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REPORT
STUDY of TOMPKINS COUNTY AGRICULTURE

Phase I

**TOMPKINS COUNTY AGRICULTURE & FARMLAND
PROTECTION PLAN**

Prepared by
**TOMPKINS COUNTY
AGRICULTURE & FARMLAND PROTECTION BOARD**

OCTOBER 1996

STATE DIRECTIVE FOR THE PROTECTION PLAN

The New York State Constitution directs the legislature "to provide for the protection of agricultural lands". In 1992, the New York State legislature declared that agricultural lands are irreplaceable state assets. In an effort to maintain the economic viability, environmental, landscape and societal values associated with agriculture, the State has authorized county initiatives for agriculture protection policies. The latest of these is legislation authorizing Agriculture and Farmland Protection Plans under Article 25AAA of New York State's Agriculture and Markets Law.

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This study was funded in part by a matching grant from the New York State Department of Agriculture and Markets; Agriculture and Farmland Protection Planning Grants Program, and from Tompkins County.

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EXECUTIVE SUMMARY

AGRICULTURE IN TOMPKINS COUNTY

Agriculture in Tompkins County is in transition. Structural changes in Tompkins County agriculture, as on the national level, continue to occur resulting in fewer larger farms and more diverse smaller farms. According to the last Agriculture Census (1992), there are 215 part-time farms and 226 full-time farms with combined annual agricultural sales of \$50 million. While dairy and field crop operations are fewer, their agricultural economic output has accounted for a steady increase in production and market value of dairy and commodity crops in Tompkins County. Meanwhile, farms and substantial amounts of farmland are disappearing in the mid-size range of 50 to 500 acres.

There is strong growth in the number of small part-time farms raising livestock, horses, fruits, vegetables and specialty agricultural and horticultural products. The proximity of an increasing urban population, appreciative of the rural character of the County and its farm products, has enabled the successful establishment and expansion of these smaller enterprises. Ornamental horticultural operations have also enjoyed growth due to the expanding urban/suburban population, and now represent the largest category of specialty agriculture enterprises in the County.

Given the dichotomies in County farming - traditional commodity based operations, and specialty consumer-dependent farms, the prospects for the future of our 441 full and part time farms is dependent upon a strategy that encourages and supports both types of enterprises. Traditional dairy and field crop operations are continuously challenged by low prices and rising production costs, while specialty farms struggle with challenges to diversify and develop their farm businesses.

Farmers will make decisions that affect the loss or retention of farmland. They are motivated to continue farming if they can do so profitably. To encourage this, disincentives to profitable farming have to be minimized and incentives must be provided so farmers can maintain and expand investments and extend commitments to the land.

WHAT WE STAND TO LOSE

Farming and farmland need to be protected from further economic and infrastructural pressures or the following contributions of the agricultural community enjoyed by all County residents will be diminished and opportunities for growth will be lost.

- The loss of farmland will be accelerated. Given recent and long-term trends, we will probably experience reductions of 10 - 24% per decade in both the number of farms and farm acreage.
- Reduced availability of high quality locally grown products such as: fruits, vegetables, greenhouse, and nursery products, maple syrup, poultry, horses, livestock, and others.
- Over \$40 million of annual farm exports will be threatened. The potential for expansion, retention of local jobs and dollars will be reduced. The potential for substitution of locally grown food and other products for imported products will be lost.
- Biodiversity will be diminished through reversion of field and meadow habitats to woodland. The rural lifestyle and associated cultivated open spaces that appeal to residents and tourists will be diminished.
- Future availability of farmland and farming resources will be reduced. Once converted, it is almost impossible to return lands to farming.

WHY WE SHOULD PROTECT AGRICULTURE IN TOMPKINS COUNTY

Agriculture and farmland need protection from land use and regulatory decisions which fail to adequately consider agricultural impacts and may produce unintended consequences.

Tompkins County farming is highly vulnerable to pressures from (1) land use planning that supports rural residential development and infrastructure expansion without adequate consideration of negative impacts on agricultural viability, (2) practice of assessing farmland, in part, as a use with a higher market value than farming, (3) rapidly rising property taxes, and (4) a growing and unmet need for economic development of the agriculture industry.

Agriculture in Tompkins County has the potential for greater contributions to the quality of life within the County. Strength lies with maintaining and expanding dairy and field crop operations, and the development and diversification of smaller farming enterprises. Entrepreneurial approaches to farming are expanding as the "business" of farming adopts more advanced technologies and management practices, direct-to-consumer marketing, specialized niche farming, food processing, organic production and value-added processes.

GOALS OF THE AGRICULTURE AND FARMLAND PROTECTION PLAN

This report concludes that economically viable agriculture provides a natural means for retaining farmland, and that supportive public policies are necessary to assure agriculture's continued contributions to the economy and quality of life in the County.

(1) Create general awareness and inform Tompkins County government, community leaders and the general public about:

- (a) the significance of agriculture.
- (b) stresses on area farming from conditions and trends in the agriculture industry.
- (c) impacts on agriculture from public policies.
- (d) economic potential for expanded agricultural activity.

(2) Identify agricultural resources in need of protection and present appropriate farmland protection measures.

(3) Present options to strengthen the economic vitality and viability of agriculture and retain productive farmland.

OPTIONS FOR STRENGTHENING AGRICULTURE

Tompkins County's Agriculture and Farmland Protection Plan - Phase II will develop specific recommendations and an implementation plan derived from options under these broad headings:

1. **EDUCATION:** Create a high level of awareness and knowledge by community decision-makers, farmers and other county residents about economic and societal values of agriculture.
2. **GOVERNMENT POLICIES:** Provide a supportive climate for continuation of farming through public policies and actions on land use and taxation that minimize disincentives for farming. Effective action is needed from various levels of government.
3. **AGRICULTURAL ECONOMIC DEVELOPMENT:** Strengthen the economic viability of farm businesses through programs of education, business retention and expansion, and the development of diverse agricultural enterprises supplying both local and distant markets.

GLOSSARY OF TERMS USED

Agricultural Assessment Value - A real property assessment provision of the NY State Agriculture District Law. The value per acre assigned to agricultural land for assessment purposes is determined by the capitalized value of its agricultural productive value instead of its "highest and best use" value.

Agri-Business - Any business that provides products or services generally directed toward support of agricultural production, marketing and distribution of its products.

Agricultural District - Locally designated farming areas which receive protective benefits under New York State Dept. of Agriculture and Markets Law. County Agriculture & Farmland Protection Boards make recommendations to County and State government for establishment, modification and continuation of districts.

Agricultural Economic Development - The programs and initiatives that support the process of enhancing viability and vitality of agricultural businesses.

Biodiversity - A concept referring to varied and native life forms existing in a natural dynamic balance.

Commodity - A raw agriculture product which has an established large scale market.

Comprehensive Plan - A community planning document that identifies land resources, current land uses, and preferred and restricted future land uses.

Development - The improvement of land by construction of infrastructure, housing, commercial, industrial or uses other than agricultural production.

Open Space - Generally refers to land areas that are undeveloped and in their natural state. Also refers to variations of woodland, fields and pastures which offer views from roadside.

Prime farmland - Broadly defined by the USDA as those soils best suited for producing food, feed, fiber, forage crops, or forest. It possesses sufficient soil quality, growing season, and moisture supply needed to produce sustained high yields of crops when treated and managed according to acceptable farming methods.

Purchase of Development Rights - A land preservation program in which rights to develop the land are sold, usually to a public entity. An easement permanently (or for a term) restricts land to agricultural use, but does not require that active farming continue. Assessed value of the land is reduced to the agricultural value and cash payments may be used by the farmland owner without restriction.

Quality of Life - Aspects of a community that make it appealing as a place to live, such as; open space, cultural, educational, goods and services, employment, recreation, safety, etc.

Right to Farm - A concept defined in the New York State Agriculture District Law giving priority rights for sound normal and traditional farming practices over objections of non-farm people who might bring nuisance lawsuits against farmers for such practices.

Transition Zone - An area of mixed land uses between predominantly agricultural land use and predominantly developed land uses.

Urban Growth Boundary - A land use planning term that prescribes separation of areas of urban growth from areas of low density rural uses.

Value-added - Monetary value that is added to an agriculture product through processes that enhance its usefulness or appeal.

Viability - Capacity to attract investment of capital or commitments of human resources.

Vitality - Capacity to sustain continuity, growth or development.

AGRICULTURE AND FARMLAND PROTECTION PLAN **TOMPKINS COUNTY, NEW YORK**

PHASE I - Study of Tompkins County Agriculture

PART I. INTRODUCTION

1. Why Farming and Farmland should be Protected.

The contributions of Tompkins County Agriculture and its farmers remain vulnerable to pressures which have steadily reduced its capacity as a result of fewer productive farm units and less total farmed acreage. Trends, if unchanged, will further reduce important contributions the County population enjoys.

Agricultural products

Our population has become increasingly dependent upon food imported from outside the County and State. The availability of a quality local food supply is becoming of greater importance to local residents.

Farmers also supply the local non-farm population with non-food products and activities such as horticultural and nursery products, cut flowers, potted and bedding plants, medicinal herbs, seeds, straw, pet food, horses, and wool.

As farmers, farms units and farmland become fewer, the wisdom of ignoring the availability of these resources into the future is of concern.

Quality of Life

Farming contributes many benefits. A healthy and active agriculture results in not only fresh food supplies but also rural lifestyle, maintenance of open space, and pastoral scenes.

Economic Value

There is substantial potential improvement for the County's economic net cash flow from two directions: (1) expansion of its exports of agricultural products, and (2) substitution of locally grown food for imported food.

Environment

Our local environment is undergoing an evolution from loss of field and meadow habitats to increased areas of woodland environments that already cover 63% of the County land area. Such evolution will change the existing balance of plant and animal life as biodiversity is reduced. Agriculture is a preferred land use for protecting natural resources and preserving biodiversity.

2. From What Do Farming and Farmland Need Protection?

Long-term pressures

Agriculture and farmland in Tompkins County are in need of protection from (1) pressures impacting the economic vitality of farming, and (2) pressures from public policies on land use that compete with agricultural use of farmland. These pressures have developed over time at two levels:

National and International -

Market conditions increasingly dominated by large-scale global food and fiber production and distribution systems. These conditions bring about a level of competition adverse to small and medium size farms.

Federal government policies to maintain a plentiful supply of food at relatively low prices, resulting in low farm profits and aggregation of ever larger farm units and more competition.

Local -

Limited awareness by County residents and policymakers about the condition and needs of the local farming industry, and the negative impacts on it from land use development decisions.

Weakened viability from cumulative pressures

Numerous pressures have created cumulative negative impacts on farms and farmland:

- Narrowing profit margins from long-term stable market prices and rising expenses.
- Inequitable property tax burdens which have become unbearable for many farms.
- Short-term commodity price instability, which inhibits confidence needed for progressive investment decisions.
- Financial risks and comparatively low long-term income potential discourage new investments.
- Increased complaints from rural residents who choose to live close to actively farmed areas, which generate conflict over accepted and reasonable farming practices.
- Pressure to maintain competitive yields has brought with it increased reliance upon chemical inputs and the indirect cost of greater scrutiny and control for health and environmental concerns.
- Increased prices for farmland, driven by speculation for land development.
- Lack of farm family successors on dairy and crop farms due to poor economic incentives.
- Lack of adequate capital and credit to finance new investments and farm ownership transfer.
- Lack of public support for the industry, its operators and their needs to sustain competitiveness.

3. Likely Impact on Farmers and Farmland from Continued Pressures.

Tompkins County farmers, surveyed in 1994, revealed the situations they continue to face. They expect these trends in the next ten years:

- Continuing reduction in number of farms.
- Increasing development in rural areas.
- Increasing size of larger farms.
- Increasing regulations.

- Property tax increases contributing to more farm terminations.
- Upon retirement, 40% expect to sell their land to non-farmers.

Many small and medium size farms are not able to support a family on farm income alone, especially for land intensive traditional dairy and feed crop operations. Continuation of farming at this scale often depends upon off-farm incomes or sale of building lots or parcels for development uses. It is reported that even large farms are dependent upon off-farm incomes of family members.

4. Likely Impact on the County Non-farm Population from Continued Pressures.

Farms that go out of business reduce many contributions of farming to the non-farm community. Continued losses will adversely affect the economy and 'quality of life' for all residents of the County through declines of:

- exports
- property tax base of farms
- irreplaceable prime farmland
- fresh high quality local food
- non-food farm products used by consumers
- open space
- agricultural product diversity
- farm jobs and farm support service businesses
- rural qualities of life
- biodiversity
- tourism attractiveness
- rural/urban interface
- number and quality of scenic vistas as former farmland reverts to brush and woodland.

The decisions made by farmers, in response to many pressures and limited incentives, ultimately affect the loss or retention of farmland. Farmers in Tompkins County want to continue farming and to do it successfully. To do so, they need incentives to maintain and expand investments, and support from local government to deal with external pressures.

5. Implications for Public Policy.

A. Appropriate land use and taxation policies

Successful agriculture needs to rest upon a viable agricultural land base. Local government must recognize the need for appropriate policies for land use and land taxation.

New thinking is needed about farmland in order to protect farming and the most viable agricultural soils. These three principles run counter to current understanding about farmland:

- (1) prime farmland is not land waiting to be something else
- (2) agricultural production from prime farmland should be valued above more developed uses
- (3) a farmer must not be denied the full market value of his/her farmland

B. Agricultural Economic Development

A further policy implication is to recognize the need for a supportive framework of coordinated programs to economically enhance the development of agriculture. When the County Board of Representatives defines its role in County economic development, it should address the needs and potential of the local agriculture industry.

C. Heightened Education and Public Awareness of Agriculture's Contributions.

There is a low level of awareness about the contributions of agriculture both at the consumer level and the public policy level. Efforts to enhance education about the interdependence of our local agriculture community and the non-farm population will strengthen farming as an economically viable industry and maintain its contributions to the County.

D. Leadership

What can be done to reverse the negative trends? The will to protect what the Tompkins County community values about farming and farmland is a primary requirement.

County government can play a leadership role by assisting supportive municipal land use planning and comprehensive economic development that includes agriculture. It is in the public interest, through county and local government, to provide an environment which will sustain farming vitality to the greatest extent possible.

Without this needed support, fewer farmers will be in a position to make commitments necessary to sustain a viable agriculture industry in Tompkins County.

PART II. THE STATUS OF AGRICULTURE IN TOMPKINS COUNTY

1. Significance of Agriculture in Tompkins County

Economic Factors

Farming is a highly productive industry that uses less land and fewer farmers to produce a greater supply of food than in the past. Area farmers have participated in this outcome while making significant and increasing economic contributions to Tompkins County in the following ways:

1. Produced \$50,720,000¹ of agriculture products in 1992; 226 farm operations produced 98.7% of this volume.
2. Agricultural product sales rose 4.3% annually from 1978 through 1992.
3. Export more than \$40,000,000 in products and services yearly.
4. Generate \$100 - 150 million a year directly and indirectly to the County's economy through effect of an economic multiplier² in the range of 2.0 to 3.0.
5. Support related agriculture service and supply businesses.
6. Provide 2.6% of County employment.
7. 1.0% of population pays 2.1% of property taxes.
8. Hold investments in land and buildings of \$267 million and machinery and equipment of \$55 million.
9. Provide new job opportunities on large farms for middle managers and agriculture specialists.
10. Grow a diversity of agricultural products which provide greater stability for the industry.

Although there are fewer County farms employing fewer workers, on less acreage, gross market value of their agricultural production has risen steadily from \$31.6 million in 1978 to \$50.7 million in 1992, an average annual increase of 4.3%. Productivity improvements have been achieved per worker, per acre, and per dairy cow and other measures.

Strength in the County agriculture industry comes from large farms which primarily account for the steady increase in production and market value of dairy, crop and livestock products. Milk sales and sale of dairy heifers represent about 75% of County's agricultural product sales from family owned farm operations.

Strong growth has also occurred in the number of very small farms and specialty agricultural and horticultural operations - the segment that serves consumers directly. Direct farm marketing, ornamental horticulture, greenhouse, nursery products, horses, fruits, vegetables, honey, syrup, timber, Christmas trees and aquaculture are part of the County's rich agricultural diversity.

Some vegetable and fruit growers have demonstrated opportunities for value-added and processing operations. This is an area of growth potential and would benefit from increased agricultural economic development.

¹ Approximately 50% of this amount is produced by Genex Cooperative, Inc. (Eastern Artificial Insemination Cooperative) and Isa-Babcock Breeders, Inc., who together employ about 180 workers as of 1994, or about 25% of all hired farm labor.

² Local economic multipliers are based upon local factors of inputs and output. No multiplier has been calculated for Tompkins County Agriculture. This range is typical for similar areas.

Quality of Life

Farming's importance is more significant than is generally visible from roadside views or economic measurements. Open space and contributions to 'quality of life' are benefits too often unacknowledged by non-farmers.

Lifestyles and community values in Tompkins County are closely integrated with and dependent on the viability of agriculture. Local farms provide direct-to-consumer supplies of fresh fruits, vegetables, meat, eggs, dairy, horticultural, and other specialty products.

Tourists admire cultivated fields and well-kept farmsteads that give impressions of well-being in the countryside and the region. The public's awareness of open space is often associated with views and scenes of hillsides, valleys, lakes and ponds, hilltops, and fields of colorful crops. Grazing animals add to the image of rural life that is a part of our nostalgic heritage with the land.

As a measure of its value, more people are migrating from urbanized areas to these appealing rural spaces.

Land Stewardship and Environment

Farms maintain 30% of the County's land area at no cost to the non-farm population, and they help to preserve prime farmland, a non-renewable resource for future farming operations.

Farmers expend considerable effort and expense on good soil management practices to successfully and profitably manage this resource. Extensive use of soil conservation practices, crop rotations, limited use of fertilizers, and pesticides, use of high efficiency machine operations, and energy saving equipment are some of the many practices that farmers regularly employ to maintain the best use of their land over the long term.

Some 125 small part-time farms (under 50 acres) provide active use of productive farmlands that might otherwise lie fallow, develop scrub growth and eventually become woodland. Maintenance of pastures and meadows retains habitats for many birds and small animals that are not a part of a woodland environment.

Small scale farms create links to urban customers by utilizing rural and urban fringe lands. Such farms serve as buffers between more dense residential areas and more intensive farm areas.

2. Profile of Local Farming and Farmers

Number of Farms, Farm Acreage and Farm Size

Data about farming are reported by the US Department of Commerce every five years through the Agriculture Census (Appendix A-1, Agriculture Census Tables). In 1992, it reported on 441 farm operations in Tompkins County, down 75% from 1950.

Of Tompkins County's 308,500 acres, farm acreage has declined from 201,200 acres in 1950 to 91,822 acres in 1992. The portion that is cropland follows a similar trend, but at a slower pace. What remains of active farmlands is of greater productive quality than in the past as a result of decades of abandonment of the less viable farming areas. (See Appendix A-4, Data - Tables and Charts, Table 1, for relevant data from 1978 to 1992.)

Large farms of 500+ acres have remained fairly constant in number (about 50) since 1978 and produce the major portion of County farm product sales, primarily dairy, livestock, and feed crops. These farms account for about 40% of all farmland used in the county, indicating a major trend the agriculture industry and the County on the continuation of fewer larger farm operators.

Small farms of less than 50 acres are still numerous. Small scale farming is mostly characterized by part-time operations of both intensive specialty production as well as less intensive farms maintaining hay and pasture land for livestock operations. Growth is occurring through opportunities in direct-to-consumer food sales by-passed by large scale farming. Some owners of small farm acreage also rent excess land to large farms thereby providing these farmers with productively efficient land parcels without the burden of unusable areas often associated with entire farms. Such favorable arrangements exist where rentable lands are in close proximity to active farms and the landowner offers long-term availability to farmers. (See Appendix A-4, Data - Tables and Charts, Table 2, for changes in size groups of farms.)

Farm Products

Tompkins County farms produce a broad range of agricultural, horticultural, and forest products. Traditional farm enterprises concentrate on livestock and dairy products, feed crops of hay, corn, wheat, oats, soybeans, barley, and similar crops. Other products include poultry and poultry products and livestock such as beef cattle, horses, donkeys, mules, hogs, sheep, lambs, goats, and rabbits. The variety extends to vegetables, fruits, berries, honey, maple syrup, timber, firewood, field and forage crop seed, cut flowers, and nursery and greenhouse plants. (See Appendix A-4, Data - Tables and Charts, Table 3, for Farm Commodities grown in Tompkins County.)

Farm Product Sales

Anyone who reported selling at least \$1000 of agricultural products is included among the 441 farms in the 1992 Agriculture Census. Of these, 226 grossed \$10,000 or more in sales, and only 178 of these reported farming as their principal occupation. In a survey of County farmers in 1994, gross sales of farm products above \$40,000 were reported by 49%, and sales above \$250,000 were reported by 12%. (See Appendix A-4, Data - Tables and Charts, Table 4, for Farm Commodity Market Values)

Farm product prices, according to New York Agriculture Statistics Service for 1985-94, have remained largely unchanged over the past ten years, with some occasional widespread fluctuations in given years and within product categories. At the time of this study's conclusion, raw milk prices had begun an increase, unprecedented in the past twenty years, but there are no assurances that it will be sustained.

Demographics of the Farm Population

Two broad groups of farmers include those who operate long-term multi-generational farms (usually dairy, livestock, and feed crops), and those who farm either new part-time operations or scaled down former multi-generational family farms, or new specialty farms.

The ages of farm owners and operators range from early twenties to eighties. The average age of 51.9 years is rising, partly explained by the inclusion of retired farmers with longer lifespans and general population trends. Fifty-nine percent of farmers are under age of 55; and 20% are over 65 years of age. Women as principal operators (defined as senior partner or person in charge) represented 13% of all farmers in 1992.

PART III. FACTORS THAT INFLUENCE LOSS OF FARMLAND

Tompkins County Agriculture is experiencing continual structural changes caused by numerous factors that are much the same as in other counties and states.

1. Economic Productivity Factors of Farmland

Thomas Hirschl, Department of Rural Sociology, and Nelson Bills, Department of Agricultural Resource & Managerial Economics, Cornell University, report three factors that influence the rate of farmland retention in New York Counties³:

Land productivity

- Reflected in gross receipts per acre.
- Highest gross receipts are generally achieved on good quality land and in the hands of good farm managers.

Size of farm operations

- Counties with a larger fraction of large size farms have lower rates of farmland loss.
- Large farms are generally organized more efficiently and realize lower unit costs of production.
- Large farms are more able to take advantage of new cost-reducing production technologies.

Proportion of cropland to total acreage

- Forests, pasture, and farm support land uses contribute comparatively little to farm receipts.
- Low contributing land uses have carrying costs that can be a drag on profitability.
- Counties with a larger fraction of income producing lands generally have realized lower rates of farmland loss in recent years.

In 1972, R. E. Linton and H. E. Conklin published Economic Viability of Farm Areas in Tompkins County (Appendix C-3). It contains classified and mapped land areas of the County by High, Medium, and Low economic viability farming areas and serves as a reliable land evaluation planning resource even today.

2. Historic Over-supply and Competitive Market Factors

Oversupply has resulted from three principal conditions that impact area farmers:

- (1) Unstable and unpredictable market prices and production levels.

Seasonal unpredictability of weather patterns, changing supply and demand for food in world markets, and national foreign policy decisions involving food supplies make cyclical production decisions especially complicated for farmers.

- (2) Government policies to assure low consumer food prices and to manage food production and supply levels.

³ Policy Issues in Rural Land Use, Vol. 6, No. 2, Cornell University Department of Agricultural, Resource, and Managerial Economics, April 1993

Consequent depressed farm commodity prices (below par with other consumer prices) have been inadequate to sustain reasonable profits for all but the most efficient and best capitalized operations utilizing the most responsive soils.

- (3) Steadily improving yields of farm products as a result of national research programs.

Research efforts for most of this century have successfully improved yields of all major crop and livestock units.

Local farmers who produce major livestock, dairy, and feed crops, have faced uncertainty while competing in a world market environment for many decades. Furthermore, small and medium size farms do not have access to the economic resources needed to be competitive with large farms that greatly influence agricultural production and markets. Close to 95% of Tompkins County farm operations are in this unfavorable situation.

3. Property Tax Impacts

Rapidly rising property taxes have added to an already disproportionate tax burden and represents farmers' largest operating expense increase in recent years. Agriculture Census data indicates a 35% increase in Tompkins County farm property taxes from 1987 to 1992. Data reported by the State Office of Real Property Services in its 1996 Agricultural Assessment Values report that statewide property taxes equate to 62.2% of net farm income, up from 20.9% in 1987.

The tax burden for New York farmers is inequitable. Over 75% of the property taxes farmers pay goes to public school education, a service that provides no direct benefit to active farmlands. New York State Farm Bureau reports that property taxes on farms are \$23.00 per acre, the highest of all agricultural states. The national average is \$6.50. This differential puts New York farmers at a severe competitive disadvantage with farmers in 19 other major agricultural states whose farmland taxes average \$20.00. (See Appendix A-4, Data - Tables and Charts, Table 5, for comparison of property taxes of major agricultural states.)

The disproportionate share of property taxes on farmland, compared to residential properties, is reported by Cost of Community Services studies conducted in many states. A similar study, conducted in Tompkins County in 1995, revealed that agricultural lands receive a lower value of services for every dollar paid. These differences were expressed as a ratio of tax revenues collected to cost of services provided. Among the towns of Tompkins County, the ratios for residential properties ranged from 1:1.09 to 1:1.56, meaning that they received 9% to 56% more services than they paid for. Agricultural and open space property ratios ranged from 1:0.15 to 1:0.40, meaning they received 15% to 40% of the services they paid for. This disparity is primarily a result of public education costs⁴ (Appendix A-3, Cost of Community Services Study - Tompkins County).

Projections of tax impacts on farmland are for continued upward pressure unless mitigation

⁴ Residential portions of farms were included with residential data. Tompkins County Assessment Department reports that about 75% of building assessment values are for the farm residence.

measures are applied. The predictable increase of local property taxes for public education and other human services will be further escalated by nearly \$50 million in new school construction projects approved in 1996 among County school districts.

The agriculture value assessment program established by the NYS Agricultural District Law reduces the impact of property taxes for nearly 80% of Tompkins County farmers by about 22% of the full assessed value of all agricultural properties⁵. The value of agricultural exemptions represent 0.71% of all County property assessments. This program establishes assessment ceilings for farmland on the basis of agriculture productive value rather than the local practice of using market values under the "highest and best use" approach, which is sometimes assumed to be as rural residential.

The NY State Office of Real Property Services' formula for these assessment ceilings sets higher assessments on the best agricultural soils and the lowest on the poorest soils. It is asserted by some that this produces disincentives for holding on to good farmland when a farmer is faced with the prospect of a land sale. It is assumed that more productive farmland can carry a higher tax level than less productive land, and that farmers are not inclined to sell their more productive land.

Other agricultural tax abatement measures include a ten year exemption for certain farm structures, and an assessment reduction for managed forests committed to long term woodland use.

Under the initiative of Tompkins County Farm Bureau, the County Board of Representatives recently passed a resolution supporting statewide tax relief in the form of a "circuit-breaker" measure. In July 1996, State legislation was passed that provides a credit against State income taxes for excessive property taxes paid by qualifying farmers under a formula with annual increments.

4. Low Public Policy Support for Farmers and Agriculture

Agriculture has a low profile among the non-farm population partly because the agriculture industry is highly decentralized, partly because it involves only about 2-3% of the population, and partly because it is difficult to gather accurate local data and exchange information. The resulting perceptions held by the general public are influenced by these conditions. Furthermore, the contributions of agriculture to the non-farm population are not well articulated to the general public nor are they well understood or appreciated.

In contrast, public policies exist that are highly supportive of commercial business development, industrial job growth, housing development, and the infrastructure network of transportation, public water and sewer. These policies receive greater attention and are formed in an absence of knowledge about the related impacts on the agriculture industry.

The current low level of public policy support for agriculture throughout Tompkins County is a crucial weakness in the protective network that is necessary. It needs to be addressed in order for agriculture to be an economically viable industry and to maintain its contributions to the County.

⁵ All data on property taxes reported in the Agriculture Census reflects actual taxes paid after the utilization of tax reduction measures received on farm properties.

5. Land Development Impacts

Farming is adversely affected by rural residential sprawl and by industrial and commercial expansion into predominately agricultural areas. This pressure on farming is supported by zoning laws that either permit or encourage developed uses of rural lands, and by expansion of water and sewer services to accommodate development. (See Appendix C-2, Combined Map - High to Moderate Potential Soil Associations and Water and Sewer District Service Areas in Tompkins County, for an illustration of relationship of these areas). Such public policies stimulate higher land values as development potential is created for agricultural lands without regard to the value of the land as an irreplaceable productive agricultural resource.

Understandably, many farmers who look forward to the highest potential market value for their land, don't oppose such local policies when presented a windfall offer, or profitability has declined, or farmers wish to retire.

Whether a farmer sells land or not, the dual value of farmland (as an agricultural resource and as a development resource) presents choices that often lead to fragmentation of contiguous farmland parcels. A farmer's uncertainties about the future often translate into reduced expectations and commitments whether they have sound farm operations or must continue making defensive decisions.

When economic pressures lead to sale of a farm, it is understandable that farmers look to land sales as a financial option. The usual preference is to sell the farm to another farmer, but there is no demand for farmland at the prices generated by either development or speculation. At such a time, a farmer views land more for its marketplace value than for its productive agricultural value. Individual cases can counteract this argument, but the cumulative effect of this tendency continues to remove farms and farmland from our countryside.

6. Increased Environmental Regulation

Agriculture has come under increasing criticism for its effects on the environment, and has been targeted as a significant non-point source of pollution. Water quality affected by manure runoff, applied nutrients and use of pesticides has become a major concern leading to greater regulation.

Food supplies produced with growth hormones, antibiotics, and pesticides present other public concerns that affect marketplace attitudes and influence government regulations. Media enthusiasm and misinformation have contributed to the negative image that farming practices may be harmful to humans and the environment.

It is unfortunate that farmers have been portrayed as thoughtless or reckless in their use of chemicals. Farmers who use them are wary and cautious about the potential harmful effects from personal exposure and to potential side-effects on their land and animals. The high cost of agricultural chemicals has resulted in an increasing reliance upon least cost, lower input production methods.

The costs and benefits of compliance with regulations is an increasing concern of many farmers. Efforts to protect the environment must be balanced to avoid undermining agricultural capacity in the absence of clear evidence of risk.

There is some reassurance about careful farming practices evidenced in a recent report on Tompkins County water quality. Of the 176 public systems tested in 1995⁶ under Federal EPA standards, no unacceptable levels of inorganics (except lead in three locations which are upgrading their systems), pesticides, SOC's and POC's (Synthetic and Principal Organic Compounds), nitrates, nitrites, or asbestos were found.

7. Reduced Succession of Farmers

When facing retirement years, farm families confront crucial problems. Families with children may have one or more of them interested in continuing the operation. For those who prefer this path, the needs of the retiring parents (and ultimately estate division among siblings) place a new demand on the cash flow of the farm operation. Most often, farm youth seek careers off the farm. In cases where there are no interested children, estate planning becomes a paramount concern.

8. Technical and Managerial Proficiency of Farmers

Cooperative Extension Agents and research by Hirschl and Bills indicate that the level of skills and knowledge applied to the business of farming is an increasingly important factor for survival. Some farmers who were interviewed reported they regularly cope with a large amount of reading to keep up to date with changes in farming methods, regulations, and technology. Basic and ongoing education targeted at decision-making is essential for the future viability of farm operations. Cooperative Extension serves a major role in the transfer of research based information to the farm community.

⁶ Tompkins County Health Department, Environmental Health Division, Highlight Report, 1995.

PART IV. TRENDS

1. Decreasing Numbers of County Farmland Acres and Farms

Farmland acreage in Tompkins County has declined by 25% from 1978 to 1992 (1.8% per year); while statewide decline has been 20% (1.4% per year). Even with this decline in total farmland, the average farm size has varied only slightly in the 14 year study interval, standing at an average of 208 acres per farm. Statewide average farm size has increased in the same interval by 5% to 231 acres.

The long term trend since 1930, shows Tompkins County farmland acreage decreased 1.0% annually. However, the latest ten year interval from 1982 - 1992 turned down sharply at a rate of 2.4% annually, the largest percentage decline in any 10 year interval studied since 1930. (See Appendix A-4, Data - Tables and Charts, Table 6, for trend of farm acreage reduction since 1930.)

The number of farms has also been steadily declining during this century, falling by an average of 1.9% per year in the 14 year period from 1978 to 1992, compared to the statewide decline of 1.8% per year. The number of farms has declined from 2988 farms in 1910 to 441 in 1992.

2. The Changing Structure of Farm Sizes

Consolidation of farm acreage, both owned and rented parcels, into larger more efficient units has resulted from decisions of the most competitive farmers in response to market forces, technological innovations, and economies of scale. Farms of 500+ acres are generally profitable and expanding in Tompkins County. (See Appendix A-4, Data - Tables, and Charts, Table 2, for Farm Size trend information.)

The number of small farms of less than 50 acres has increased slightly, primarily the 10-49 acre size that produce over \$10,000 annual gross sales. A number of these farms and those of 50 - 179 acres are the result of downsizing of former active, larger farms now run by semi-retired farmers who raise livestock and grow hay and other crops on a limited scale.

It appears likely that a considerable loss of farms and acreage will occur among farms of 50 - 499 acres. Farms of this scale are highly dependent upon incomes from off-farm sources to remain in operation and are more vulnerable to cessation and ultimately to conversion to other uses.

3. Farmland Loss and Fragmentation

The "loss" of active farmland results largely from abandonment of formerly active farms and subsequent reversion to scrub and woodland. Only a small amount of "lost" farmland has been converted into land development but random patterns of development fragment and negatively impact viable agricultural areas. (See Appendix A-4, Data - Tables and Charts, Table 7, for changes in Tompkins County Land Use since 1910.)

Municipal land use planning, zoning and even the avoidance of planning have encouraged the

conversion of prime agricultural lands to other uses without consideration for the negative impacts on farming profitability and farmland retention. This has partly resulted from the long-standing importance given to residential and commercial development as a means to build a larger tax base upon which to spread public service and infrastructure costs and ostensibly to reduce tax burdens among residents. (Refer to Appendix B-1, Municipal Land Use Plans in the Towns of Tompkins County, for examples of land use priorities, and to Appendix A-3, Cost of Community Services Study, for findings about distribution of public service costs among different land uses.)

The randomness of rural land development in Tompkins County interrupts the contiguity of massed agricultural areas that encourage farming efficiency. It is believed that widely scattered distribution of rural population growth in Tompkins County has caused substantial fragmentation of efficiently organized farmlands.

Thomas Hirschl and Nelson Bills further reported important consequences of farmland loss that occurs from such fragmentation:

- (1) Fragmentation of farmlands is accelerated when market-driven land prices rise much higher than the value as productive farmland.
- (2) Fragmentation and reduction of farm sizes leads to further erosion of profitability that is so critical to survival of productive farm units.
- (3) Some rural counties have lost farmland at rates that are as large or larger than metropolitan counties.

Recent trends of residential migration to rural areas of our County is bringing new development pressure on farming. In Tompkins County, this effect is concentrated in the Town of Ithaca and the western and southern portions of the Town of Lansing more so than elsewhere.

4. Farmland Sales and Rental

Profitable farmers seldom sell land unless it is not suitable for agricultural purposes. Those who sell building lots may do so to cover deficits from operations or to avoid them. Sale of large tracts of farmland usually occurs upon the retirement of farmers who have either experienced long-term marginal economic returns or do not find buyers to continue farming the land.

When entire farms are sold off or split up, it is not uncommon for the most productive and accessible fields to be purchased by nearby farmers who can afford the investment and anticipate a profit at the purchase price. Remaining land and buildings are sometimes marketed to rural residential buyers, rented to other farmers, or retained by the retiring farmer for limited farm operations.

As farms are sold, non-farm buyers sometimes hold the land as an investment, speculating on rising market values. Farmers who may wish to buy more land find it difficult to justify the purchase when the owner's expectations for price exceed the productive value as cropland or pasture.

Active farmers reported in the 1994 Agriculture Survey (Appendix A-2, Report on 1994 Agriculture Survey in Tompkins County) on amounts of land they sold during the past ten years and what happened to it. Twenty-three percent of them reported selling a total of 1282 acres, which

averages 3.6 acres per farm per year. Of this small amount, 34% was developed for homes, 21% was idled, and 12% was sold to another farmer or to a buyer who rented it to a farmer. Another 30% reported multiple reasons, all of which included some amount of development.

Much greater amounts of land were sold by farmers who retired from full-time farming. These account for the major reductions of total farmland in the County. It is also significant that farmland bought by farmers in the same ten year period totaled 4,826 acres, nearly four times as much land as active farmers sold.

Howard Conklin pointed out in his 1972 Agricultural District proposal⁷, that farmers and other land speculators are misled about the likelihood of eventually selling to high-price buyers. Relatively few such windfalls materialize. Some farmers over-estimate future farmland values and consequently hold off making needed investments that would improve competitiveness.

In many cases, lack of buyers for operating farms brings about the liquidation of farm assets, sometimes piecemeal to other farmers, for non-farm use, or divided among family members.

It is often more cost effective for farmers to rent land than to buy it and pay the taxes, but its continuing availability is at risk. Rented farmland, which accounts for as much as 30% of the County's harvested croplands, represents a considerable amount that is vulnerable to sale for non-farm use. There are reports that considerable development conversions are occurring from farmland currently owned by non-farmers.

Good farmland, without farmer ownership, is at risk that it will eventually be abandoned from active agricultural use. Farmland becomes fragmented as parcels are sold and converted for development or revert to natural growth. Farming scattered parcels isn't efficient, even as rented land, when busy roads and increasing residential density present obstacles.

5. Lack of Critical Mass to Support the Local Agriculture Industry

A sufficient critical mass of farm acreage, farms, farm service and supply businesses, and credit sources is needed to retain a healthy agriculture industry and its contributions to the County's economy.

Most farm supply businesses in Tompkins County that provide seed, feed, fertilizer, machinery, and parts have either gone out of business or downsized. Principal suppliers are now in nearby counties that have retained a larger farming base on a regional level through phone, fax, and fast shipping services. Area farmers must find suppliers out of the County more than in past decades, thereby shifting sales tax and bank funds from local use.

Local bank financing for farming has virtually disappeared over the past two decades as specialized farm credit lenders retire without replacements. Farm lending portfolios have shrunk as a reflection of fewer profitable, expanding farms in the County. Seasonal credit lines, livestock purchase loans, building, and specialized equipment financing are not being provided by any banks in

⁷ Maintaining Viable Agriculture in Areas of Urban Expansion"; Howard E. Conklin, New York State College of Agriculture; 1972

Tompkins County, with the exception of one small bank that writes small equipment loans usually with supplemental non-farm collateral and income. It is not known how much farmers have shifted bank funds out-of-county to other depositories.

Agricultural financing in this area is primarily provided through Empire Farm Credit (ACA) (formerly Production Credit Association) and Farm Service Agency, (until recently, Farmers Home Administration). These sources of farm financing generally favor traditional dairy and feed crop operations that have a greater degree of price stability, but at low loan-to-equity ratios. Smaller specialized farm operations have considerable difficulty obtaining credit due partly to a lack of specialized knowledge by many traditional lending sources, and partly by lack of experience in preparing business plans, marketing plans, and financial projections.

As agriculture related businesses that provide supplies and services down-size or close, there are reductions in County employment, incomes, and flow of funds toward other counties where needed supplies and services remain available.

6. Lack of Continuity of the Family Farm

Aging farmers with no succession plans also contributes to farmland loss.

Half of full-time farmers surveyed in 1994 stated that after retirement the land would stay in farming either by selling to other farmers or transferring to family members who plan to farm. Another 10% said they would let the land idle or farm modestly. The remaining 40% said they would sell to non-farmers or to non-farm family members. It is encouraging that 80% of them expect to continue to farm into early retirement years of age 60 - 65. But a critical indication of the aggregate impact from pressures on farming is that 55% of full-time farmers reported that they don't expect their family farm to continue past their working careers.

Rarely do new farmers move into the area or begin as a new career. Farm brokers point to the lack of concentrations of large productive farmlands that are important for farmers relocating from elsewhere. Other considerations of new farmers are the cost of acquisition (usually at market values reflecting competing non-farm use), and quality and condition of the facilities.

Who wants to buy a farm? How available is financing for purchase of farms? Who is trained in successful farming practices? These challenging questions illustrate the conditions that limit options for finding buyers to take over the farm. When a young person in a farm family considers taking over the farm, the family must make tough decisions to meet the retirement needs of one generation and the purchase commitments of the younger from the same farm income.

Traditionally, young people in farm families have been the primary source of continuity in farm operations. This pattern has been broken as a result of the attraction of "off-farm" careers with higher incomes and job growth, and by limited farm ownership opportunities for aspiring young farmers.

PART V. LAND USE ISSUES

1. Competing Uses for Farmland

Farmers and non-farmers view farmland and its protection from differing perspectives, which emerge from farmland's different potential uses. Conflicts arise as farmers and non-farmers seek assurances about the benefits they hope to secure into the future.

Peter Wolf, in Land in America⁸, suggests, "the rationale for farmland preservation at the fringe of and within built-up areas is much more an argument about aesthetics and amenity than a reasonable effort to conserve a precious natural resource." Such an argument by open space proponents often overlooks open space as a by-by-product of farmers' efforts to earn a living.

It is important to distinguish between open space and farmland. Farmland, as one form of open space, has economic value for production of food and fiber. Other forms of open space include scrubland, forests, hillsides, parks, wetlands and other natural undeveloped areas.

2. Preservation vs. Protection

These terms are sometimes casually interchanged, but their dissimilarity needs clarification.

Preserving farmland vs. protecting farmland

Preservation measures for farmland seek permanence for agricultural use.

Exclusive agricultural uses are defined and obtained under preservation policies that reduce or eliminate some of the rights of land ownership in exchange for monetary benefits in order to permanently restrict land use for farming. Examples include Conservation Easements and Purchase of Development Rights.

Protective measures for farmland are limited in time by statute or public policies. Examples of zoning, agriculture value assessments, and right-to-farm laws are subject to change by the will of the public sector.

Preserving agriculture vs. protecting agriculture.

Preserving agriculture is only an ideal value.

Protecting agriculture can be accomplished with the collective effect of various policies and practices. Farmland preservation policies can provide partial support, but other supportive measures are needed to maintain active agricultural use of the land.

8 Land in America: Its Value, Uses and Control, Peter Wolf, 1981, Pantheon Books

Wolf further states, "top-grade agricultural soils...are becoming scarcer in the Northeast with a high potential for conversion of quality cropland. As population concentrations continue to grow, the reserves of top quality agricultural soils become more precious to preserve for future needs."

This argument identifies the most fundamental purpose of preserving the best farmlands as a natural resource for food production. The preservation of such land can consequently assure open space, but only if other conditions support economic viability of farming the preserved land.

3. Where Private Rights and Public Interests Converge

Controversy about protecting farmland centers around issues of private rights and public interests. Farmers want to maintain their rights to farm profitably and to be assured that they can sell their land at its highest market value whenever they choose. Many non-farmers want assurances that the public interest benefits of local food supply, open space, nostalgic rural images, etc. will continue.

As an agricultural resource, prime farmland is especially valuable for its ability to provide plentiful yields with the least amount of inputs of labor, energy, supplemental water and nutrients and loss from erosion. But good farmland is also highly desirable for development due to its cleared, well drained, and reasonably level topography.

Good farmland is not a commodity that can be moved, replicated, or generated. Yet farmland is bought and sold much like a commodity, not for its agricultural uniqueness, but its potential for development for other uses with a higher economic value. There is concern about the future use of large holdings of former farmland throughout the County that some non-farm landowners have accumulated. Investor motives probably lie within the range of long-term portfolio strategies and short to medium term speculation.

When a farmer decides to sell farmland to a buyer with a development use, the concerns about resulting loss of open space come into sharper focus. Who are the potential buyers - farmers, investors, new home builders, businesses, developers? Remaining farmers cannot justify paying the market level price that building lots or other developed uses command. Are open space preservationists prepared to compete in the marketplace or compensate owners of productive farmland for the open space they wish to preserve?

Finding a way to balance the private land rights of farmers and the public interests in farmland is probably the most compelling challenge presented by the desire to protect farming and farmland and to preserve open space.

Purchase of Development Rights and Conservation Easements

The Agriculture Survey of Tompkins County farmers in 1994 questioned farmers' about their familiarity with agricultural and farmland protection measures. Agricultural zoning, land trusts, and

Purchase of Development Rights (PDRs) and Transfer of Development Rights (TDR's) were known to less than half of them. When asked if Tompkins County should embark upon an agriculture preservation plan, only 20% answered "yes", 10% checked off "no", and 70% left it blank. Based upon public comment on early drafts of this Plan, the non-farm public has equally little awareness.

Twelve states have programs to purchase development rights and place voluntary conservation easements on selected farmland. The cost is sometimes shared by various levels of government. PDR approval receives greater public support where the targeted inventory of farmland is a very small portion of the assessment base of the municipality.

New York State enabling legislation exists for local PDR initiatives, Suffolk County established such a program in 1974, the first in the State. In July 1996, The Town of Pittsford, NY approved a bond issue of \$9.9 million to fund the purchase of conservation easements on about 1175 acres of agricultural land deemed vulnerable to development.

It is essential that any proposal for PDRs, or similar approach, have well defined provisions to allay farmers' anxieties about loss of market value and non-farmers' resistance to higher taxes or fees.

The present limited understanding about PDRs at the local level may change as the Town of Ithaca's Board and Planning Board explore the PDR concept. Ithaca Town Planning Department staff is now preparing a proposal for a PDR program that will stimulate debate and awareness.

4. Local Government Policies Influencing Land Use

Tompkins County has no Comprehensive Plan or any stated policy about agriculture. Land use plans and ordinances among its towns exhibit a wide, and ineffective, range of attention to the values, needs and future of agriculture. The existence of nine different town governments, in addition to the County and six municipalities, further complicates efforts for a meaningful and consistent approach to planning for a countywide population of less than 100,000 people.

Six of the County's nine towns have adopted land use plans that vary greatly (Refer to Appendix B-1, Land Use Plans of the Towns in Tompkins County). Although the Town of Ithaca Comprehensive Plan has the clearest expression for preserving farmland, the Town has yet to revise its zoning to reflect its recommendations. However, the Town of Ithaca Codes and Ordinances Committee has begun the process of revising and updating the Zoning Ordinance to better reflect the Comprehensive Plan. The other Town Plans provide varying degrees of recognition of agriculture land use, but generally do not provide for the protection of the most viable farmland areas as unique agricultural resources for farming.

Past and present land use policies and attitudes have viewed agricultural lands as being available for any other use an investor or the public can justify. The effect is that land development, planned or not, fragments productive farmlands and efficient farming, and weakens commitments for continued farming.

PART VI. RESOURCES IN NEED OF PROTECTION

Preservation of prime farmland, and the protection of the agriculture industry that maintains it, should be as important a priority as protecting any other worthy natural resource. As an irreplaceable disappearing agricultural resource, farmland is important as a food source, an economic contributor, and as rural open space, for future generations of farmers and non-farmers.

1. Economic Contributions of Farming to the Local Economy

Lost economic opportunity cost to the County results from a low level of awareness about the contributions and potential of agriculture. County income from sale of exported agriculture products and the turnover of those funds is not only a source of local wealth, but a base from which to expand exports. Additionally, the sizeable amount of food imports to the County offers opportunities for replacement sales that would keep funds in local circulation and expand jobs.

2. Prime Farmland

Soils most responsive to the least amount of inputs of labor, energy and chemicals are becoming more scarce in Tompkins County. Prime farmland areas containing such soils in association with level, well drained and accessible parcels, are located contiguously with other actively farmed land, and are not compromised by high density residential use or planned development. Prime farming areas in Tompkins County are generally associated with agricultural parcels in the two Agricultural Districts of the County. (Appendix C-1, Map of Agricultural Districts)

3. Future of Local Food Supply

Our county residents are dependent upon imports of plentiful and inexpensive food supplies. Projected unstable worldwide food supply/demand factors should instill caution about our traditional indifference toward the capabilities of the food supply system and the need to retain access to the most productive farmlands.

4. Farmers As Producers, Managers and Stewards of Open Land.

The fate of farmland is directly and indirectly affected by the business decisions of farmers who provide food, fiber, jobs, taxes, export products, etc. As owners of 30% of the County land area, their stewardship and continued ownership of farmland provides a broad-based community benefit that serves far more people than themselves, their families, and peers.

5. Open Space

A greater number of County residents than just the farm community have important indirect needs for the open spaces provided by active agriculture. Projected increases of visible abandoned scrubland and decreases of pastoral landscapes can be moderated with the implementation of an appropriate agriculture and farmland protection plan.

PART VII. OUTLOOK FOR AGRICULTURE IN TOMPKINS COUNTY

Given the recent and long-term trends of farm and farmland losses, and assuming that present conditions will prevail, we will probably experience losses between 10 - 24% per decade of both numbers of farms and acreage of productive farmlands, and the associated losses of valuable direct and indirect benefits for the non-farm population.

1. Summary of Projected Negative Conditions

Farm and Farmland loss

Further reduction in farm numbers and acreage will occur among the middle size farms of 50 - 499 acres. Farms of this scale are highly dependent upon incomes from off-farm sources to remain in operation and are highly vulnerable to cessation and ultimately to conversion to other uses.

Many full-time farmers (55% of those surveyed in 1994) don't expect their family farm to be able to continue past their working careers.

Good farmland, without farmer ownership, will continue to be abandoned. As breakups of farms continue, especially upon retirement, the fragmentation of farmland parcels further accelerates negative factors.

Property Taxes

Projections of tax impacts on farmland are for continued upward pressure unless mitigation measures are successfully applied. In July 1996, NY State approved an income tax credit for school taxes paid on eligible farm property. This is expected to provide immediate relief for many farm operations.

Public Policies Affecting Agriculture

Inconsistent land use policies and regulations throughout Tompkins County are a crucial weakness in the protective network that is needed.

Without sensitive and uniform land use policies that span municipal boundaries, the inconsistency of land use planning among the Towns will likely impede implementation of new measures to protect prime farmland in the County.

Land Development

Present land use plans and even the absence of land use plans will continue to encourage the conversion of prime agricultural lands for development.

Present land use policies and attitudes still view agricultural lands as being available for any other use an investor or the public can justify. Continued random land development, whether planned

or not, will fragment productive farmlands and efficient farming, and weaken commitments of farmers

The cumulative effect of random rural land development will continue to remove farms and farmland from the countryside.

Recent residential migration back to rural areas of our County is bringing new development pressures on farming.

Limited Credit availability

Smaller, specialized farm operations will have considerable difficulty obtaining credit for expansion and diversification.

2. National and International Influences

There are a number of trends and influences unfolding beyond the borders of the County and State that have the potential of significant impact on agriculture markets.

Potential Rise in World Food Demand

For most of this century, American agriculture has managed to over-supply its markets, in spite of disruptions of climate and world events. But there are indications that world food demand is expanding at a rate that may exceed present capacity.

- World food demand is growing from expanding population rates and developing economies that desire more meat and varied diets.
- U.S. grain reserves have been drawn down to the lowest levels on record.
- World grain harvests in 1996 will be below consumption for the third year in a row⁹.
- U.S. grain production for 1996 is endangered by weather extremes in major food producing states.

Research to Develop New Uses for Agriculture Products

Agricultural research commitments that have generated high productivity growth for the industry is turning again toward developing new uses for renewable agriculture products. The 1992 USDA Yearbook summarizes this heightened sense of opportunity for the future of agriculture.

"The demand for [utilization] research has rarely been greater and has never come from so many directions. New crops and new uses for old ones hold out promise to restore the balance of trade, reduce our dependence on imports...and make us more competitive in agriculture exports."

"Finding new ways to tap the abundance of our natural resources will benefit not only

⁹ State of the World 1996, Worldwatch Institute, 1996

agriculture but consumers and society as a whole. Developing industrial possibilities for agricultural commodities could open up new domestic markets for American farm products, generate new jobs, and ensure greater prosperity in rural communities."

The oil crisis of the '70's refocused research on organic substitutes for industrial products and materials such as oils, plastics, lubricants, adhesives, inks, coatings, cosmetics, and many others. Environmental quality concerns have further motivated efforts to produce organic fuels, biodegradable substitutes for petroleum products, and recyclable materials that will conserve natural resources. The move to find renewable sources from agricultural products appears to be driving renewed commitment in agriculture research.

Lynn Jelinski, Director of the New York State Center for Advance Technology at Cornell University, describes the current capacity for sweeping changes from new research in bio-engineering¹⁰.

"Now the tools of bio-technology make it possible to produce designer materials. We envision an era when bacteria and plants, rather than oil wells and petroleum refineries will produce high performance, bio-inspired materials."

3. Local Opportunities

The outlook for a vital and viable agriculture industry in Tompkins County is favorable if there is a will among County leaders to organize and coordinate its resources and participants.

Opportunities exist within the existing framework of Tompkins County agriculture. Entrepreneurial approaches to farming are becoming more evident as the "business" of farming takes on more importance than in earlier decades. Specialized farming, direct-to-consumer marketing, food processing, access to more distant markets, organic food production, and value-added processes are examples of the areas that now go beyond traditional farming activities. To successfully capitalize on this motivation will take coordination of many existing resources and development of supportive public policies.

Initiatives worth pursuing are the building of partnerships, exploration of new marketing efforts, development of added-value processes, collaboration with resources at Cornell University, and adaptation of successful models.

New programs and organizations have been formed in recent years that provide various support for agriculture through education, development, and collaboration. Some examples include:

Farming Alternatives Program
Cornell Local Government Program
Agriculture Business Retention and Expansion Program
Sustainable Agriculture Initiatives
Food Venture Center
COTABA

¹⁰ Cornell Chronicle Vol. 27, #6 Jan. 18, 1996

PART VIII. POLICIES and PROGRAMS THAT SUPPORT TOMPKINS COUNTY AGRICULTURE

1. POLICY

New York State Agricultural Districts Law

This State Law recognizes that agricultural lands are an important and irreplaceable natural resource, that they are being lost due to development, high costs of doing business, and regulatory restraints, and that certain actions can be taken to retain lands in agriculture. The Law does not seek to preserve farmlands, but to create an economic and regulatory climate which will encourage farmers to continue farming. A number of benefits and protections are outlined below.

Agricultural Assessment is designed to protect farmers from excessive property taxation by valuing farmland on the basis of its agricultural capacity. It is helpful where market assessments on farmlands exceed agricultural assessments. This law also provides the same benefits to qualifying farmlands outside a District on which farmland owners make individual commitments.

Limitations on Local Regulation are provided where local ordinances or laws would unreasonably restrict or regulate farming practices or enhancements. This protection is a response to the increasing number of non-farm residents who urge new zoning and regulatory practices in traditional farming areas. Reviews of local laws or ordinances may be independently initiated by the Commissioner of Agriculture and Markets or proceed upon the complaint of a District land owner.

Requirements of Notice on Public Actions requires filing a notice of intent by any state agency, public benefit corporation or local government which intends to acquire certain farmland within a district, or intends to supply public funding for development or infrastructure facilities for non-farm benefit. The purpose is to assure an evaluation of potential effects on farms and farming resources. Sponsors of such projects must provide essential information to justify a proposed project and to explore alternatives.

Limitation on Local Benefit Assessments are provided to protect farmlands from excessive costs for local improvements such as water and sewer that are calculated on the basis of property values, road frontage or land areas. This protective benefit is of considerable importance for traditional farming operations that use large tracts of land and multiple structures that have relatively little benefit from the improvements.

Directs State Agencies to administer their policies, programs and regulations in a manner that can affect farming viability. This Law directs all state agencies to encourage maintenance of viable farming in agricultural districts by modifying their regulations and procedures (standards for public health and safety notwithstanding) to facilitate the retention of farmland.

Tompkins County Agriculture Districts

Local guidance for supportive measures in the County's two Agriculture Districts is provided by the Tompkins County Agriculture and Farmland Protection Board. The Agriculture Districts serve some 340 farm enterprises and include 83,400 acres of agricultural land and 76,100 acres of rural residential land.

Town of Ithaca Comprehensive Plan - A Progressive Model.

In 1992, Town of Ithaca published Planning For Agriculture in the Town of Ithaca (Appendix B-2). A report of the Agriculture Committee of the Town of Ithaca Conservation Advisory Council, recommended measures to protect Agriculture in the Town of Ithaca. These have been incorporated in the Town of Ithaca Comprehensive Plan (Appendix B-3), adopted September 1993. It is the best attempt among the Towns of Tompkins County to address the need for protecting farmland. County farmers oppose the zoning of agricultural lands as a mechanism to retain open space if it diminishes their right to sell their land as opportunities develop. However, a proposal being prepared by the Planning Department of the town for Purchase of Development Rights could compensate farmers for any potential reductions in market values that could occur as a result of land being zoned for primarily agriculture and agriculture related uses.

2. AGENCY PROGRAMS SUPPORTING AGRICULTURE IN TOMPKINS COUNTY

Cornell Cooperative Extension

As a New York State function of the Land Grant University system, it plays a major supportive role in agricultural education and research. Many farmers make use of services and programs provided by the Tompkins County Association and the technical expertise of faculty at Cornell University.

The Agriculture Programs of Cornell Cooperative Extension of Tompkins County are aimed at improving the sustainability of the agriculture and food systems. Educational programs address the following areas:

- Improving Dairy Production Efficiency and Managing Costs
- Improving Field Crop Production and Nutrient Management Practices, Integrated Pest Management (IPM)
- Farm Business and Human Resource Management, Estate Planning
- Livestock Production and Marketing
- Ornamental Horticulture Industry Competitiveness
- Fruit and Vegetable Crop Production and Marketing
- Rural Land Management for Stewardship and Economic Return
- Agriculture Environmental Protection Practices
- Agricultural Policies and Public Relations
- Agriculture Business and Market Development

The goals of Cooperative Extension agriculture program are to increase the profitability and competitiveness of individual farm business, preserve and enhance the environment through sound production practices, and to strengthen the County's agricultural sector by helping farm business expand and diversify.

Extension programs are reflective of and responsive to the changing needs of the agriculture industry by involving farmers in determining priorities for educational programs.

Farm Bureau

The Tompkins County Farm Bureau serves at the local level to report on conditions in farming

and advocate to state and national policymakers for legislation that supports farming. It provides information to farmers and the general public, and provides programs to improve marketing, obtain forecasts of supply and demand, to ease regulations, obtain fair pricing, to obtain credit, and reduce taxes on agricultural operations.

Farm Service Agency (USDA)

The Tompkins-Schuyler FSA is the lead agency for the 7 year Market Transition Program, and, in conjunction with the Commodity Credit Corp. (CCC) administers the local aspects of the Dairy Support program, Dairy Refund Program, Crop Insurance Program, and the Disaster Emergency Loan Program. This agency also provides low cost loans to first time farmers. In cooperation with the Natural Resources Conservation Service (see below), FSA administers the Conservation Reserve Program and the program formerly called Agricultural Conservation Program (ACP), now being phased into the Environmental Quality Incentives Program (EQIP). In addition, the FSA assists the NYS DEC in distributing the Stewardship Incentives Forestry Program. This agency also provides Emergency Conservation Funding after natural disasters, and assists in conducting agricultural referenda, such as the current Sheep Referendum being conducted by the Agricultural Marketing Service.

Natural Resources Conservation Service (USDA), (Formerly the Soil Conservation Service)

The NRCS provides technical assistance for the engineering and design phases of the ACP/EQIP programs, as well as cost-shared assistance in barnyard improvements such as milkhouse waste disposal, farm drainage management, barnyard improvements, and manure management structures. The NRCS, working with the FSA, also administers and provides technical assistance for the Wetlands Reserve Program and the Conservation Reserve Program. Working in cooperation with the SWCD, the NRCS assists with the installation of grazing systems under the GRAZE NY project. Another valuable program administered by the NRCS is the Emergency Watershed Protection Program. This provides both cost sharing and technical assistance after natural disasters that threaten life, property or water quality in the small watersheds of our county. The NRCS also provides engineering and technical support for the Soil and Water Conservation Districts for the design and implementation of Best Management Practices (BMPs) in farms in Tompkins County.

Tompkins County Soil & Water Conservation District (SWCD)

The SWCD, working in concert with the NRCS, provides farmers of Tompkins County technical (and in many cases, cost sharing) assistance in installing and maintaining the Best Management Practices on Tompkins County's agricultural lands. The District also provides technical assistance in the design and maintenance of farm ponds for irrigation and stock watering. Through administration of the GRAZE NY program, the District provides technical support and cost sharing for the implementation of grazing systems on the farms in Tompkins County. The District provides soils information to farmers, and can make recommendations on nutrient management and whole farm planning. The resources of the District are also available for technical support and design assistance on streambank erosion, as well as support and advise on remedial watershed management. An important service provided by the District is the production of the Soils Group Work Sheets necessary for farmers to obtain Agricultural Value Assessments on active farmland.

PART IX. OPTIONS TO STRENGTHEN TOMPKINS COUNTY AGRICULTURE

Underlying this study is a consensus that economically viable agriculture provides a natural means for preserving farmland, and that supportive public policies are necessary to assure agriculture's continued contributions to the economy and quality of life in the County.

Need for Broad-based Understanding

1. **Recognize that the opportunities to establish a sustainable agriculture sector in the County are affected** by the agricultural capability of the land, the cost of establishing an agricultural business or farm, the availability of markets, and increasing urbanization of the County. Viable agriculture reflects both a basic and evolving industry. It will not survive stasis.
2. **Recognize that the success of economically viable agriculture in Tompkins County is dependent upon education -- which produces mutual in-depth understanding between farmers, government and non-farm population.**

Farmers should understand and accept that government and the public have a legitimate and important interest in rural land and environmental concerns.

Non-farm population needs to learn and understand that the benefits and contributions of an active agriculture industry is in the best interests of the County population, that the amenities associated with "country" comes at a price, and that farmers must make a living from the land they farm.

Government at all levels has an essential leadership role in terms of taxation, regulation, land use, and economic incentives.

OPTIONS for consideration as RECOMMENDATIONS

These options present goals, objectives, and strategies to be developed in Phase II of the Protection Plan. Phase II will refine these and other ideas into specific recommendations in a Plan offering viable strategies and an implementation plan.

These options propose a range of measures intended to:

- strengthen the viability of agriculture.
- protect important farmlands, which offer productive capacity for future food production.
- maintain agriculture's many contributions to the County.

They are grouped under three headings:

1. **Education**
2. **Land Use Planning and Taxation Policies**
3. **Agricultural Economic Development**

1. **EDUCATION GOAL:** To have a high level of awareness and knowledge about economic and societal values of agriculture by community decision-makers, farmers, and the non-farm population.

General Public

Promote general understanding and emphasize the economic, employment, food, and land management contributions of local agriculture. Communicate positive aspects of normal practices of farming, such as; recycling nutrients, rural land management, wildlife diversity, livestock care, etc.

Publish and promote information about the role of agriculture through a variety of communication methods.

Inform residents, institutions, and the business community about economic advantages of buying locally produced food and other agricultural products.

Hold community forums.

Youth and Young Adult Education

Educate children through schooling about the importance of local farming, its relation to local food supply, land management, and environment, and opportunities for agriculture careers.

Conduct farm tours, and visits to food processing and distribution operations.

Show children how food is grown.

Educate older youth about economic and environmental contributions of farming.

Integrate agriculture with classroom studies: social studies, natural sciences, reading, etc. ("Ag in the Classroom").

Support the Cayuga Nature Center's proposed demonstration farm.

Encourage the development of farming careers through training, internships, apprenticeships and career counseling at high school and college levels.

Farmers

Stimulate farmers' involvement in agricultural education and leadership.

Be better informed as spokespersons about the contributions of their industry.

Learn how farmers are perceived by decision-makers and non-farm residents.

Be informed about public issues that affect their industry, the public policy decision-making processes, and how community policies are formulated at the local level.

Be informed about farmland retention programs.

Be informed about benefits of Agriculture Districts.

Participate in public education and school education programs that promote understanding of farming.

Expand knowledge about opportunities for diversification, expansion, new markets, and specialized production. Expand knowledge of advanced business and farm management techniques.

Local government

Have discussions with elected county and town officials and other community leaders be informed about the benefits of agriculture and the negative effects of traditional land use planning.

Encourage policies that protect and support the economic value of viable farm areas.

2. **GOVERNMENT POLICIES** **GOAL:** To have a supportive climate for continuation of farming through public policies and actions on land use, regulation and taxation that minimize disincentives for farming. Effective response and action is needed from various levels of government.

County

Establish a county-wide process to evaluate farming interests when competing land uses are involved.

Designate areas in active agricultural use that merit protection from non-agricultural development.

Agriculture & Farmland Protection Board should participate actively in County policy discussions and decisions on topics affecting agriculture and land use.

Explore the development of a county-wide program for farmland retention, including Purchase of Agricultural Conservation Easements (PACE), also known as Purchase of Development Rights (PDR).

Establish an equitable assessment policy (1) that assesses agricultural lands at "current value for agricultural production" rather than on basis of "most likely future use"; and (2) on buildings and other improvements used in agricultural production.

Towns and Villages

Assess impacts on farming from land use regulations.

Plan the siting of residential, commercial, industrial and development and expanded public infrastructure in ways that diminish negative impacts on the most viable agricultural lands.

Extensions of public water and sewer service should avoid negative impacts on actively farmed

agricultural lands.

Encourage innovative planning concepts, such as cluster housing, to retain rural open space.

Adopt "Right-to-Farm" legislation that reaches beyond the protection of Agriculture Districts.

Adhere to the provisions of Agriculture District Law.

Reduce special district assessments that do not benefit agricultural land and other open space.

Seek farmer involvement on boards and committees.

State

Advocate for State policies that are supportive of farming, including education funding, assessment and others.

General

Agriculture community should be included in watershed planning.

Avoid conflicting and overlapping regulatory policies at all levels of government. Including watershed rules and regulations, and local environmental policies.

Provide incentives or compensation when creating regulations or restrictions on farming or farmland use.

Assure protection of private property rights.

3. **AGRICULTURAL ECONOMIC DEVELOPMENT GOAL:** To strengthen the profitability of farm businesses through programs of education, business retention, and expansion, and the development of diverse agricultural enterprises.

Financial

Create a revolving loan fund to leverage conventional financing sources.

Seek county financial support of matching funds for grants that support the County's agriculture industry.

Include agriculture in County programs directed toward economic development. Provide County funds for economic development of agriculture with expansion financing, tax abatement, promotional efforts, and others.

Marketing

Promote benefits of purchasing locally grown food by individuals, businesses, and institutions from local agriculture producers.

Pursue opportunities for development of value-added processing enterprises.

Explore and develop regional collaboration in marketing, product development, training, and food processing opportunities.

New Product Development

Encourage research and development at Cornell University for new uses of agricultural products (such as substitutes for non-renewable natural resources). Jointly develop pilot projects with County farmers and Cornell.

Other

Develop an agricultural industry database to track performance toward goals. Identify ag related business entities, zoning and public infrastructure systems, ownership of farmed properties, land values, products and services, and market information. Include support agencies and program services, and other relevant data and information.

Conduct periodic study of the agriculture industry.

Hold ag economic conferences and workshops on Tompkins County Agriculture with economic development leaders, planners, municipal officials, Cornell Ag and Business School people, and area farmers and agri-business operators.

Promote interest in farming careers through training programs, internships and apprenticeships.

Establish a "new farmer entry program", matching experienced farmers with new and younger farmers, and establish a "farm brokerage" program to match available farms with farmers moving from other regions.

Advocate for:

- Consolidation and coordination of government requirements, procedures, and approvals.
- Reduced levels of electric rates
- Reduced levels of property taxes on agricultural lands
- Stronger emphasis at Dept. of Agriculture & Markets for market development for NY grown agriculture products.