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A Look at the Economic Impact of the Grape Industry in New York

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CORNELL
AGRICULTURAL ECONOMICS
STAFF PAPER

A LOOK AT THE ECONOMIC IMPACT
OF THE
GRAPE INDUSTRY IN NEW YORK

by

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No. 77-36

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BACKGROUND AND ACKNOWLEDGEMENTS

This material was prepared at the request of the New York State Grape Production Research Fund, Inc., and presented as testimony in the New York State Public Service Commission Hearing Case 80007 - Niagara Mohawk Power Corporation Article VIII - Lake Erie Generating Station.

Applicant (Niagara Mohawk) has requested a certificate of environmental compatibility and public need in order to construct a \$1.5 billion coal-fired electric generating station having two units, each with a power output of 850 megawatts on a site near Fredonia, New York, in the heart of the Chautauqua Grape Belt.

The New York State Grape Production Research Fund, Inc. petitioned to intervene in the Hearing on behalf of the grape industry to present testimony concerning; A) current impact of the grape industry on the economy of New York State, B) the risk of increased air pollution damage to New York vineyards as a result of the proposed facilities operation, C) the economic consequences of increased air pollution to the grape industry, and D) possible microclimatic effects of the proposed facility on nearby vineyards. The New York State Grape Production Research Fund, Inc. did not oppose siting of the facility, but urged that design, construction, and operation specifications be established that would ensure no adverse impact of the proposed facility on the Grape Industry.

The very substantial assistance of Stuart F. Smith, Department of Agricultural Economics, Cornell University in summarizing data for the "Chautauqua County Grape Farm Business Study - 1976", and his counsel are gratefully acknowledged.

A LOOK AT THE ECONOMIC IMPACT OF THE GRAPE INDUSTRY IN NEW YORK

Data are not available to calculate precisely the aggregate economic impact of the Grape Industry on New York State and its residents. This study is, therefore, an attempt to compile the available information from both published and unpublished sources so as to indicate the approximate magnitude of the economic impact of grape farming and first-level agribusiness activity. No attempt will be made here to analyze the impact of second or third-level business activity.^{1/}

First-level agribusiness is here defined as business that provides inputs to and/or purchase outputs from grape farmers. Second-level agribusiness is here defined as that which provides inputs to and/or purchases outputs from first-level agribusiness. Second-level activities include the trucking of farm supplies to local merchants, the suppliers of credit; insurance and other business services to farm equipment, supply and processing firms. The manufacture of equipment and supplies and the merchandising and distribution of grape products would here be considered third-level agribusiness activity.

Emphasis will be on three areas:

- A) Economic Impact of grape farm receipts
- B) Economic Impact of the Agribusiness firms supplying grape farm inputs
- C) Economic Impact of Processors and Wineries purchasing grape farm outputs

Grape growing in New York dates back to the early 1800's and New York is the second largest grape producing state in the United States. New York is world famous for its vineyards, grape products and viticulture.

During the 1970's, the annual harvested production (Table 1) from New York Vineyards has ranged from a high of approximately 200,000 tons in 1971 to a recorded low of 100,000 tons in 1972 (Hurricane Agnes). The average production has been mid-way between these extremes. With normal weather, production can be expected to increase significantly in the years ahead, due both to increased acreage and improved yields if additional limiting factors, such as increased damage from air pollution, can be avoided.

According to the December 1975 survey of commercial vineyards^{2/}, New York has over 42,000 acres of grapes located on 2,176 farms. This is a 16 percent increase in acres of grapes over 1970, and a 28 percent increase over the 1966 acreage. Grapes are the only commercially produced fruit crop in New York State that has been increasing in acreage and importance: All others have been declining.

Table 1.

Tons of New York State Grapes Harvested
for Processing and Wine
1970 - 1976

Variety	1970	1971	1972	1973	1974	1975	1976	1970-76 Average
Concord	97,974	152,787	80,101	95,659	130,356	105,448	123,277	112,229
Niagara	6,149	11,359	5,203	7,109	9,205	7,519	8,297	7,834
Catawba	7,129	10,325	4,486	7,132	12,243	10,447	10,046	8,830
Delaware	4,980	6,792	1,981	4,996	6,045	6,750	5,519	5,295
Elvira	2,151	2,301	1,180	1,612	1,725	1,998	1,672	1,806
Ives	1,867	2,133	959	1,086	1,627	1,593	1,177	1,492
Dutchess	187	426	171	267	618	822	581	439
Isabella	202	416	197	247	342	298	233	276
French Hybrids	5,324	7,908	5,452	6,812	10,316	13,105	12,843	8,823
Misc.	1,271	2,006	914	1,066	1,363	1,465	847	1,276
Total	127,234	196,452	100,644	125,986	173,840	149,445	164,492	148,299

Source: Annual Surveys of Wineries and Grape Processing Plants, New York, 1970-1976, New York State Crop Reporting Service, New York Department of Agriculture and Markets, Bureau of Statistics

Sixty percent of New York's vineyard acreage is located on 1,382 farms in the four county (Chautauqua, Cattaraugus, Erie, Niagara) Great Lakes Region. Within this region, over 20,000 acres are grown on 1,052 farms in Chautauqua County -- all within 25 miles of the proposed Lake Erie Generating Station site.

The narrow coastal zone of Chautauqua County, which New York's Commission on the Preservation of Agricultural Land has called "irreplaceable,"^{3/} contains almost 50 percent of the total New York vineyard acreage, as well as most of New York's unfermented grape products processing plants and several wineries. Fifty-three percent of New York's total grape crop was harvested from these vineyards in 1975, and over 60 percent in 1976.^{4/} These vineyards are located here, along the lee shore of Lake Erie, because of the moderating influence of this large body of water on the climate. They enjoy a history of the least frost damage of any major Concord grape producing area in the country. It is this climatic advantage, combined with the viticultural expertise of its producers, that has enabled this small area to attain and maintain its position as the single most important grape producing and processing district in the United States, outside of California.

This combination of natural and human resources cannot be duplicated elsewhere in New York.

New York's second largest grape producing region is the Finger Lakes district. This is located approximately 150 miles to the east of the Chautauqua district. It, too, is a climatically favored area, and is especially noted for the fine wines produced there. The majority of New York's major wineries are headquartered in the Finger Lakes district, but the district is normally unable to produce sufficient raw product to meet winery needs. So grapes from the Great Lakes region of New York are crucial to the operations of Finger Lakes wineries and processors. In 1975, this five county district contained 36 percent of New York's vineyard acreage and produced 33 percent of the total New York State grape crop.

There are also commercial vineyards in twenty additional New York counties. These are, for the most part, in counties bordering Lake Ontario or in the Hudson Valley. However, collectively these accounted for only four percent of New York's grape acreage and three percent of the total crop in 1975^{2/}

Economic Impact of Grape Farm Receipts

Gross annual farm income generated by New York Grape Production has ranged from 18.7 to 38.1 million dollars since 1970 (Table 3). It varies with size of crop and price per ton. Crop size is primarily a function of vineyard management and local or regional weather conditions during the current and preceding growing seasons. Price is also affected by local and regional conditions. But, since New York Processors and Wineries compete in national and international, as well as eastern U.S. markets, New York prices are affected by raw product supplies and economic conditions in grape producing and marketing areas far from New York State. Table 1 illustrates the annual crop variation for some major New York grape varieties; Table 2 the price variations, and Table 3 their effect on farm receipts for the period 1970 to 1976.

Table 2.

Average Grape Prices Paid to New York State Growers
by Wineries and Processing Plants, 1970 - 1976

Variety	1970	1971	1972	1973	1974	1975	1976
(Dollars Per Ton)							
Concord	156	139	170	211	189*	164**	141**
Niagara	179	178	187	198	229	196**	155**
Catawba	239	243	245	259	300	271**	222**
Delaware	245	254	259	294	360	330	243**
Elvira	173	172	172	172	210	199	159
Ives	370	370	370	370	400	397	346
Dutchess	305	305	305	335	430	424	375
Isabella	305	305	305	305	315	314	287
French hybrids	227	239	240	245	309	309	249
All Processing	170	159	185	212	219	199**	161**

* Revised
** Preliminary

Source: Survey of Wineries and Grape Processing Plants, New York, 1976, New York Crop Reporting Service, New York Department of Agriculture and Markets, Bureau of Statistics

Table 3.

Grape Crop Size, Average Price and Value of Grape Sales
To New York Producers: 1970 - 1976

Year	Total Crop Tons	Ave. Price All Varieties \$ per Ton	Farm Value of Grape Crop (Million \$)
1970	127,234	170	21.6
1971	196,453	159	31.2
1972	100,644	185	18.7
1973	125,986	212	26.7
1974	173,840	219	38.1
1975	149,445	199	29.7
1976	164,492	161	26.5
Total	1,038,093	- - -	192.5
Average	148,299 Tons	\$185	27.5

Source: Survey of Wineries and Grape Processing Plants, New York (Annual 1970-1976), New York State Crop Reporting Service, New York Department of Agriculture and Markets, Bureau of Statistics.

Total farm receipts from the New York Grape crop, computed from the New York Crop Reporting Service data, have averaged 27.5 million dollars per year during the past seven years. An indication of the impact of these dollars on economic conditions in the communities and counties surrounding important grape growing districts can be obtained by using data reported in two recent Cornell University, Agricultural Economics Department studies; "Finger Lakes Grape Farm Business Summary - 1976" by R. S. Smith^{2/}, and "Chautauqua County Grape Farm Business Summary - 1976" by T. D. Jordan and S. F. Smith^{6/}.

Studies were made of 28 grape farm businesses, 16 in Chautauqua County and 12 in the Finger Lakes district in early 1977. These farms ranged in size from 20 to 205 acres of vineyard. A few were operated by part-time farmers, but most were full-time, specialized grape operations. Total farm inventories (land, buildings, equipment, and supplies) averaged \$248,991 per farm or \$2,757 per acre of vineyard. The Chautauqua County farms averaged \$2,969 per acre of vineyard. However, even if the lower figure (28 farm group average) is applied to Chautauqua County's 20,000 acres, grape growers had slightly over \$55,000,000 invested in Chautauqua County on January 1, 1977. The investment for all New York State grape growers was nearly \$116,000,000.

These studies also permit an up-to-date estimate of how the 27.5 million dollar average annual farm income (Table 3) generated by New York's more than 42,000 vineyard acres is spent. The 28 farms reported real property taxes of just over \$3,200 per farm or \$35 per acre of vineyard. In Chautauqua County, it was \$41 per acre of vineyard. This suggests that Chautauqua County's vineyards support a real property tax load in excess of \$800,000, while all New York State vineyards support county, town, village and schools via real estate taxes to the extent of about \$1,470,000.

An estimate of vineyard investment and support of local government services and education can also be made from the appraised value of vineyards. For 1977, the New York State Board of Equalization and Assessment established vineyard values in the Great Lakes Region and Finger Lakes district as indicated in Table 4. Personal consultations with local assessors in Chautauqua County grape belt communities in 1975 and again in 1976 indicated that the assessed value of vineyards (vines and land) was approximately \$1,000 per acre. According to the New York State Board of Equalization and Assessment instructions, the value of the trellis should be added to the value of land and vines. This would put the value of Chautauqua County and New York State Vineyards (land, vines and trellis) at approximately \$30,000,000 and \$63,000,000 respectively. A 1975 study, "Economics of Grape Production," in the Great Lakes Region of New York, and a 1976 supplement to this study, found the real property tax load on the typical Chautauqua County vineyard was \$27 per acre in 1974 and had increased to \$29 per acre in 1975. Since these figures excluded special district (fire, water, sewer, light) and village taxes as well as taxes on farm buildings and land other than direct vineyard support land, it seems reasonable that the total tax load arrived at by this method would easily reach the \$35 and \$41 totals per acre of grapes reported for 1976 in the 1977 grape farm business studies.

Table 4.

Vineyard Agricultural Values as Established by New York State Board of Equalization and Assessment in the Great Lakes Region & Finger Lakes District Counties

Counties	Vineyards Yielding:		
	5 Tons & More Per Acre	More Than 4 & Less Than 5 Tons Per Acre	Less Than 4 Tons Per Acre
Land and Vine Values:	(Dollars Per Acre)		
Cattaraugus	1075	775	525
Chautauqua	1075	775	500
Erie	1125	825	525
Niagara	1100	775	525
Ontario, Seneca	1100	775	525
Steuben, Schuyler	1075	775	525
Yates	1175	850	575
Trellis Values:			
All counties	600	480	320

Source: Agricultural Value Factors for Computing Agricultural Assessment Ceilings, New York State Board of Equalization and Assessment, 1977; and letter, Harvey Haynes, County Director of Real Property Tax Services, Yates County, to S. C. Mendall, September 1977.

Grapes are a labor intensive crop and the 1977 Chautauqua County and Finger Lakes district grape farm business studies indicate New York's vineyards required in excess of 4,500,000 hours of labor to produce and harvest the 1976 crop. This included family labor, but did not include harvest labor on those farms where mechanical harvesting was done by a custom-harvest operator. Assuming forty hours per week and fifty weeks per year, this means full time employment for about 2,300 people in New York's vineyards. Actually, there is a substantially greater number of vineyard workers because much of the labor need is seasonal. This enables many local individuals and families to supplement other family income with part-time vineyard employment.

Hired labor on these farms averaged just over \$25,000 per farm. This is \$277 per acre of vineyard. If the labor expense for all of New York's 42,000 vineyard acres were at the same rate, the 1976 hired labor alone would have been in excess of \$11,000,000. In Chautauqua County, it would have been in excess of \$5,500,000. This projection may be high for hired labor because these were larger than average farms which of necessity may hire a higher percentage of their labor. On the other hand, many small part-time grape farms hire most of their labor.

A study of 1975 costs in New York's Great Lakes region reports a total of \$217 per acre in production labor for Concord vineyards with a conventional single-curtain training system.^{1/} Harvest labor cost was not included in this study, but, if added, would result in a total production and harvest labor cost of approximately the same magnitude as these 1977 studies report.

Grape farm families are also consumers and the dollars they spend must ultimately come from the farm business. A 1976 study of 124 Illinois farm families found that total family living costs average \$21,786 per family for such items as food, clothing, furniture, life insurance, recreation, education, medical expenses, etc.^{8/} Income and social security taxes were not included. The lowest spending third of the four-member families in that study averaged family living expenditures of \$12,644. If Chautauqua County's 20,000 acres of grapes were divided into 400 farms, each containing 50 acres of vineyard (a reasonable size for a full-time, single-family farm)^{1/} and each family credited with family living expenditures at only the rate of this low third, the total expended for consumer items would have been in excess of \$5,000,000 in 1976. In contrast, if the average family living costs from that study (\$21,786) is projected, the total consumer expenditures attributable to grape farm families was nearly \$9,000,000. On this same basis, the corresponding consumer expenditures attributable to all New York State grape farm families would have ranged from \$10,500,000 to \$18,300,000 in 1976.

It seems clear that Chautauqua County and New York farmer's investment in vineyards, the real property taxes paid and the labor requirements of these vineyards, whether met by family or hired labor, contribute substantially to the economy of nearby towns, villages and cities.

Economic Impact of Agribusiness Supplying Grape Farm Inputs

The numerous firms that provide farm supplies and services for New York's more than 2,100 grape growers are here considered "input" agribusiness. In vineyard districts, these agribusiness establishments are highly dependent on and part of, the grape industry. Data are not available to permit comprehensive, enumeration, but the 1977 Chautauqua and Finger Lakes grape farm business studies here too provide some insight to the impact of this segment of the grape industry on the economy.

The 28 farms in these studies averaged \$3,906 per farm, or \$43 per acre, in machinery parts, repair and small tools expenditures. This means that equipment, supply and repair establishments received over \$1,800,000 for their role in maintaining the farm machinery on New York grape farms in 1976. Although an anticipated depressed grape market in 1976 caused most growers to limit new machinery purchases to the bare essentials, the 1977 studies still report \$4,468 per farm or \$49 per acre of grapes invested in new machinery. This calculates to slightly more than \$2,000,000 bringing the total for these two categories of machinery expense in New York State to over \$3,800,000 in 1976. Combining the "machinery repair" and "new machinery" items for Chautauqua County alone indicates that local farm equipment, supply, repair and sales firms did nearly \$2,000,000 worth of business with grape growers in 1976.

Other agribusiness firms supply such production and maintenance items as fertilizer, trellis supplies, pesticides, hardware, building materials, gasoline, oil, business insurance, accounting and consulting services, etc. In 1976, the 28 grape farms that participated in the 1977 studies spent an average of \$15,109 per farm or \$166 per acre on these farm business inputs. For New York's 42,000 acres, this amounts to nearly \$7,000,000; and in Chautauqua County's concentrated grape belt, \$3,332,000. These agribusiness firms also purchase equipment and supplies, pay taxes and hire employees who in turn spend their earnings on consumption goods and taxes.

There are additional grape farm cash expenditures of interest revealed by the 1977 studies: Grape farm business expenditures for utilities - primarily electric and telephone, averaged \$630 per farm. Since Chautauqua County has over 1,000 grape farms in the lake plain area, this suggests that local utility companies receive well over a half million dollars in annual revenue from grape farm businesses, in addition to what grape growers spend for utilities for family living.

Another item is cash interest paid. These 28 grape farms averaged \$5,347 in interest payments per farm. This is \$59 per acre of grapes, or approximately 2.5 million dollars in New York State. In Chautauqua County alone it appears that in 1976, farm lenders received approximately one million dollars in interest income from grape producers. Assuming an interest rate of 10 percent, for ease of calculations, this suggests that Chautauqua County grape growers generate approximately 10 million dollars annually in short and long term loan business for local farm lenders. The comparable New York State figure would be 25 million dollars.

Since the advent of mechanical harvesting, "machine hire" has become an important grape farm cost and generates substantial income for custom-harvest operators as well as local equipment dealers and machine manufacturers. This cost averaged \$48 per acre for the 28 farms studied. This is less than half the per acre "machine hire" cost incurred on the average New York grape farm, because several of the study farms had mechanical harvesters of their own. However, at only the \$48 per acre rate the machine hire cost for New York vineyards in 1976 would have been \$2,016,000. In Chautauqua County payments to local custom machine-work operators would have exceeded \$1,000,000 even when calculated at this low rate.

Totaling the available information on grape grower purchases of supplies, equipment, and services leads to the conclusion that in 1976 more than 16.5

million dollars was received by the most obvious of the New York State first-level input agribusiness firms. In Chautauqua County, this conservative computation puts the total at just under eight million dollars.

A 1974 publication by Cole & Conklin, Department of Agricultural Economics, Cornell University, reports on a 1972 research study of agribusiness firms in four Western New York counties.^{1/} They identified 930 businesses supplying farm inputs and services to, and 138 firms purchasing significant quantities of produce from, farmers in those four counties. The data collected from the agribusiness firms in the study area were used to compute employment and capital investment ratios per \$1,000 of direct transactions with farmers. They reported that "on the average, first level agribusinesses that sell supplies to farmers employ .0158 man years per \$1,000 of business with farmers and have \$540 of capital investment per \$1,000 of this business". The affects of the four years of inflation, since 1972, on these ratios is unknown. However, applying these ratios to the supplies, equipment and service dollars that grape growers spent in 1976 suggests that first-level input agribusiness firms in New York State employ 260 people and have a capital investment of \$8,900,000 directly attributable to their business with grape farmers. In Chautauqua County, the corresponding figures would be 125 employees and a capital investment of over \$4,250,000.

Clearly, in areas of vineyard concentration such as the Chautauqua belt and the Finger Lakes district, "input" agribusiness makes a significant contribution to the local, regional and state economies through investment, employment and real property taxes. In addition, they generate significant second and third level business activity through their dealings with wholesalers and manufacturers.

Economic Impact of Processors and Wineries Purchasing Grape Farm Outputs

A limited quantity of New York's annual grape crop is sold by growers to the ultimate consumer as fresh fruit, but most of the crop is sold to processors and wineries. The quantity sold on the fresh market, whether for immediate consumption as fresh fruit, or for home canning and wine making, is increasing and it, of course, adds to the value of the New York Grape Industry. However, it is not included here.

The major portion of New York's annual production for processing is purchased and processed in New York State by New York State firms. However, some moves interstate as raw product to out of state processors. The quantity and first utilization of grapes by New York State processors is documented each year by the New York State Crop Reporting Service, a division of the New York State Department of Agriculture and Markets.^{4/} Its 1976 "Survey of Wineries and Grape Processing Plants" indicated there were 28 firms processing grapes in New York State. These firms collectively processed 145,195 tons of grapes, more than 85 percent of the New York crop processed. The remainder was processed outside of New York State. Utilization, based on first use, was reported as 48,132 tons (33 percent) for sweet juice; 86,518 tons (60 percent) for wine; and 10,545 tons (7 percent) for other products such as jelly and preserves. Table 5 reports the tons used for each purpose for the period 1970 through 1976. Several trends are apparent. An increasing percent of the total has been utilized for "wine" and "other". The percent used by New York wineries has increased from 40 percent in 1971 to 60 percent in 1976. New York's grape industry growth during this period has been primarily in the wine segment and even though the quantity of "other varieties" used in New York wines has increased, the use of Concord has

also increased in both absolute and relative terms. The increasing use of Concords by New York wineries is especially important to Chautauqua County growers because their vineyards are predominately of the Concord variety.

Table 5

Primary Utilization of Grapes in New York, 1970 - 1976

Crop Year & Varieties	Sweet Juice		Wine		Other		Tons all Varieties
	Percent of		Percent of		Percent of		
	Tons	Total	Tons	Total	Tons	Total	
1970							
Concords	75,229	54	27,592	20	2,916	2	
Other varieties	2,897	2	30,624	22	6	-	
Total	78,126	56	58,216	42	2,922	2	139,264
1971							
Concords	94,730	54	31,782	18	2,622	2	
Other varieties	7,320	4	38,915	22	- - -	-	
Total	102,050	58	70,697	40	2,622	2	175,369
1972							
Concords	51,971	52	24,337	24	2,028	2	
Other varieties	3,227	3	18,763	19	- - -	-	
Total	55,198	55	43,100	43	2,028	2	100,326
1973							
Concords	41,850	34	38,758	32	9,545	8	
Other varieties	3,026	3	28,413	23	- - -	-	
Total	44,876	37	67,171	55	9,545	8	121,592
1974							
Concords	60,008	35	56,155	33	5,773	4	
Other varieties	2,915	2	44,597	26	- - -	-	
Total	62,923	37	100,752	59	5,773	4	169,448
1975							
Concords	47,537	34	39,539	28	7,285	5	
Other varieties	4,708	3	41,753	30	86	-	
Total	52,245	37	81,282	58	7,371	5	140,898
1976							
Concords	47,075	32	45,310	32	10,545	7	
Other varieties	1,057	1	41,208	28	- - -	-	
Total	48,132	33	86,518	60	10,545	7	145,195

Source: Survey of Wineries and Grape Processing Plants, New York, (Annual 1970-1976), New York State Crop Reporting Service, New York Department of Agriculture and Markets, Bureau of Statistics.

Data regarding the Economic Impact of the output purchaser segment of the New York Grape Industry based on 12 New York firms is presented in Table 6. These 12 firms reported raw product acquisition of 125,149 tons or 76 percent of the total New York grape crop in 1976. The seven New York wineries, which provided data utilized 71 percent of the grapes sold to wineries while the five processors purchased 78 percent of the grapes sold to unfermented products firms. The reported farm value of raw product purchases by these 12 firms totaled \$24,425,610. If the remaining 24 percent of the reported New York grape crop is valued at the same rate, the total farm value of the 1976 crop to New York grape growers exceeded \$32,000,000. This is significantly (\$5,500,000) higher than the amount computed in Table 3 from the New York Crop Reporting Services' annual tonnage and average price data. It is reasonable to conclude that for 1976, at least, Table 3 significantly understates the farm value of New York grape production sold to processors and wineries because of the preliminary nature of the data.

Table 6

Report of 12 New York Processors & Wineries for 1976

Item	Processors*	Wineries**	Total
Tons of N.Y. grapes processed	66,562	58,587	125,149
Tons of grapes processed in N.Y.	45,656	61,536	107,192
Percent of total N.Y. crop processed***	40	36	76
Percent of N.Y. primary utilization for juice & other unfermented product***	78	--	78
Percent of N.Y. primary utilization for wine***	--	71	71
Farm value of grapes processed	\$11,897,400	\$ 12,528,210	\$ 24,425,610
Market value of inventories	\$ 3,949,718	\$145,975,893	\$149,925,611
Gross sales (excluding out of state operations of multi-state firms)	\$66,939,365	\$125,921,679	\$192,861,044
Employees - full time	1,032	1,339	2,371
casual	50	360	410
Total			2,781
N.Y. salaries & wages paid	\$ 8,918,937	\$ 13,904,929	\$ 22,823,866
Excise taxes on gross sales	-- -- --	\$ 17,225,211	\$ 17,225,211

* Summary of August 1977 data from five New York State grape juice processors who submitted 1976 operations information to R. Saville, Treasurer, New York State Grape Production Research Fund, Inc.

** Data from 1976 Annual Report of the seven member Finger Lakes Wine Growers Association

*** Survey of Wineries and Grape Processing Plants, New York, 1976 by the New York Crop Reporting Service, New York Department of Agriculture and Markets Bureau of Statistics.

The 12 firms also reported inventories with a market value of nearly \$150,000,000 and gross sales in excess of \$192,000,000. If total New York winery and processing sales are projected at the same rate for the remaining 24 percent of the crop, the gross grape product sales by New York State firms in 1976 exceeded \$250,000,000. The winery segment of the industry holds most of the reported inventory, because fine wines generally are held for aging, some for several years. In addition, New York wineries have been experiencing severe price competition from California and foreign wineries which in 1976 slowed the movement of New York wines out of inventory. In contrast, processors of unfermented grape products tend to sell a high percentage of their annual production within a year, planning to carry only enough inventory to smooth out annual fluctuations in the size of New York's grape crop and meet projected sales growth.

The 12 firms reported a total of 2,781 employees with salaries and wages of \$22,823,866 in 1976. If these employment and wage rates are projected to the remainder of the New York crop, it appears that more than 3,600 people were employed by New York wineries and processors in 1976 and that they received salaries and wages in excess of \$30,000,000.

The available data, though limited to New York firms, indicates that "output purchasers" of the annual New York Grape crop make a substantial contribution to the local economy. No doubt their farm output purchase, employment and real property investment dollars have the greatest impact in the local communities and regions where the grape industry is concentrated. But, these firms undoubtedly make an even greater contribution to the state and national economy as generators of second and third-level business activity with, for example, trucking, manufacturing (glass, can, box, label, equipment), supply, advertising and distribution firms. No attempt is made to compile this here, but it is of interest to note that the seven members of the Finger Lakes Wine Growers Association report Federal and State excise tax payments for 1976 to be in excess of 17 million dollars.^{2/}

SUMMARY AND CONCLUSIONS

The available data, imperfect though it and these projections may be, indicates that the Grape Industry makes a significant economic impact on the State of New York, especially in the rural districts and communities where commercial grape production, processing and wine making are concentrated.

Chautauqua County and New York State grape growers, at the beginning of 1977, had approximately 55 million dollars and 116 million dollars respectively invested in vineyards, buildings, equipment and supplies. This investment generated farm income that averaged at least 27.5 million dollars annually during the period 1970-1976.

In 1976, this grape farm income was used to pay real property taxes of nearly 1.5 million dollars in New York State including almost one million dollars in Chautauqua County. It was also used to employ substantial vineyard labor. Combining family labor and hired labor, and using a 2,000 hour work year, New York's 42,000 acres of vineyard provide the equivalent of approximately 2,300 full time jobs, nearly 1,100 of these in Chautauqua County. These jobs, whether filled by family members or non-family employees are believed to generate at least 30 million dollars in consumer spending, nearly half of this in Chautauqua County.

Based on a 1972 study, it appears that first-level agribusinesses supplying New York grape growers with production inputs have a capital investment of nearly nine million dollars and employ 260 people as a direct result of their business with grape growers. The comparable figures for Chautauqua County are 4.25 million dollars investment and 125 employees. In 1976, these firms sold 16.5 million dollars worth of supplies, equipment, and services to New York grape growers including nearly eight million dollars worth to Chautauqua County growers.

Twelve New York processors and wineries reported purchasing 76 percent of New York's 1976 grape farm output for 24.4 million dollars. At this rate, the farm value of the total reported 1976 crop exceeded 32 million dollars. According to the available data and projections, New York processors and wineries employed more than 3,600 people, paid wages and salaries in excess of 30 million dollars, and had gross grape product sales of over 250 million dollars in 1976.

It is apparent that Chautauqua County vineyards are important to the New York State grape industry. It is also apparent that this Industry (grape farms, input agribusinesses, processors and wineries) has a very large investment, and generates significant employment, family consumption purchases, and second and third-level business activity. Much of the Industries investment is in real property, so it contributes substantially to the support of local governments and schools in regions where grape production, processing and wine making are concentrated.

It seems clear that the economic impact of this Industry is of sufficient magnitude, especially in the Chautauqua and Finger Lakes districts, that great care should be exercised to insure that no avoidable new limitations or handicaps are imposed which might further reduce the competitiveness of the industry and lessen its contribution to the economy.

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