

June 1954

A.E. 952

Location of Agricultural Production in New York State

by S. W. Warren and W. McD. Herr

Cornell University Agricultural Experiment Station
Department of Agricultural Economics
New York State College of Agriculture
Cornell University, Ithaca, New York

LOCATION OF AGRICULTURAL PRODUCTION IN NEW YORK STATE

Table of Contents

	<u>Page</u>
Introduction	1
Land Use in New York State	1
New York's Farmers	3
Methods and Sources of Data for Deriving Type of Farming Areas.	4
Generalized Type of Farming Areas.	6
Receipts and Expenses by Type of Farming Areas	8
Location of Individual Crops and Livestock	10
Changes in Types of Farming.	14
Summary.	18
List of Figures.	20

Acknowledgements

The authors wish to express their appreciation for the dot maps
contributed by Professors M. C. Bond and L. C. Cunningham.

LOCATION OF AGRICULTURAL PRODUCTION IN NEW YORK STATE

Introduction

The purpose of this bulletin is to summarize the location of agricultural production in New York. The combination of enterprises characteristic of areas will be indicated by designating the type of farming in each township of the state. Generalized type of farming areas will then be derived for the state. In order to reveal in more specific terms what is included in the classification, dot maps for major enterprises will also be presented.

A second objective is to indicate changes in type of farming since 1934 for geographic regions. Changes in types of farming will be indicated by presenting data which show the change in the distribution of the total labor requirement between 1934 and 1949.

Land Use in New York State

The total land area of New York State is about thirty and a half million acres. Of this, 16 million acres, or 52 percent, was in farms in 1950. Of the land in farms, approximately 35 percent was classed as harvested cropland, while 30 percent was in pasture, 20 percent in woodland and 15 percent in idle cropland and other land, including farmsteads, roads and wasteland. This distribution of use of land in farms for 1949 is shown in Table I. In addition, the use of the harvested cropland acreage is also given. To obtain some idea of the variation between counties in uses of cropland, the percent of harvested

cropland in roughage, grain, and in fruit and vegetables was computed for counties of the state and indicated in Figures 1, 2 and 3 respectively. The significance of these maps will be more apparent as types of farming in New York are discussed in more detail. In general, where soils are of low productivity, or topography is rough, a high proportion of the cropland is in roughage. Most of the roughage is marketed through dairy cattle. Highly productive soils and more favorable topography are

TABLE I. USE OF LAND IN FARMS, NEW YORK STATE, 1949*

Land Use	Acres (Thousands of acres)	Percent of total land in farms	Percent of total har- vested cropland
Land in farms	16,017	100	
Woodland	3,472	22	
Pasture	4,705	29	
Other land (farmsteads, roads, wasteland, etc.)	934	6	
Idle cropland	1,114	7	
Cropland harvested	5,792	36	100
Acres of roughage	3,656		63
All hay	3,196		55
Corn for silage and fodder	460		8
Acres of grain	1,409		24
Corn for grain	163		3
Wheat	385		7
Oats	616		10
Other grains	245		4
Acres of fruits and vegetables	727		13
Annual legumes (dry beans)	177		3
Potatoes	112		2
Other vegetables	207		4
Fruit	226		4
Other crops	5		#

* Data from the 1950 Census of Agriculture

Less than .5 percent

found in extensive areas of Western New York and in localized areas of the Hudson Valley and Southeastern New York. In these areas grain and vegetables are adapted. Depending on climatic factors, large areas of fruit may or may not be found.

New York's Farmers

The agricultural production of the state is concentrated largely in the hands of a few farmers. This concentration of agricultural production is primarily due to the large size of business and efficient operations maintained by relatively few farmers. Thirteen percent of all farms in the state produced half of the total gross output, Table II. The remaining fifty percent of gross output from agriculture was produced by eighty-seven percent of the farms in the state.

TABLE II. SUMMARY OF NEW YORK FARMS IN 1949
According to Their Economic Classification*

Value of farm products sold in 1949	Number of farms (thousands)	Percent of all farms	Total value of farm products sold (millions)	Percent of all farm products sold	Average value of farm pro- ducts sold per farm
\$10000 and over	16	13	\$322	50	\$19674
\$1200 to \$9999	65	52	301	47	4674
Less than \$1200	<u>44</u>	<u>35</u>	<u>20</u>	<u>3</u>	<u>385</u>
Total or Average	125	100	\$643	100	\$ 5147

* Data from the 1950 Census of Agriculture

Eighty-one thousand farmers sold 97 percent of all the farm products in 1949. Almost all of these could be seated in the Yankee Stadium at one time.

It is noted that over one-third of the farms in the state produce a negligible portion (under 3 percent) of the total gross output. About half of these low production farms are classified as residential and the other half are made up of both full-time and part-time operations.

Methods and Sources of Data for Deriving Type of Farming Areas

Data from a special compilation of the 1950 Census of Agriculture were the basic data used in this report.^{1/} The special compilation included acres of all important crops and number of head of major classes of livestock by townships. Using these data and standard work units (average labor requirements), total work units on each enterprise were calculated for each township in the state. A further calculation of the proportion of work required on each of six major enterprises was used as a basis of typing each township. Townships were typed according to the following criteria:

Specialized types - major enterprise 50 percent or more of total work units, no secondary enterprise as large as 30 percent the size of the major enterprise.

Major-Minor combinations - secondary enterprise between 30 and 65 percent as large as the major enterprise.

Equal combination types - secondary enterprise at least 65 percent of the size of the major enterprise.

^{1/} Bond, M. C., "Township data from the 1950 Census of Agriculture" mimeo

Diversified type - major enterprise less than 50 percent of the total work units and no secondary enterprise as large as 30 percent of the major enterprise.

A classification of townships based on these criteria is shown in Figure 4. Townships with less than one-half of a work unit per acre of total land area are designated as rural non-farm areas. Townships in the Adirondack and Catskill Park areas were not typed except for those having more than one-half of a work unit per acre of total land area.

Enterprises are named in order of importance. Minor enterprises are designated in lower case letters, while major enterprises and "equal size" enterprises are designated in capital letters. Any number of enterprises were allowed in the type name as long as the enterprises were over 30 percent of the size of the major enterprise. In this way, it was possible to specify three kinds of combinations: major-minor combinations, equal combinations, and equal combinations with minor enterprises. A maximum of six enterprises could be included in any of the above combinations, but most combinations were of the major-minor variety and included only two enterprises.

After this categorical classification was made of each township, a cartographic generalization was made in order to derive a generalized type of farming map for the state. Boundaries for these areas were designed to follow recognized soil lines, topographic features, or meaningful economic boundaries.

Generalized Type of Farming Areas

The generalized type of farming map is shown in Figure 5, while the proportion of work required on each of six enterprises in each area is shown in Table III. Inspection of the table shows that significant differences occur between groups of type areas. While some variability exists within any one group of areas, the consistency in the proportion of work required on each enterprise is striking. For the fruit-dairy combination areas, only Area 8 shows a tendency to have a rather high proportion of inputs on dairy and a smaller proportion on fruits than do the other areas. This reflects, in part, a trend away from fruit which has been occurring in this area for the past decade or so. Area 4 and particularly Area 1 tend to have a relatively high proportion of the total work units on vegetables.

Of the vegetable areas, only Area 20 (Long Island) shows a marked difference in distribution of work units. In this area a much higher proportion of the work was required on vegetables, while all other enterprises were of a minor nature.

Dairy-poultry areas show a very consistent pattern for the distribution of work units. Only Area 21, which is on Long Island, shows a distribution which indicates that the poultry enterprise was more important than any other enterprise in the area. This area has large numbers of both broilers and ducks.

The five dairy areas without exception show the same distribution of labor inputs on all enterprises. Differences between dairy areas are due to intensity of operation. In areas of high milk prices,

TABLE III. PROPORTION OF LABOR REQUIRED ON SIX ENTERPRISES IN TWENTY-ONE GENERALIZED TYPE OF FARMING AREAS IN NEW YORK STATE, 1949

Area	Percent of total productive man work units on:						Total work units (thousands)
	Dairy	Forage	Grain	Poultry	Fruit	Vegetables	
Fruit-Dairy Areas							
1 FRUIT-dairy and vegetables	20	6	7	7	42	18	1,949
4 FRUIT-dairy	25	6	2	5	48	14	347
8 DAIRY-FRUIT-grain-poultry	33	9	10	10	30	8	501
16 FRUIT-DAIRY	30	9	2	11	43	5	930
Vegetable Areas							
3 VEGETABLES-dairy	27	8	4	10	7	44	231
6 VEGETABLES-DAIRY	33	10	8	5	#	44	287
19 VEGETABLES-DAIRY	39	8	#	4	9	40	418
20 VEGETABLES	6	#	1	11	1	81	703
Dairy-Poultry Areas							
2 DAIRY-poultry-forage and grain	42	14	13	20	5	6	119
10 DAIRY-poultry	46	13	10	24	1	6	484
15 DAIRY-POULTRY	45	12	2	34	4	3	683
18 DAIRY-poultry	47	13	1	26	12	1	123
21 POULTRY-vegetables-dairy	23	4	#	48	1	24	31
Dairy Areas							
7 DAIRY	67	16	5	7	1	4	4,028
11 DAIRY	72	19	3	3	1	2	4,518
12 DAIRY	70	18	3	5	1	3	2,671
13 DAIRY	71	16	2	7	1	3	6,222
17 DAIRY	65	19	4	8	3	1	1,490
Dairy-Vegetable and Dairy-Grain Areas							
5 DAIRY-vegetables	41	11	11	7	4	26	3,337
9 DAIRY-grain	40	11	21	11	6	11	80
Mixed Areas							
14 DAIRY-fruit-forage	42	15	3	11	18	11	180
Total for all Areas	57	14	5	7	7	10	29,332
# Less than .5 percent							

intensity is generally greater than in areas of lower milk prices. Thus farms in Areas 13 and 17 tend to be operated more intensively than dairy farms in Areas 7 or 11.

The dairy-vegetable and dairy-grain areas of Western New York also show a reasonably consistent pattern. The main difference is the shift in emphasis in Area 9 from vegetables to grain.

Area 14 is classed by itself as it did not fit clearly into any of the above patterns. This is due to several influences. First, the dairy-poultry and the dairy-fruit regions of the Hudson Valley tend to merge into one at the northern end of the Hudson Valley-- this tends to give this area a mixture of these two types of farming. Second, the urban influence in this area tends to give greater emphasis to vegetables in this particular location than occurs in adjacent areas.

Receipts and Expenses by Types of Farming Areas

As generalized type of farming areas represent different combinations of enterprises, it would be expected that items of receipts and expenses would vary in relative importance between the different areas. Table IV presents these data for three groups of areas and for the state.

Major variation in sources of gross receipts between the different type areas occurs in the proportion of receipts from crops and livestock. In the dairy areas almost three-fifths of the gross income is from dairy sources; this proportion decreases to about one-fifth in the predominately crop areas. Other livestock receipts, mostly from poultry, do not vary greatly between the different areas.

TABLE IV. COMPONENTS OF TOTAL RECEIPTS AND EXPENSES BY GROUPS OF TYPE OF FARMING AREAS, 1949
(Millions of Dollars)

Item	Dairy Areas		Dairy-crop Areas		Predominately crop Areas		Total for all Areas	
	Percent	Total Value	Percent	Total Value	Percent	Total Value	Percent	Total Value
I. Gross farm income	100	\$327.8	100	\$223.9	100	\$225.5	100	\$777.2
A. Operator's privileges	15		15		14		15	
B. Government payments	1		1		#		1	
C. Net change in livestock inventories	2		1		1		1	
D. Cash income from farm marketings	82		83		85		83	
1. Crop receipts	8		19		44		21	
2. Livestock receipts	74		64		41		62	
a. Dairy receipts	56		41		19		43	
b. Other livestock receipts	18		23		22		19	
II. Total farm expenditures	100	\$231.2	100	\$174.5	100	\$179.7	100	\$585.4
A. Hired labor	13		16		20		16	
B. Feed	35		30		19		29	
C. Purchased livestock	8		7		6		7	
D. Crop	6		7		11		8	
E. Machinery expense	15		16		18		16	
F. All other expenses	23		24		26		24	
III. Net income to farm operators		\$ 96.6		\$ 49.4		\$ 45.8		\$191.8
# less than .5 percent								

Major items of expense also vary in importance between type of farming areas. The expenses for hired labor, crops, and machinery tend to increase with increasing emphasis on crops while purchases of feed and livestock tend to be the highest in dairy areas. These differences in the relative importance of receipts and expense items indicate the economic significance of type areas in quantitative terms. When general economic conditions change, the price of each item changes to a different extent. As the relative importance of each item varies between type of farming areas, changes in general economic conditions will affect each area to a different degree.

Location and Individual Crops and Livestock

Any classification or aggregating procedure tends to cover up some detail which was previously available. This is the case with the generalized type of farming map. In order to reveal in more detail what is included in each of the six enterprises, dot maps for some of the more important enterprises are included in Figures 6 through 16. It is to be emphasized that the type of farming map is based on the relative importance of enterprises in the same area. Dot maps do not show the same thing. These maps show the importance of an enterprise in one area relative to the importance of the same enterprise in a different area. Thus, even though Allegany County has a relatively low concentration of milk cows compared to other areas of the state (Figure 6), the dairy enterprise is relatively more important than any other enterprise in the county. Consequently, the area is mapped largely as dairy on the type of farming map.

High concentrations of milk cows are found in five main areas which correspond approximately with the dairy areas outlined in Figure 5. One area extends from Chautauqua County in a northeasterly direction into Wyoming and Livingston Counties. The largest area of concentration covers most of Central New York corresponding to Area 13. A third area of concentration is the North Country corresponding to most of Area 11. Two other areas of heavy concentration while relatively small are nevertheless important. One is in Orange County and the second lies east of the Hudson River.

In general, Areas 7 and 13 are characterized by hill and valley topography. Climate, soil, and topography are more favorable to hay than to other crops. In the North Country while topography is more favorable, soils are of only medium fertility, and climatic conditions are still more limiting. Again, these conditions favor the growing of hay and pasture relative to other crops. Milk cows are the logical choice to convert these large quantities of roughage into usable food for the large urban areas of the Northeast, particularly New York City. Hay acreage (Figure 7) and hence dairy cows are also concentrated on the upland soils east of the Hudson River. Again, soils and topography limit cultivated crops in this area. In parts of this region, milk is sold in New England.

Probably the relatively high price of milk close to the city has more to do with the concentration of cows in Orange County than any other factor. In this area topography is more gently rolling than in other dairy areas of the state except for the North Country. With soils and climatic conditions generally more favorable for grain than

in the other dairy areas, it is at first surprising to find such a large concentration of hay acreage in this area. In this case, the relatively high price of milk encourages a concentration of roughage production to keep as many cows as possible.

The level to gently rolling fertile land in Western New York and in parts of the Central Lakes region is adapted to extensive cash crops. The location of the bulk of the wheat, corn for grain, and dry bean acreage is within this region (See Figures 8, 9 and 10). Oats and other small grains, and corn for silage are similarly concentrated in this region and also tend to be important where dairy cows are concentrated (Figures 11 and 12). These crops provide feed in support of the dairy enterprise.

Chickens are widely distributed over the state, however, concentration occurs through the Hudson Valley and Southeastern New York and south of the Central Lakes region (Figure 13). An important factor in the location of chickens in the Southern Tier region is that the enterprise practically divorces the farm from the land resource. Commercial poultry farms in this area and in the Hudson area buy most of their grain so that little land is needed with this type of farming. Broilers are concentrated in Sullivan and Suffolk Counties. The relative concentration of chickens in Northern New York is small compared to other areas in the state. Important factors limiting chickens in this area are the severity of winter climate and the distance to major markets.

The distribution of the fruit acreage over the state (Figure 14) conceals the specialization which exists in each area. The fruit acreage along Lake Erie in Chautauqua County and the acreage bordering

the Finger Lakes is primarily in grapes. In both these areas about 80 percent of the work required on all fruit is on grapes. The Central Lakes region has a somewhat more diversified fruit acreage than does the Chautauqua County fruit belt.

The largest fruit area is just south of Lake Ontario. Approximately 70 percent of the labor requirement on all fruit is required on apples in this area. Cherries account for about 15 percent of the total labor on fruit while the remainder is on peaches, pears, plums and grapes. The fruit region of the Hudson Valley is still more specialized in the production of apples. Approximately 85 percent of the labor requirement on all fruit is on apples in this area.

Influence on climate by adjacent lakes and good air drainage through the Hudson Valley region has important influences on the location of the fruit acreage. Deep, friable soils along Lake Ontario also exert an important influence.

Vegetable acreage (Figure 15) is largely concentrated on well drained soils along Lake Ontario and southward toward the Southern Tier and adjacent to important urban areas, particularly the Buffalo market. Fertile bottom lands in the Hudson Valley region and muck soils in scattered parts of New York are also used for the growing of vegetables. Within these areas, various vegetable crops tend to be concentrated in localized areas.^{1/}

Potatoes (Figure 16) are heavily concentrated on Long Island and in Northern Steuben County. Even with these important areas of concentration, potatoes are probably more widely grown over the state than any other vegetable crop.

¹ For a more detailed discussion of the vegetable crops, reference should be made to: Bond, M. C., "Vegetables, Location and Trends, New York and United States, 1918-1953," A.E. 951, Department of Agricultural Economics, Cornell University.

Tomato acreage is concentrated in the fruit regions along Lake Erie and Lake Ontario, where there is a long growing season.

Sweet corn acreage is located primarily in Western New York where conditions favor the growing of extensive kinds of cash crops. A second concentration occurs in the Hudson Valley and Ulster County areas. In this latter region much of the corn is sold on the fresh market, while in Western New York most of it is canned and more recently used for freezing.

Cabbage and green peas are also widely grown in the western part of the state. Most of the peas are either canned or frozen. A sizable proportion of the cabbage is sold as market cabbage, however, a large proportion of that grown around Phelps in Ontario County is used in making saurkraut. Concentrated acreages of both cauliflower and brussel sprouts occur on Eastern Long Island.

In Western New York most of the snap beans and lima beans are either frozen or canned, while considerable proportions are sold on the fresh market from areas adjacent to urban areas.

Most of the acreage of beets for processing is concentrated on the loam soils of Ontario County. Extensive acreages of carrots also exist in this area.

Crops which are highly concentrated in areas of muck soils include onions, celery and lettuce.

Changes in Types of Farming

The purpose of this section is to briefly point out some of the major changes in types of farming which have been going on since 1934 in various areas of the state.

Changes in the relative emphasis on an enterprise which are described in this section may be due to either or all of three different factors. First, numbers of livestock or acres of crops may have changed; second, the labor requirement on the enterprise may have decreased due to increased efficiency or may have increased as larger yields have required more labor; and three, no change in either of these two factors, but changes in the relative importance of other enterprises has caused this particular enterprise to shift in importance. The change from 1934 to 1949 in the proportion of total work units on five enterprises is shown by counties in Figures 17 to 21.

The main change in type of farming in New York State since 1934 has been toward more emphasis on dairy. At the same time, less emphasis has been given to the grain and vegetable enterprises. While the above statement characterizes the state in general, it is apparent that exceptions occur, and further even though regions have the same type of farming changes, they do not change at the same rate.

Counties which had increases in the emphasis on the dairy enterprise of between 8 to 15 percentage points (Figure 17) are located in the areas south of the Lake Ontario fruit region and extending east to Cayuga Lake. Counties and probably parts of counties extending eastward from Onondaga and Cortland Counties into the Mohawk Valley and eastward to Rensselaer County also had similar increases.

Increases in the emphasis on the dairy enterprise also occurred in counties located in type of farming Areas 11 and 13 but by less than 7 percentage points. The small change in type of farming in these

counties is associated with areas which were already specialized in dairy in 1934. With these conditions there was little opportunity to increase the already existing high degree of emphasis on dairy. Counties showing decreases in dairying occurred in Southeastern New York.

Areas in the Ontario fruit belt tended to increase both the dairy and fruit enterprises relative to other enterprises (Figure 18). This same movement occurred in Schuyler County along Seneca Lake and in the Hudson Valley region of Columbia, Ulster and Saratoga Counties.

It appears that emphasis on the fruit enterprise increased in a majority of counties in the state between 1934 and 1949. As such movements are relatively small, not much weight should be given to them. Most of the increase is associated with an increase in work units on several of the fruit crops rather than to an increase in the number of trees.

Increases on poultry occurred in most areas of New York (Figure 19). The largest movements were apparent in Sullivan, Westchester and Warren Counties; although sizable increases occurred throughout Eastern New York. The higher proportion of work units on poultry in Sullivan and Suffolk Counties is largely due to the increased numbers of broilers. Sizable movements towards both dairy and poultry occurred in the Albany, Rensselaer, and Greene County area, while another center was located in the Schuyler, Tompkins, Chemung, Tioga and Broome County area. This latter group of counties is located in the dairy-poultry area indicated as Area 10 in Figure 5.

Three counties showed an increased proportion of work units on vegetables; Suffolk, Orange and Cayuga (Figure 20). Counties showing the greatest decline in the relative importance of vegetables were located throughout most of Western New York, except for Wayne and Steuben Counties which showed only minor decreases. Another area showing important decreases occurred in east-central New York.

The proportion of work units on the grain enterprise (Figure 21) decreased in all important agricultural counties of the state during the 15 year interval. In some counties a large part of this decrease was due to a reduction in acreage, however the underlying factor responsible for this change is the decrease of labor required to care for an acre of the grain crops.

In the same vein individual townships could also be scrutinized for changes in type of farming since 1934. Changes are apparently more pronounced for areas of this size than for counties. Inspection of township data in Cayuga, Seneca, and Tompkins Counties suggest rather large changes in types of farming.

In Cayuga County most townships show an increased emphasis on the dairy enterprise by about 7 percentage points. However there was a wide range of variation, some towns actually shifted out of dairy while others increased dairy by 20 or more percentage points. Inspection of individual township data in Seneca and Tompkins Counties also showed a wide range in the change in type of farming. While explanations for these changes in type of farming for individual townships is beyond the scope of this bulletin, such changes deserve

careful study. Analysis of changes in types of farming in some of these areas which are undergoing rapid change may help in determining the conditions which influence the rate of change and in discovering the factors which makes one area change while another continues in its old way.^{1/}

Summary

The emphasis in this bulletin has been to indicate the location of agricultural production. Generalized types of farming areas were constructed by calculating the proportion of labor required on each of six enterprises by townships. Six kinds of type of farming areas were delineated in the state. As each of these kinds of farming do not exist in a contiguous area of the state twenty-one type areas were delineated (Figure 5). These areas differ significantly from each other in the composition of their receipts and expenses. As a result of these differences in receipts and expenses, each area will be affected differently, given a change in economic conditions.

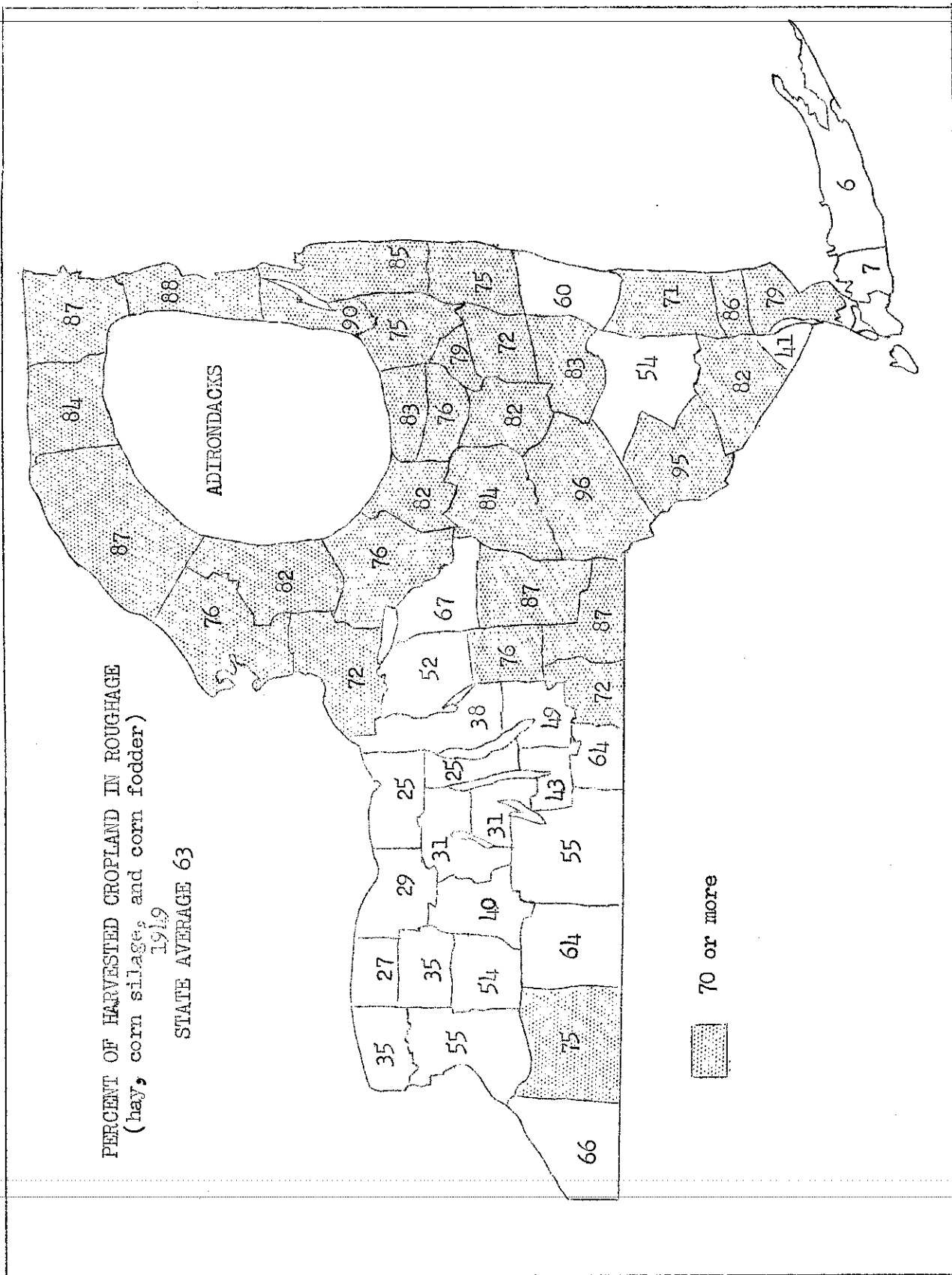
In addition to mapping the location of types of farming areas in the state, brief mention was given to changes in types of farming since 1934. It is apparent that changes in types of farming, since 1934, have not always been in the same direction, nor are changes taking place at the same rate in adjacent areas. An individual farmer has the problem of not only adapting to the most profitable

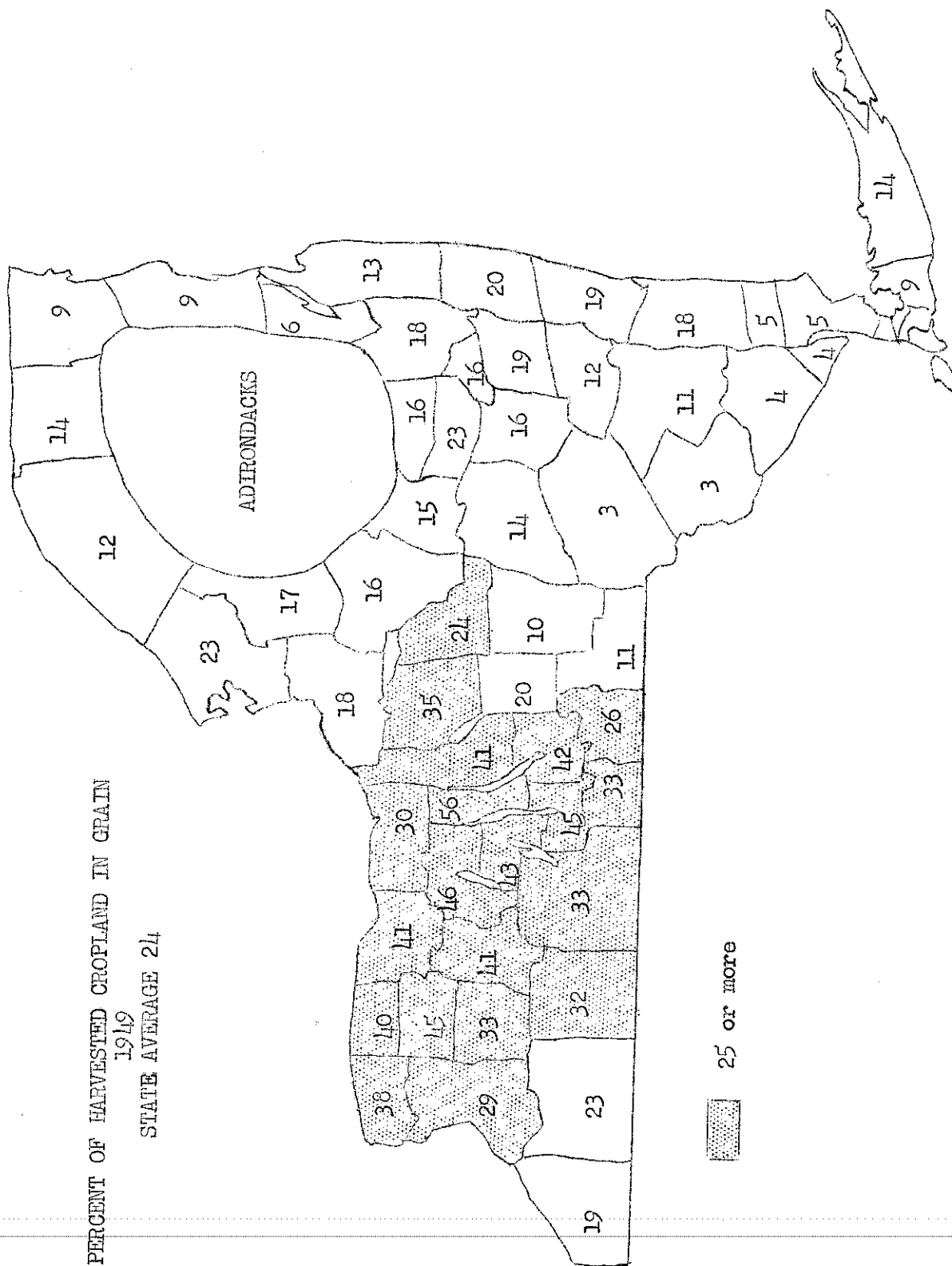
¹ A study of this nature was made by E. A. Hyer, "Changes in Type of Farming in the Finger Lakes Region," A. E. 706, September, 1949. Department of Agricultural Economics, Cornell University.

type of farming in his area but also to periodically readjust the combination of enterprises. Since 1934 it is apparent that in some areas little change in type of farming was required, while in other sections types of farming have changed at fairly rapid rates.

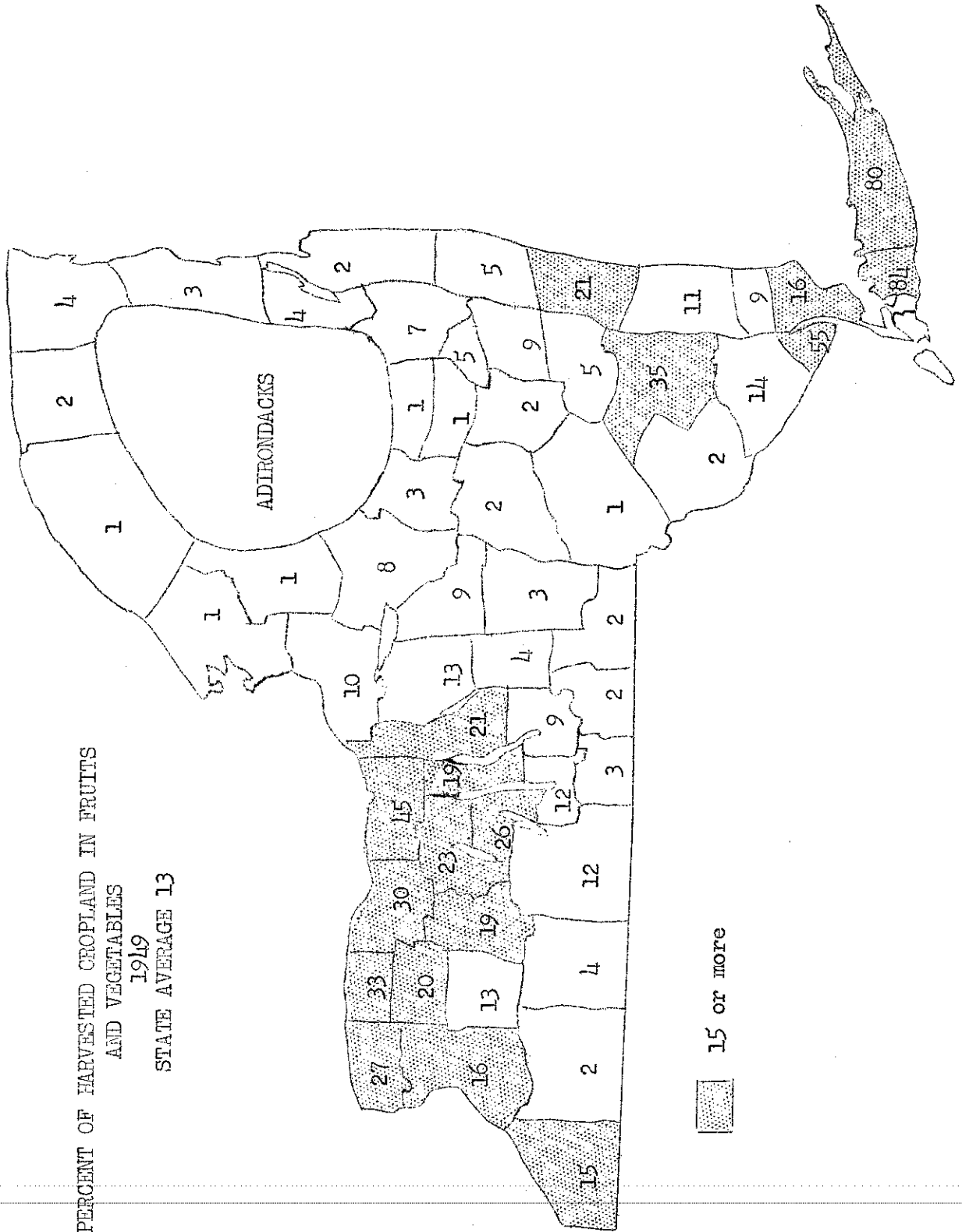
List of Figures

- | | |
|-----------|--|
| Figure 1 | Percent of Harvested Cropland in Roughage, 1949 |
| Figure 2 | Percent of Harvested Cropland in Grain, 1949 |
| Figure 3 | Percent of Harvested Cropland in Fruits and Vegetables, 1949 |
| Figure 4 | Type of Farming by Townships |
| Figure 5 | Generalized Type of Farming Areas of New York State |
| Figure 6 | Dot Map - Milk Cows |
| Figure 7 | Dot Map - All Hay Acreage |
| Figure 8 | Dot Map - Wheat Acreage |
| Figure 9 | Dot Map - Acreage of Corn for Grain |
| Figure 10 | Dot Map - Dry Bean Acreage |
| Figure 11 | Dot Map - Acreage of Oats, Barley and Small Grain Mixtures |
| Figure 12 | Dot Map - Acreage of Corn for Silage |
| Figure 13 | Dot Map - All Chickens |
| Figure 14 | Dot Map - All Fruit Acreage |
| Figure 15 | Dot Map - Vegetable Acreage Other Than Dry Beans and Potatoes |
| Figure 16 | Dot Map - Potato Acreage |
| Figure 17 | Change in the Proportion of Total Work Units on the Dairy Enterprise |
| Figure 18 | Change in the Proportion of Total Work Units on the Fruit Enterprise |
| Figure 19 | Change in the Proportion of Total Work Units on the Poultry Enterprise |
| Figure 20 | Change in the Proportion of Total Work Units on the Vegetable Enterprise |
| Figure 21 | Change in the Proportion of Total Work Units on the Grain Enterprise |

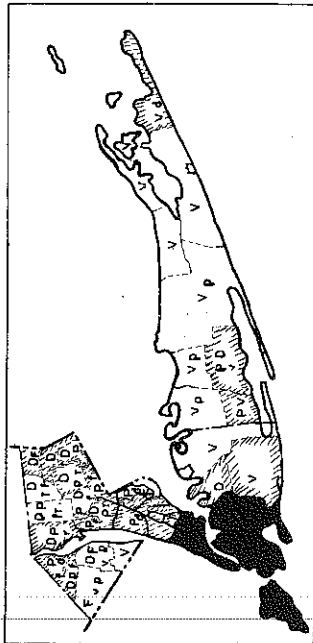




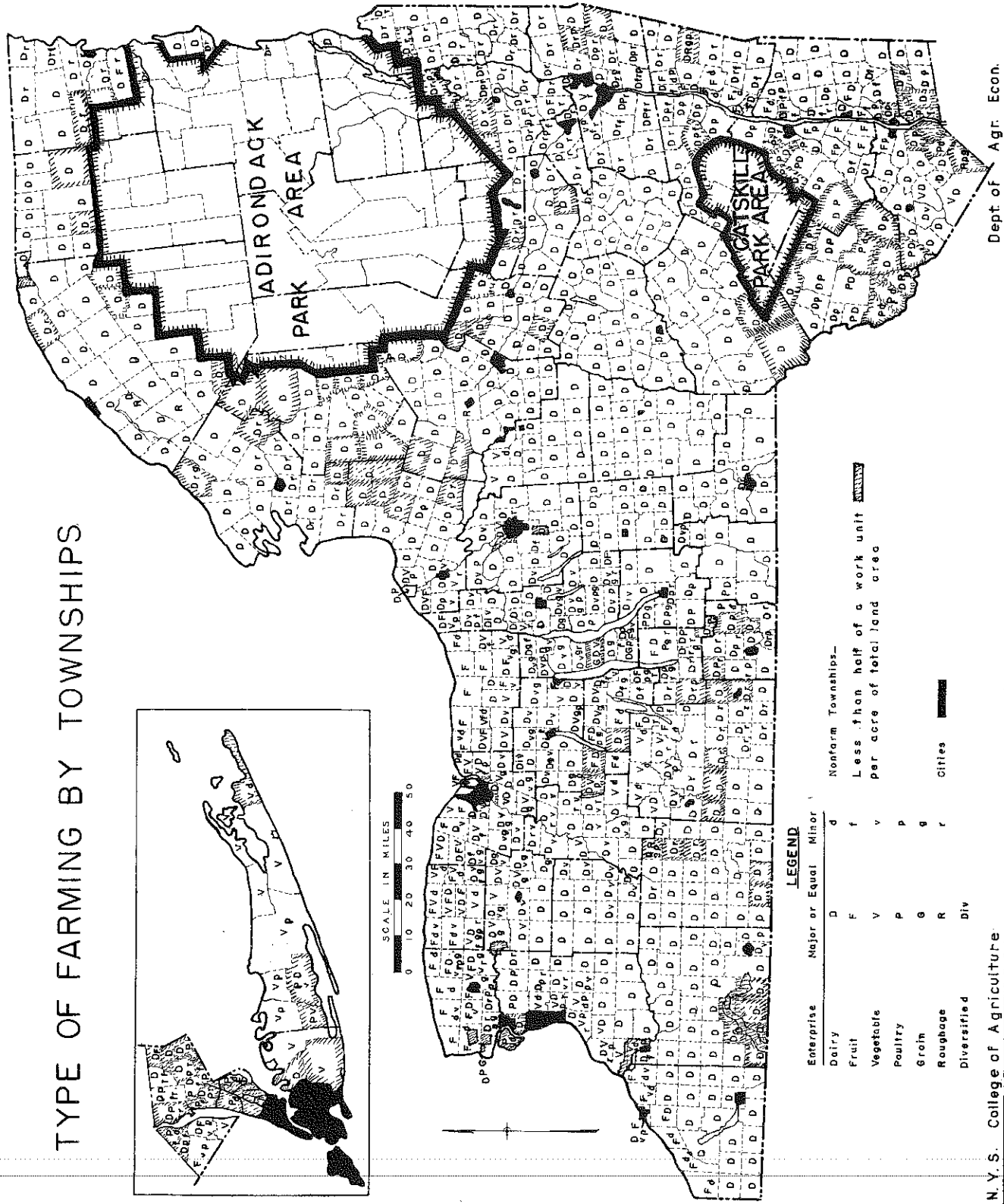
PERCENT OF HARVESTED CROPLAND IN FRUITS
AND VEGETABLES
1919
STATE AVERAGE 13



TYPE OF FARMING BY TOWNSHIPS



SCALE IN MILES
0 10 20 30 40 50



LEGEND

Enterprise	Major or Equal	Minor	Nonfarm Townships—
Dairy	D	d	
Fruit	F	f	
Vegetable	V	v	Less than half of a work unit
Poultry	P	p	per acre of total land area
Grain	G	g	
Roughage	R	r	
Diversified	Div		
			Cities

GENERALIZED TYPE OF FARMING AREAS OF NEW YORK STATE

