframe:	Every July
Responsible Agencies:	Agricultural and Farmland Protection Board
Potential Funding:	County Appropriations and Agribusiness

Implementation Measure 4.7	Encourage and promote the proper care of animals on farms.
Why:	Animals are the livelihood of farmers and should be properly cared for. Promoting the proper care of animals helps to keep a positive image for farming.

How:	 Support programs offered by 4-H, Cornell Cooperative Extension, Farm Bureau and veterinarians and encourage farmers to utilize these programs. Train and educate law enforcement and court system on animal welfare law. 3. Develop a process to animal welfare claims that benefits all parties.
Timeframe:	Currently ongoing
Responsible Agencies:	4-H, Cornell Cooperative Extension Dairy and Field Crop Team and Bio Security Program, Farm Bureau, Veterinarians. In coordination with farmers
Potential Funding:	County Appropriations

Implementation Measure 4.8	Encourage and promote the proper stewardship of the land for the betterment of future farmers and the community as a whole.
Why:	The proper stewardship of land will allow farmers to continue raising livestock and crops on their land for generations to come, benefiting both the future farmers and the overall health of the community.
How:	1. Encourage farmers to apply for agricultural building exemptions.
Timeframe:	Currently ongoing
Responsible Agencies:	Agricultural and Farmland Protection Board, Cornell Cooperative Extension, Farm Bureau, Foresters, Landowners, and Soil and Water Conservation District
Potential Funding:	Chenango County Appropriations and grant funding through EPA, NRCS, NYSDEC, and USDA

Implementation Measure 4.9	Encourage and promote recreational opportunities in Chenango County.
Why:	Farmland and open space have multiple use opportunities. Using land for recreation keeps it in active, maintained use, while providing another source of income for farmers.
How:	1. Promote recreational uses through maps, videos, and recreational event (ex. Mtn bike event, Canoe Regatta, etc.). 2. Develop resource map showing areas to buy/rent canoe, bikes, etc.
Timeframe:	Currently ongoing
Responsible Agencies:	Cornell Cooperative Extension, Commerce Chenango, Chenango County Planning Department
Potential Funding:	Chenango County Appropriations and grant funding

Appendix

New York State Agriculture and Markets Law Article 1, Section 3 Declaration of policy and purposes

The agricultural industry is basic to the life of our state. It vitally concerns and affects the welfare, health, economic well-being and productive and industrial capabilities of all our people. It is the policy and duty of the state to promote, foster, and encourage the agricultural industry, with proper standards of living for those engaged therein; to design and establish long-range programs for its stabilization and profitable operation; to increase through education, research, regulation, and scientific means, the quantity, quality, and efficiency of its production; to improve its marketing system; to encourage adequate and skilled assistance for agricultural enterprises; to maintain at fair prices uncontrolled by speculation the instrumentalities and products of agriculture; to remove unnecessary or unfair costs and obstacles in the transportation, storage, processing, distribution, marketing, and sale of agricultural products; to

prevent frauds in the traffic therein; to promote an expanded demand for the state's agricultural products and the intelligent uses thereof by consumers as pure and wholesome food; to protect the public health and to eliminate the evils of under-nourishment; to encourage the selection and consumption of food according to sound dietary and nutritional principles; and to make our people conscious of the bond of mutual self-interest between our urban and our rural populations.

Accordingly, all laws enacted concerning the agricultural industry and its allied subjects, whether included in this chapter or not, are to be deemed an exercise of the police power of the state and a discharge of its obligations for the promotion of the general welfare through state-wide laws and regulations, local initiative and government, cooperative action between groups and localities, home-rule measures, individual enterprise, civic consciousness, and appropriate coordination with the federal government and as between educational research institutions within the state.

Such laws and all governmental measures adopted pursuant thereto should receive a liberal interpretation and application in furtherance of the aforesaid policy and purposes.

Chenango County Farmland and Protection Plan Survey Survey Questions and Results

Part I. Land Use Description

1. In what Town/Village is your farm located?

Municipality	# of Responses
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<u></u>	T
Afton	2
Bainbridge	5
Columbus	3
Coventry	7
German	2
Greene	15
Guilford	9
Harpursville	1
Lincklean	2
McDonough	1
New Berlin	4
Nineveh	1
North Norwich	1
Norwich	1
Oxford	8
Pharsalia	1
Pitcher	3

Plymouth	2
Preston	5
Sherburne	6
Smithville	5
Smyrna	1
South Otselic	1

2. Approximately how many farmed acres do you own?

Average Acres	Highest #	Lowest #
189.90 acres	1421	0

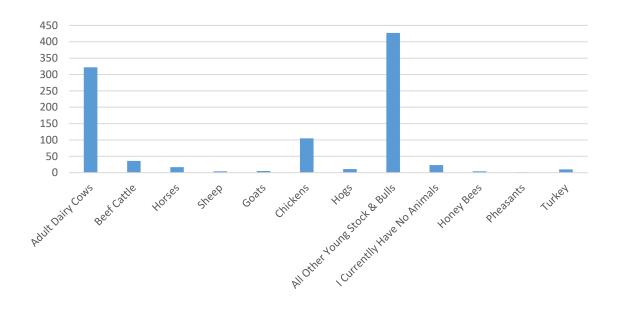
3. Approximately how many acres do you rent to farm?

Average Acres	Highest #	Lowest #
53.67 acres	558	0

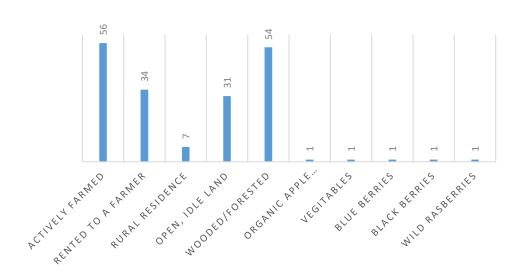
4. If actively farmed, what enterprises are undertaken on your land? (Check all that apply)



5. What is the approximate number of animals on your farm?

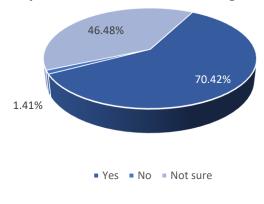


6. What is the current use of the land that you own? (Check all that apply)



7. Is most or all your land currently located in a State Certified Agricultural District?

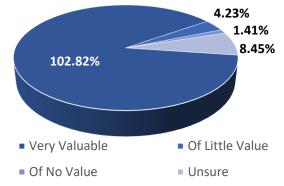
Answer	# of Responses
Yes	50
No	1
Not Sure	33



8. How valuable do you think Agricultural Districts are for the purpose of preserving and

Answer # of Responses

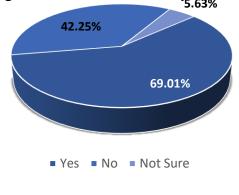
protecting farmland?



Very Valuable	73
Of Little Value	3
Of No Value	1
Unsure	6

9. Are you currently receiving an Agricultural Assessment on your land? 5.63%

	1
Answer	# of Responses
Yes	49
No	30
Not Sure	4



10. Have you ever been involved in a right to farm concern or nuisance lawsuit complaint

raised by a neighbor or municipality?

Answer	# of Responses
Yes	2
No	82



Comments:

I raised a concern over a neighbor carelessly spreading manure over a 1 1/2 mile stretch of road.

Part II. Economics of the Farm

11. How many years has this farm been in your family? (Please use a number)

Average # of Years	53.9 Years
Least # of Years	3 Years
Most # of Years	221 Years

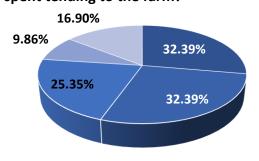
12. If you are actively farming, how many years have you operated your farm?

Question removed due to invalid numbers. Respondents used years well beyond the standard lifetime

13. How many households does your farm support?

Average # of Households	1.3 Households
Lowest # of Households	1 Household
Most # of Households	4 Households

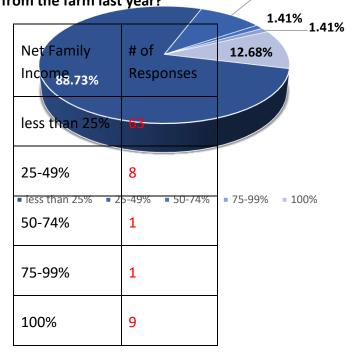
14. How many hours per week are spent tending to the farm?



Hours Spent Per Week	# of Responses
less than 10	23
10 to 20	23
20 to 40	18
40 to 60	7
Over 60	12

15. Approximately how much of your net family income came from the farm last year?

11.27%



16. What is the approximate age(s) of the person(s) that run the farm?

Average Age	59.5 Years Old
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Youngest Age	24 Years Old
Oldest Age	90 Years Old

17. How many family members (not including yourself) are employed/working on your farm? (If None Put 0)

Average #	0.80 Family Members
Lowest #	0 Family Members
Highest #	6 Family Members

18. Of the family members working on your farm how many are part time? (If none put 0)

Average #	0.32 Family Members
Lowest #	0 Family Members
Highest #	3 Family Members

19. Of the family members working on your farm how many are seasonal? (If none put 0)

Average #	0.18 Family Members
Lowest #	0 Family Members

Highest #	2 Family Members
-----------	------------------

20. Of the family members working on your farm how many are year-round? (If none put 0)

Average #	0.41 Family Members
Lowest #	0 Family Members
Highest #	6 Family Members

21. How many employed persons (not including yourself) are working on your farm? (If none put 0)

Average #	0.75 Family Members
Lowest #	0 Family Members
Highest #	11 Family Members

22. Of employed labor how many live locally? (If none put 0)

Average #	0.61 Family Members
Lowest #	0 Family Members
Highest #	7 Family Members

23. Of employed local labor how many are part time? (If none put 0)

Average #	0.38 Family Members
Lowest #	0 Family Members
Highest #	4 Family Members

24. Of employed local labor how many are seasonal? (If none put 0)

Average #	0.11 Family Members
Lowest #	0 Family Members
Highest #	5 Family Members

25. Of employed local labor how many are year-round? (If none put 0)

Average #	0.23 Family Members
Lowest #	0 Family Members
Highest #	3 Family Members

26. Of employed labor how many DO NOT live locally? (If none put 0)

Average #	0.2 Family Members
Lowest #	0 Family Members
Highest #	4 Family Members

27. How many of the NON-LOCAL labor are part time? (If none put 0)

Average #	0.04 Family Members
Lowest #	0 Family Members
Highest #	3 Family Members

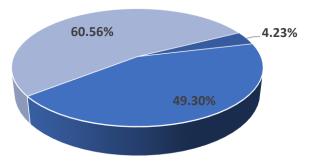
28. How many of the NON-LOCAL labor are seasonal? (If none put 0)

Average #	0.06 Family Members
Lowest #	0 Family Members
Highest #	3 Family Members

29. How many of the NON-LOCAL labor are year-round? (If none put 0)

Average #	0.06 Family Members
Lowest #	0 Family Members
Highest #	3 Family Members

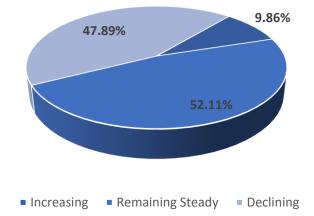
30. How would you describe your current profits on your farm?



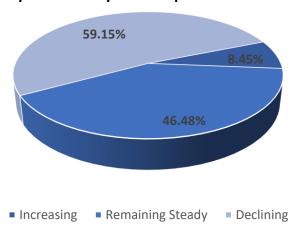
Answer	# of Responses
Increasing	3
Remaining Steady	35
Declining	43

31. How would you describe your current sales on your farm?

Answer	# of Responses
Increasing	7
Remaining Steady	37
Declining	34



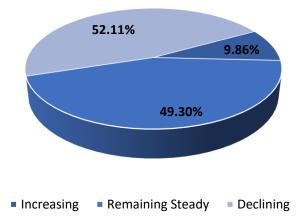
32. Over the last five (5) years how would you describe your farm profits?



Answer	# of Responses
Increasing	6
Remaining Steady	33
Declining	42

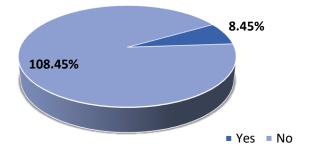
33. Over the last five (5) years how would you describe your farm sales?

Answer	# of Responses
Increasing	6
Remaining Steady	35
Declining	37



34. Do you sell any farm products at a farmer's market?

Answer	# of Responses
Yes	6
No	77



Comments:

Organic Cider operations harmed by NYS officials and regulations

Oxford farmers market because it is a mile away from the farm

Planning to

Oxford Farmers Market because it is local

Word of mouth, telemarketing, newspaper ads. This is the best way to reach other farmers.

Commission sales or to individuals

Private sale of hay to locals

Wholesale retail district

Word of Mouth

Road-side stand- Convenient

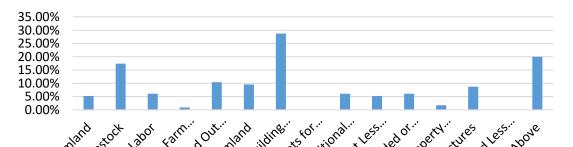
Direct sale to farmers

Sell at the Oxford market. It is close to us and farmers market adds a little more income.

Sell products at the Hamilton, Clinton, and Utica markets. Sell at those markets because of the volume of people.

Roadside stand

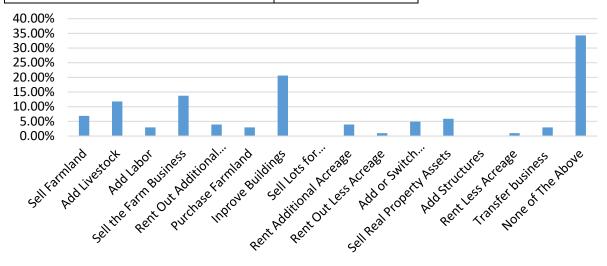
Action	# of Responses
Sold Farmland	6
Added Livestock	20
Added Labor	7
Sold the Farm Business	1
Rented out Additional Acres	12
Purchased Farmland	11
Improved Building Lots	33
Sold Lots for Development	0
Rented Additional Acreage	7
Rented Out Less Acreage	5
Added or Switched Enterprises	67
Sold Real Property Assets	2
Added Structures	10
Rented Less Acreage	0
None of the Above	23



36. Over the next five (5) years do you intend to: (Check all that apply)

Options	# of Responses
Sell Farmland	7
Add Livestock	12
Add Labor	3
Sell the Farm Business	14
Rent out Additional Acres	4
Purchase Farmland	3
Improve Building Lots	21
Sell Lots for Development	0
Rent Additional Acreage	4
Rent Out Less Acreage	1

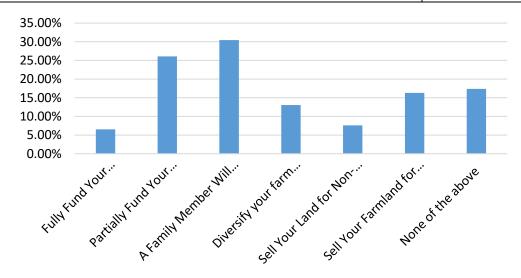
Add or Switch Enterprises	5
Sell Real Property Assets	6
Add Structures	0
Rent Less Acreage	1
Transfer Business to a Family Member	3
None of the Above	35



37. Please check all that apply to your farm operation:

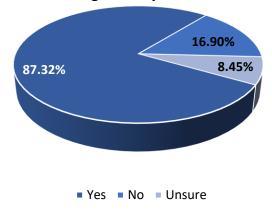
Options	# of Responses
You Expect Your Farmland to Fully Fund Your Retirement	6
You Expect Your Farmland to Partially Fund Your Retirement	24

A Family Member Will Continue Running the Farm	28
You Expect to Diversify Your Farm Operation	12
You Expect to Sell Your Land for Non-Agricultural Uses	7
You Expect to Sell Your Farmland for Agricultural Uses	15
None of The Above	16



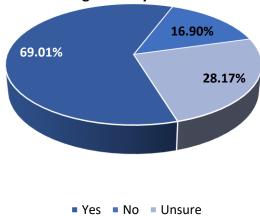
38. Do you feel that good farmland in Chenango County is available?

Answer	# of Responses
Yes	62
No	12
Unsure	6



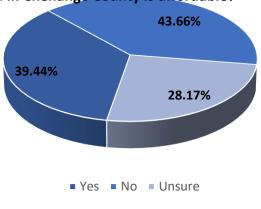
39. Do you feel that good farmland in Chenango County is accessible?

Answer	# of Responses
Yes	49
No	12
Unsure	20

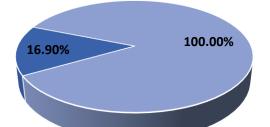


40. Do you feel that good farmland in Chenango County is affordable?

Answer	# of Responses
Yes	28
No	31
Unsure	20



41. Are you personally more interested in selling your farmland than continuing farming?



Answer	# of Responses
Yes	12
No	71

Comments

Approaching a more advanced age, I expect to downsize and eventually sell the property.

Age an issue and future of farm.

I rent my crop land and maintain the fields and pastureland. I have no desire to sell.

We will look over woodlot until we cannot anymore. Our son is increasing his time as his job allows.

Leaving farm to relative.

A portion of the farmland, roughly 100 forested acres is in Chenango Land Trust.

I have no choice. At present my SS income pays most of the property taxes. When I die my heirs will not use the farm will probably be sold.

Like many others, it is our way of life.

Old and widowed.

Wife and I are of retirement age and a local farmer uses land for hay. He will continue to cut and bale.

We currently produce maple syrup and lease the farmland to the neighbor dairy farmers who currently takes 4 cuttings off about 150 acres and spreads manure on these acres. My children would like to continue the ownership of the farm.

Farm to continue operating/expanding with younger generation and new partner. Retirement funded by draw from farm and personal assets.

Trying to get a good price before age forces a sale.

Do not like paying ever increasing taxes.

Family plans to keep what we have. Finger Lakes trail runs through property.

High Taxes.

Due to age.

Getting too old to farm.

Getting too old to handle the workload.

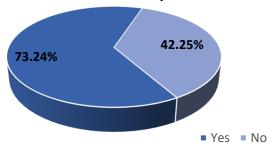
We are recently retired and are planning to continue forest management and hay production.

We have just started hemp farming this year. Just learning the process, we are doing it with the hope of making enough to pay the taxes at least.

No tax relief- costs too much to own- NYS no gas drilling.

42. Do you have a plan for your farm and farmland after you retire?

Answer	# of Responses
Yes	52
No	30



Comments:

I am retired.

Not sure if anyone is willing to take over.

Getting too old for the demands, would hopefully sell to a younger couple wanting chickens, goats, perhaps a couple of beefers.

Still planning. Looking for a plan that will work.

We have not fully figured out what the farm is capable of, so to plan for that would be a waste as of now.

It will probably be sold at death with existing restrictions (land trust, 480-A).

This is a hobby, small Christmas tree operation. I am partially retired currently and not getting any younger.

I will probably never leave here.

Continue improving soil.

I am doing it now; I am a retired teacher.

Ag is on the way out.

It will be left to family members who do nothing for property aside other person cutting hay. I am looking to plant maple trees for syrup-side note.

Grandson plans to take over.

Depends on what the real estate market is at that time. Not too many people can afford or want to buy a 150-acre farm.

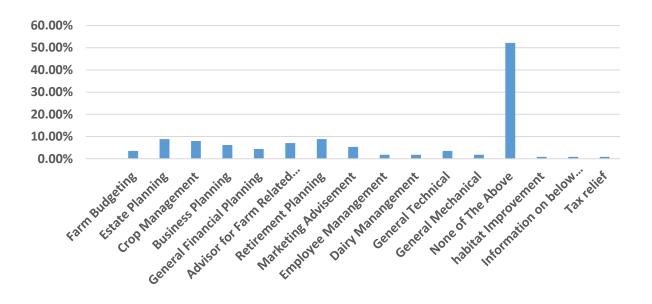
No interest in family to take over.

Will continue farming and grow livestock.

I have a vegetable garden and bees for pollination. My neighbor cuts some of the fields for hay and I mostly use the land for recreation and firewood. This year I purchased a freeze dryer to save my harvest for the winter and I sold some zucchini chips from my garden to co-workers at my real job. When I retire, I will probably continue to have a garden but probably by then I will move out of New Yuck because the taxes are too high.

43. If offered, what type of assistance would you use? (Check all that apply)

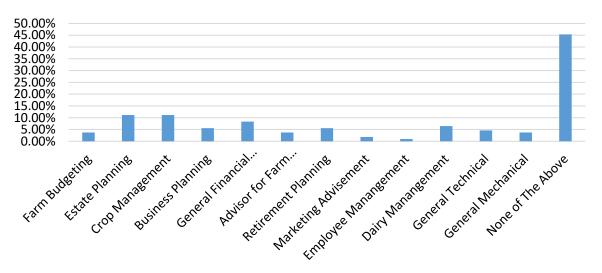
Assistance Type	# of Responses
Farm Budgeting	4
Estate Planning	10
Crop Management	9
Business Planning	7
General Financial Planning	5
Advisor for Family or Personal Issues	8
Retirement Planning	10
Marketing Advisement	6
Employee Management	2
Dairy Management	2
General Technical	4
General Mechanical	2
None of the Above	59
Habitat Improvement	1
Information on below strategies	1
Tax Relief	1



44. What type of assistance do you use? (Check all that apply)

Assistance Type	# of Responses
Farm Budgeting	4
Estate Planning	12
Crop Management	12
Business Planning	6
General Financial Planning	9
Advisor for Family or Personal Issues	4
Retirement Planning	6

Marketing Advisement	2
Employee Management	1
Dairy Management	7
General Technical	5
General Mechanical	4
None of the Above	49

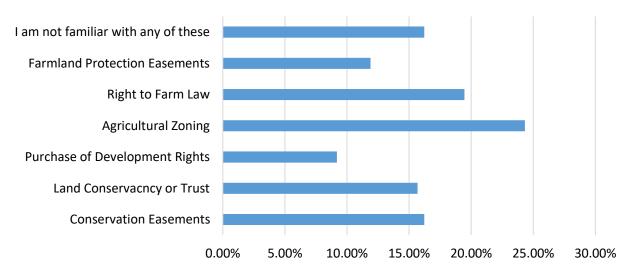


Part III. Agriculture in Chenango County

45. Are you familiar with any of the following farmland protection strategies? (Check all that apply)

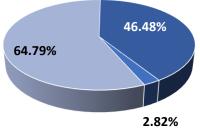
Protection Strategies	# of Responses
-----------------------	----------------

I am not familiar with any of these	30
Farmland Protection Easements	22
Right to Farm Law	36
Agricultural Zoning	45
Purchase of Development Rights	17
Land Conservancy or Trust	29
Conservation Easements	30



46. Would any of these strategies mentioned above protect farmland in Chenango County if

practiced more widely?

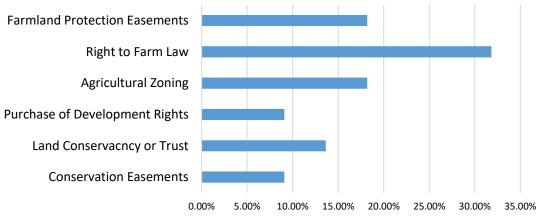


Answer	# of Responses
Yes	33
No	2
Not Sure	46

47. If yes, which would be the best? (Check all that apply)

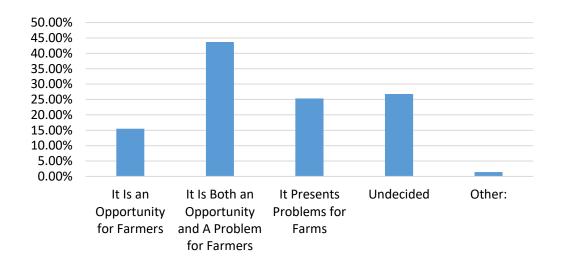
Note: This was an optional question and not all respondents answered.

Protection Strategies	# of Responses
Farmland Protection Easements	4
Right to Farm Law	7
Agricultural Zoning	4
Purchase of Development Rights	2
Land Conservancy or Trust	3
Conservation Easements	2



48. How do you feel about the development of farmland for Non-Agricultural purposes?

Option	# of Responses
It is an Opportunity for Farmers	11
It is Both an Opportunity and a Problem for Farmers	31
It Presents a Problem for Farms	18
Undecided	19
Other	1



Comments:

I believe that the best help for farmers would be to get the government to stop stealing taxes from some to give handouts to others and let successful farmers keep their profits and let unsuccessful farmers fail.

It decreases farmland but gives revenue to farmers.

Concerned about excessive land use for solar farm development.

People are doing what they MUST do not what they WANT to do to survive.

It provides extra income, but it also takes away valuable land.

The problem would arise depending on what type of non-ag purpose entailed.

Green Energy.

Personally, if I could get more for non-farm use, I would take it. Not all farmers feel this way.

If the farmland is lost for non-agricultural use it will never be available again.

Too many non-farm people.

Must stop climate change and stop the sprawl of development.

Farmers make money by selling land but suffer infringement.

Loss of potential farmland for smaller, niche purposes.

This needs to be managed by someone. Some of the area farmland is sold and then used for a "Junk Yard" that farming or other development to improve the County.

If a non-Ag enterprise could be converted to agriculture, it could be a good option. Also, most important, drilling for the abundant supply of natural gas in Chenango County would keep many farmlands in the family and would help the entire economy in the County.

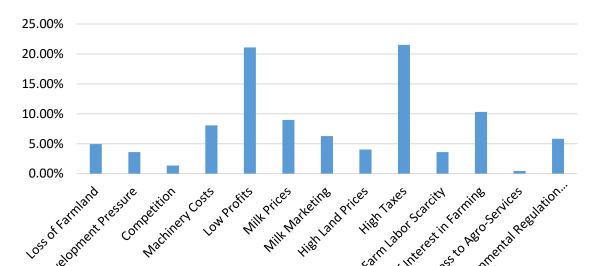
For the next section (questions 49 to 54) respondents were asked to rank the following from 1 to 6 with 1 being the most important.

Option	Avg. Ranking
Preserving Farmland as Open Space	2.7
Preserving Farmland as Economically Productive Land	2.3
Preserving Economic Sustainability of Farms, Regardless of Possible Change in Farmland Acreage	2.6
Continuation of Farming on Your Land by Others After Your Retirement	2.9
Maximum Freedom to Sell off Farmland for Development	4.5
Some Freedom to Sell off Farmland for Development	4.5

Based on respondents answer the ranking is as follows:

- 1. Preserving Farmland as Economically Productive Land
- Preserving Economic Sustainability of Farms, Regardless of Possible Change in Farmland Acreage
- 3. Preserving Farmland as Open Space
- 4. Continuation of Farming on Your Land by Others After Your Retirement
- 5. Tie: Maximum Freedom to Sell off Farmland for Development & Some Freedom to Sell off Farmland for Development

55. In your opinion, which of the following are the three (3) greatest issues facing farms in Chenango County.



For the next section (questions 56-63) respondents were asked to rank the trends expected over the next five years. Respondents were asked to rank on a scale from 1 to 8 with 1 being most likely and 8 being least likely.

Change Expected	Avg. Ranking
Increase in Agricultural Community	6.7
No Significant Changes in Agricultural Community	5.4
Decrease of Agricultural Community	2.6
A Small Number of Very Large Farms	3.3
A Large number of Small Farms	6
Relocation of Operations Outside Chenango County	5.3
Relocation of Operations into Chenango County	6.5
Change of Emphasis from Dairy to other Types of Operations	3.8

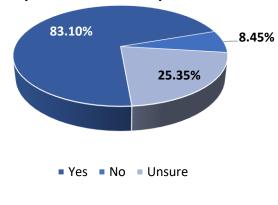
Based on the average ranking over the next five years respondents expect to see the following:

- 1. Decrease of Agricultural Community
- 2. A Small Number of Very Large Farms

- 3. Change of Emphasis from Dairy to other Types of Operations
- 4. Relocation of Operations Outside Chenango County
- 5. No Significant Changes in Agricultural Community
- 6. Many Small Farms
- 7. Relocation of Operations into Chenango County
- 8. Increase in Agricultural Community

64. Do you think more needs to be done by New York State to preserve farmland?

Answer	# of Responses
Yes	59
No	6
Not Sure	18



Comments:

Change political powers at the top of NY.

Fund schools some other way than by property taxes.

Greenway

More government subsidies

Guaranteed outlets for products, i.e., food banks, local markets

More protective legislation needed.

Purchase development rights.

Lower Taxes.

Cut land taxes on active farmers and reduce income tax rate for active farmers. Vote the people out of office who all they know is go green. Windmills are okay when you have wind. No wind no good. We are all being forced to pay for other energy. I worked for NYSEG for 38 years, I have never paid so much for electricity as I do now. Too many State and Country regulations and living off the back of NYSEG. Everybody clings on their back to make money.

Stop harassing small farmers with tax audits, NYST+F. The rich get the breaks the rest get raked.

More emphasis on smaller, diversified farms.

When farmland is subdivided for sale it cannot revert to farming. It has gone forever.

Use of County and State funds, for people to grow food for the local people. Allow the landowner to clean out his own creeks.

Split New York into 2 states and then get a new update government that believes that local governments can govern themselves rather than the 1 size fits almost none that we currently have.

"Tax relief for farmers Stop charging dairy farmers to truck their own milk Replace federal milk marketing system with a fair, transparent price, perhaps based on a quota system. Let farmers & landowners sign gas leases if they want"

Get information out to people of what is available.

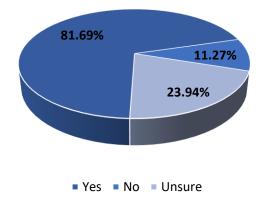
Promote our local agriculture.

Improve Broadband communication.

More opportunity for young farm programs like FFA, 4-H, etc. With onsite and hands-on experience and summer jobs.

65. Do you think more needs to be done by Chenango County to preserve farmland?

Answer	# of Responses
Yes	58
No	8
Not Sure	17



Comments:

More land tax relief - currently \$7/acre.

More county legislation needed.

Tax incentives

Protection from outside imports.

Too many small farms being crowded out.

"1. Money to improve farmers market 2. Realizing that Chenango County is bigger than Norwich 3. Provide grants for improvements that protect water, etc. (i.e., bridge for livestock/farm vehicles)."

Promote use of land that WAS farmland when purchased by non-farmer to reach out to farmers in area to use for crops.

Allow gas drilling.

Look for ways to help small family farms- tax breaks.

Get information out to people of what is available.

Promote our local agriculture.

Improve Broadband communication.

More opportunity for young farm programs like FFA, 4-H, etc. With onsite and hands-on experience and summer jobs.

66. What initiatives or incentives should local & county governments undertake to help keep farming viable in Chenango County? (Check all that apply)

Option	# of Responses
Other	6
None of the above	2
Strengthen Ag Supported Agencies	53
Establish Exclusive Agricultural Zoning	32

Attract New Farmers to Chenango County	55
Start Up Loans for New Farmers	47



Grants for longtime residents to put up green houses. 50 60

Purchase large equipment for families and provide low-cost loans so families can afford payments.

Pricing of goods and control of cost from tax is the increase.

Tax relief for farmers Stop charging dairy farmers to truck their own milk Replace federal milk marketing system with a fair, transparent price, perhaps based on a quota system Let farmers & landowners sign gas leases if they want.

The government's responsibility is "establish Justice, ensure domestic Tranquility, provide for the common defense, promote the general Welfare, and secure the Blessings of Liberty to us and our Posterity" The people can take care of themselves if the government does its previously described duties correctly.

67. What kind of information do you feel local planning and/or zoning boards need in order to make more effective land use decisions?

Answers:

Information from this survey.

Need to consider how much acreage is needed for intermittent power sources such as solar. It is nuts. Very inefficient from a land use perspective.

Economic Impact reports of farming in Chenango Co.

Local planning boards are be hooved to make keen their awareness of ag activity in their towns and reach out by survey/speak to those owners for the "real deal".

Information on how to encourage town officials to support agriculture.

Attend the many courses offered by the State and Non-State agencies to better understand the more modern concepts of planning and zoning.

More farmers on these boards.

Need to understand the value of open space.

68. Please list any other comments or concerns not addressed in this survey.

Answers:

I do not think it is the government's job to take care of us. We should have more options on how to market our milk.

Need young people with new ideas about new ventures to stay competitive.

Need for a strong Ag Development Council

Need for drilling gas

Because of corona concerns I think we will see a great interest and outflow from the downstate area. These people will be looking for a closer to earth lifestyle and we could benefit from giving them the ideas and tools needed to support their interest. Help them get established in food production, livestock producing, and hemp for fiber, grains for beer, solar and other ideas.

Photograph Sources

- Photo 1: Front page ariel view of a farm and county landscape taken and provided by Terry Ives.
- Photo 2: Haying operation taken and provided by Ken Ryan.
- Photo 3: Haying operation in a field taken and provided by Ken Ryan.
- Photo 4: Greenhouses at Norwich Meadows Farm taken and provided by Shane Butler.
- Photo 5: Profile of a farm next to a forest taken and provided by Ken Ryan.
- Photo 6: Lamb herd at Hopestead Hill Farm taken and provided by Shane Butler.

CHENANGO COUNTY AGRICULTURE & FARMLAND PROTECTION PLAN - 2021

- Photo 7: View of greenhouses at Norwich Meadows Farm taken and provided by Shane Butler.
- Photo 8: Dairy cows at Postma Dairy Farm taken and provide by Shane Butler.
- Photo 9: A dairy cow at Von Hassel Organic Dairy Farm taken and provided by Shane Butler.
- Photo 10: Ariel view of a farm in Chenango County provided by Jennifer Kelly from Chenango County Soil and Water Conservation District.
- Photo 11: Riparian forest buffer project next to a Chenango County farm provided by Jennifer Kelly from Chenango County Soil and Water Conservation District.
- Photo 12: A flood on new seeding provided by Jennifer Kelly from Chenango County Soil and Water Conservation District.
- Photo 13: A farm's landscape after a flood taken and provided by Ken Ryan.
- Photo 14: An alpaca from Lone Spruce Alpacas provided by Jeanne Angell.
- Photo 15: Kutik's honey provided by Kutik's Everything Bes, Pollination Services, Nucs & Queens, and Honey Farm.
- Photo 16: Rows of blueberry bushes from a U-pick farm provided by Stone Hill Blueberry Farm's Facebook page.
- Photo 17: Vacuum tubing system photo provided by Foggy Hollow Maple Farm.
- Photo 18: Kutik's honeybee hives provided by Kutik's Everything Bes, Pollination Services, Nucs & Queens, and Honey Farm.
- Photo 19: Kutik's honeybee close-up with queen bee provided by Kutik's Everything Bes, Pollination Services, Nucs & Queens, and Honey Farm.
- Photo 20: Blueberry bush from Stone Hill Blueberry Farm in Coventry provided by Stone Hill Blueberry Farm's Facebook page.
- Photo 21: Hop close-up from Hillside Hops taken and provided by Shane Butler.

Local Law Filing

NEW YORK STATE DEPARTMENT OF STATE 162 WASHINGTON AVENUE, ALBANY, NY 12231

(Use this form to file a local law with the Secretary of State.)

Text of law should be given as amended. Do not include matter being eliminated and do not use italics or underlining to indicate new matter.

	County				1991 (FEB 115	PA 3: 32
	Sieta Koncu Kielense	of	Chenango		COUNTY CLER CHENANGO CO	IK'S OFFICE GUNTY, N.Y.
	1		No3			
A local l	lawT	he Chenar (Insert 1		To Farm Law		
Be it en	acted by	theChe	enango County Boo (Name of Legislative I	ard of Super Body)	visors	of the
County EXSX XXXXX XXXXX	of	Chen	ango	***************************************		as follows:

THE CHENANGO COUNTY RIGHT TO FARM LAW

The Agriculture, Buildings and Grounds Committee offered the following local law for enactment:

Be it enacted by the Chenango County Board of Supervisors as follows:

SECTION 1. TITLE. This local law shall be known as the Chenango County Right to Farm Law.

SECTION 2. Legislative Intent and Purpose. It is the general purpose and intent of this Local Law to maintain and preserve the rural tradition and character of the County of Chenango, to permit the continuation of the practice of farming within the County, to protect the existence and operation of established farms, and to encourage the initiation and expansion of farming practices. In recognition of the fact that there are many practices and activities which are inherent to and necessary for the practice of farming, it is the specific purpose and intent of this Local Law to attain the aforementioned goals and objectives by providing that such practices and activities may proceed and be undertaken free of unreasonable and unwarranted interference of restructions. It is also recognized that it is desirable for farmers to be good neighbors.

SECTION 3. Definitions.

- (a) Unless specifically defined below, words or phrases used in this Local Law shall be interpreted so as to give them the meanings they have in common usage and to give this Local Law its most reasonable application.
- (b) "Farmer" shall mean any person, organization, entity, association, partnership, or corporation engaged in the practice of agriculture, whether for profit or otherwise, including the cultivation of land, raising of crops, raising of livestock and the grazing of pasture.
- (c) "Farmland" shall mean land used primarily for bona fide agricultural production of those items and products set forth in the Agriculture and Markets Law of New York, Section 301.

(If additional space is needed, attach pages the same size as this sheet, and number each.)

(1)

DOS-239 (Rev. 7/90)

SECTION 4. Right of Farm. Farmers, as well as those employed, retained, or otherwise authorized to act on behalf of farmers, may lawfully engage in farming practices within the County of Chenango at any and all such times and all such locations as are reasonable necessary to conduct the practice of farming. For any activity or operation, in determining the reasonableness of the time, place and methodology of such operation, due weight and consideration shall be given to both traditional customs and procedures in the farming industry as well as to advances resulting from increased knowledge and improved technologies.

SECTION 5. Interference Prohibited.

- (a) No person, group, entity, association, partnership or corporation will engage in any conduct or act in any manner so as to unreasonably, intentionally, knowingly, and deliberately interfere with, prevent, or in any way deter the reasonable practice of farming within the County of Chenango.
- (b) Notwithstanding any other provision of this Act, agricultural activities conducted on farmland, if consistent with recognized agricultural practices and established prior to surrounding nonagricultural activities, are presumed to be reasonable and do not constitute a nuisance unless the activity has a substantial adverse effect on the public health and safety. No commercial agricultural or farming operation, place, establishment or facility, shall be or shall become a nuisance, as a result of changed conditions in or around the locality of such agricultural or farming operation, place, establishment, or facility which has been in operation for one year or more and if it was not a nuisance at the time it began operation. This section, however, shall not apply whenever a nuisance injurious to health, results from the operation of any such agricultural or farming operation, place, establishment, or facility or any of its appurtenances.

SECTION 6. Protection of Rights.

The provisions of Section 5 shall not affect or defeat the right of any person, firm, or corporation to recover damages for any injuries or damages sustained by them on account of any pollution of, or change in condition of, the waters of any stream or on the account of any overflow of lands of any such person, firm, or corporation.

SECTION 7. Construction with Other Laws. This Local Law and the provisions set forth herein are in addition to and not in lieu of all other applicable laws, rules and regulations which are therefore continued in full force and effect and unaffected by this Local Law. Conversely, this Local Law is not intended to contradict or contravene any law, rule, regulation, restriction or proscription of the United States, State of New York or County of Chenango, which may now or hereafter obtain.

SECTION 8. Severability Clause. If any part of this Local Law is for any reason held to be unconstitutional or invalid, such decision shall not affect the remainder of this Local Law. The Chenango County Board of Supervisors hereby declares that it would have passed this Local Law and each section and subsection thereof, irrespective of the fact that any one or more of these sections, subsections, sentences, clauses or phrases may be declared unconstitutional or invalid.

SECTION 9. Effective Date. This Local Law shall be effective immediately upon filing, pursuant to Section 27 of the Municipal Home Rule Law.

Seconded by Mr. Powers

Results of a roll call vote were: Yes-2,012, No-335, Absent-124

No: Supervisors Briggs and Knoll

Absent: Supervisor Schlafer

The Chairman declared the Local Law duly adopted.

Town of				
Local Law No of the year 2009				
Town of Right to Farm Law				
SECTION 1. Title. This local law shall be known as the Right to Farm Law.				
<u>SECTION 2. Legislative Authority.</u> This local law is enacted pursuant to the provisions of the Agricultural and Markets Law of the State of New York and the Municipal Home Rule Law of the State of New York.				
SECTION 3. Legislative Intent and Purpose. It is the general purpose and intent of this Local Law to maintain and preserve the rural traditions and character of the Town of, to permit the continuation of the practice of farming within the Town, to protect the existence and operation of established farms, and to encourage the initiation and expansion of farming practices. In recognition of the fact that there are many practices and activities which are inherent to and necessary for the practice of farming, it is the specific purpose and intent of this Local Law to attain the aforementioned goals and objectives by providing that such practices and activities may proceed and be undertaken free of unreasonable and unwarranted interference and restrictions. It is also recognized it is desirable for farmers to be good neighbors.				
SECTION 4. Definitions.				
(a.) Unless specifically defined below, the words, phrases terminology used in this Local Law shall have the same definitions as contained in Section 301 of the State Agricultural and Markets Law as existing or hereinafter amended and in those instances where interpretation is still required such terminology, words and phrases shall be interpreted so as to give them the meanings they have in common usage and to give this local law its most reasonable application.				
(b.) "Operator" shall mean a farmer and any person, organization, entity, association, partnership, limited liability company, or corporation engaged in "agricultural practices" as below herein defined, whether for profit or otherwise, for the production of "agricultural products" as below herein defined, including but not necessary limited to the cultivation of land, raising of crops, raising of livestock, and grazing of pasture.				
(c.) "Farmland" shall mean land located within the Town of, Chenango County, New York, used primarily for bona fida "agricultural practices" as defined herein for the production of "agricultural products" as defined below herein and in section 301 (2) of the Agricultural and Markets Law as existing and as hereinafter amended. Farmland may consist of one or more parcels of owned or rented land, which parcels may be contiguous of noncontiguous to each other.				

- (d.) "Agricultural Products" shall mean those products as defined in section 301(2) of Article 25AA of the State Agriculture and Markets Law.
- (e.) "Agricultural Practices" shall mean those practices engaged by an "operator" as above defined herein, necessary for on-farm production, preparation, marketing, keeping or raising of "agricultural products" as above defined herein. Examples of such practices shall include, but not limited to, operation of farm equipment both on and off public highways, proper use of agricultural chemicals and other crop protection and fertilizer methods, including the spreading and ponding of manure in solids, semisolids or liquid forms, and the construction and use of farm or agricultural structures.
- (f.) "Farm Operation" shall mean the land and on-farm buildings, equipment, manure processing and handling facilities, practices which contribute to the production, preparation, and Chenango County Agriculture & Farmland Protection Plan 2012 73 marketing of "agricultural products" as above defined herein, whether for profit or otherwise and including a horse boarding or horse breeding operations, whether for profit or otherwise. Such farm operations may consist of one or more parcels of owned or rented land, which parcels may be contiguous or noncontiguous to each other.

SECTION 5. Right of Farm. Operators and farmers as above defined herein, as well as those employed,
retained, or otherwise authorized to act on behalf of an operator or farmer, may lawfully engage in
"agricultural practices" and engage in "farm operations" as above defined herein upon "farmland" as
above herein, located within the Town of, New York, at any and all such times and all such
locations as are reasonable and necessary to conduct and engage in "agricultural practices" and "farm
operations", as above defined herein. For any agricultural practice in determining the reasonableness of
time, place, and methodology of such practice, due weight and consideration shall be given to both
traditional customs and procedures in the farming industry as well as to advances resulting from
increased knowledge and improved technologies.

Agricultural practices and farm operations on farmland shall not be found to be a public or private nuisance if such agricultural practices and farm operations are:

- (a.) reasonable and necessary to the particular farm or farm operation,
- (b.) conducted in a manner which is not negligent or reckless,
- (c.) conducted in conformity with generally accepted and sound agricultural practices,
- (d.) conducted in conformity with all local, state, and federal laws and regulations,
- (e.) conducted in a manner which does not constitute a threat to public health and safety or cause injury to health or safety of any person, and
- (f.) conducted in manner which does not unreasonably obstruct the free passage or use of navigable waters or public roadways.

SECTION 6 Interference P	Prohibited
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- (a.) No person, group, entity, association, partnership, or corporation will engage in any conduct or act in any manner so as to unreasonably, intentionally, knowingly, and deliberately interfere with, prevent, or in any way deter the reasonable practice of farming within the Town of Guilford.
- (b.) Notwithstanding any other provision of this Act, agricultural activities conducted on farmland, if consistent with recognized (sound-best management) agricultural practices and established prior to surrounding nonagricultural activities, are presumed to be reasonable and do not constitute a nuisance unless the activity has a substantial adverse effect on the public health and safety. No agricultural or farming operation, place, establishment or facility, shall be or shall become a nuisance, as a result of changed conditions on or around the locality of such agricultural or farming operation, place, establishment, or facility which has been in operation for one year or more and if it was not a nuisance at the time it began operation. This section, however, shall not apply whenever a nuisance injurious to health, results from the operation of any such agricultural or farming operation, place, establishment, or facility or any of its appurtenances.

SECTION 7. Protection of Rights.

The provisions of Section 6 shall not affect or defeat the right of any person, firm, or corporation or other entity to recover damages for any personal injuries or property damages suffered or incurred by them on account of any pollution of, or change in condition of, the waters of any stream or on the account of any overflow of lands of any such person, firm, or corporation.

SECTION 8. Resolution of Disputes.

- (a.) Should any controversy arise regarding any inconveniences of discomfort occasioned by agricultural operations which cannot be settled by direct negotiation between parties involved, either party may submit the controversy to a dispute resolution committee as set forth below in an attempt to resolve the matter prior to the filing of any court action and prior to a request for a determination by the Commissioner of Agriculture and Markets about the practice in question is sound pursuant to Section 308 of Article 25AA of the State Agricultural and Markets Law.
- (b.) Any controversy between the parties shall be submitted to the committee within thirty (30) days of the last date of occurrence of the particular activity giving rise to the controversy or the date the party became aware of the occurrence.

(c.) The co	mmittee shall be composed of three (3) members selected from the county,
including one representa	ative from the County Agricultural and Farmland Protection Board, one person
from the Town of	Board, and one person mutually agreed upon by both parties involved in
the dispute.	

(d.) The effectiveness of the committee as a forum for the resolution of disputes is dependent upon full discussion and complete presentation of all pertinent facts.

- (e.) The controversy shall be presented to the committee by written request of one of the parties within the time limits specified. Thereafter, the committee may investigate the facts of the controversy, but must, within twenty-five (25) days, hold a meeting at a mutually agreed place and time to consider the merits of the matter and within five (5) days of the meeting render a written decision to the parties. At the time of the meeting, both parties shall have an opportunity to present what each considers to be pertinent facts. No party bringing a complaint to the committee for settlement or resolution may be represented by counsel unless the opposing party is also represented by counsel. The time limits provided in this subsection for action by the committee may be extended upon the written stipulation of all parties in the dispute.
- (f.) Any reasonable cost associated with the functioning of the committee process shall be borne by the participants.

SECTION 8. Construction with Other Laws.

This Local Law and the provisions set forth herein are in addition to and not in lieu of all other applicable laws, rules and regulations which are therefore continued in full force and effect and unaffected by this Local Law. Conversely, this Local Law is not intended to contradict or contravene any law, rule, regulation, restriction, or proscription of the United States, State of New York, County of Chenango, or Town of ______, which may now or hereafter obtain.

SECTION 9. Severability Clause.

If any part of this of this Local Law is for any reason held to be unconstitutional or invalid, such decision shall not affect the remainder of this Local Law. The ______ Town Board hereby declares that it would have passed this Local Law and each section and subsection thereof, irrespective of the fact that any one or more of these sections, subsections, sentences, clauses or phrases may be declared unconstitutional if invalid.

SECTION 10. Effective Date

This Local Law shall be effective immediately upon filing, pursuant to Section 27 of the Municipal Home Rule Law.

References

- American Farmland Trust. (2008, April 25). Transfer of Development Rights. Northampton, MA. Retrieved from https://www.farmlandinfo.org/transfer-development-rights
- American Farmland Trust. (2016, January 1). Agricultural Conservation Easements. Northampton, MA. Retrieved from https://www.farmlandinfo.org/agricultural-conservation-easements
- American Farmland Trust. (2016). Agricultural District Programs. Northampton, MA. Retrieved from https://www.farmlandinfo.org/agricultural-district-programs
- American Farmland Trust. (2016). *Cost of Community Services Studies*. Northampton: American Farmland Trust. Retrieved from https://farmlandinfo.org/publications/cost-of-community-services-studies/
- American Farmland Trust. (2016). *Keeping Farmers on the Land: New Research Underscores Need To Address Farm Transition in New York.* Saratoga Springs: American Farmland Trust. Retrieved from https://www.farmlandinfo.org/keeping-farmers-land-new-research-underscores-need-address-farm-transition-new-york

- Arjomad, S., & Haight, D. (2017, May 18). Greener Fields: Combating Climate Change by Keeping Land in Farming in New York. Saratoga Springs,, NY, USA: American Farmland Trust. Retrieved from https://www.farmlandinfo.org/greener-fields-combating-climate-change-keeping-land-farming-new-york
- Baily, K. (2017). Factors That Affect U.S. Farm-Gate Milk Prices. Penn State Extension.
- Bureau, U. C. (2017). 2013-2017 American Community Survey 5-Year Estimates. Retrieved from American Fact Finder.
- Chenango County 2020 Vision Commission. (1992). *Chenango County's 2020 Vision*. Norwich: Chenango County. Retrieved from http://www.co.chenango.ny.us/planning/planning-board/documents/Chenango%20County's%202020%20Vision%20Summary%20Report.pdf
- Cornell Agricultural Workforce Development Program. (2019). 2017 Farm Employee Compensation Benchmark. Cornell. Retrieved from https://cpb-us-e1.wpmucdn.com/blogs.cornell.edu/dist/7/8192/files/2019/02/2017-Farm-Employee-Compensation-Report-1uksiuz.pdf
- Dempsey, J. (2017, October 1). Agricultural Conservation Easement Program—Agricultural Land Easements. Northampton,, MA: American Farmland Trust. Retrieved from https://www.farmlandinfo.org/agricultural-conservation-easement-program%E2%80%93agricultural-land-easements
- Development, C. C. (2016). *Guiding Chenango A County Comprehensive Plan.* Norwich: Chenango County.
- Ebra, E. M., & Novakovic, A. M. (2005). *The Evolution of Milk Pricing and Government*. Ithaca: Cornell University.
- Empire State Development. (2019). *Industrial Hemp Research Initiative in New York State*. Retrieved from New York State Empire State Development: https://esd.ny.gov/industrial-hemp
- Empire State Development. (n.d.). *Craft Beverage*. Retrieved from Empire State Development: https://esd.ny.gov/industries/craft-beverage
- Farm Brewery. (n.d.). Retrieved from New York State Brewers Association: https://newyorkcraftbeer.com/farm-brewery/
- Farm Credit East. (2019). *The Economic Impact of Mandatory Overtime Pay for New York State.*Knowledge Exchange Report. Retrieved from https://www.farmcrediteast.com/knowledge-exchange/Reports/the-economic-impact-ofovertime-
- Farm Service Agency. (2016). Biomass Crop Assistance Program for Fiscal Year 2017. USDA.

- Gee, K. (2016). Live Cattle Auctions Make a Comeback Online. *Wall Street Journal*. Retrieved from https://www.wsj.com/articles/live-cattle-auctions-make-a-comeback-online-1481976001
- Haight, D. &. (2011). *Planning for Agriculture in New York: A Toolkit for Towns and Counties.* Saratoga Springs: American Farmland Trust.
- Heavey, J. P., & Volk, T. A. (2014). Shrub Willow Renewable Energy & Environmental Benefits. Syracuse: SUNY-ESF.
- Hunter, M. C., Smith, R. G., Schipanski, M. E., Atwood, L. W., & Mortensen, D. A. (2017). Agriculture in 2050: Recalibrating Targets for Sustainable Intensification. *BioScience*, 386-391.
- Johnson, L. L. (2019, February 12). URBAN CREEP IN UPSTATE NEW YORK: OPTIMIZING THE PRESERVATION OF AGRICULTURAL LAND. *Albany Law Review, 82.2*.
- MacDonald, J. M., Cessna, J., & Mosheim, R. (2016). *Changing Structure, Financial Risks, and Government Policy for the U.S. Dairy Industry*. USDA.
- Mark, T., Shepherd, J., David, O., Snell, W., Proper, S., & Thornsbury, S. (2020). *Economic Viability of Industrial Hemp in the United States: A Review of State Pilot Programs.* USDA. Retrieved from www.ers.usda.gov
- Miller, S. (2018, April 6). Frequently Asked Questions when Starting Up a Hop Farm in New York.

 Retrieved from https://smallfarms.cornell.edu/2018/04/frequently-asked-questions-when-starting-up-a-hop-farm-in-new-york/
- National Agricultural Statistic Service. (2019). Statistical Summary Honey Bees. USDA.
- National Agricultural Statistic Service. (2019). United States Maple Syrup Production. USDA.
- National Institute of Food and Agriculture. (n.d.). *Organic Agriculture Program*. USDA. Retrieved from nifa.usda.gov/program/organic-agriculture-program
- NYS Ag & Markets. (2019). Farm to School in New York. Retrieved from https://www.agriculture.ny.gov/F2S/index.html
- NYS Department of Ag & Markets. (n.d.). Frequently Asked Questions Regarding Agricultural Districts:.

 Albany, NY. Retrieved from

 https://www.agriculture.ny.gov/ap/agservices/Agricultural_Districts_FAQ.pdf
- NYSERDA. (2011). Responding to Climate Change in New York State: The ClimAID Intergrated Assessment for Effective Climate Change Adaptation in New York State. Albany: NYSERDA.

- NYSERDA. (2019). NYSERDA-Supported Solar Projects. Retrieved October 2019, from NY-Sun: https://www.nyserda.ny.gov/All-Programs/Programs/NY-Sun/Solar-Data-Maps/NYSERDA-Supported-Solar-Projects
- NYSERDA. (2020, August). New York Solar Guidebook for Local Governments. 149-157. Retrieved December 2020, from https://www.nyserda.ny.gov/All%20Programs/Programs/Clean%20Energy%20Siting/Solar%20G uidebook
- NYSERDA. (2020). New York Wind Energy Guidebook for Local Governments. 37-42. Retrieved December 2020, from https://www.nyserda.ny.gov/All-Programs/Programs/Clean-Energy-Siting/Wind-Guidebook
- Office of Budget and Policy Analysis. (2016). *Organic Farms: Growing in New York*. Albany: Office of The New York State Comptroller.
- SARE. (2003). Transitioning to Organic Production.
- Schimmelpfennig, D. (2016). Farm Profits and Adoption of Precision Agriculture. USDA ERS. Retrieved from https://www.ers.usda.gov/webdocs/publications/80326/err-217.pdf?v=0
- Schmit, T. M. (2016). *The Economic Contributions of Agriculture in New York State (2014).* Ithaca: Cornell University. Retrieved from http://publications.dyson.cornell.edu/outreach/extensionpdf/2016/Cornell-Dyson-eb1609.pdf
- Stup, R. (2019). *The State of the Agricultural Workforce in New York*. Retrieved from http://agworkforce.cals.cornell.edu/2019/03/28/the-state-of-the-agricultural-workforce-in-new-york/
- Tetra Tech, Inc. (2016). Chenango County Hazard Mitigation Plan. Norwich: Chenango County.
- The Nature Conservancy. (2017, October). Accelerating Large-Scale Wind and Solar Energy in New York. Albany, New York. Retrieved from https://www.nature.org/en-us/about-us/where-wework/united-states/new-york/stories-in-new-york/accelerating-large-scale-wind-and-solar-energy-in-new-york/
- USDA. (2019). 2017 Census of Agriculture. Retrieved from https://www.nass.usda.gov/Publications/AgCensus/2017/index.php
- USDA. (2019). *A Case Fore Rural Broadband*. USDA. Retrieved from https://www.usda.gov/sites/default/files/documents/case-for-rural-broadband.pdf
- USDA. (2019). Farm to School Grant Program. Retrieved from https://www.fns.usda.gov/cfs/farm-school-grant-program

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USDA National Agriculture Statistics Service. (2018). 2017-2018 Agricultural Statistics Annual Bulletin

New York. USDA. Retrieved from

https://www.nass.usda.gov/Statistics_by_State/New_York/Publications/Annual_Statistical_Bull
etin/index.php

Vincente, C. (2019, July 29). NY's first industrial hemp park coming to Broome County. 12 NEWS WBNG.