

Greene County, New York

Agricultural Development and Farmland Protection Plan

1.0 Why Farming Is Important to Greene County - The Top 10 Reasons

Farming is much more than a starting point on the development scale. It represents a fundamental economic opportunity that also pays dividends in cultural, environmental and social gains for Greene County. Consider the following:

1.1 Farming is big business to Greene County.

Farming in Greene County involves some 244 business locations, both large and small, that generated sales of \$8,781,000 million in 1997. The **average** value of land, buildings and equipment used in each of these businesses was \$327,314 for a total investment in the Greene County economy of approximately \$79,865,000, the equivalent, from an economic development standpoint, of several major manufacturing facilities.¹

1.2 Farming provides year-round business for other Greene County enterprises.

Agriculture is much more than farming. A substantial number of non-agricultural businesses supply the needs of farmers. These include processors, vehicle and equipment dealers and other enterprises. Greene County farmers, for example, own and must maintain and replace 226 mower/conditioners, 251 balers, 410 trucks, 653 tractors and numerous other pieces of farm equipment and machinery. They also annually purchase \$348,000 of electricity, \$490,000 of petroleum products, \$834,000 in repairs and maintenance, \$926,000 of property taxes, \$1,371,000 of hired farm labor, \$2,007,000 of feed and approximately \$2,701,000 of other products and services from Greene County and other nearby enterprises, many of which would not be considered farm supply businesses.²

1.3 Income from agriculture goes further than other sectors in helping the economy.

Agriculture produces much higher economic multipliers than any other sector of the Greene County economy. These multipliers indicate how many times a dollar of sales recirculates in the local economy for feed and supplies and still additional purchases of labor and goods by those businesses. Dairy production, for example, enjoys a 2.29 income multiplier compared to 1.66 for construction, 1.48 for services (which includes tourism), 1.41 for

1 Source: U.S. Census of Agriculture, 1997. Farming is also integral to the support of SUNY Cobleskill which is an economic center onto itself. Market values of land and buildings averaged \$281,800 in 1997 and machinery and equipment was valued at an average of \$45,514.

2 Source: 1997 U.S. Census of Agriculture.

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manufacturing and 1.40 for retail and wholesale trade. Applying these multipliers indicates agriculture represents a total contribution to the economy of approximately \$20,000,000, not including forestry enterprises, many of which take place on farms and all of which are part of agriculture.³

1.4 Agricultural opportunities can actually increase with growth of an area.

While development can, obviously, create conflicts for farmers, the leading agricultural county in New York is Suffolk County. It is home to 1.3 million people and one of the most highly developed suburban environments in the nation, suggesting not only that farming and urbanization can co-exist, but also that the local demand for agricultural products increases with the latter and raises the value of farming as an economic enterprise.⁴ Greene County is growing much faster than the rest of the State and is only 30 minutes from Albany. Farming will, therefore, become ever more important to the County as it continues to develop and grow in population. This is particularly true for fruit and vegetable growers that depends so much on direct marketing and the rapidly developing nursery industry in the County.

1.5 Farms lower taxes.

Farms are tax winners despite preferential assessments afforded by the Ag District Law. A 1995 study of Tompkins County at the other end of the Southern Tier East region found "agricultural .. uses should be recognized as beneficial because they do not demand a large amount of services and provide other benefits such as employment."

The data, in fact, indicate agriculture typically produces \$1.00 in tax revenue for every 15¢ to 40¢ of town and school expenditures it generates, whereas residential development costs \$1.09 to \$1.56 per \$1.00 of taxes gathered. Similar analyses in adjoining Schoharie County for 1998 indicated agriculture produced \$1.09 to \$2.06 in tax revenue for every \$1.00 of municipal and school costs created.⁵ These results are consistent with those of a number of

3 Source: "Economic Multipliers and the New York State Economy," Policy Issues in Rural Land Use, Cornell Cooperative Extension, December 1996. Crops produce a multiplier of 2.28, nursery and wood products yield 1.78 and poultry and livestock generate a 1.64 figure. Agricultural processing operations offer multipliers of 1.65 (meat) to 2.61 (dairy).

4 Source: Cornell Cooperative Extension of Suffolk County.

5 Source: Costs of Community Services Study, Tompkins County, Cornell Cooperative Extension of Tompkins County; Tompkins County Agricultural and Farmland Protection Plan, August, 1995; and Schoharie County Agricultural Development and Farmland Protection Plan, 2000.

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other similar studies done throughout the Northeast.⁶

1.6 Farms create rural character and attract tourism.

Farms contribute to Greene County's rural character and protect open spaces essential to the quality of life for both permanent and seasonal residents. Any number of surveys of rural residents and second-home dwellers indicate the primary reasons people live in such areas have to do with their appreciation of the natural resources and open spaces offered, but the anecdotal evidence is perhaps even stronger and local tourism brochures provide examples. They include references not only to the County's historic and natural sites but also its "spectacular scenery" and the "natural beauty of the countryside." They also speak of the "exceptional natural beauty" along the 21 miles of highway designated as the "Catskill Mountain Heritage Trail" that is included on New York States Scenic Byway system. The Catskill Game Farm, a family-owned tourist enterprise established in 1933 has also attracted millions of visitors who, according to its website, "have enjoyed the close contact of exotic animals in a relaxed, country atmosphere."

These facets are directly created by working farm landscapes in many instances. They help support some 44 bed and breakfast operations throughout the County. There is, indeed, a direct relationship between farming and the attractiveness of Greene County as a place to both live and visit.

1.7 Successful farming limits suburban sprawl.

Preserving farmland discourages expensive suburban sprawl, steering development toward hamlets and villages with existing services. "Gasoline taxes and other user fees only cover about 70% of the direct cash costs of building and maintaining the nation's road system," according to a recent article on sprawl. Hook-up fees for sewer systems within areas of sprawl often cover less than half the real costs of those extensions.⁷ These differences are attributable to the high costs of servicing development spread out along highways and the deficits must be made up by all taxpayers.

1.8 Farms and forests preserve natural environments.

Farms and forests provide working self-sustaining landscapes which preserve and enhance

⁶ These include studies by American Farmland Trust, Cornell Cooperative Extension, and Commonwealth Research Group, Inc. of communities in Dutchess and Oneida Counties in New York and various other Connecticut and New England areas.

⁷ Source: "Who Pays for Sprawl?," U.S. News and World Report, April 27, 1998.

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environmental quality. Use of New York City watershed lands in the West-of-Hudson region of New York State (including Greene County) for largely farm and forestry uses have, for example, allowed Federal water drinking quality criteria for filtration avoidance to be met. The suburbanized Croton and other East-of-Hudson area watersheds, by contrast, cannot meet these same standards and demand extraordinarily expensive filtering processes to produce potable drinking water.

Forest land, which is a part of nearly every farm, "may reduce sediment, nutrient and other pollutant loadings by as much as 85% by minimizing soil erosion and filtering watershed runoff" according to a Watershed Agricultural Council publication.⁸ A recent study of land use and water quality along 100 Wisconsin streams also found that "watershed with more than 20% of land in urban use had very poor biological diversity."⁹ This is particularly important to those portions of the County within the New York City watershed and increasingly so in the remainder of the County as environmental requirements tighten.

1.9 Farms and forests support wildlife, sport hunting and other recreational land uses.

Farms support wildlife such as deer, turkeys and small-game and thereby sustain hunting as a source of tourism to the area. The 1997 white-tail deer harvest was, in fact, some 2,129 deer with the largest takes being in Durham, Greenville and Catskill, respectively.¹⁰ The 1996 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation estimated that \$322,919,067 in retail sales and \$575,535,000 in total economic output was generated for New York State as a result of deer hunting (an economic multiplier of 1.78). This equals \$712 and \$2,654, respectively, for each deer harvested, yielding a \$5,650,000 deer hunting economy for Greene County.¹¹ Bird watching and other forms of hunting (e.g. bear), fishing and outdoor recreation and eco-tourism are also supported by farming. There are, in addition, a number of related summer festivals in Hunter and elsewhere that support local businesses.

Finally, as indicated earlier, the County is home to the Catskill Game Farm, a home-grown

8 Source: Policy Recommendations for the Watersheds of New York City's Water Supply, Watershed Forest Ad Hoc Task Force, July 1996, p.8. Also, remarks by Watershed Agricultural Council Chairman Richard Coombe at "Promoting Partnerships" Conference, American Farmland Trust and others, Albany, New York, May 1998.

9 Source: Land Works Connection, October, 1998, American Farmland Trust.

10 Source: New York State Department of Environmental Conservation. The 1998 harvest was 2,172 deer.

11 See <http://www.restorewildlife.org/dollars/index.cfm> for details on Statewide basis.

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specialty tourism business that involves the exhibit of approximately 2000 animals, representing over 150 different species from all parts of the world and including both domestic and exotic species. It alone attracts some 200,000 visitors per year. The Catskill Game Farm zoological park is a unique and important purchaser of agricultural products as well, including grain and local hay.

1.10 Farmland is an invaluable resource for future generations.

Farmland is a valuable future resource for the County in providing for a healthy and plentiful local supply of food products and generating new sources of farm income. Many new residents of the County and of areas to the North and South (e.g. Albany, Kingston), as well as visitors to the Hudson Valley, are seeking locally grown fresh fruits, vegetables and flowers, both organic and non-organic. County farmers are already capitalizing on these opportunities in the promotion of farm stands. There are also CSA (Consumer Supported Agriculture) groups operating successfully in Greene County, supplying the metropolitan markets.

Likewise, the County's base of both small and mid-sized farms provides a foundation for exploring new dairy and non-dairy opportunities for added-value ventures and development of new niche businesses. These resources offer tremendous economic potential for the future and, once again, Suffolk County provides an illustration. Its agricultural economy has been reinvented several times with urbanization but today yields well over \$167,000,000 in annual sales and its lead as New York's most valuable agricultural producer is lengthening because of the shift to these higher valued products.¹²

¹² Source: Cornell Cooperative Extension of Suffolk County and U.S. Census of Agriculture, 1997.

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2.0 Agriculture Today - An Inventory

The following represents an overview and inventory of the agricultural industry sector of the Greene County, New York economy as it exists today.

2.1 Physical Features of Greene County Related to Agriculture

Greene County is located in the mid-eastern part of New York State: south of Albany County; south and east of Schoharie County; north of Ulster County; and north and east of Delaware County. Columbia County borders Greene County on the east, at the common boundary, the Hudson River. It has an area of 417,920 acres, or about 653 square miles. Elevation in the county ranges from just above sea level at the Hudson River, to 4,025 feet at the top of Hunter Mountain, in the southwest part of the County. This unique topology has inspired countless visitors through the centuries to come celebrate the views; painters, photographers, writers. It has also inspired the placement of three renown ski resort areas.

The Northeast Escarpment of the Great Northern Catskills (the Mural Front) divides the county into two physiographic provinces. The southwestern half is the mountainous Catskill section of the Appalachian Plateau. The northeastern half of the County consists of the Hudson Valley section of the Ridge and Valley Province. Although there is productive farmland in varying degrees in both sections of the County, it is predominately found in the Hudson Valley section. The largest areas of farmland within this area are found in the Embought, the Coxsackie Flats, the Kiskatom Flats, along Catskill Creek, western New Baltimore, Norton Hill, Greenville, and large sections of Durham. Farmland concentrations within the Catskill, or “mountaintop” area, are found in parts of Ashland, along the Schoharie Creek, along the Little Westkill, in East Jewett and Jewett, and in the Halcott Valley. The areas of farming concentration are shown on the Prime Soils Map I, and on the Agricultural Districts Map II that follow.

Water erosion is a major hazard on nearly half of the County’s cropland. The erodibility of the soil itself; amount and intensity of rainfall; types of plant cover; and, particularly, the length and degree of the slope, contribute to this problem. Management of cover crops to keep the soil in place is essential, given the steep slope conditions. The wide topographical differences also account for the three USDA Plant Hardiness Zones (4, 5, and 6) found in the County and for the variable length in growing seasons (from 90 days at the higher elevations, to 165 days in the lower areas).

Rainfall averages 37 inches per year, including 68 inches of average annual snowfall. The average winter temperature is 24 degrees Fahrenheit with an average minimum temperature

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of 15 degrees. The average summer temperature is 68 degrees with an average maximum temperature of 80 degrees. Average relative humidity is 55% in mid afternoon. Humidity is higher at night with an average at dawn of about 80%. The sun shines 60% of the time possible in the summer and 40% of the time in winter. The prevailing winds are from the south and the west. Average wind speed is highest in the Spring at 11 miles per hour.

Land classified as farmland totaled 48,770 acres in 1997, down 23% from 63,598 acres in 1982. Prime farmland from a soils perspective represents 24,910 acres. About 35% of this is forested. Some of the prime soils have been developed into residential, commercial or industrial uses and are not included in the following list or in the total acreage. Table I lists the prime farmland by name, classification and number of acres. Table II lists other soils of economic importance. Map I shows prime soils within the County. Forested land covers approximately 82% of the County or about 342,700 acres. Forested acreage includes the Catskill Park, a state forest preserve that alone covers approximately 70,000 acres, or 17% of the county. Section 2.6 provides an in-depth discussion of the forest industry.

Table I - Prime Farmland Soils in Greene County

<u>Soil Name</u>	<u>Acres</u>	<u>Land Capability Classification</u>
Barbour loam	4,427	I
Tioga loam	439	I
Elka channery loam, 3 – 8% slopes	455	Ile
Lackawanna channery loam, 3 – 8% slopes	594	Ile
Lewbeach channery silt loam, 3 – 8% slopes	846	Ile
Lordstown channery silt loam, 0 – 3% slopes	210	IIs
Lordstown channery silt loam, 3 – 8% slopes	632	Ile
Maplecrest gravelly silt loam, 3 – 8% slopes	252	Ile
Valois gravelly loam, 3 – 8% slopes	688	Ile
Chenango gravelly loam, 0 – 3% slopes	187	IIs
Chenango gravelly loam, 3 – 8% slopes	517	IIs
Riverhead loam, 0 – 3% slopes	293	IIs
Riverhead loam, 3 – 8% slopes	418	IIs
Tunkhannock gravelly loam, 0 – 3% slopes	457	IIs
Tunkhannock gravelly loam, 3 – 8% slopes	1,548	IIs
Tunkhannock gravelly loam, fan, 3 – 8% slopes	335	IIs
Basher silt loam	889	IIw
Busti silt loam, 3 – 8% slopes	1,434	IIw
Chautauqua loam, 3 – 8% slopes	209	IIw
Elmridge very fine sandy loam, 0 – 3% slopes	766	IIw
Elmridge very fine sandy loam, 3 – 8% slopes	586	IIw
Middlebury silt loam	422	IIw
Burdett channery silt loam, 0 – 3% slopes	586	IIIw
Shaker very fine sandy loam	946	IIIw
Total	24,910	

e = erosion potential, s = stony, shallow, or droughty, w = wet

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Table II - Other Soils of Economic Importance in Greene County

<u>Soil Name</u>	<u>Acres</u>	<u>Land Capability Classification</u>
Hudson and Vergennes soils, 3 – 8 percent slopes	2,568	IIe
Lewbeach channery silt loam, 3 – 8 percent slopes	846	IIe
Nunda silt loam, 3 – 8 percent slopes	1,098	IIe
Oquaga very channery silt loam, 3 – 8 percent slopes	465	IIe
Vly very channery silt loam, 3 – 8 percent slopes	547	IIe
Riverhead loam, 0 – 3 percent slopes	293	IIs
Riverhead loam, 3 – 8 percent slopes	418	IIs
Mardin gravelly silt loam, 3 – 8 percent slopes	1,400	IIw
Wellsboro channery loam, 3 – 8 percent slopes	2,741	IIw
Willowmoc channery silt loam, 3 – 8 percent slopes	2,836	IIw
Willowmoc channery silt loam, 8 – 15 percent slopes	2,779	IIw
Arnot channery silt loam, 3 – 8 percent slopes	6,460	IIIe
Hudson and Vergennes soils, 8 – 15 percent slopes	1,025	IIIe
Lewbeach channery silt loam, 8 – 15 percent slopes	2,446	IIIe
Nunda silt loam, 8 – 15 percent slopes	1,867	IIIe
Onteora silt loam, 8 – 15 percent slopes	496	IIIe
Riverhead loam, rolling	774	IIIe
Vly very channery silt loam, 8 – 15 percent slopes	414	IIIe
Volusia channery loam, 8 – 15 percent slopes	120	IIIe
Arnot channery silt loam, 0 – 3 percent slopes	168	IIIs
Canandaigua silt loam	489	IIIw
Kingsbury and Rhinebeck soils, 0 – 3 percent slopes	5,866	IIIw
Kingsbury and Rhinebeck soils, 3 – 8 percent slopes	3,490	IIIw
Morris channery silt loam, 0 - 3 percent slopes	189	IIIw
Morris channery silt loam, 3 – 8 percent slopes	856	IIIw
Onteora silt loam, 3 – 8 percent slopes	1,016	IIIw
Volusia channery loam, 0 – 3 percent slopes	144	IIIw
Volusia channery loam, 3 – 8 percent slopes	<u>1,104</u>	IIIw
Total	42,915	

e = erosion potential, s = stony, shallow, or droughty, w = wet

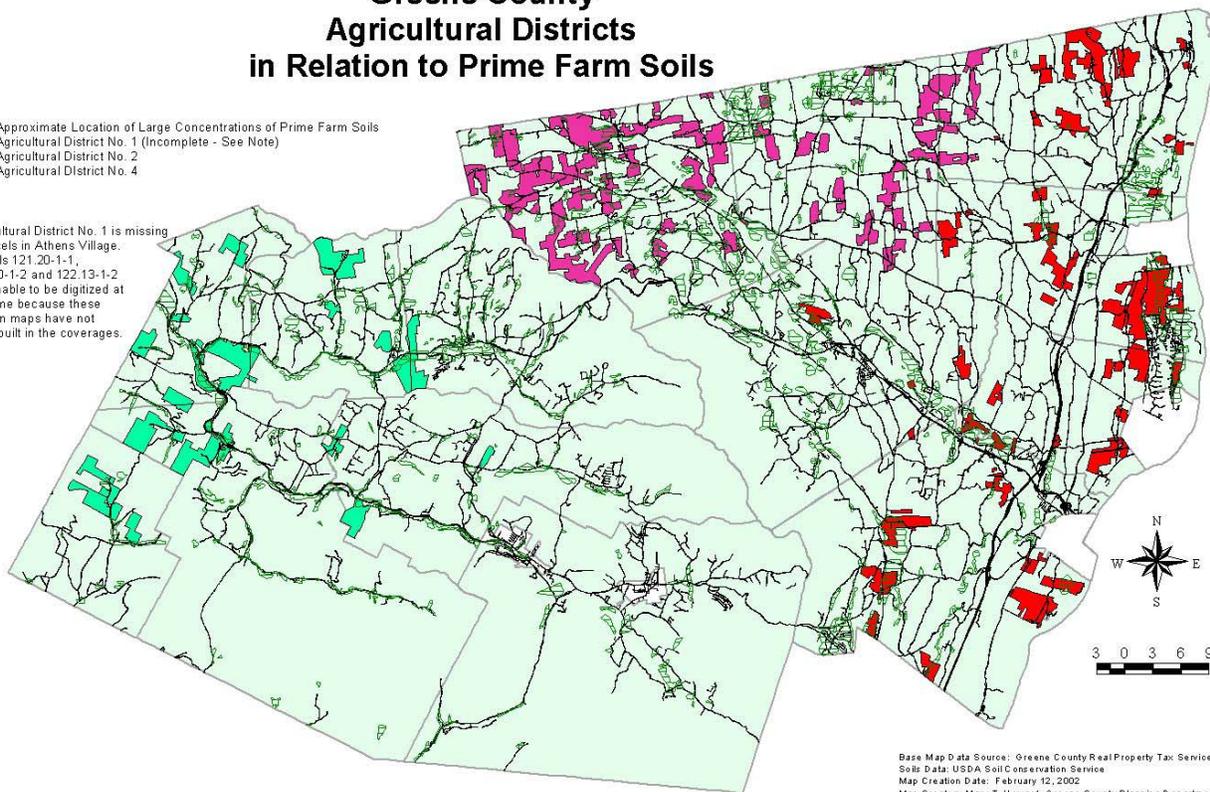
2.2 Agricultural Districts in Greene County

The New York State Agriculture and Markets Law “provides a locally initiated mechanism for the protection and enhancement of New York State’s agricultural land as a viable segment of the local and state economies, and as an economic and environmental resource of major importance.” Article 25AA provides for the creation, maintenance, regulation, administration, and evaluation of “agricultural districts” within the various counties of the state. The law protects and strengthens agriculture by; (a) limiting both state and local governmental interference, (b) controlling “nuisance law suits,” (c) regulating conversions and development projects, and (d) providing for agricultural land assessment tax valuation.

Greene County Agricultural Districts in Relation to Prime Farm Soils

- Approximate Location of Large Concentrations of Prime Farm Soils
- Agricultural District No. 1 (Incomplete - See Note)
- Agricultural District No. 2
- Agricultural District No. 4

Note:
Agricultural District No. 1 is missing
3 parcels in Athens Village.
Parcels 121.20-1-1,
121.20-1-2 and 122.13-1-2
are unable to be digitized at
this time because these
section maps have not
been built in the coverages.



Base Map Data Source: Greene County Real Property Tax Services
Soils Data: USDA Soil Conservation Service
Map Creation Date: February 12, 2002
Map Creator: Mary T. Howard, Greene County Planning Department

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Since 1971, when agricultural districts were mandated in New York, 361 have been formed in the State. There are currently three Agricultural Districts in Greene County, totaling 30,073 acres or roughly three-fourths of the farmland in the County. Basic data for the three districts is summarized in Table III below. Agricultural Districts No. 3 and No. 5 were consolidated with District No. 1 in 1997 to form the “Hudson Valley Agricultural District.” Agricultural District No. 4 will be redesignated as District No. 3, or the “Mountaintop Agricultural District” during its next review. Agricultural District No. 2 was realigned during the last review in 1998 to form the “Durham/Greenville Agricultural District.” The approximate boundaries of each District are shown in the Agricultural Districts of Greene County – Map II that follows.

Table III - Greene County Agricultural Districts

<u>District No./Name</u>	<u>Acreage</u>	<u>Towns</u>	<u>Next Review</u>
District No. 1 Hudson Valley	10,125.41	New Baltimore, Cairo, Catskill, Coxsackie, Athens	2004
District No. 2 Durham/Greenville	12,361.22	Durham, Greenville, New Baltimore, Coxsackie, Cairo	2006
District No. 4 Mountaintop	7,097.47	Lexington, Jewett, Prattsville, Windham, Ashland, Halcott	2003

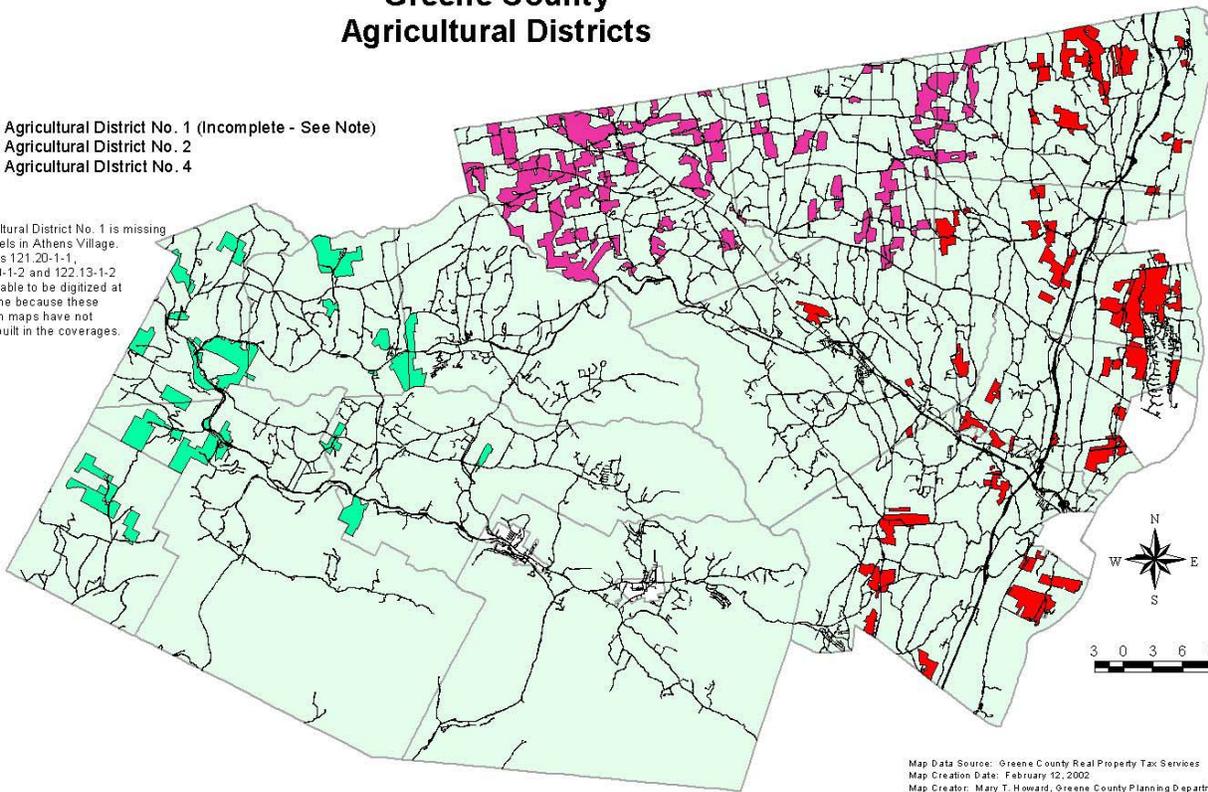
Article 25AA also directs each county’s legislative body to establish and oversee an “Agriculture and Farmland Protection Board.” These boards consist of eleven members, at least four of whom are supposed to be active farmers plus representative of agribusiness and organizations dedicated to land preservation. Other members include the chairperson of the Soil and Water Conservation District; a member of the county legislative body; a Cooperative Extension agent; the County Planning Director; and the Director of Real Property Tax Services.

The Board's function is to advise the County legislative body in establishing, reviewing and modifying agricultural districts. It is also charged with duties of preparing an “Agriculture and Farmland Protection Plan,” endorsing applications for State Purchase of Development Rights (PDR) funds and reviewing “notices of intent” (agricultural data statements) on proposed public projects that may impact farms or their operations within agricultural districts. The Board is, furthermore, asked to make recommendations about proposed governmental acquisition of farmland in agricultural districts and request review of local and state agency regulations that affect farm operations within agricultural districts.

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- Agricultural District No. 1 (Incomplete - See Note)
- Agricultural District No. 2
- Agricultural District No. 4

Note:
Agricultural District No. 1 is missing
3 parcels in Athens Village.
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Map Data Source: Greene County Real Property Tax Services
Map Creation Date: February 12, 2002
Map Creator: Mary T. Howard, Greene County Planning Department

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2.3 Land Use and Development Trends

Early Native American inhabitants of Greene County, when the first European settlers arrived, included the Munsee (or Lenni Lanape), the Mahicans of the Algonkian Group and the Mohawks and other Iroquois Confederacy tribes. Dutch settlers arrived in the early 1600's followed by the English. Both groups brought with them many of the crops, livestock and farming practices they had utilized in the Europe.

Greene County was formed by an act of the New York State Legislature on March 25, 1800. The County originally had 4 towns but today has 14. Population in 2000 totaled 48,195 persons. There is an estimated additional population of 12,958 seasonal residents. Towns vary widely in the ratio of full-time to part-time residents. The "mountaintop" areas have more part-time residents than the lowlands, because they offer more seasonal recreational activities. Table IV shows trends in permanent residential population trends in each of the towns for the past 20 years. Greene County's 7.7% growth rate during the 1990's was among the fastest in New York State, bucking the general upstate pattern of very low or no growth. Nevertheless, it was still well below the 13% national growth rate.

Table IV - Greene County Population Growth

<u>Municipality</u>	<u>1980</u>	<u>1990</u>	<u>2000</u>	<u>% Change 1990-2000</u>
Ashland	744	803	752	-6.4%
Athens	3,462	3,561	3,991	12.1%
Cairo	4,729	5,418	6,355	17.3%
Catskill	11,453	11,965	11,849	-1.0%
Coxsackie	6,018	7,633	8,884	16.4%
Durham	2,283	2,324	2,592	11.5%
Greenville	2,849	3,135	3,316	5.8%
Halcott	150	189	193	2.1%
Hunter	2,252	2,116	2,721	28.6%
Jewett	723	933	970	4.0%
Lexington	819	835	830	-0.6%
New Baltimore	3,050	3,371	3,417	1.4%
Prattsville	666	774	665	-14.1%
Windham	<u>1,663</u>	<u>1,682</u>	<u>1,660</u>	<u>-1.3%</u>
Total	40,861	44,739	48,195	7.7%

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Data from the 2000 Census shows that there were, at that time, some 26,544 total housing units in the county, with 2.18 people per occupied household. This housing included 13,171 owner-occupied (full time), 5,085 renter-occupied (full-time), 5,944 seasonally occupied (seasonally vacant) and 2,344 other vacant units. The countywide rental vacancy was 12% due to the large number of seasonally occupied units. This housing, both occupied and non-occupied, is widely dispersed. Scattered development of this nature is often viewed as preserving rural character but can actually have serious negative on farming operations by placing incompatible residential land uses closer to them.

Commercial and industrial development is taking place and being generally promoted along the US Route 9W Corridor (see Existing Land Use Map following). Route 9W runs parallel to the Hudson River, from the south to the north through the entire county, with the towns of Catskill, Athens and Coxsackie as the main focus area of the development efforts. Some of these areas also constitute excellent farmland. Several are currently being farmed. Industrial development is necessary but can also segment farmlands. The County's economic development strategy should attempt to balance these needs. One method of doing this is using the Greene County Industrial Development Agency (IDA) to stimulate new agricultural development (as it attempted to do with the Fern Lea project).

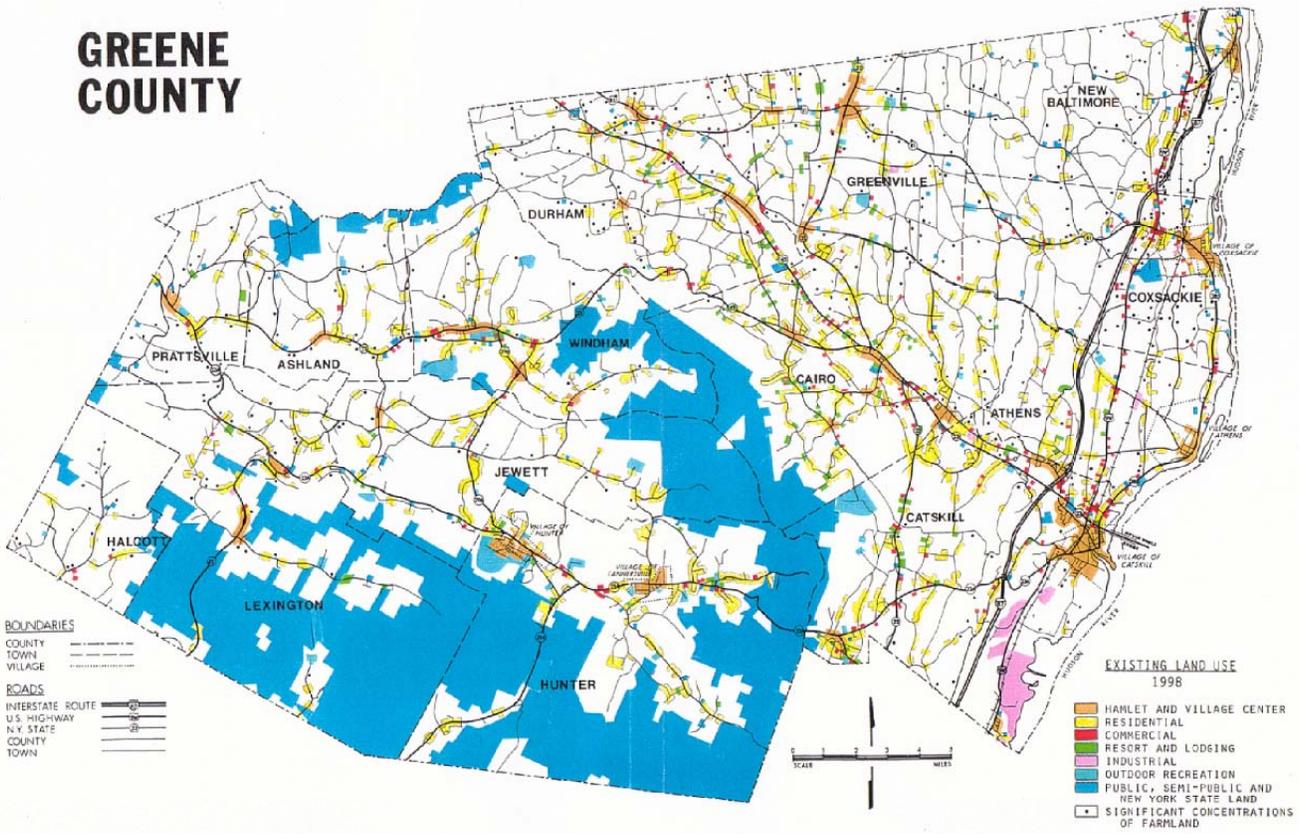
The Agricultural and Farmland Protection Board should be actively involved and help secure protection of the most valuable farmlands for agricultural production. There are IDA programs that could be of extreme value to farming and agribusiness enterprise endeavors. Innovative programs to purchase or transfer development rights could also facilitate other economic development projects. Section 4.0 of this Plan outlines some of the possibilities.

2.4 The Economics of Greene County Agriculture

Section 1.0 of this Plan ("The Top Ten Reasons Why Farming Is Important to Greene County") notes that the 244 farms identified in the 1997 Agricultural Census generated estimated sales of \$8,781,000. This, however, is probably a low figure today given the existence of several major agricultural operations that would appear, at least, to generate much more than this. Moreover, price increases, expanded operations and new value-added activities have almost certainly increased agricultural sales revenue since then, taking the total to well over \$10,000,000 by Cooperative Extension agent estimates. These figures will fluctuate with year to year changes in market values and production levels.

The top five commodities produced in the County, according to the 1997 Census of Agriculture, were; 1) dairy products, 2) poultry and poultry products, 3) nursery and greenhouse crops, 4) cattle and calves and 5) vegetables, sweet corn, and melons. These and other commodities are ranked in importance by sales in Table V following:

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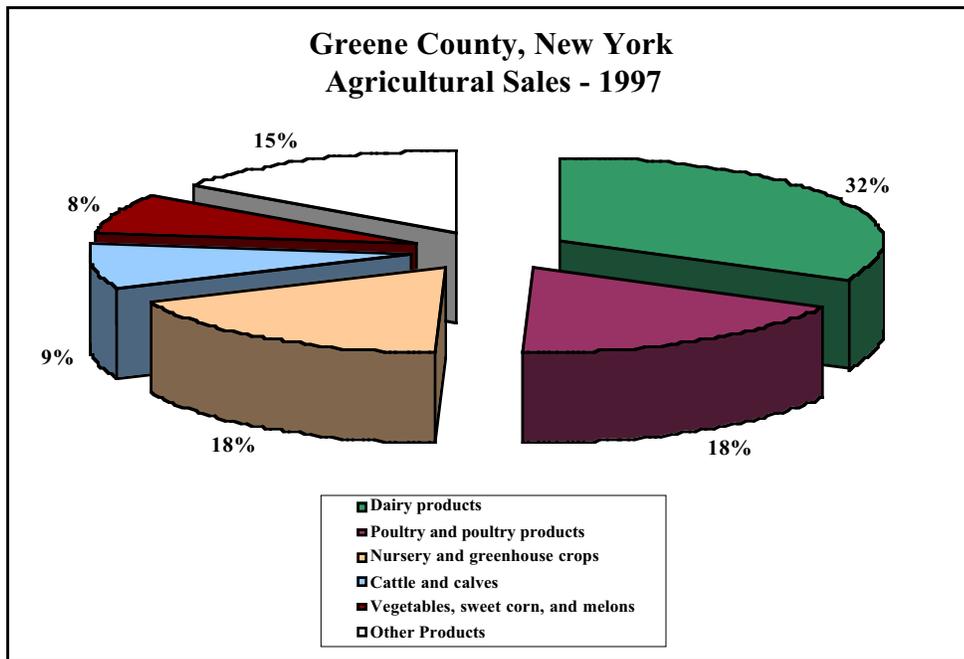
Table V – Economic Contributions of Greene County Agriculture Products

<u>Item</u>	<u>Quantity</u>	<u>State Rank</u>
Total value of agriculture products sold	\$8,781,000	50
Value of livestock and poultry	\$5,583,000	48
Value of crops including nursery	\$3,198,000	47
 <u>Top Five All Commodities – Value of Sales</u>		
Dairy products	\$2,848,000	48
Poultry and poultry products	\$1,587,000	14
Nursery and greenhouse crops	\$1,571,000	34
Cattle and calves	\$766,000	46
Vegetables, sweet corn, and melons	\$684,000	32
 <u>Top Five Commodities – Livestock Sold</u>		
Ducks, geese, and other poultry sold	N/A*	4
Layer, pullets, and pullet chicks sold	N/A*	8
Cattle and calves sold	2,019	47
Sheep and lambs sold	479	37
Rabbits and their pelts sold	N/A*	19
 <u>Top Five Commodities – Livestock Inventory (number)</u>		
Layers 20 weeks and older	N/A*	15
Pullets 13 to less than 20 weeks	N/A*	7
Ducks, geese, and other poultry	25,900	3
Pullets less than 13 weeks	N/A*	13
Cattle and calves	5,145	49
 <u>Top Five Commodities – Crop Area</u>		
Hay crops – acres	15,297	44
Corn for silage – acres	1,018	49
Corn for grain – acres	638	49
Land used for vegetables – acres	514	32
Nursery, all – acres	252	44

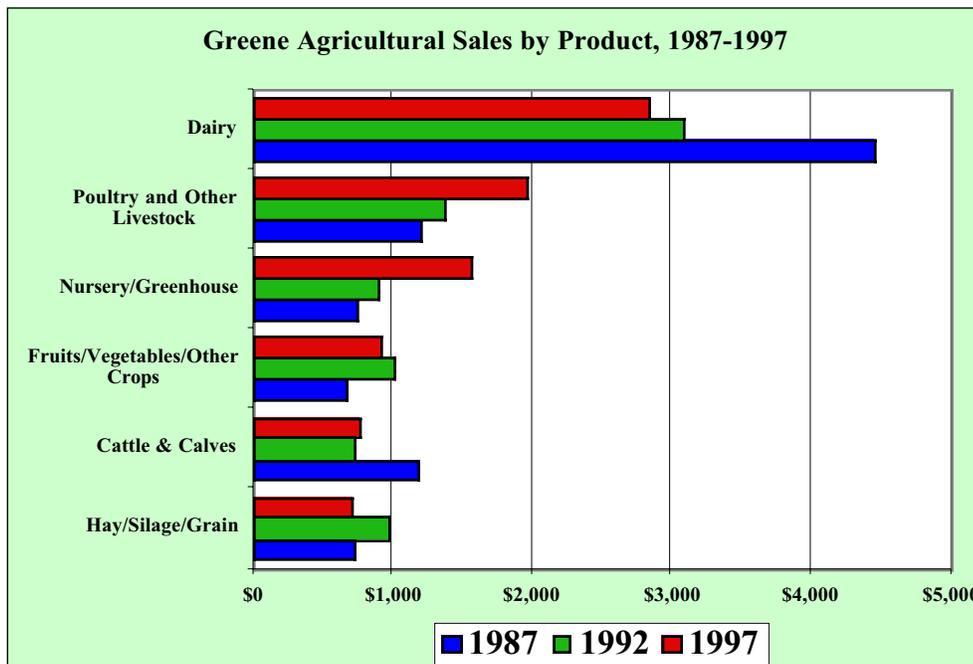
* Note: Certain records gathered by the USDA may not be made public for reason of maintaining privacy for operators filing the reports.

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County agricultural highlights and farm demographics, along with statistical comparisons between 1987 and 1997, are provided below and in Table VI following:



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Table VI - Other County Highlights and Farm Demographics

	<u>1997</u>	<u>1992</u>	<u>% Change</u>
<u>Farms by Value of Sales</u>			
Less than \$10,000	145	134	8%
\$10,000 or more	99	88	13%
<u>Farm Production Expenses</u>			
Total for all farms	\$8,777,000	\$7,044,000	25%
Average per farm	\$35,390	31,585	12%
<u>Net Cash Return From Ag Sales</u>			
Total for farms	(\$203,000)	\$736,000	-128%
Average for farms	(\$ 819)	3,302	-125%
<u>Characteristics of Farms and Operators</u>			
Individual or family	203	192	11%
Partnership or corporation	28	29	-3%
Other	3	1	200%
Full ownership farms	146	129	12%
Part ownership farms	84	77	8%
Tenant farms	14	16	-12%
Hired labor (number of farms)	49	85	-42%
Hired labor (number of workers)	209	266	-21%
Farming as principal occupation	114	105	9%
Farmers with other principal occupations	130	117	11%
Average age of farmers	56.0	54.5	3%

The economic contributions of Greene County's agricultural sector extend throughout all sectors. These impacts are typically measured using "economic multipliers" that represent the number of times a dollar of farm sales circulates in the local economy. Agricultural industries enjoy very high economic multiplier because most farm products are sold outside the region, bringing in new dollars that are generally respent locally for labor and goods such as feed. The multiplier represents the total contribution of that dollar to the economy after all these expenditures are considered.

The economic multiplier effects of agricultural activities in rural New York State relative to other industries are generally discussed in Section 1.0 of this Plan and the following table provides additional updated income and employment multipliers for selected agricultural activities on a Statewide basis, illustrating the power of the agricultural economy and especially of added-value processing businesses:

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Table VII - Economic Multipliers by Sector, New York State, 1996

	<u>Income</u>	<u>Employment (FTE)</u>
<u>Production Agriculture Industries</u>		
Horse Breeding and Boarding	2.82	0.76
Landscape and Horticultural Services	1.98	1.31
Food Grains	1.96	1.27
Oil Bearing Crops	1.95	1.36
Fruit	1.92	1.50
Vegetables	1.92	1.85
Sheep, Lambs and Goats	1.91	1.23
Greenhouse and Nursery Products	1.90	1.50
Cattle	1.89	1.56
Feed Grains	1.87	1.46
Hay and Forage Crops	1.87	1.18
Dairy Products	1.83	2.24
Forest Products	1.80	1.92
Hogs, Pigs and Swine	1.73	1.48
Poultry and Eggs	1.58	1.91
Agroforestry	1.36	1.19
<u>Agricultural Manufacturing Industries</u>		
Dairy Processing	2.26	5.72
Food Grain Processing	2.15	5.46
Canned Fruits and Vegetables	2.00	3.14
Frozen Fruits, Juices and Vegetables	1.97	3.10
Bakery, Confections, Nuts	1.97	2.75
Prepared Livestock/Poultry Feeds	1.81	4.52
Meat Processing	1.64	2.72
<u>Other Agriculture</u>		
Farm and Garden Machinery	2.12	3.75
Agricultural Services	1.93	1.33

Source: IMPLAN

Clearly, Greene County's agricultural economy has far reaching impacts. The greater point, however, is the extent to which agricultural processing can contribute. This reaffirms the wisdom of the County IDA's pursuit of these industries.

2.5 The Horse Industry

Horse breeding and boarding operations are bona fide agricultural entities that preserve agricultural land, provide markets for locally grown hay and grain crops, generate agricultural tourism and support core agribusinesses such as veterinarians. They are not,

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however, always recognized as such because their products are different. They are often viewed as hobby or luxury goods that will not sell during economic downturns. Nonetheless, horses are becoming big business throughout the Northeast and fit well in Greene County. Consider the following information, mostly gleaned from the New York State Agricultural Statistics Service 2000 Equine Survey:

- Horses add value to farmland. The average acre of land devoted to equines represents a value of \$4,029 in land, barns, fencing and other buildings on a statewide basis. Greene County, however, is part of the Southeastern New York region for purposes of equine surveys and within that region the investment per equine acre is \$8,700.
- Annual expenditures for grain, hay, hay for bedding and feed supplements average \$1,037 per horse statewide. Bedding materials, fencing, veterinary supplies, feeding equipment, tractors, trucks, trailers, tack and building materials are other costs associated with keeping horses. Total equine-related expenditures average \$4,188 per animal statewide. This suggests Greene County's horses are an \$8,000,000 per year industry for the region, as large as all other County agricultural activities combined.
- As the preceding section indicated, the horse industry enjoys an economic multiplier of 2.82 (up to 3.1 in recent survey), highest among all agricultural production sectors.
- Cornell Cooperative Extension of Greene County is presently working with 6 new, equine operations in the County. Three will be horse-boarding facilities, two will be boarding, riding and training operations, and one will be a breeding and showing enterprise. Most of the new operations have been attracted by the rural character of the County compared to nearby urban areas.
- Greene County ranks 37th in New York State in numbers of horses according to the 2000 Equine Survey, but 26th in the value of the horses kept (\$11,400,000, or \$5,700 per horse). The 2,000 horses the Survey indicates are maintained in the County exceed the number of dairy cows (approximately 1,300) by a large margin. They also constitute a much higher number than the 300 horses counted in the 1997 Agricultural Census, suggesting the latter significantly underestimates the impact of the industry and Greene County agriculture in general.
- Several horses raised, trained or boarded in Greene County have competed in high-prestige races around the country, in addition to regularly participating in races at Saratoga and in Florida.
- The average horse generates \$460/year of cash labor expenditures.

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- Approximately 40% of horse owners earn less than \$50,000/year (regional figure).
- Horse boarding and breeding operations qualify for agricultural assessment under the New York State Agriculture and Markets Law provided they include at least 10 horses, 10 acres and \$10,000 in revenue over two years. Inclusion of horse operations under agricultural assessment must also be ratified by each county's legislative body.

2.6 The Forestry Industry

The source of all forestry data, unless otherwise indicated, is the USDA Forest Service, Northeastern Station, "Northeastern Forest Inventory and Analysis Project," (FIA) 1993 and 1996. Although this is the only official source of the data available, it is based on sampling of a mere 50 plots and is often prone to error as a result. So as to correct for this wherever possible, discussions were held with forestry industry representatives.

Trees are among Greene County's most important crops. Their value is underrated because the rotation period is long and the economic returns are irregular. Some 253,500 acres or 75% of Greene County is considered timberland. Sawtimber represents 134,300 acres, with the remainder consisting of seedlings, saplings and pole timber. Christmas trees (7 farms in 1997) and ginseng are included in nursery and greenhouse figures reported above.

A total of 4% of the timberland is owned by farmers (10,200 acres), another 4% is owned by corporations (10,000 acres) and the remainder is held by private individuals (228,900 acres). It is a valuable income-producing asset for these landowners. The following is a breakdown of privately owned woodland in the County by forest type:

Table VIII - Greene County Private Timberland by Forest Type, 1993

<u>Forest Type</u>	<u>Acreage</u>
Maple-beech-birch	101,000 acres
White-red-jack pine	63,000 acres
Oak-hickory	52,200 acres
Oak-pine	14,100 acres
Eastern red cedar	9,700 acres
Elm-ash-cottonwood	8,300 acres
<u>Aspen-birch</u>	<u>5,100 acres</u>
Total Timberland	253,500 acres

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The Forest Service studies indicate the most common species, in terms of numbers of live trees, are Hard Maple, Soft Maple, Eastern White-Red Pine, Ash and Eastern Hemlock. The Hard Maple is quite valuable but some of the others are lower value species. Significantly, some 161,500 acres or 64% of Greene's private timberland is considered to be either fully stocked or overstocked and, altogether, the County's timberland represents 459,500,000 cubic feet of growing stock. Growing stock generally refers to all usable portions of trees, those portions which exceed 4" in diameter. Timberland within Greene County includes an estimated 1,240,300,000 board feet of sawtimber and is growing by 43,000,000 net board feet per year. Sawtimber refers to the net volume of saw logs in trees.

The following table compares Forest Service estimates of growth compared to average annual removals of sawtimber. Average annual removals refers to the net growing stock harvested, killed in logging operations, cleared or reclassified from forest to non-forest land. Totals may not agree, due to rounding, and the data should be used very cautiously because of the small number of plot analyses from which these numbers are extrapolated

Table IX - Greene County Average Net Annual Growth and Average Annual Removals of Sawtimber (in Board Feet) by Species Group, 1993

<u>Species Group</u>	<u>Sawtimber Base Volume</u>	<u>Annual Growth</u>	<u>Annual Removals</u>	<u>Cutting Rate</u>
Eastern White - Red Pine	410,800,000	15,700,000	100,000	0.0%
Spruce-Fir	1,300,000	0	300,000	23.1%
Eastern Hemlock	174,900,000	5,100,000	0	0.0%
Other Softwood	1,900,000	100,000	0	0.0%
Total Softwoods =	588,800,000	21,000,000	400,000	1.0%
Select Red Oak	113,200,000	4,000,000	1,000,000	0.9%
Other White Oak	16,200,000	600,000	0	0.0%
Other Red Oak	19,800,000	600,000	0	0.0%
Hickory	29,500,000	900,000	0	0.0%
Yellow Birch	17,900,000	900,000	100,000	5.6%
Hard Maple	206,200,000	7,200,000	1,200,000	0.6%
Soft Maple	57,000,000	2,800,000	100,000	0.2%
Ash	48,900,000	2,300,000	300,000	0.6%
Cottonwood-Aspen	43,300,000	1,400,000	0	0.0%
Black Walnut	2,000,000	200,000	0	0.0%
Beech	36,500,000	800,000	400,000	1.1%
Other Soft Hardwoods	28,300,000	500,000	0	0.0%
Other Hard Hardwoods	32,700,000	0	300,000	0.9%
Total Hardwoods =	651,500,000	22,100,000	3,300,000	0.5%
All Species =	1,240,300,000	43,000,000	3,700,000	0.3%

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The 1,240,300,000 board feet of sawtimber yields an average of 4,893 board feet per acre of timberland. However, managed stands, according to industry representatives, typically yield only 2,000-3,000 board feet per acre. The Forest Service numbers, therefore, may well overstate yields for Greene's largely unmanaged woodlands. Moreover, annual growth in the case of managed stands is usually about 100 board feet per year per acre of timberland. This suggests a gain in sawtimber of roughly 25,350,000 board feet per year as compared to the Forest Service's estimate of 43,000,000 board feet. Nevertheless, the FIA data is the best source of information available. Annual growth does appear to exceed removals, although perhaps by not as wide a margin as indicated in the FIA reports.

Forest Service data ("Cutting Activity in New York's Forests," Northeastern Forest Experiment Station) indicates cutting rates within the County are lower than New York State's 0.8% average and adjoining New England (1.3%). The rates for all species are more than sustainable. Indeed, the ratio of annual growth to removals as well as other evidence, indicates a continually maturing forest within the County. Neither hardwoods nor softwoods are being harvested to the extent they could be in many cases. This is not good for wildlife management, the long-term vitality of woodlands or the forest industry. Too many large trees crowd out the understory vital to regeneration and to animals for cover and as food. More timbering using best management practices would create a healthier forest.

There are, nevertheless, concerns with the harvesting patterns taking place throughout much of the hardwood-rich Northeast. The trend has been to "high-grade" forests to remove the better quality trees while leaving behind the less-valuable stock. It typically results from lack of demand for low-grade logs and species. However, Greene County is fortunate in having some outlets for these products. A oriented strand particle board (OSB) plant is located in not too distant Deposit, New York. High-grading, nevertheless, is a problem and additional markets are needed to balance the cutting of valuable hardwoods.

Hardwood lumber production Statewide is up 50% since 1990. Hardwood lumber is also a niche business from a worldwide perspective. It is less affected by cheap softwood imports from South America, plus little cutting of hardwoods is allowed on Federal lands, giving eastern producers some opportunities. Greene County, because it possesses a number of high-grade species is a good source and the contributions of the industry to the County economy, if not up to potential, are significant.

The following table summarizes some estimates of economic impact based on the FIA 1996 report on roundwood production in Greene County. However, it substantially underestimates the total contributions of timbering because the numbers only measure the value of the trees in the woods (the "stumpage price") as applied to sawlogs. The actual

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value at the mill is much higher but reflects the added value from harvesting that is accounted for below in multiplier effects and income attributable to logging and milling.

Table X - Greene County Roundwood Products, 1996

<u>Species Group</u>	<u>Saw Logs (MBF)</u>	<u>Average Price*</u>	<u>Value</u>
Spruce	19	\$85	\$1,615
Cedars	12	75	900
Hemlock	418	40	16,720
Red Pine	155	40	6,200
White Pine	56	75	4,200
Other Pines	166	40	6,640
Ash	639	180	115,020
Aspen	82	40	3,280
Basswood	22	145	3,190
Beech	133	30	3,990
Yellow Birch	16	140	2,240
Other Birch	200	140	28,000
Black Cherry	381	725	276,225
Elm	82	45	3,690
Hickory	78	40	3,120
Hard Maple	381	490	186,690
Soft Maple	599	125	74,875
Select Red Oak	2,707	415	1,123,405
Other Red Oaks	496	125	62,000
Select White Oak	458	140	64,120
Other White Oak	116	125	14,500
Yellow Poplar	255	60	15,300
Other Hardwoods	<u>107</u>	<u>45</u>	<u>4,815</u>
TOTALS	7,578	\$267	\$2,020,735
Firewood	9,884 cords	\$7**	\$69,188
Pulpwood	3,395 cords	\$10**	33,395
TOTAL SALES			\$2,123,318

* Per thousand board feet (MBF) based on NYS-DEC data, 1/01/01

** Price for full cord on the stump

The economic multiplier for wood products, as indicated later, is 1.78 and this suggests the \$2,123,318 in estimated sales actually generates a total annual economic impact on Greene County of \$3,780,000 (some \$1,657,000 of additional activity from related enterprises). These numbers are more than substantiated by County Business Patterns - 1999 data from the Census Bureau, indicating that the County had 9 forestry support, logging and wood products manufacturing establishments, employing over 50 individuals. The Empire State Forest Association reports, based on 1992 data, that New York State forest-related

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enterprises produced \$2.25 in valued-added for every dollar of payroll generated, suggesting minimum total additional impact from wood manufacturing of approximately \$2,800,000, assuming an average payroll of \$25,000 per employee. This somewhat higher number reflects the fact that manufacturers are also using out-of-County wood.

The combined value of the County's timber assets (what they represent in total at any given point even if only a portion is cut in any given year) is also worth considering. The following table illustrates this for major species, based on current stumpage prices:

Table XI - Greene County Sawtimber Value

<u>Species Group</u>	<u>Sawtimber Base Volume</u>	<u>Stumpage Price</u>	<u>Total Value</u>
Spruce-Fir	1,300,000	\$85	\$110,500
Eastern White - Red Pine	410,800,000	40	16,432,000
Eastern Hemlock	174,900,000	40	6,996,000
Other Softwood	1,900,000	40	76,000
Total Softwoods =	588,800,000	\$40	\$23,614,500
Select Red Oak	113,200,000	\$415	\$46,978,000
Other White Oak	16,200,000	125	2,025,000
Other Red Oak	19,800,000	125	2,475,000
Hickory	29,500,000	40	1,180,000
Yellow Birch	17,900,000	140	2,506,000
Hard Maple	206,200,000	490	101,038,000
Soft Maple	57,000,000	125	7,125,000
Ash	48,900,000	180	8,802,000
Cottonwood-Aspen	43,300,000	40	1,736,000
Black Walnut	2,000,000	500	1,000,000
Beech	272,200,000	50	13,610,000
Other Hardwoods	61,000,000	45	2,745,000
Total Hardwoods =	651,500,000	\$293	\$191,220,000
All Species =	1,240,300,000	\$173	\$214,834,500

Altogether, the County's forests represent a natural resource with a current value of almost one-quarter billion dollars. While cutting of this entire stock at once is, obviously, not desirable, it is self-replenishing and, with good management, can actually be enhanced in value even as it is being removed, a feature of almost no other natural resource. The following observations can also drawn regarding this Greene County industry:

- Greene County's forest industry would benefit by the development of additional secondary processing and value-added industries that would utilize locally produced wood. Craft-related enterprises that would mesh with the County's tourism industry

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are a distinct possibility. Other niches could include specialty products for marketing to nearby metropolitan areas (e.g., fence boards, quality dimension lumber, wood flooring, wooden lawn furniture).

- While finding additional uses for low-grade timber is a challenge, there are some distinct opportunities given the large quantity of growing stock available. These include pallet manufacturing, firewood, wood pellets, wood chips for sale to regional pulp and paper mills and sales of local product to the Deposit OSB plant. The County's geography puts it within reasonable trucking distance to some major U.S. and Canadian metropolitan markets that would purchase the product.
- Forests managed for sustainability also contribute to the tourism resource base. Farm and woodlot owners in the County can, if they wish, generate additional income from both woodlot management and recreational leasing. There are a number of possibilities to complement Greene County's tourism industry by using its forest land to build on the reputation of the Catskills. Forest land is ideally suited to mountain biking, wilderness camping, hunting and other similar endeavors. If promoted properly in conjunction with area bed and breakfasts and restaurants, such activities can contribute in substantial ways to the economy while helping to offset the average \$5-10/acre/year holding costs associated with the timberland.
- Unfortunately, forest land is often taxed at rates exceeding revenues derived from it. Recent analysis of real estate taxes on private forest land in the Catskill counties of New York State indicated annual tax rates of \$7-\$33/acre compared to forest revenues averaging less than \$5/acre. Section 480(a) of the Real Property Law provides some relief for participating landowners, but there is a strong disincentive to promote this program because the tax "costs" must be made up within the municipality and the management strings attached are too entangling. Clearly, there are no compelling reasons for private owners to hold onto forest land except for speculative purposes. This poses a major threat to long-term maintenance of forest land. A better solution for taxing forest property would be to collect at the time of harvest based on a percentage of sales or some similar measure of productivity. This is a matter that should be pursued by the Agricultural and Farmland Protection Board, working together with organizations should as Farm Bureau and the Empire State Forest Association. At a minimum, more training for local assessors and more effective programs for determining the real economic value of forest land are needed.

Greene County also has some unique forestry resources and experience with agroforestry issues that make it an ideal location for research and development. Cornell Cooperative

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Extension, together with the County Legislature and other agencies is, accordingly, proposing to create an Agroforestry and Sustainable Landscape Center for Greene County. The purpose of the Center is to link research, education and outreach organizations, focusing on sustainable temperate forest landscape development and conservation.

The USDA Forest Service projects a 38% increase in domestic wood demand by 2050 and a global increase of 50% by 2020 while it is reducing its own timber harvesting. This has increased the need for sustainable timber harvests from private lands. There are also opportunities for sustainable agroforestry production of wild fruits and nuts, medicinals (ginseng), native plants for restoration, honey, mushrooms and maple syrup. Recreational leasing and tourism development around forest resources are also possibilities.

Many rural communities are simultaneously experiencing escalating development pressure from primary and second homeowners migrating out of urban centers to rural upstate communities. This will probably increase in the wake of the events of September 11, 2001. Major negative impacts may occur if public policies are not developed that reflect an understanding of sustainable growth principles. The Center would work with supporting partners to promote sustainable forest management, agroforestry and wise land use. Those partners include two research facilities, three colleges, four community-based organizations and four governmental agencies. The Center's activities would include a regional conference for stakeholders, workshops, college classes relating to agroforestry and an interactive website. The intended outcomes are an increase in the general understanding of agroforestry, greater appreciation of the benefits of sustainable forest management and an increase in the number of agroforestry professionals.

Long-range forestry management is important for all landowners with wooded land in Greene County. The proposed Agroforestry Center will be dedicated to helping landowners understand the environmental and economic advantages of sound forest management. Collaborative efforts will be made with the New York Forest Owners Association (NYFOA), NY Tree Farm, Catskill Forest Association (CFA) and other regional forestry-oriented partners and "Master Forest Owners" to accomplish this. The challenge is complicated by fragmentation of forest land. Average land ownership over the last 24 years has declined from 28 to 17 acres. Local timber harvesting ordinances also impair forest owners ability to manage their forest resources. Although well intentioned, these ordinances tend to become a tangle of inconsistent, costly and complicated processes. A statewide "Right to Practice Forestry" law ensuring that forest owners harvesting timber under Section 480-a standards would not be subject to such local ordinances is needed. It would promote good forest resource management and have the added advantage of providing watershed protection at the local and regional levels.

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2.7 Relationship to Other Planning Activities

Municipalities in Greene County employ a mix of development regulations (see Table VIII below). Zoned towns typically list Agriculture as a permitted use in all districts. Comprehensive plans mention agriculture but seldom include specific goals to encourage it.

Table XII - Greene County Town Plans and Regulations

<u>Town</u>	<u>Comprehensive Plan</u>	<u>Zoning Law</u>	<u>Subdivision Regulations</u>	<u>Site Plan Review</u>
Ashland	1976	No	R1985	No
Athens	1975	R1988	1970	Zoning
Cairo	1971	No	1990	2001
Catskill	1970	R1987	No	Zoning
Coxsackie	R1986	R1989	R1989	No
Durham	1991	No	1986	No
Greenville	1989	R1991	R1987	Zoning
Halcott	1976	No	1987	1989
Hunter	1991	Pending	R1989	1989
Jewett	R1990	1991	1988	1991
Lexington	1976	1977	1984	No
New Baltimore	1976	R1989	1978	Zoning
Prattsville	1976	No	1987	No
Windham	1976	No	1990	1989

Note: Numbers indicate years enacted. Numbers preceded by "R" indicate years revised.

The New York State Quality Communities Interagency Task Force report, Partnering for a Better New York, noted the loss of farmland is viewed as a threat to quality of life throughout the State. It suggests agriculture be included in community planning to counteract this trend. Smart growth policies concentrate development near existing centers. The public benefits from this include the reduction of air pollution, road construction and other infrastructure costs while protecting open spaces. Farmers benefit from the easing of development pressure surrounding their farms and a reduction in nuisance complaints.

Other methods to reduce development pressure on agricultural areas are used throughout the Hudson Valley. State, federal and not-for-profit organizations provide funding on a limited basis for the purchase or lease of development rights (PDR or LDR) and conservation easements. The USDA and New York State Department of Agriculture and Markets offer such programs, as do the American Farmland Trust, Schoharie Land Trust, Columbia Land Conservancy and Scenic Hudson. Some mountaintop farms are also working with the Watershed Agricultural Council (WAC), an organization that assists farmers in meeting water quality standards for the New York City watershed, provides

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whole farm planning services and acquires conservation easements to protect farmland. Some of the programs used or being considered within the Hudson Valley region include:

Agricultural Protection Programs Used in the Hudson Valley Region

Agricultural Districts Law – This Law protects lands and farming operations in designated districts through “right to farm” provisions, agricultural assessments, an agricultural notice process, and reparation penalties for conversion of agriculturally assessed land.

Conservation Reserve Program (CRP) and Conservation Reserve Enhanced Program – These programs pay landowners to take erodible or marginal land out of production, or for implementation of conservation practices, or both. Landowners are paid on the basis of acreage enrolled for the length of the contract (usually 10 years).

Purchase of Development Rights (PDR) - PDR programs allow landowners to sell the rights to develop their land. This is typically accomplished by recording conservation easements in favor of a county or land trust. The easement is priced on the difference between the value of the land for development and as farmland. Funding sources include State and Federal Purchase of Development Rights programs, land trusts, the Watershed Agricultural Council and landowner donations with income tax reductions as an incentive. There are many variations of such programs and landowner education regarding methods should be a priority of the Agricultural and Farmland Protection Board.

Lease of Development Rights (LDR) - This method of farmland protection is similar to PDR but involves easements of limited duration. It is a less expensive and less permanent method of protection that is often more economically and politically palatable than PDR. Generally, a LDR agreement is paid for in yearly installments or tax reductions for up to 25 years, rather than a lump sum. Also, the total amounts paid are usually much less per acre than those given for the PDR's, sometimes as low as 10% of the PDR value.

Transfer of Development Rights (TDR) - This method involves transfer or trade of development rights from farmland to developable land. It has been used successfully in fast developing regions (e.g. Montgomery County, Maryland) to encourage higher population densities in developed areas and lessen pressure on nearby farmland. However, it is very complex and requires very active real estate markets.

Forestry Management Tax Reduction Program (480-a) – This program is intended to maintain healthy, sustainable forests and can help save farms by reducing farm property taxes. Most farms in Greene County have a woodlot segment that, if enrolled and managed properly, could produce better harvests while taxes are lowered through the program. Again, it can be complex and the penalties are somewhat stringent. More education is needed here also (see later discussion).

New York State Environmental Quality Review (SEQR) - This is a planning, review, and decision-making process, set up as a part of the Environmental Conservation Law. It is intended to help determine, at the earliest stages, through the use of an Environmental Assessment Form (EAF), if a project will have adverse effects on the environment. Impacts on agriculture must be considered in the review process and, therefore, SEQR may be considered another form of agricultural protection

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2.8 The Impact of Agricultural Innovations on Greene County

The adoption of new technology, practices and innovations within any economic sector is generally governed by the receptiveness of the industry's decision-makers to change. An old farmer adage states, "There are three kinds of farmers; those who make things happen, those who watch things happen, and those that wonder what happened." Some boldly forge ahead into new markets and new technologies as pioneers looking forward and seeing opportunity. The success of one of Greene County's farmers in producing pathogen-free eggs for the research markets is an outstanding example of how to create a new business around a niche market using innovative techniques. Other local landowners have developed markets for agroforestry products such as ginseng and goldenseal with the help of Cornell Cooperative Extension of Greene County.

Others are motivated by desperation but are, nonetheless, able to achieve the same success. The Finger Lakes vineyard owners of 25 years ago who developed the early farm wineries are a prime example. They have been able to build an entirely new market for their products around the now very popular wine trails. The growth has been exponential. Such leaders perform a valuable service by testing innovations for the industry. They also have opportunities for greater profits in return for accepting greater risks. The Hudson Valley is also now starting to produce some farm wineries but its future may well depend on other niche enterprises. The Catskill Family Farms Cooperative has been able, for example, to develop a market for specialty potatoes that grow well in the area. At least one Greene County dairy farmer has found this to represent far greater profit potential and is shifting his business in that direction.

The second group to adopt new technologies or ways of doing business is composed of those who have observed the pioneers and the success or failure of the innovations employed. This group studies, evaluates, adapts or modifies the innovation to use it to their advantage, making it able to be more widely used. The adoption of Consumer Supported Agriculture (CSA) methods of marketing by some Greene County farmers is a good example. The technique is not new but local farmers who have observed its success in areas closer to the metropolitan region have adopted it as a means of guaranteeing their own markets and securing better prices. The Catskill Point Farmers Market, created in cooperation with County economic development staff, should provide additional such opportunities.

Some will not accept innovation, unless and until it becomes commonplace or conventional. The risk is lowest in this instance but so is the opportunity to profit from the introductory benefits of the innovation. Others are always trying to catch up as still newer technology looms on the horizon. Failure to adapt to changing business conditions and markets is one

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of the primary challenges of the industry. Yet, those who have innovated by specializing, diversifying or reaching out to find better methods of production and marketing have always prospered despite the persistent pricing problems of the industry.

All these groups are represented in the Greene County agricultural community, with numbers of each group depicting a fairly normal bell curve. Greene County also has an entirely new group of people moving into its rural areas, coming back to the land after generations of being away. These “home-comers” often buy large tracts of land with little thought of what they will do with it. When school and property taxes come due, a harsh dose of economic reality leads many to become involved in agricultural enterprises they hope will generate income and help make the land self-sustaining.

These home-comers are a category by themselves. Almost any practice they adopt will, by necessity and time constraints, be new and different. The methods of informing and educating this group are decidedly dissimilar from those employed in helping the agricultural community assimilate innovation. A “New and Beginning Farmer” Training Program is being planned in 2002 for this reason.

2.9 Agricultural Strengths, Weaknesses, Opportunities and Threats

Greene County is a unique agricultural area within New York State. It possesses several characteristics that distinguish it from other parts of the Catskills and the Hudson Valley. Its geographical position makes it highly accessible, yet is very rural. It includes some of the best and some of the most difficult conditions for agriculture. A summary of the major strengths, weaknesses, opportunities and threats associated with agricultural economic development in the County follows:

2.9.1 Strengths

The following are some of Greene County's natural strengths for agriculture:

- Greene County has an abundance of water, grass, trees, sensational scenery and abrupt topical relief and unused land available for renewal of production.
- The lowland areas of the County offer rich soils capable of many types of effective production.
- The County is located within 4 hours of one of the world's greatest markets (20 million people of all types of ethnicity). Other world-class markets also exist within Greene County's reach (e.g. Montreal and Boston).

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- The New York State Thruway (I-87) provides the County with easy access from all directions.
- Greene County has one foot in the Catskills and the other in the Hudson Valley, allowing it to trade off both regional brands (Hudson Valley Harvest and Catskill Family Farm) for purposes of agricultural marketing.
- Greene County produces a number of excellent products. These include timber, grass-fed livestock, bluestone, fruits, vegetables, new commodities for ethnic markets, meat-goats, chickens, grass-based dairy, sheep dairying, goat dairying, dairy processing, agroforestry products (ginseng, mushrooms, maple and “nutraceuticals”).

2.9.2 Weaknesses

The following are some of the weaknesses of Greene County for agricultural development:

- Greene County has a small agricultural base and few providers of agricultural support services locally. This forces farmers to go long distances for these services. Lack of competition also raises prices.
- The Thruway has stimulated residential growth, competition for farmland and conflicts with farming.
- Skilled labor for agricultural enterprises is increasingly difficult to obtain and many farmers lack labor management capabilities.
- Much of the best farmland is already tied up and unavailable for new agricultural enterprises. A great deal of this land is also prime commercial and industrial land because it adjoins the Thruway.
- Weather conditions limit the ability to grow certain crops, particularly in the mountaintop area of the County.
- Soils can be stoney and difficult to work in growing farm crops. Much of the mountaintop area is unsuitable for most agricultural enterprises of any scale (although agroforestry is another matter).

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2.9.3 Opportunities

The following are some of the opportunities for agricultural economic development in Greene County :

- The County's unique landscape and attractions make it a prime location for small scale agricultural entrepreneurs and niche businesses trading off its Catskill and Hudson Valley images.
- Greater use of farm markets to capture Thruway, second home and Catskill Game Farm traffic can increase sales and margins. The Catskill Point farmers market offers similar opportunities.
- Farm-based tourism fits well with other County attractions and can increase income opportunities for many farmers.
- The County has already carved out a niche in agroforestry and this provides a foundation for new such enterprises. It also offers a basis for attracting research on this industry and within related fields such as carbon sequestration.
- The County's forest resources are largely untapped but of excellent quality. This, combined with superb access to markets, could also be the basis of a much larger secondary processing industry.
- The Catskill portion of the County is able to take advantage of a special watershed protection arrangement with New York City that provides it with access to resources and markets other counties (e.g. adjacent Columbia County) do not have. These have already been used to create the Catskill Family Farms Cooperative and a specialty potato market. There is potential to create several new such markets under the same framework.

2.9.4 Threats

The following are some of the major threats to agricultural economic development in Greene County :

- The attrition of those older individuals now running many farms could end it as an industry if younger replacements who will use the land for farming and not develop it or lock it up for speculation purposes are not found.

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- Industrial development could affect water, air and soil quality for farming.
- Rising wage scales could affect the ability of farmers to attract labor.
- New seasonal and permanent housing being developed in the County near prime operating farms could create long-term conflicts making it difficult to continue farm management practices.
- Land use regulatory decisions can exacerbate farm and residence conflicts and limit a farmer's use of his assets if decision makers are not well informed.
- Environmental mandates associated with CAFO and New York City watershed regulations can destroy over-leveraged farm operations unless funding to address these burdens is made available.
- Future tax increases on income, sales or property could easily wipe out farm profit margins.

2.10 Major Agricultural Challenges for Greene County

Greene County's agricultural industry faces a number of specific challenges that warrant further discussion. These include the following:

2.10.1 Farm Tax Burden

The survey of agricultural producers conducted for this Plan indicated the farm tax burden was one of the major factors affecting the future of agriculture in Greene County. Despite agricultural assessment and a number of other tax benefits for farmers they often still pay far more in taxes than they consume in services. There is, too, a lack of consistency from one town to another in the assessment procedures applied to agriculture. Farmers, however, often fail to take advantage of all the tax reduction methods available to them under New York State law.

More continuing education of farmers, accountants, assessors and real estate agents on these issues is essential. An annual collaborative seminar for this purpose is a goal of the Agricultural and Farmland Protection Board (see Sections 3.0 and 4.0 for further discussion). Greene County would also benefit by making agricultural tax assessment available to horse boarding operations.

Agricultural assessment in Greene County is summarized in Table IX following:

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Table IX - Agriculturally Assessed Land by Town

<u>Town</u>	<u>Acres Inside Ag District</u>	<u>Acres Outside Ag District</u>
Ashland	970.2	9.4
Athens	1,047.2	0.0
Cairo	301.7	0.0
Catskill	2043.6	127.3
Coxsackie	1,821.1	65.7
Durham*	0.0	0.0
Greenville*	121.1	0.0
Halcott	286.8	294.8
Hunter	0.0	0.0
Jewett	200.4	0.0
Lexington	1349.7	929.8
New Baltimore	1374.2	0.0
Prattsville	854.2	0.0
Windham	219.9	0.0
Totals	10,590.1	1,427.0

* **Notes:** (1) Durham under revaluation. Ag assessments will be completed by 3/31/03.
 (2) Greenville to undergo revaluation in 2003.

Some 10,590 acres or slightly more than one-third of the 30,073 total acres in Greene County's agricultural districts are subject to agricultural assessment. Market values in the remaining areas are less than agricultural values and, therefore, there is no incentive for farmers to apply for agricultural assessment. The Town of Durham, for instance, currently has no parcels under agricultural assessment, but a 2002 revaluation will reverse that situation by updating market values and precipitate much more use of agricultural assessment in the Town. The Town of Greenville is also due to undergo revaluation in 2003 and the same results are expected there as well.

Revaluation and subsequent property value increases will lead to many more farmers applying for agricultural assessment. This will challenge both assessors and farmers presently unfamiliar with the regulations. The Agricultural and Farmland Protection Board will need to focus on helping agricultural producers understand and fully utilize the potential of the agricultural assessment as well as the other methods of reducing agricultural taxes. Appendix 5.1, "Lowering Farm Taxes," is intended to help with this task.

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2.10.2 Low Commodity Pricing

Conventional agricultural production is subject to low commodity pricing and wide swings in the market that can create cash flow problems for all but the largest producers. Commodities cannot command special prices without some product differentiation to distinguish them from others produced elsewhere. The larger the market, the less opportunity there is to do this. Section 3.6 of this Plan on Agricultural Economic Development Strategy suggests specialty crops and livestock are one method of breaking the commodity pattern.

Direct marketed niche products can be priced to not only cover the cost of production but also generate a significantly higher profit margin. Smaller supplies of goods targeted at specific markets allow producers to capture whatever those markets will bear. Producers have the opportunity to be “price-makers” instead of the customary “price-takers” that commodity production demands.

Higher costs of land, taxes and labor here have made it very difficult for Northeast farmers to compete in a global commodity-based economy. They can grow the products well, but the high input costs make it difficult to make a profit when they do grow them. Conversion to higher value specialty crops, promotion of regionally branded products, establishment of closer ties with consumers and building of local food systems are essential elements of family farm profitability in this global environment.

2.10.3 Nutrient Management

There are no existing livestock operations in Greene County that will be subject to CAFO (Concentrated Animal Feeding Operations) nutrient management regulation. However, several other land-use and nutrient management programs are being employed in Greene County. These include: the Environmental Quality Incentives Program (EQIP), the Conservation Reserve Program (CRP), the Forestry Incentives Program (FIP), the Wetlands Reserve Program (WRP) and the Wildlife Habitat Incentives Program (WHIP). A collaborative public-private Agricultural Environmental Management (AEM) program also exists in New York State to reduce the use and improve the management of pesticides.

These programs, in addition to being regulatory in nature, could also be considered agricultural protection measures because they help to preserve farmland and pay for farm improvements. They can assist farmers with assessment of environmental impacts associated with farming operations, implementing management practices to

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eliminate or reduce those problems, complying with state and federal environmental regulations and financing the costs of needed improvements. There will surely be more regulation of farming practices in the future, particularly livestock operations, and including smaller farms. These programs are important in allowing farmers to prepare for these changes.

Within the NYC Watershed region, the Watershed Ag Council (WAC) has entered into agreements with farmers to implement nutrient best management practices (BMP's) to help assure NYC's water supply will remain clean. There are 17 farmers in Greene County who have contractual agreements with WAC to implement conservation practices on their land. The NYS Department of Environmental Conservation also has regulatory programs in place that affect some farming operations in Greene County.

2.10.4 Reshaping Agriculture for New Generations

The average age of farm operators in the County was 56 years in 1997. While that figure is not extremely high, it does help to draw attention to the future. A reasonable estimate is that 30-40 percent of farms will change hands in the next 15 years. Who is going to take over? Preparing a new generation of farmers and facilitating estate transfers are both essential to the future of farming in Greene County. Tools to accomplish this include the new Ag in the Classroom curriculum, Future Farmers of America and 4-H Clubs, BOCES, interdisciplinary agricultural sciences incorporated into school curriculums, mentoring initiatives and youth entrepreneur programs. Simply put, there is no better investment or method of farmland protection than putting educated, enthusiastic young people in the position of stewards of the land.

The key to these efforts is changing the image of agriculture. It is, too often, perceived as a dead-end occupation with limited growth prospects, long hours, and low profitability, discouraging new parties from entering the industry. High land prices and taxes also make it prohibitive for many entry-level farmers to begin operations. Training in developing niche markets, manufacturing value added products and conducting low-cost input farming is needed.

Seasonally produced grass-fed dairy products marketed through a new cooperative offers one example of the possibilities. Meat goat production could also fill a niche in ethnic markets with relatively low startup costs. Other possibilities appropriate for Greene County include: 1) grass-fed beef and replacement dairy heifers; 2) pastured poultry, veal and pork; and 3) rabbit and sheep production. Each exploits

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the County's natural advantage - its cool-season grass production capacity, more than likely the reason so many dairies were located in the region in the first place. The same capacity for grass production has always been here although the method of "harvesting" the grass may need to evolve to achieve profitability.

Vegetable and fruit production is another area of great potential. Organic product sales in both the U.S. and Canada are growing at rates of 20% per year. New direct-marketing ventures, roadside stands, farmers' markets and Consumer Supported Agriculture (CSA) ventures are being established in the County. There is potential for more growth, for profitability and for exciting careers in agriculture. However, the agricultural education piece is missing, and has been for some time. More education to present and promote agriculture as a growth industry is required.

2.10.5 Land Development Pressures

Development has been scattered throughout Greene County and continues at a steady pace. While there are few major housing developments outside of villages, the trend has been to build in rural areas, fragmenting the harmony of farm areas, forests, and open spaces. The consequences of this type of conversion are not immediately obvious, as they are with large-scale development, but they are just as permanent and immutable. Some of the consequences include: increased prices for farmland; tax increases to support new services demanded by these residents; more conflicts between farm and non-farm neighbors; decreases in farm viability as opportunities for expansion are foreclosed; relative declines in the influence of farmers; and loss of rural character.

This is not to say growth is bad for Greene County. Indeed, many new types of agriculture depend on the availability of expanding markets. Nevertheless, current development patterns do not represent "smart growth." Education of elected officials, realtors, planners, developers and landowners is paramount to creating new patterns that encourage growth near existing centers and away from farmland.

2.10.6 Agricultural Labor Issues

Workforce availability for Greene County agricultural enterprises is very limited. It is difficult to secure agricultural labor of any kind – trained, untrained, skilled, unskilled. Department of Labor projections indicate this trend will continue to be a problem for agricultural producers in the County. More migrant workers than ever before are being used to produce County farm products due to a lack of local labor.

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Greene County's migrant agricultural work force is now approximately 50 people and growing. This raises issues of using "guest workers," on-the-job training, culture, language, housing, pay scales and mobility that have to be addressed as the numbers of migrant workers coming to Greene County keeps growing. Training for both employers and employees will be necessary. The following is an overview of some of the migrant labor issues as they affect New York State as a whole:

Migrant Workers in New York Agriculture

Demographic Information

Up to 47,000 agricultural migrant or guest workers
Up to 8,000 work in the Hudson Valley (corn, onions, apples)
Average annual income of less than \$10,000
Most migrant workers come from Mexico, Central America, Puerto Rico, Jamaica, Haiti and Bangladesh.

Issues in Using Migrant Workers in Agriculture

Housing (migrant camps, dormitories, rental housing, employer furnished housing)
Proper documentation/certification
Transportation:
Insurances
Getting to and from work
Shopping, visiting, church, haircuts, etc.

Cultural Differences:

Language - who learns what language?
Families left behind in home country
Food choices and availability
Religious differences
Mistrust of regulatory agencies

Proper Job Training In Procedures, Safety, and Regulations:

Wages, perks and benefits
Profit-sharing
Housing, transportation, food and services in lieu of pay

Agencies and Organizations That Deal With Placement of Migrant Farm Workers:

Dairylea Cooperative's Agri-Placement Division, Syracuse, NY
American Ag Employers, Groveland Station, NY
USDA Office of Outreach, Washington, DC.
ProDairy Human Resource Management, Ithaca, NY

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2.10.7 Fragmented Ag Community

The farm community in Greene County is necessarily fragmented by several factors, and unnecessarily by others. County geography divides it and there are, in some areas, few direct routes. New Baltimore to Halcott is almost two hours driving time and Prattsville to Catskill requires about an hour. Topography and climate also separate the County with different type of production enterprises possible in each area. There is also lack of connections among different types of farm enterprises. Horse owners have little in common with vegetable growers, for example. Production philosophies are also a cause of fragmentation. Organic, natural, or “green” oriented production farmers are suspicious of those using conventional methods of agricultural production and vice-versa.

Farmers tend to spend more time at work than in social interaction because the nature of the work keeps them tied to the farm for longer hours. The independence of farmers is widely known and understood. This individualism is a strength in many ways and supports entrepreneurship. It also, however, tends to isolate the farm community from the mainstream of economic development efforts and can leave farmers out of touch with their farm neighbors and markets. Engaging neighbors, government decision-makers and market makers is crucial not only to the survival of farming as an industry but also the ability of individual farmers to grow and prosper in what has become a world economy.

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3.0 Agricultural Goals and Objectives

The following goals and objectives have been established for Greene County's agriculture development and farmland protection program. These are based on the results of detailed surveys of agricultural producer summarized in Appendix 5.2 of this report as well as public meetings conducted by the Greene County Agricultural and Farmland Protection Board and others (e.g. the "Community Agriculture Visioning to Action Project"). The goals are intended to be multi-year in nature and reflect the basic policies of the County for agricultural development and farmland protection, while the detailed objectives spell out more specific criteria by which policy performance can be measured. Measures of success are also suggested. Major specific recommendations may be found in Section 4.0 of this Plan.

Goals of this Plan include the following:

- 1) Control and, where possible, reduce tax burdens on the ability of New York State and Greene County farmers to compete in the marketplace and transfer farms from one generation to the next.
- 2) Promote the development of new specialty crops, the establishment of new markets for all Greene County agricultural products and the general diversification of all agriculture within Greene County.
- 3) Increase the profitability of all farm enterprises and ability of farmers to deal with vacillating prices in a changing marketplace.
- 4) Protect and promote the abilities and rights of farmers to engage in all sound agricultural management practices, maintain Agricultural Districts throughout the prime farming areas of the County and reduce regulatory burdens on farmers.
- 5) Develop more strategic alliances among farmers and agri-businesses to expand markets, decrease costs and increase the profitability of farm operations.
- 6) Promote and create new economic incentives for the development of agricultural enterprises, particularly local suppliers of needed support services.
- 7) Add value to agricultural products by ensuring quality, encouraging maximum participation of the farm community in State and industry quality assurance programs and supporting the further processing of agricultural products at the farm or locally.

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- 8) Develop agriculture as a valued career path within Greene County.
- 9) Build a foundational farm, community and consumer relationship that supports the continued development of the local food system.
- 10) Achieve higher levels of management of farm woodlands for additional profit as secondary crops.
- 11) Assist Greene County's farmers in meeting demands of New York City and others for water quality management in connection with farming.

Detailed objectives by goal follow:

3.1 Control and, where possible, reduce tax burdens on the ability of New York State and Greene County farmers to compete in the marketplace and transfer farms from one generation to the next.

Objectives:

- 3.1.1 Annually conduct an intensive training programs for farmers and assessors on the availability of farm tax relief under both New York State and Federal law, including agricultural assessments, exemptions/refunds and estate planning, also pushing for more flexible rules with respect to eligibility for the School Tax Refund.

Measure: Hours of training provided, number of assessors and farmers who participate in training and proportion of farmers who take advantage of programs.

- 3.1.2 Integrate agriculture into a County economic development strategy geared toward the development of additional commerce and industry that will help to achieve a more balanced tax base and reduce the burden on farm land.

Measure: Specific inclusion of agriculture in strategy, development of an expanded commercial/industrial tax base in appropriate communities and lowered taxes for farmers in these communities.

- 3.1.3 Develop a leased development rights program in return for abatement of local real property taxes as a means of decreasing the cash flow required during the early years while a farm is being purchased and lowering taxes as a cost of doing business for farmers.

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Measure: Development of an LDR program and number of farmers participating.

- 3.1.4 Consolidate, streamline and privatize services wherever possible to limit the costs of government at all levels and reduce the overall tax burden on farmers.

Measure: Reduction in the level of taxation on farms and agri-businesses compared to those of other counties and states with whom Greene County producers must compete in the marketplace.

- 3.1.5 Seek 100% participation among Greene County municipalities in the Section 485-b tax abatement program for business investments.

Measure: Number of Greene County municipalities participating in the program. The Towns of Ashland, Hunter, Jewett, Lexington and Windham and the School Districts of Gilboa-Conesville, Greenville, Hunter-Tannersville, Margaretville and Windham-Ashland-Jewett are not presently 485-b eligible according to the County Office of Real Property Tax Services.

- 3.1.6 Encourage New York State to allow refund of the New York State Investment Tax Credit to farmers in cash if they don't owe any taxes to which to apply the refund.

Measure: Passage of legislation now proposed to allow such a cash refund of the Investment Tax Credit.

- 3.1.7 Encourage Federal and State governments to eliminate all capital gains and estate taxes, particularly in regard to farm transfers, as these taxes disproportionately impact upon farm operations, most of which are family owned, even if very large in size.

Measure: Elimination of capital gains and estate taxes on both the State and Federal level.

- 3.1.8 Also promote estate tax planning and intergenerational farm transfers by; using the Farm Link program, conducting intensive educational sessions and providing technical assistance through organizations such as Farm Credit.

Measure: Hours of training and technical assistance provided, number of participants and number of successful farm transfers.

3.2 Goal: Promote the development of new specialty crops, the establishment of new

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markets for all Greene County agricultural products and the general diversification of all agriculture within Greene County.

Objectives:

- 3.2.1 Continually identify new alternative agricultural/agro-forestry product lines (including organic products), opportunities for new agricultural industries and areas where value can be added to existing products to encourage diversification, addressing the interests of the many farmers surveyed who stated that they wished to do so.

Measure: Number of educational programs conducted to disseminate this data and number of diversification ventures initiated.

- 3.2.2 Provide additional training and technical assistance to farms to develop the entrepreneurial skills for marketing agricultural products, including the establishment and support of additional CSA's, identification and/or development of new outlets, pricing strategies and new promotional themes that can be employed with regard to Greene County agricultural products.

Measure: Hours of specialist training and technical assistance provided and volumes of new products marketed.

- 3.2.3 Work with locally owned/operated food stores to market local produce and develop new products such as specialty cheeses produced on a local dairy farm using an on-farm processing facility.

Measure: Number of local or regional stores handling Greene County products and number of farmers producing for them.

- 3.2.4 Expand farm-based tourism by cross promoting with Bed & Breakfast operators, increasing farm-stand activity and building off the exceptional facility and Catskill Farmers Market program at the Catskill Point.

Measure: Number of farm-based tourism enterprises, number of Bed & Breakfast visitors, farm-stand sales and vendors participating in the Catskill Farmers Market at the Catskill Point.

- 3.2.5 Provide agricultural economic development and marketing support to both farm and non-farm agencies in promoting new farm and agri-business ventures.

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Measure: Hours of staff support provided.

- 3.2.6 Encourage the State to reduce regulatory barriers to the development of on-farm processing and direct marketing operations in New York State (particularly with respect to milk), patterning these efforts after the very successful Farm Winery Act.

Measure: Streamlining of State regulations regarding milk processing.

- 3.2.7 Conduct continuing market research on evolving consumer tastes and provide this information to farmers in the form of technical assistance so as to better enable them to respond to markets and devise their own strategies for meeting consumer demand.

Measure: Number of studies completed and/or disseminated and hours of technical assistance provided.

3.3 Goal: Increase the profitability of all farm enterprises and ability of farmers to deal with vacillating prices in a changing marketplace.

Objectives:

- 3.3.1 Train farmers in the use of the Dairy Futures Program, forward pricing and similar mechanisms as means of stabilizing milk and other farm prices and securing greater farm control over costs of farm inputs.

Measure: Hours of training provided and number of farmers who participate.

- 3.3.2 Provide farmers with general information and research findings on innovative and alternative farming practices that can lower the costs of inputs and/or improve quality for a greater return (e.g. rotational grazing, direct commodity purchasing and other least cost feeds programs).

Measure: Hours of training provided and numbers of farmers using methods.

- 3.2.3 Encourage extension of the Northeast Dairy Compact to New York State.

Measure: Passage of required legislation.

- 3.3.4 Encourage use of bargaining cooperatives as a device to negotiate over-order milk premiums and higher prices for other agricultural products on the basis of quality

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and volume.

Measure: Number of groups organized and over-order premiums secured.

- 3.3.5 Develop "train the trainer" programs for farm agricultural advisors (including bankers, accountants, lawyers and agency personnel), in relation to business and financial planning so that all such advisors are capable of offering farms good advice on issues of taxes and business management.

Measure: Hours of training provided and number of farm advisors who participate.

- 3.3.6 Conduct an annual agri-business forum for farmers, bankers, Farm Credit, agencies, and others engaging in serving the farm community to exchange information of programs, industry trends and opportunities.

Measure: Establishment of annual forum and number of participants.

- 3.3.7 Encourage more on-farm specialization within farm industries (e.g. raising high-bred cattle for export) as well as diversification among farm industries (e.g. combining dairy and beef operations).

Measure: Number of farmers adding profitable new lines of business.

- 3.3.8 Encourage greater use of recreational leasing as a means of supplementing farm incomes by helping to resolve insurance and liability issues.

Measure: Number of farmers engaged in recreational leasing.

- 3.3.9 Train farmers in labor management to reduce employee turnover and related costs.

Measure: Hours of training provided and number of farmers who participate.

- 3.3.10 Directly train more farmers in the use of business planning methods and develop a comprehensive list of financing resources both within and outside the agricultural mainstream to help increase farmer awareness of financing opportunities.

Measure: Hours of training provided, numbers of farmers who participate and the development of a financing sources brochure.

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3.3.11 Establish a farm manager development program along the line of those employed in other states to create a core of professional farm managers with the requisite skills in those aspects of farming designed to enhance profitability.

Measure: Development of a Farm Manager Development curriculum and enrollment levels in such program.

3.3.12 Promote energy conservation measures on the farm to reduce demand and lower costs.

Measure Hours of training provided.

3.4 Goal: Protect and promote the abilities and rights of farmers to engage in all sound agricultural management practices, maintain Agricultural Districts throughout the prime farming areas of the County and reduce regulatory burdens on farmers.

Objectives:

3.4.1 Increase the level and frequency of farm community communications with the non-farm community by conducting more shared events, use of additional publications and employment of public service announcements and advertising.

Measure: Number of communications to non-farm community and number of non-farm participants in events.

3.4.2 Increase the participation of farmers and agri-business owners in local government and, specifically, on town planning boards by getting all towns with significant agricultural activity to appoint agricultural members under the authority of § 271.11 of the Town Law. Also, conduct training programs for local officials on agricultural planning issues.

Measure: Number of Planning Boards with designated agricultural members and hours of training provided.

3.4.3 Encourage more positive interaction among farmers and their non-farm neighbors by using newsletters to provide examples of successful efforts (e.g. neighborhood pig roasts, free sweet corn, pre-notification when emptying manure pits, etc.) and offering guidelines regarding how to avoid conflicts.

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Measure: Number of articles distributed.

- 3.4.4 Specifically address the lack of public knowledge regarding animal agriculture by promoting farm tours, utilizing videos such as "Feeding the Green Machine" and conducting educational sessions.

Measure: Numbers of showings and tours conducted and number of participants.

- 3.4.5 Streamline town land use and zoning measures to simultaneously accommodate both agricultural activities and development, incorporating the latest elements of State law affording protection for farmers and agri-businesses.

Measure: Number of towns with specific provisions in their land use regulations to not only allow but also protect agricultural enterprises.

- 3.4.6 Encourage development of sewer and water infrastructure within town centers rather than agricultural areas so as to ensure development within and adjacent to agricultural zoning districts is fully compatible with farm activities.

Measure: Number of towns with strong incentives for hamlet and village development and disincentives for strip development.

- 3.4.7 Adopt a Right to Farm Law for Greene County and encourage major agricultural towns to adopt similar or complementary measures at the local level.

Measure: Adoption of Greene County Right to Farm Law and level of participation by towns.

- 3.4.8 Encourage Federal and State agencies to provide small farmers more time to react to changing pesticide rules and develop alternative remedies through research and application.

Measure: Favorable changes in time limits and numbers of alternative remedies developed.

- 3.4.9 Develop technical support services to assist all farmers with environmental compliance measures and maintain a vigilant approach to the monitoring of new and enforcement of existing regulations, pressing for consideration of the potential negative impacts on agriculture and the appropriate modifications thereof to avoid such problems.

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Measure: Numbers of farmers assisted and successes in modifying regulations to address impacts on farm operations.

- 3.4.10 Promote the use of Agricultural Data Statements and local law authority by towns to educate realtors and put land buyers and home builders on legal notice that they are locating within an agricultural area where sound management practices can produce odors, slow moving traffic and other consequences.

Measure: Numbers of towns using such notice procedures.

- 3.4.11 Use the County's new GIS system to identify and distribute maps of Greene County's most valuable farmland for purposes of promoting agricultural awareness, providing regulatory protection, defining agricultural districts and implementing other agricultural programs.

Measure: Maps produced (Ag District and otherwise) for local government use.

- 3.4.12 Encourage towns with and without zoning to enhance agricultural districts by developing agricultural zoning districts to provide for compatible forms of development within these districts.

Measure: Number of communities employing these measures in their zoning laws (if they have such laws) or other land use regulations.

- 3.4.13 Encourage farm landowner participation in the Agricultural Districts program by identifying candidate properties and specifically soliciting those persons through regular paid advertisements, FSA and Cornell Cooperative Extension newsletters and other techniques that allow the benefits of districts to be touted.

Measure: Number of landowners asking to be included in Agricultural Districts.

- 3.4.14 Encourage all towns with significant areas of Agricultural District within their borders to participate in an annual agricultural economic development and land use forum where the evolving aspects of agriculture can be discussed and participants can learn about the latest issues and the importance of protecting farmland and the application of farm practices.

Measure: Number of towns participating.

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3.5 Goal: Develop more strategic alliances among farmers and agri-businesses to expand markets, decrease costs and increase the profitability of farm operations.

Objectives:

3.5.1 Encourage the formation of additional marketing and purchasing groups as well as cooperative structures for financing of new ventures and purchasing of raw materials and services, electricity and insurance being two areas of great potential for negotiating better rates with the appropriate professional level technical assistance.

Measure: Number of Greene farmers participating in such cooperatives or groups.

3.5.2 Form less formal bargaining groups to jointly purchase farm supplies, cooperatively advertise farm products, provide better outlets for cull-dairy cows and facilitate use of custom services.

Measure: Number of farmers participating in such bargaining groups.

3.5.3 Use Cornell Cooperative Extension to continually maintain lists of product sources for purposes of promoting intra-county purchases, similar to the State's "hayfinder" program but extending the concept to other forages and products.

Measure: Lists of products, number of farmers who participate and amount of products sold through lists (consider using the Internet to offer the lists).

3.5.5 Maintain similar lists with regard to custom services and labor pools (e.g. relief milkers).

Measure: Lists of services, number of farmers who participate and amount of services and labor acquired through lists.

3.5.6 Help develop new labor sources (e.g. migrant labor) and better utilize existing sources by providing technical assistance in accessing labor pools, developing lists of relief farm workers and training farmers in the use of immigrant labor.

Measure: Quantitative and qualitative growth in the farm labor pool.

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3.6 Goal: Promote or create new economic incentives for the development of agricultural enterprises, particularly local suppliers of needed support services.

Objectives:

3.6.1 Specifically promote the Greene County IDA's tax abatement program as a complement to the Section 483 of the New York State Real Property Tax Law (10 year property tax exemption on newly constructed or reconstructed agricultural structures), using it as a basis to solicit agri-businesses such as feed mills, farm machinery dealers, other farm suppliers, agricultural processing operations and farm marketing buildings.

Measure: Development and distribution of written materials explaining the existing tax-abatement program and use of the same to solicit increased use of the program by local and new agri-businesses.

3.6.2 Develop a program to lease development rights, financed through tax-abatements on the most valuable farmland so as to allow those farmers to capture their equity, reduce their carrying costs and continue farming.

Measure: Number of farmers participating and acres of farmland preserved.

3.6.3 Develop and promote the availability of financing programs that can provide capital for farm diversification and modernization as well as agri-business ventures, doing so in cooperation not only with farm agencies, but also the County Industrial Development Authority and other economic development entities.

Measure: Dollar volume of loan capacity available to creditworthy farmers. and number of institutions and programs available to help.

3.6.4 Establish and/or promote demonstration and new initiative grant and loan programs specifically targeted at agriculture by working with regional development organizations.

Measure: Establishment of program, dollars committed and number of participants.

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3.7 Goal: Add value to agricultural products by ensuring quality, encouraging maximum participation of the farm community in State and industry quality assurance programs and supporting the further processing of agricultural products at the farm or locally.

Objectives:

3.7.1 Increase Greene County farmer use of the Pride of New York label as a means of capturing more intrastate as well as tourist sales, combining this initiative with Hudson Valley regional branding programs.

Measure: Increase in the number of Pride of New York program participants to a minimum of 50.

3.7.2 Increase participation in other statewide and national quality certification programs, specifically including beef farm involvement in the New York State Cattle Health Assurance Program and similar endeavors.

Measure: Number of farmers participating in quality assurance programs.

3.7.3 Assist farmers in organizing to deliver local farm products for regional institutional use, adding value by addressing quality and packaging standards that will facilitate use of these products by schools and others.

Measure: Number of farmers participating and volumes of products purchased by regional institutions.

3.7.4 Assist farmers in pursuing specific added value initiatives such as on-farm dairy processing or training in the use of marketing tools that add value.

Measure: Number of farmers participating and volumes of added value products sold.

3.7.5 Support local meat processors in developing a livestock marketing map/brochure that promotes local freezer trade and other livestock businesses based on the County's strong natural image, using colorful photography and trading off the ability of local farmers to raise quality meat animals.

Measure: Development and distribution of brochure and the number of farmers participating and volumes of added value products sold.

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3.8 Goal: Develop agriculture as a valued career path within Greene County.

Objectives:

3.8.1 Work with educators, guidance counselors and work force development program leaders to add agriculturist training tracks and promote agricultural curriculums wherever possible, including FFA participation, so as to expand and train the supply of agricultural workers.

Measure: Number of agricultural-related training programs available, number of participants and number of trained workers available.

3.8.2 Develop more broad-based public education efforts, promotional materials and other programs designed to specifically increase public awareness of the value of agriculture as an industry to Greene County and as a career opportunity for Greene County youth and those pursuing second careers.

Measure: Numbers of programs conducted, materials developed and non-farm participants.

3.8.3 Encourage more participation in 4-H programs by increasing the range of offerings to emphasize the high-tech nature of modern agriculture, promoting different forms of membership and extending the opportunities to join.

Measure: Numbers of participants.

3.8.4 Arrange for more on-farm demonstrations to emphasize the high-tech nature of modern agriculture, promoting these to both the farm and non-farm communities as a means of demonstrating the science involved in agriculture, thereby also creating farm tourism opportunities visitors to the area who are seeking to fill out their day with events.

Measure: Numbers of demonstrations and participants

3.9 Goal: Build a foundational farm, community and consumer relationship that supports the continued development of the local food system.

Objectives:

3.9.1 Support the continued development of Consumer Supported Agriculture (CSA)

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organizations that reach out into new markets, through the provision of technical assistance and training.

Measure: Number of CSA's operating within County and participation by both farmers and consumers.

- 3.9.2 Assist farmers with outreach to unfamiliar but developing ethnic markets by offering guidelines and training in the nuances of dealing with these groups.

Measure: Number of farmers participating in training programs and hours of training provided.

- 3.9.3 Assist farmers in evaluating and fully understanding their customers wants and needs, and vice-versa, so as to build the permanent level of trust necessary to grow their markets on a firm foundation.

Measure: Surveys conducted, hours of training offered and volumes of products sold to developing markets.

3.10 Goal: Achieve higher levels of management of farm woodlands for additional profit as secondary crops.

Objectives:

- 3.10.1 Promote agro-forestry enterprises and crops such as ginseng, goldenseal, and mushrooms taking advantage of the County's extensive forest resources and using the proposed Agroforestry and Sustainability Learning Center as a foundation.

Measure: Workshops conducted and agro-forestry enterprises established.

- 3.10.2 Encourage, through landowner education, greater use of best management practices for farm woodlands as a means of increasing value and returns.

Measure: Hours of training provided and number of farm wood lot owners who participate.

- 3.10.3 Create additional markets for wood products in the County by providing economic incentives for the development of new primary and secondary wood processing ventures (including on-farm enterprises).

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Measure: Incentives provided and volume of products processed.

3.10.4 Make additional forestry-related technical assistance available to landowners.

Measure: Man-hours of technical assistance provided to Greene County forest owners and number of farm wood lot owners who participate.

3.10.5 Promote timber products manufactured in Greene County.

Measure: Number of promotional materials and/or advertisements developed and sales of forest products.

3.10.6 Develop a technical assistance and training program on effective bear, deer and other wildlife control with respect to both agriculture and forestry.

Measure: Numbers of hours of training provided and number of participants.

3.11 Goal: Assist Greene County's farmers in meeting demands of New York City and others for water quality management in connection with farming.

Objectives:

3.11.1 Provide farmers with technical assistance in responding to New York City watershed and other environmental regulations.

Measure: Hours of training provided, number of farmers who participate in training and/or water-quality certification programs.

3.11.2 Provide farmers with greater financial assistance in responding to watershed regulations by encouraging participation in the Whole Farm Planning Program.

Measure: Dollars available to make improvements.

3.11.3 Work with small and large farmers alike to encourage greater use of economical and environmentally sound practices, including rotational grazing and complementary management practices such as pasture fertilization programs, planting of turnip crops and similar strategies aimed at reducing costs and increasing yields.

Measure: Funding applications made and resulting increase in dollars available for promotion of rotational grazing and related or similar practices.

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4.0 Major Agricultural Initiatives

The following are major initiatives recommended in implementation of the Goals and Objectives laid out in Section 3.0 of this Plan. Each includes a suggested initial implementation date. Most are intended to be continuing in nature, however. Suggested parties responsible for implementation are also provided with the first listed being the proposed leader of the effort.

4.1 Tax Reduction and Management Initiative

Surveys conducted in the course of this planning effort and input received at public meetings both suggest that reducing and managing the farm tax burden is necessary. It is important to profitability and to ensuring the capacity to transfer farms from one generation to the next. The following recommendations are offered in this regard:

- **Provide annual tax training for farmers and tax preparers.** Survey results, in particular, indicate many farmers are unaware of tax benefits available to them or fail to take advantage of those programs. An intensive training seminar should be conducted every January to equip farmers and tax preparers with detailed knowledge of tax benefits and recent changes in State and Federal law that may affect those benefits. This training should be of a workshop nature and highly focused to create value for participants. Certificates of recognition for participation in the training should also be given and publicized to add value to the program. Training should be given using experienced professionals with agricultural backgrounds so as to avoid giving incomplete or misleading information. Agricultural agency and farm group leaders also need to be included in the training for two reasons; 1) providing these individuals with skills to be mentors to their farm clients or members on tax issues; and 2) creating peer pressure that will stimulate attendance at the training workshop(s).
- **Develop an agricultural tax informational publication that can be reissued each January to provide written guidance on these issues.** This annual publication can build on the "Lowering Farm Taxes" handout appended hereto. It should be developed using a skilled tax preparer familiar with both real estate and income tax laws at both the State and Federal level.
- **Work with Farm Bureau and others to eliminate all estate taxes on farm transfers and develop training programs and publications related to estate planning.** Farm transfers demand extensive planning even in those situations where estate taxes are not a major issue. Professionals from organizations such as Farm Credit should be used to conduct this training.

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- **Work with the County Legislature, local governments and schools to consolidate and streamline services wherever possible.** This is a subject that demands across the board cooperation but one in which the Agricultural and Farmland Protection Board needs to be actively engaged as a participate.

Responsible Parties:

- 1) Cornell Cooperative Extension Service of Greene County
- 2) Greene County Agricultural and Farmland Protection Board
- 2) Greene County Office of Real Property Tax Services
- 3) Greene County Legislature

Implementation Date: 2002

4.2 Profitability and Risk Management Initiative

Increasing the profitability of farm enterprises is essential but, even more important in some respects, is the management of the widely vacillating prices so prevalent in agricultural markets.

The Agricultural and Farmland Protection Board cannot, obviously, create higher profits or absorb the risks itself. It can, however, help to create the skills and the tools to do so. Professional farm manager training and business planning are among the skills needed. Tools for risk management include futures trading, forward pricing and crop insurance. The following measures are recommended:

- **Professional farm manager training, directed at managing for profit, not simply production, is needed.** University extension and farm service agency programs nationwide have traditionally been yield-focused but these often fail to meet the needs of smaller farmers interested in diversifying into niche areas of business. They are also of little help to larger farmers specializing in various enterprises where highly technical sources of information are required.

This demands a focus of educational efforts on those needs that cannot be fulfilled elsewhere. These include training in water quality management, labor management, business planning, forward pricing, managing for premiums, Internet use, marketing, estate and tax planning, quality assurance, and low-cost input farming, with an overall objective of improving the profit-making skills of farm managers. The Agricultural and Farmland Protection Board should work with Cornell Cooperative Extension to develop an intensive core training curriculum for professional farm managers and a certification

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procedure to reward those who finish the program.

- **Managing costs in a commodity business is the best and often the only way to increase profits. Intensive education along this line is critically needed.** As an example, while intensive grazing is not for everyone, it has the potential to dramatically increase the profitability of small to medium sized operations. Cornell Cooperative Extension recently published a comparison of Dairy Farm Business Summary program data for grazing and non-grazing dairy farms. Three years of financial data were examined. The 36 farms that engaged in some form of rotational or intensive grazing enjoyed average net farm incomes per cow of \$463 before taking appreciation of value into account, while the 77 non-grazing farms averaged only \$339/cow. Results can obviously vary greatly from farm to farm, and year to year, but the potential for lowering costs through grazing is quite apparent. It is an economic option for small and medium sized farms.

Prices for inputs can also typically be lowered by 5% or more simply by purchasing in bulk. A small group of farmers in another county have, for example, banded together as an informal buying cooperative. They meet monthly to determine their needs, solicit bids from regional farm suppliers and award annual contracts that members can then buy under individually throughout the year. It is a simple, yet very effective, program with no overhead. Machinery sharing and alliances among farmers to grow products for each other offer additional opportunities to lower costs and increase profits by eliminating middlemen.

- **Increasing production per cow and yields per acre are far more important than growing overall production.** Culling low milk producers regularly and replacing them with higher producers, for instance, typically increases profits if heifer growing expenses are controlled. Replacement costs will not vary as much as milk prices. Moreover, earlier culled animals yield better slaughter prices. Dairy farmers need training in using the information available from the Dairy Farm Business Summary program and their own particular experience to develop culling guidelines that balance these various economic factors. The Dairy Farm Business Summary program involves 300 dairies in New York State and provides extremely valuable data for evaluating costs of inputs. There are also separate summaries for small and large dairies and intensive grazing farms. Enrollment in this program needs to be heavily promoted for the advantages it offers.
- **Dairy futures trading, promoted as part of a special Federal program, provides an opportunity to assure future revenues.** Interest has been very limited (particularly while prices have languished at low levels) and results have been mixed. Nevertheless,

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it is clear that farmers who locked in prices in early 2001, for example, gained significant time to adjust to lower prices later in the year. Other farmers have used forward pricing to stabilize prices of purchased feed ingredients. These tools will become increasingly important, as the means to even out cash flows and stabilize income and expenses going forward, allowing the opportunity to adjust to changing circumstances through good management. Intensive training is needed to equip Greene farmers with a full understanding of the benefits and logistics of these programs.

- **Crop insurance is another vastly underutilized risk management tool.** It costs very little (\$50/crop typically) and provides significant protection against the risks of crop loss due to natural disasters. The program is not popular because crops must be registered in multiple jurisdictions where farms cross political boundaries. Additionally, USDA has repeatedly provided disaster payments to all farms after having indicated that only those with crop insurance would be compensated, thereby undermining the program. Nonetheless, it guarantees compensation on a timely basis to prudent managers. There can be no such assurance of aid dependent on political decisions. Crop insurance is, therefore, a useful mechanism in protecting small farms from the hazards of drought and other natural conditions that can raise havoc with cropping plans and cash flows. The Board needs to include this tool in its risk management education initiative.

- **The most effective tool for managing risk, however, lies in farmers banding together to negotiate pricing in the form of long-term contracts.** This is the role of farm cooperatives. The best illustrations are often found with smaller groups. The Schoharie Farm Cooperative, for example, has successfully locked in significant over-order milk premiums for a number of years by negotiating with different processors. Local cooperatives serving Greene County farmers need to review and strengthen their bargaining efforts on behalf of their memberships. Opportunities exist for cooperative work by farmers marketing livestock, field crops and vegetables, particularly potatoes, so that farmers can take advantage of collective bargaining. New cooperatives are needed in Greene County and existing cooperatives could gain from assistance in developing their negotiating skills and other technical help.

Responsible Parties:

- 1) Greene County Agricultural and Farmland Protection Board
- 2) Cornell Cooperation Extension Service of Greene County

Implementation Date: 2002-2003

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4.3 Right to Farm and Good Neighbor Initiative

Protecting the ability of farmers to engage in sound agricultural practices is a critical legal need of the industry. Equally important, however, is the engendering of a good neighbor policy between farm and non-farm neighbors that allows agriculture to prosper without leading to legal disputes. This demands two-way communication and the exercise of consideration between the farm and non-farm neighbors. The following actions are recommended:

- **Right to Farm Laws are needed to ensure the legal rights to engage in sound agricultural practices.** Such laws (see model attached as Appendix 5.3) establish effective methods of dispute resolution. Use of Agricultural Districts is also essential.
- **A broader Greene County Good Neighbor Farm Policy is needed to establish effective two-way communication between farm and non-farm neighbors.** It should include encouragement of;
 - 1) Farmer communications to neighbors of impending activities such as manure lagoon emptying that could create temporary odors.
 - 2) Regular pronouncements of the value of agriculture as an industry and the need to be tolerant of odors, slow-moving equipment and other farm activities.
 - 3) Farm-city events and farm tours that bring farm and non-farm neighbors together.
 - 4) Distribution of brochures that highlight the value of agriculture.
 - 5) Farm events for non-farm neighbors (e.g., corn roasts).
 - 6) Farmer participation in local government and community organizations.

This policy should be crafted by an ad hoc group of farmers, homeowners, realtors and others to ensure it is broad-based and two-way in nature. It should then be heavily publicized.

Responsible Parties:

- 1) Greene County Planning Department
- 2) Greene County Agricultural and Farmland Protection Board
- 3) Cornell Cooperative Extension Service of Greene County

Implementation Date: 2002-2003

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4.4 Specialty Enterprise and Market Development Initiative

It is recommended that Greene County initiate a coordinated advocacy effort to market more farm products and develop the skills needed within the farm community to pursue specialty agricultural enterprises. This should be accomplished using Cornell Cooperative Extension of Greene County staff resources working closely with surrounding counties, particularly Schoharie, Ulster and Columbia, all of whom also have significant specialty agricultural industries.

The agroforestry activities of the Extension staff provide an excellent base to build from and should be expanded upon by developing these resources into a center of research and technical help that can be extended to other areas. The staff should help to identify new markets for these and other agricultural products and services and provide technical assistance to farmers and agri-businesses in selling to those markets. This will require a somewhat different approach, one of advocacy and direct technical support, as opposed to the typical Extension education role.

Funding to support these activities could come from a variety of sources including the County but, initially, this endeavor should be approached as a demonstration project. It should be possible to secure grant funds from State and/or Federal sources to help launch the project. Over the long term, however, the goal should be to obtain direct support from producers and agri-businesses on a fee-for service or cooperative basis. Tasks should include, but not be limited to the following projects:

- **Development of new markets, both within and outside the County, for Greene County's farm products.** This should include direct/technical assistance to farmers, agri-businesses and farm organizations (including cooperatives) in selling, promoting and structuring the distribution of these products as well as the development of new lines. A promotional example might include a "Ginseng Festival."

One example might include establishing a permanent farmers market in one of the I-87 Visitor Centers to complement the Catskill Point Farmers Market or at least direct people to it. This would offer excellent opportunities to market products and there are several successful examples of such markets to draw upon for experience. The Visitor Centers should, at a minimum, be used as a location to promote Greene farm products with brochures, displays and directions to the Catskill Point Farmers Market.

A concerted effort should also be put into the creation and support of additional Consumer Supported Agriculture (CSA) groups serving both the Albany and New York City urban areas.

- **Training farmers and agri-businesses in marketing practices, including direct**

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marketing, Internet sales and exporting. There are significant opportunities in each of these areas. Nearby urban markets and already successful specialty enterprises in the County suggest the potential for more direct marketing is large. Some farmers are already using the Internet to sell product from websites and much more can be done in this area by helping to develop those websites on a cost-effective basis.

Special opportunities abound because New York State can supply more demand for a niche product than found for ordinary products in most states. The skills required to tap these markets need developing, however, because much of agriculture has been commodity driven where farmers have essentially been "price-takers." They must be converted to "price-makers," through better marketing.

- **Identifying opportunities for adding value to existing farm products before they are sold.** Forestry products for instance, offer possibilities to craft patio furniture, storage sheds and wooden novelties in the manner of so many Lancaster, Pennsylvania enterprises. On-farm dairy processing of cheeses, yogurts and ice cream also offers opportunities. The Albany market is immediately accessible to such producers if someone can help them exploit it. Additional work is involved but, when combined with quality assurance and relatively low-key marketing, farmers can deliver added value to customers for higher income and better cash flow. The key is to establish relationships with end-users, vertically integrating the industry wherever possible.
- **Disseminating information on market opportunities.** A key element in development of new markets is the communication of information on demand, supply and prices. No market is forever and farmers need to continually adapt and respond to developing opportunities. These include, for example, meat goats for the ethnic markets.
- **Promoting sales of existing Greene County farm products.** The Greene County Farm Markets Brochure and Map should be regularly updated and used effectively to promote local farm products. Additionally, too few of the County's producers are making use of the Pride of New York label.

Responsible Parties:

- 1) Greene County Agricultural and Farmland Protection Board
- 2) Cornell Cooperative Extension Service of Greene County
- 3) Greene County Promotion Department

Implementation Date: 2003-2005

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4.5 Agricultural Economic Development Initiative

Greene County's location along I-87 between Albany and New York City make it an excellent location for added-value agricultural processing operations pulling product from across the upstate region, the North Country and across the Hudson River. Additional efforts should be made to target these industries for solicitation and development, through creation of improved sites, promotion of tax abatement programs and use of other incentives.

Short-term incentives should be used to initially attract such enterprises to Greene County. These must be competitive with other regions and help to off-set some of the capital costs relating to investment by these new businesses in Greene County. The most important incentives, however, are inherent. They relate to location, access to raw products and markets and relatively inexpensive land. Documenting and promoting these marketable competitive advantages is essential. While this is largely the task of Greene County's economic development agencies, the Agricultural and Farmland Protection Board must be an active partner to ensure that added-value agricultural processing get the attention they deserve. The County made an excellent effort to attract the Fern Lea poinsettia operation which, although it has not come to fruition for unrelated reasons, still provides a model for future endeavors. The site also now has sewer and water service and is available for another agricultural enterprise. Similar opportunities will become available in the future and should be met in the same way.

The County IDA offers a 20 year tax-abatement program specific to agricultural processing that phases in real property taxes at 5% of normal for the first year, 10% the next year, 15% the third year and so on, at an additional 5% per year, transitioning to taxation at 100% of value in the 20th year. Special arrangements can and have been negotiated with industries providing additional benefits to Greene County. This program is excellent and needs to be heavily promoted to agricultural enterprises with potential interests in Greene County.

The following are the additional recommended elements of this initiative:

- **A continuing education program to help farmers identify and capitalize on opportunities in various new products that can be produced on-farm (e.g yogurts) should be launched by Cornell Cooperative Extension of Greene County.** This should include a combination of seminars, field trips and consultations designed to equip farmers with the knowledge to know what types of on-farm processing may be economically feasible as well as the skills to be successful should they pursue these opportunities.
- **The Agricultural and Farmland Protection Board should work with the Greene**

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County Planning Department to encourage use of its Quantum (typically >\$100,000) and Micro-enterprise (<\$25,000) Revolving Loan Funds by County agri-businesses. An additional revolving loan fund targeted to businesses needing \$25,000 to \$100,000 would also be appropriate. These funds can be used for agricultural and forestry processing projects as well as other agribusiness ventures. A "Funding for Farm and Agri-business Projects," brochure should also be developed by the Planning Department. It should be distributed by the Agricultural and Farmland Protection Board and Cornell Cooperative Extension of Greene County to promote various funding sources available to assist agri-businesses and farms. It would differ from existing handouts in that it would be more focused on agriculture and also identify additional programs not available to non-farm entities. It should, for instance, include programs such as those offered by Empire State Development Agency, the Department of Agriculture and Markets and USDA Rural Development. The Agricultural and Farmland Protection Board should also meet with local financial institutions to explore ways to enhance this fund with leveraged below-market rate or market rate financing that would help to meet their Community Reinvestment Act obligations.

- **The Agricultural and Farmland Protection Board should also work with the Natural Resources Conservation Service, the Greene County Soil and Water Conservation District, the Greene County Planning and Economic Development Department, USDA Rural Development and others to pursue grant funds for agricultural economic development.** The agricultural sector of the economy needs to be brought into the mainstream of development efforts. Securing grant assistance from non-agricultural as well as conventional funding sources for agricultural economic development initiatives should be part of that.

- **As the County develops additional industrial sites it should designate some for potential agricultural use with special attention to removing any local zoning or restrictive covenant barriers.** Ontario County provides a model in this regard. It offers agribusiness sites within a designated agricultural industrial park designed to attract food processors and similar industries that use regional farm products.

Responsible Parties:

- 1) Greene County Planning Department
- 2) Greene County Agricultural and Farmland Protection Board
- 3) Cornell Cooperative Extension Service of Greene County
- 4) Greene County Industrial Development Authority

Implementation Date: 2003-2005

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4.6 Strategic Alliances Initiative

An excellent opportunity for agricultural industry expansion lies in promoting more strategic alliances between farmers. As some farmers diversify and others specialize, opportunities for small farmers to forge alliances with one another and larger operators where equipment and services are shared or one provides products and services for the other. Some farmers in other areas of the State rent fields to neighbors to use and then buy back the final products for their own use,. Others are purchasing TMR from their neighbors, raise heifers or grow forages.

The best opportunities exist where alliances between crop and dairy farmers are made. The former can rent land from the latter and sell products back to the dairy farms. Custom harvesting is another niche possibility and should be promoted through the generation and distribution of custom services lists. This initiative requires a combination of hands-on assistance in bringing parties together and education in the business benefits of strategic alliances. It should be a specific assignment of the Cornell Cooperative Extension Service of Greene County's agricultural economic development staff.

Responsible Parties:

- 1) Greene County Agricultural and Farmland Protection Board
- 2) Cornell Cooperative Extension Service of Greene County

Implementation Date: 2003-2005

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Model Right to Farm Law - Greene County

Be it enacted by the Legislature of the County of Greene as follows:

Section 1: Legislative Intent and Purpose

The Greene County Legislature hereby recognizes that farming is an essential enterprise and an important industry which enhances the economic base, natural environment and quality of life in Greene County. The Legislature hereby also declares that its policy is to promote effective communication between farm and non-farm neighbors, greater consideration by each of the other's needs and a shared understanding of the value of agricultural enterprises to Greene County

It is the general purpose and intent of this Local Law to maintain and preserve the rural traditions and character of the county, to permit the continuation of agricultural practices, to protect the existence and operation of farms, to encourage the initiation and expansion of farms and agribusinesses, and to promote new ways to resolve disputes concerning agricultural practices and farm operations. In order to maintain a viable farming economy in Greene County, it is necessary to limit the circumstances under which farming may be deemed to be a nuisance and to allow agricultural practices inherent to and necessary for the business of farming to proceed and be undertaken free of unreasonable and unwarranted interference or restriction.

Section 2: Definitions

1. 1. "Farmland" shall mean land used in agricultural production, as defined in subdivision four of section 301 of Article 25AA of the State Agriculture and Markets Law.
2. 2. "Farmer" shall mean any person, organization, entity, association, partnership, limited liability company, or corporation engaged in the business of agriculture, whether for profit or otherwise, including the cultivation of land, the raising of crops, or the raising of livestock.
3. 3. "Agricultural products" shall mean those products as defined in section 301(2) of Article 25AA of the State Agriculture and Markets Law, including but not limited to:
 - a. Field crops, including corn, wheat, rye, barley, hay, potatoes, and dry beans.
 - b. Fruits, including apples, peaches, grapes, cherries and berries.
 - c. Vegetables, including tomatoes, snap beans, cabbage, carrots, beets and onions.
 - d. Horticultural specialties, including nursery stock, ornamental shrubs, ornamental trees

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- and flowers.
- e. Livestock and livestock products, including cattle, sheep, hogs, goats, horses, poultry, ratites, such as ostriches, emus, rheas and kiwis, farmed deer, farmed buffalo, fur bearing animals, milk and milk products, eggs and furs.
 - f. Maple sap and products.
 - g. Christmas trees derived from a managed Christmas tree operation whether dug for transplanting or cut from the stump.
 - h. Aquaculture products, including fish, fish products, water plants and shellfish.
 - i. Woody biomass, which means short rotation woody crops raised for bioenergy.
 - j. Farm woodland includes land used for production and sale of woodland products, including but not limited to logs, lumber, posts and firewood.
 - k. Racehorses and horses kept at commercial horse boarding operations.
4. "Agricultural practices" shall mean those practices necessary for the on-farm production, preparation and marketing of agricultural commodities. Examples of such practices include, but are not limited to, operation of farm equipment, proper use of agricultural chemicals and other crop protection methods, and construction and use of farm structures. This term also includes those practices necessary for commercial horse boarding and breeding operations.
5. "Farm operation" shall be defined in section 301(11) in the State Agriculture and Markets Law.

Section 3: Right to Farm Declaration

Farmers, as well as those employed, retained, or otherwise authorized to act on behalf of farmers, may lawfully engage in agricultural practices within this county at all such times and all such locations as are reasonably necessary to conduct the business of agriculture. For any agricultural practice, in determining the reasonableness of the 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 conducted on farmland shall not be found to be a public or private nuisance if such agricultural practices are:

- 1. reasonable and necessary to the particular farm or farm operation,
- 2. conducted in a manner which is not negligent or reckless,

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3. conducted in conformity with generally accepted and sound agricultural practices,
4. conducted in conformity with all local, state and federal laws and regulations,
5. 5conducted 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
6. conducted in a manner which does not reasonably obstruct the free passage or use of navigable waters or public roadways.

Nothing in this Local Law shall be construed to prohibit an aggrieved party from recovering from damages for bodily injury or wrongful death due to a failure to follow sound agricultural practices, as outlined in this section.

Section 4: Notification of Real Estate Buyers of Property Within or Near a Greene County Agricultural District

In order to promote harmony between farmers and their neighbors, the county requires land holders and/or their agents and assigns to comply with Section 301 of Article 25AA of the State Agriculture and Markets Law and provide notice to prospective purchasers and occupants as follows: "It is the policy of New York State and Greene County to conserve, protect and encourage the development and improvement of agricultural land for the production of food, and other products and also for its natural and ecological value. This notice is to inform prospective residents that the property they are about to acquire lies partially or wholly within an agricultural district and that farming activities occur within the district. Such farming activities may include, but not be limited to, activities that cause noise, dust, and odors." This notice shall be provided to prospective purchasers of property within an agricultural district or of property with boundaries within 500 feet of a farm operation located in an agricultural district.

A copy of this notice shall be included by the seller or seller's agent as an addendum to the purchase and sale contract at the time an offer to purchase is made.

Section 5: Resolution of Disputes

1. Should any controversy arise regarding any inconveniences or discomfort occasioned by agricultural operations which cannot be settled by direct negotiation between the 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 determination by the Commissioner of Agriculture and Markets about

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whether the practice in question is sound pursuant to Section 308 of Article 25AA of the State Agriculture and Markets Law.

2. Any controversy between the parties shall be submitted to the Agricultural and Farmland Protection Board 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.
3. The Agricultural and Farmland Protection Board shall form a dispute resolution committee within thirty (30) days which shall be composed of three (3) members selected from the county including one representative from the County Agricultural and Farmland Protection board, one person from the town or village government in which the dispute arose, and one person from a community dispute resolution center, such as Common Ground or FarmNet.
4. The effectiveness of the dispute resolution committee as a forum for the resolution of disputes is dependent upon full discussion and complete presentation of all pertinent facts concerning the dispute in order to eliminate any misunderstandings. The parties are encouraged to cooperate in the exchange of pertinent information concerning the controversy.
5. Once formed, the dispute resolution committee may investigate the facts of the controversy but must, within twenty five (25) days, hold a meeting at a mutually agreed upon 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 dispute resolution 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 dispute resolution committee may be extended upon the written stipulation of all parties in the dispute.
6. Records of the dispute resolution committee shall be maintained by the Greene County Planning Department.
7. Any reasonable costs associated with the functioning of the dispute resolution committee process shall be borne by the participants.

Section 6: Severability Clause

If any part of this Local Law is for any reason held to be unconstitutional or invalid, such decision shall not effect the remainder of this Local Law. The county hereby declares that it

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would have passes 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 7: Precedence

This Local Law and its provisions are in addition to all other applicable laws, rules and regulations.

Section 8: Effective Date

This Local Law shall be effective immediately upon filing with the New York Secretary of State.