ANALYSIS OF CHANGE IN A RURAL COMMUNITY: A CASE STUDY OF DECATUR COUNTY, KANSAS

by

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Approved by:

Major Professor

In memory of my beloved father, Dr. Tso-ping Tung, who devoted his life for discovering the earliest Chinese history and culture.

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To people in Decatur County,I wish to express my deep appreciation for the assistance of Mr.Howard Kessinger,editor of Oberlin Herald,and the hospitality of his wife while I was visiting Oberlin.

To my wife,Sarah,I wish to express my appreciation for her assistance on the statistical test of my population projection and her patience of waiting for the completion of my thesis in such a long,hot,Kansas summer.

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CHAPTER I INTRODUCTION

I. CHANGES IN SMALL TOWNS AND RURAL AREAS

The migration of population from small towns and rural areas to urban centers has been a national phenomenon since the beginning of this century.[1] This rural-urban migration is the result of a combination of factors in modern society.

The mechanization of farming techniques has enhanced the average size of the farms and has reduced the number of people employed in agriculture. As farms become larger and larger, small farms tend to be absorbed into the large farms. The managers of the large farms often make large purchases of farming equipment and fertilizer directly from the producer and depend less on local suppliers. The local suppliers are less able to maintain a profitable business, and must change either their careers or locations.

The mass communication media have also had an effect. The influence of urban ideas on the youth of small towns and rural areas has been exerted by means of radio, television, newspapers and magazines. Modern transportation allows for higher mobility to the urban centers, either for temporary visits or permanent moves. The attractiveness of jobs in the cities, as well as the cultural attractiveness lure the younger generation away from their homes.

Education is another factor which promotes changes in the small towns and rural areas. Industrialized modern society prizes and rewards education with employment opportunities that are available only through

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[1] U.S. News and World Report, Cities Crowding-Countryside Losing, Vol. 52, May 7, 1962. p. 77.

advanced education. As the younger generation of the small towns and rural areas becomes educated and trained through schools or military services, they acquire special skills and knowledge which are oriented largely to the urban centers and their industrialized areas. As the individual's educational opportunities increase,the small towns or the rural areas are no longer able to compete with the urban world in rewarding him for his special talents. Additionally,the experience of being away from home has weakened the family and community ties and the individual feels less motivated to return home.

As the population in the small towns and rural areas continesly to drop,the communities are no longer able to attract such necessary personnel as doctors and teachers. Communities without such personnel are therefore unable to attract others,and soon the communities find themselves literally dying. Because of the lack of job opportunities in these communities,their own people are forced to leave their homes.

Although"the air is cleaner and the grass is greener" in the countryside,hundreds of thousands of Americans are leaving a rural agricultural society for the uncertain promise of an urban industrial society. Some desert their homes eagerly while others depart with tears. Some leave because too little keeps them there,others because too much lures them away.

Among the rural-urban migrants,some go first to nearby larger towns and sooner or later find their way to the nation's cities. The smart migrants,the ones with skills and the ones with cash in the bank,may well succeed in the cities. The ill-trained,ill-prepared umployed are also among the migrants who search for jobs in the cities and wind up frustrated and disillusioned with no place to turn.

The nation's decision makers have becoming aware of the problems

created by those rural-urban migrants in the cities. The hope of stopping urban unrest and ghetto-like living depends in part on providing facilities in the rural areas and small towns,so they may become attractive to industry,which in turn can create jobs that tend to keep people at home.

Rural America must offer the younger generation opportunities to learn and work equal to those available to youth in the cities. The problems of rural America and the problems of urban America must be treated together. Rural modernization must be carried out while urbanization is in progress. The improvement of jet airport,community college,modern hospital,elementary and secondary schools and the beautification of the environment are all potential ways for attracting industries into the community. All these ways of attracting industry are going to have to come from the rural community itself. Opportunity moves to where things are happening,where local leadership indicates the desire to have the community grow.

II. STATEMENT OF THE PROBLEM

Urbanization has redistributed the population of the nation,during which some places have experienced substantital population gain while others have decreased. The nation's population is increasingly becoming concentrated in large urban centers;while rural areas are depleted and face severe losses. In the two decades between 1940 and 1960,the number of farms in this country decreased from over 6 million to about 3.7 million,a 38 percent decline.

In the shadow of the urban population explosion and the resultant horizontal physical expansion,many rural communities are declining. The flow of the young adult population into the large urban centers has left

behind in the rural community the youngsters and the elderly. The proportional increase of the dependent population has resulted in the low per capita income of the rural areas.

The improvement of agricultural technology which increased the size of the farms and reduced the number of farmers is another factor of population decline. The decline of employment opportunities in agriculture along with the physical hardship of farm life compared to other jobs has forced the farm workers out of agriculture. The lack of employment opportunities in the rural community centers has causes them to go to the urban centers seeking better opportunities and more stable careers.

The decline phenomenon occurred mostly in the less-urbanized or agriculture-oriented areas. In Kansas, for instance, while the total population of the state increased 14.4 percent between 1950 and 1960, the rural segment of the population decreased 7 percent. The increase of population in Kansas occurred mainly in the eastern Kansas urbanized areas; rural communities in western Kansas have not shared the gain. As a matter of fact, most of the western Kansas counties are declining.

In order to analyze the decline phenomenon in a rural area, Decatur County in western Kansas, was chosen as a case study. There were several reasons for choosing Decatur County for this study. Firstly, the past Census data has shown definitely that the county's population has been declining since the beginning of this century. Secondly, its location is isolated from the large urban centers of the state. Thirdly, the county is an agriculture-oriented community; a large percentage of its population were either lived or worked on the farm land. Finally, the county has a high proportion of youngsters and the elderly and relatively low income level.

III. PURPOSE OF THE STUDY

The purpose of this study is to detect the trend of decline in Decatur County and to explore the impact of decline on the composition and characteristics of the population and the economy. Since agriculture plays a major role in the county,an analysis of the relationship of agriculture and the population decline will also be presented. By using descriptive, comparative and statistical methods,this study will hopefully result in findings that explain the decline in the population and the economy.

IV. LIMITATIONS OF THE STUDY

Although the original purpose of this study was the analysis of the town of Oberlin,the county seat of Decatur County,the lack of references and data on that town has forced the cuthor to shift to the analysis of the county instead. Oberlin,with a population of 2,337 in 1960,was not defined as in urban places yet in the 1960 U.S.Population Census. Therefore,Census information concerned with Oberlin was not available. The difficulties of collecting data also is true for Decatur County. Because of the limited data,this study is restricted by the information available.

V. ORGANIZATION OF THE STUDY

Chapter II of this study introduces the history and background of Decatur County. It indicates when and how this county was established and describes the natural resources and the means of transportation. All the information available in this chapter was used in support of the succeding chapters.

Chapter III discusses the composition and characteristics of the population and its impact on the past,present and future growth trends. The main purpose of this chapter is to analyze the cause and effect of population and decline. In order to reach a meaningful result in the population projection,a statistical method has been applied.

Chapter IV deals with the county's soil and economy. Since Decatur County is an agriculture-oriented county,the analysis of its agriculture is therefore of significance in this study. This chapter indicates the nature of the changing status of the county's agriculture as well as its retail trade,especially their impact on the decline of the population.

Chapter V concludes this study. It presents the result of this study and suggests several approaches which could help in the future development of the county.

CHAPTER II HISTORY AND BACKGROUND OF DECATUR COUNTY

History of Decatur County

Early settlers and development.[1] Decatur county is located at the northwestern corner of the State of Kansas. The Beaver,Sappa and Prairie Dog Creeks flow across the county from southwest to northeast. The first settlers in the Sappa Valley established the first post office in 1872 and took the name of Sappa City which is now the location of Oberlin,the county seat. A pioneer by the name of J.A.Rodehaver was the first post-master of the valley area. About 1874 the name of the town was changed to Westfield by William Penn Montgomery,Sr. a lawyer who was born in Pennsylvania and educated in Westfield,New York. When the town needed space for expansion, Mr.Rodehaver gave land from his claim,and the town's name was then changed to the present name after Oberlin of Ohio,Mr.Rodehaver's native town.

The first school conducted in Oberlin was in 1874,when a man called George Worthington started a school term in a dugout. The first courthouse was built in 1886 and the first bank opened for business in the same year. In 1875 the coundries of the county were defined by the State Legislature and the county was named Decatur County after Commodore Stephen Decatur, a distinguish naval officer.

The first edition of the weekly newspaper,The Oberlin Herald,was published on June 19,1880. Public utilities began with the erection of the stand pipe and downtown water mains in the same year. Five years later, in 1885,railroads come into the county.

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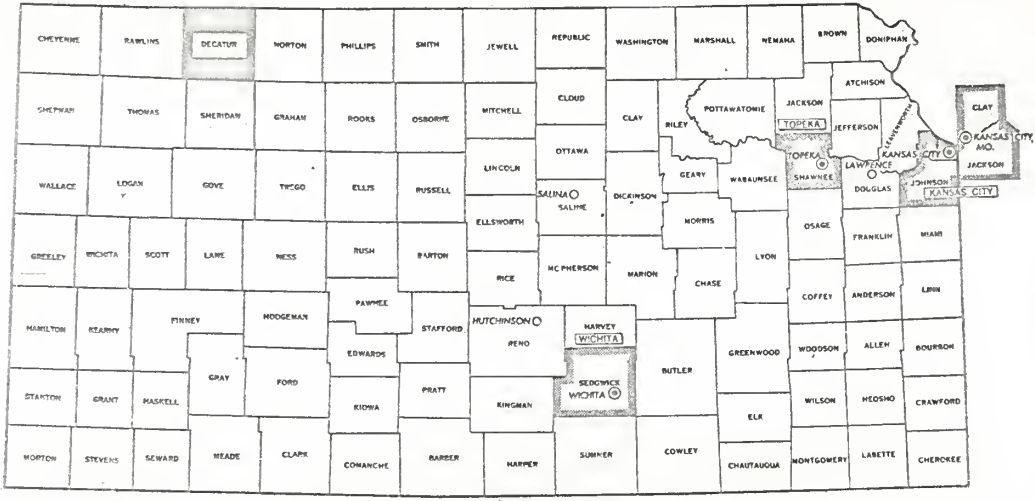
[1]Information obtained from The Decatur Historical Museum,Oberlin Decatur County.



Source of map:U.S.Census of Population,1960,Kansas,Number of Inhabitants.

Fig. 1. Location of Decatur County.

The last Indian raid in Kansas.[2] By 1878, Broken Dishes, leader of the Northern Cheyenne Indian tribe had fallen into disrepute and had lost authority. He was told by General McKenzie that his people must go south to Oklahoma or be exterminated. They protested in vain. They gave up their arms and ponies and were to receive them back after they reached the south. They were also promised abundant rations and medical care in their new homes in Okalahoma.

When they reached their distination, they were gathered into a camp with twenty-five hundred other Indians. One physician was assigned to the camp and without the necessary medicine to combat disease. Measles, ague, and other diseases played havoc among these Indians from the North. They were given two day's rations per week and they were hated and reviled by their southern brothers.

With the approach of Fall, they begged for permission to return home but this was denied. They were told that if they returned they would be exterminated. It was death for them to remain and could be no more than death if they left. On an appointed day three hundred sick and famished Indians started the long trek to their homes.

No one was molested for the first hundred miles. But, they were overtaken by the soldiers near Dodge City, Kansas. They hoped for a council but were fired upon instead. The soldiers were driven off, and the country was aroused by the report that the Cheyennes were on the warpath. However, until this time, the Indians had not harmed the settlers. In the second

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[2] Information obtained from the Decatur County Historical Museum, Oberlin, Decatur County.

skirmish with the soldiers,the settlers took part against the Indians,and after that the Indians left behind them a trail of blood.

Day after day the Indian column thinned out but they continued steadily toward the north. The depredations of the Indians were much worse in Decatur and Rawlin County. In the attacks of the Indians in Decatur County,forty unsuspecting men were killed,women were outraged and a vast amount of properties were destroyed. So ended the last Indian raid in the State of Kansas.

Recorded stories told by the survivors are on exhibit in the Decatur County Historical Museum. A monument was built by the town people in memory of the victims. A large number of mementos of the raid have been collected by the early settlers and are now displayed in the museum. The Indian raid has become an unique event in the history of the county.

Natural resources

Water. The greatest natural resources of Decatur County so far discovered is its underground water. Almost the entire county is underlain with the Ogallala formation of the Tertiary geological age,and sheet water is available within this formation in relatively large quantities. The underground water is considered as an important means of irrigation, although at present only ten percent of the farm land is irrigated.

There are three streams flowing across the county. The Sappa, Beaver and Prairie Dog creeks and their branches cover almost the entire county. The flow of the streams is limited by the seasons. The lack of all-season streams increases the significance of using the underground water for irrigation.

Sand and gravel. Sand and gravel are the most abundant and most extensive mineral deposits in Decatur County. A large amount of the sand is taken from the beds of streams and the streams are constantly bringing in new supplies. Other sources are the ancient streams beds that are some distance above the present drainage channels. Although these sources are not being replenished,the deposits are large.

The Morton Sand and Gravel Company started producing sand and gravel near Oberlin. The plant has a capacity of 300 cubic yards per day. The Decatur County Highway Department is also using gravel for road maintenance. The county extracted 42,709 tons of sand and gravel valued at $ 8,039,000 in the same year.

Petroleum. Petroleum production is of minor significance in Decatur County. The county has a total of 42 oil wells,some of them already exhausted. Yield of crude petroleum from the 16 fields was more than one-half million barrels in 1962,and 11 percent increase over that of the

previous year.

Volcanic ashes. Volcanic ashes have been reported in two locations in Decatur County. In one of these locations, the ash deposits are of the Tertiary age and lie beneath mortar beds. Consequently it can not be mined as cheaply as the ash which lies at the surface to the east in Norton County.

Volcanic ash is one of the latest developments in mineral production in Kansas. It has not been widely used yet, although it is available in forty counties in Kansas. The commercial production of volcanic ash started at the beginning of this century. In 1961, Kansas ranked first among the states in commercial volcanic ash production.

Since the volcanic ash in Decatur County has not been widely used yet, the potential of developing a volcanic ash industry in Decatur County is encouraging. Because of the wide usage of the ash, it will be meaningful to encourage the people in Decatur County to invest in the investigation and development of the volcanic ash resource.

Transportation

Air transportation. Since the county is some distance from major urban centers, air transportation has become very important for communicating with those centers. There are no scheduled flights to or from Oberlin, the county seat of Decatur County. Private and charted air planes are available in Mc Cook, 27 miles north of Oberlin.

Railroads. There are three railroad lines serving Decatur County. Oberlin, the county seat, is the terminal of the Chicago, Burlington, and Quincy branch line, which was extended from Oxford, Nebraska. There are two other lines served by the Chicago and Rock Island and Pacific Railroad across

the southeastern and northwestern corner of the county.

There are no passenger train serving Decatur County. Freight train are run daily between Oberlin and Oxford,Nebraska. There are no special facilities for loading and unloading in the Oberlin railroad station. About 2,400 square feet of warehouse space are available for delivery services.

Highway transportation. Interstate highways 83 and 36 intersect at Oberlin. Interstate 36 is the shortest route between Denver and Indianapolis and interstate 83 connects Canada and Mexico. Besides the two major highways,local highways and roads connect the small towns and rural areas.

Highway transportation is very important in Decatur County. It is the major means of freight movement and passenger travel. The delivery of livestock and crop production mainly depends on highways. Several track lines serve the county.

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[3]Interstate 83 joined U.S.Highway 85 to the Canada border and ended at Lardo,Texas to the Mexican border.

[4]Truck lines serve Decatur County are Airline express,Equity,Ideal and Syms-Shaefer track lines.

Fig. 2. Location of mineral deposits in Decatur County.

- Volcanic ash pits
- Volcanic ash deposit
- Sand and gravel pits
- Stone quarry, lime stone
- Gas
- Oil

Source of information: Kansas Geological Survey, 1951.

CHAPTER III POPULATION ANALYSIS

Population is the fundamental requirement for all human activities. The quantity and quality of the population dominate the growth of economic activities and the community as a whole. The quantity of the population determines the physical environment of the community and its needs in terms of housing,employment,recreation and education facilities,and public services and utilities. The quality of the population determines its standard of living and its level of income. The quantity of the population is represented by the changes in birth and death rates and by migration,and the quality is represented by educational attainment,employment status,and general economic and social development.

The age and sex composition of the population also influences the growth of the community. A high percentage of dependent aged and children increases the burden of the community with regard to health,welfare,education and recreation facilities. A higher percentage of the middle age group in the population means a strong potential in the labor force to attract industry.

Population projection is essential in study of population. The projection,if properly computed,is the basis for all future planning and development and is the criterion of policies for economic growth.

Since Decatur County's population is declining,a detailed analysis of the composition,trend,distribution and projection of the population is of significance for exploring the causes and studying the results of the decline. A meaningful population projection will be formulated in this chapter and it should be helpful in the future planning and development of the county.

I. POPULATION COMPOSITION

Age and sex distribution

The distribution of population by age and sex is represented by a population pyramid. A population pyramid is usually represented by a triangle with the apex at the top. The number of the population decreases as the age increases. The form of the population pyramid is influenced by many factors;birth rate,death rate and migration rate,for example,are all important factors. The form of the population pyramid varies from time to time and place to place. The following chart shows how the pyramid of Decatur County's rural farm and non-farm population differs from that of a typical population area.

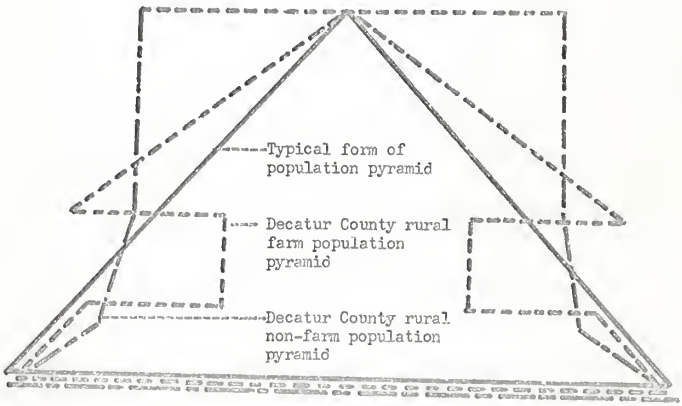

Fig. 3. Comparison of the forms of Decatur County population pyramid and the typical population pyramid.

Because of the differences in their population composition, the age and sex distributions of the rural farm population and the rural non-farm population are different. In the 1960 census data, the rural non-farm has more people in the active age group[1] and the dependent aged group[2], but less in the dependent children[3] group than has the rural farm population. This illustrated the fact that the county's aged people were mostly concentrated in the small towns where jobs were offered only to the active population. The county has 16 percent of the people over 65, but Oberlin itself has 21 percent of the population over 65.

As shown in figure 4 , the rural farm population has fewer people in the age group of 20 to 30 than has the rural non-farm population. There are two major reasons for the decline of this age group. Firstly, a number of young persons have left the county to seek higher education in the colleges and universities due to the lack of higher education facilities in the county. Secondly, other young people have left the farms because of the hardships of farm operation and limited farm employment opportunities.

In order to have a further understanding of the characteristics of the rural farm and the rural non-farm population, it would be interesting to compare their 1950 and 1960 census data. From the comparison, the changes in this ten year period will be analyzed.

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[1] Active age group was defined as the 15-64 age group.

[2] Dependent aged group was defined as people over 65 years old of age.

[3] Dependent children was defined as people under 15 years of age.

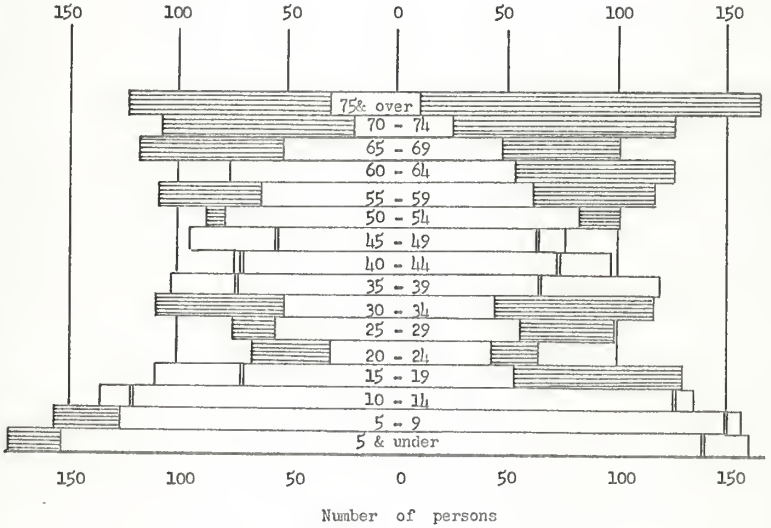

Fig. 4. Sex and age distribution of rural farm and rural non-farm population in Decatur County, 1960.

Rural farm population.[4] Because of the overall decline in the county's total population, the rural farm population has also declined. In the comparison of the 1950 and 1960 data, the most noticeable decline occurred in the age group between 15 and 34. In this ten year period, the number of farms had decreased from 923 in 1950 to 796 in 1960. The decrease in the number of farms resulted in the decrease of farm employment opportunities. Those whose age is under 15 are living with their family and those over 35 had already been employed on the farms. But there were few or no chances for persons between 15 and 34. In other words they have to leave the farm land either voluntarily or unvoluntarily. The individual sex and age distribution of the rural farm population of 1950 and 1960 and their combination are shown on the following pages.

Rural non-farm population.[5] The rural non-farm population was mainly distributed through the rural communities. Oberlin, the county seat, for instance, in 1960 had a population of 2,337, 40 percent of the county's total. The other 981[6] non-farm population were lived in the minor towns in the county.

Comparison of the 1950 and 1960 data shows that the rural non-farm population gained population in the dependent aged group and the dependent children group but lost population in the active age group.

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[4] Rural farm population was defined as all rural residents who lived on the farms.

[5] Rural non-farm population was defined as rural residents who did not live on the farms.

[6] The rural non-farm population has a total of 3,318. If 2,337 is substracted from it, the remainder is 981.

The percentage increase of the population over 65 of age in the rural area indicates that those small towns have become the retirement homes for those who have worked both at agricultural and at non-agricultural jobs. As mentioned in the previous sections, the concentration of the aged people in the rural community centers is such that 21 percent of the population in Oberlin is over 65 years of age.[7] Because of the decline of the county's population, the business activities and employment opportunities decreased. The active age population has been driven out of the county under such circumstance.

Composition by race

There are no minorities in Decatur County. In 1960, all of the 5,778 population in the county were white. 5,718 were native white and 60 were born in foreign countries. Almost 80 percent[8] of the county's total population were born in the State of Kansas and the rest were born in other states of the nation. There was a Negro family headed by an escaped southern slave who lived in the county in the early 1900's, but the man left after the death of his wife.[9]

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[7]Oberlin has "The Old Folks Homes " which was built specially for the retired people.

[8]4,617 people were born in the State of Kansas.

[9]Information obtained from the Decatur County Historical Museum.

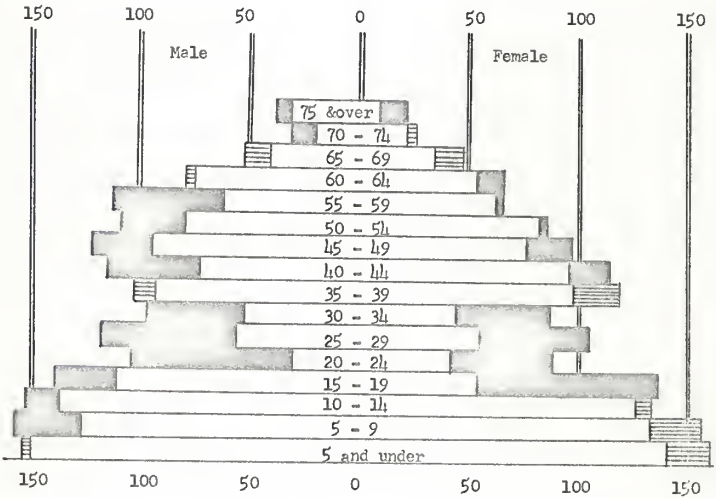

Fig. 5. Changes in rural farm population sex and age distribution, 1950-1960, Decatur County.

Loss in 1960 Gain in 1960

Source of incormation: U.S. Census of Population, 1950 and 1960.

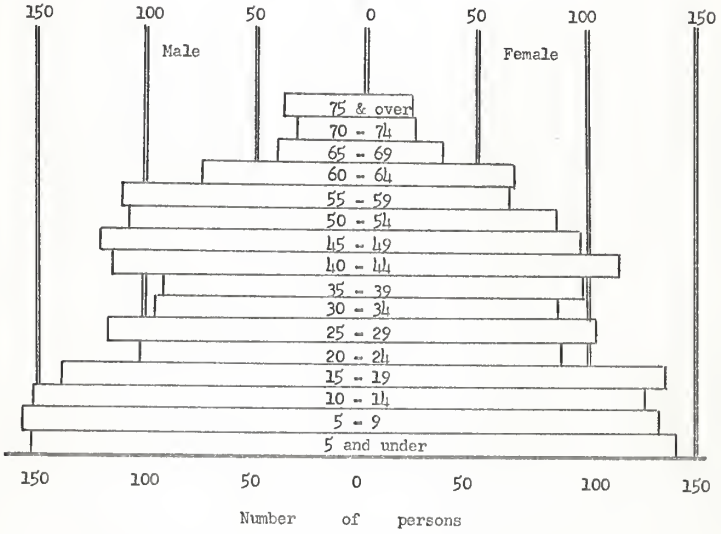

Fig. 6. Sex and age distribution of rural farm population in Decatur County, 1950.

Source of information: U.S. Census of Population, 1950.

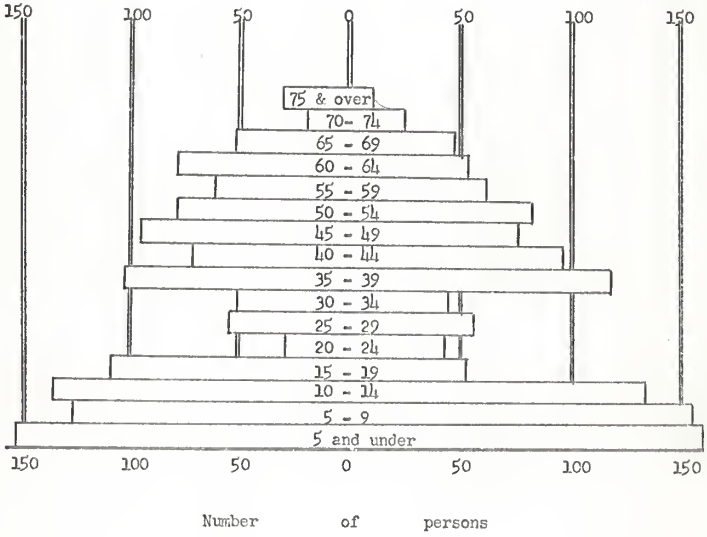

Fig. 7. Sex and age distribution of rural farm population in Decatur County, 1960.

Source of information: U.S. Census of Population, 1960.

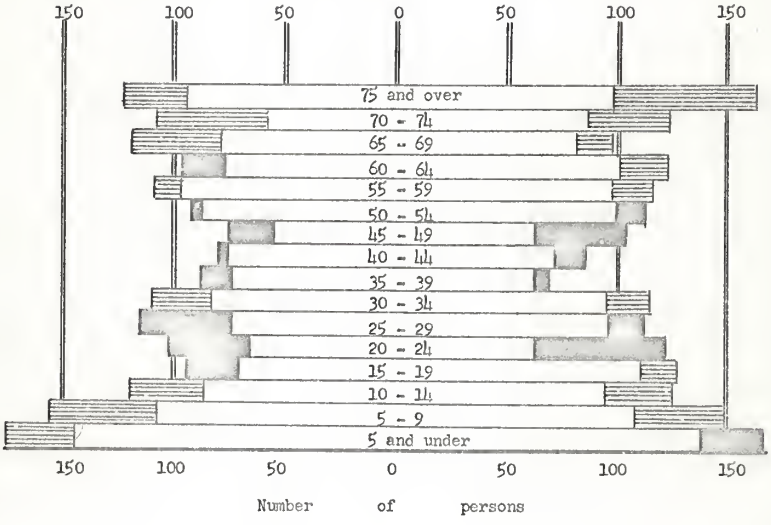

Fig. 8. Changes in rural non-farm population sex and age distribution, 1950 and 1960, Decatur County.

Loss in 1960 Gain in 1960

Source of information: U.S. Census of Population 1950 and 1960.

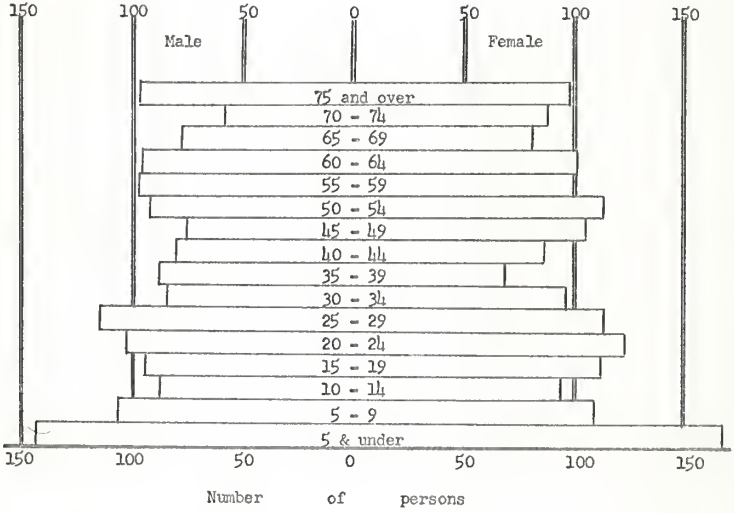

Fig. 9. Sex and age distribution of rural non-farm population in Decatur County, 1950.

Source of information: U.S. Census of Population 1950.

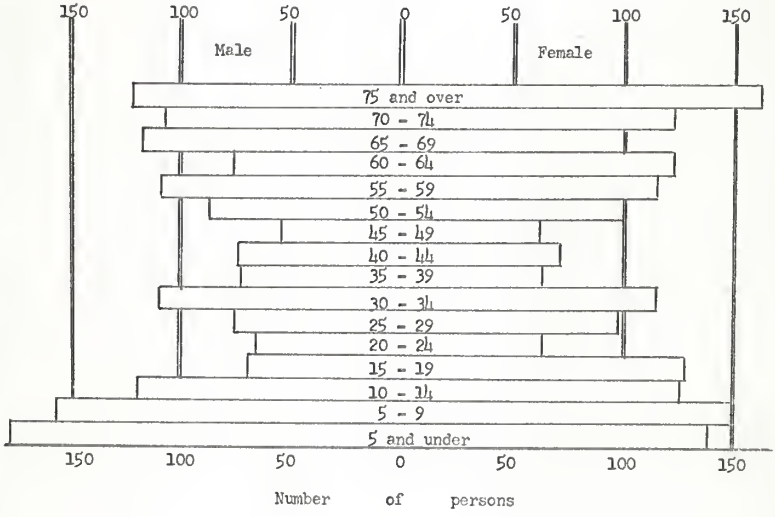

Fig. 10. Sex and age distribution of rural non-farm population in Decatur County, 1960.

Source of information: U.S. Census of Population, 1960.

Educational level

Educational attainment is the most important single indicator of the potential of the population. It has a close relation with the income level and the quality of the labor force of the population. The educational attainment was measured by the present school enrollment rate and the years of school completed by the adult population. The present school enrollment rate indicated the current education facilities and the educational potential of the future population. The years of school completed by the population over 25 years of age shows the present potential of the labor force.

Present school enrollment. Decatur County has a very high school enrollment rate. Twenty-two percent of the county's total population were enrolled in schools in 1960. More than half of the youngsters at the age of 5 or 6 had started their education. Those between the ages of 7 and 13 had a one hundred percent enrollment rate and those between 16 and 17 had a 94.6 enrollment rate. The county lacks college education facilities; those who are seeking higher education have to leave the county for the nearby colleges and universities.

Educational level of the adult population. A large percentage of the population in Decatur County has completed elementary school or high school but a small percentage has finished their college education. The educational level were different in the rural farm and the rural non-farm population. It would be meaningful to discuss them.

Changes in the educational level of the rural farm population. Comparison of the 1950 data and the 1960 data revealed that the most noticeable change occurred in high school education. Many more people had

completed high school education in 1960 than in 1950. There was a slight increase in those who had completed college. This phenomenon is indicated in figure 12 on page 30.

Changes of educational level of the rural non-farm population. Similar to the trend of the rural farm population, there was a higher percentage of rural non-farm population who have completed high school in 1960 than in 1950. But for the rural non-farm population, there is a slight increase in those who quit school after completing the eighth grade. This phenomenon was presented in figure 13 on page 31.

Comparison of the State of Kansas level. Compared with the educational level of the Kansas rural population, Decatur County has a much higher percentage of the population completing elementary school and high school than the State of Kansas. But the State has a higher percentage of the population who have completed college.

TABLE I

Comparison of Kansas and Decatur County in educational attainment of rural population, 1960.

Years of school completed	Kansas rural population	%	Decatur County population	%
Elementary School				
1 - 4	15,032	3	71	2
5 & 6	21,450	4	101	3
7	28,045	5	160	5
8	133,073	27	1,112	32
High School				
1 - 3	76,578	15	470	13
4	140,938	28	1,167	33
College				
1 - 3	42,291	8	243	7
4	25,479	5	153	4

Source of information: 1960 U.S. Census of Population

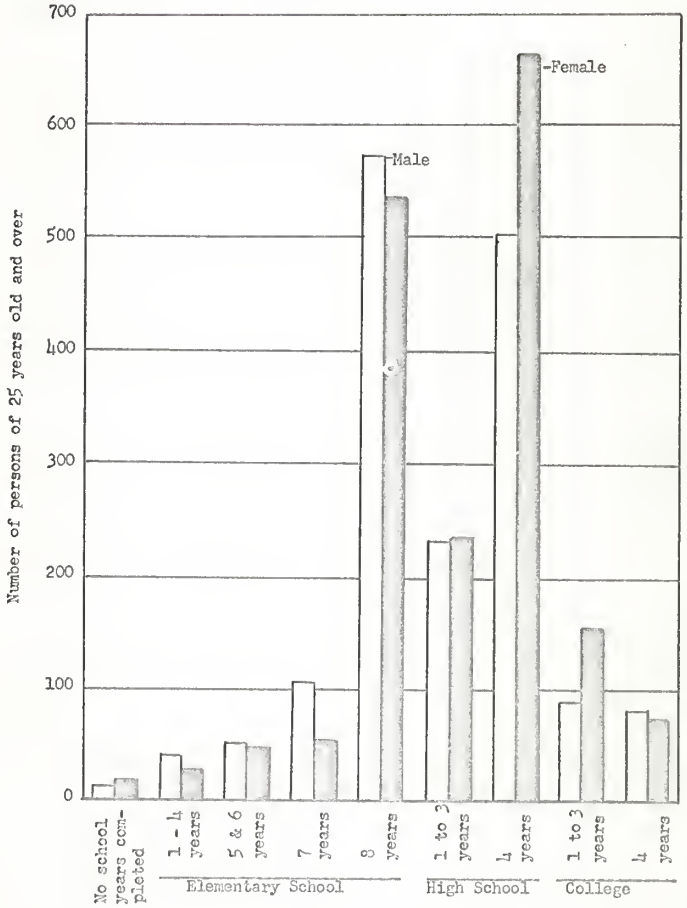

Fig. 11. Years of school completed, male and female of 25 years old and over, 1960.

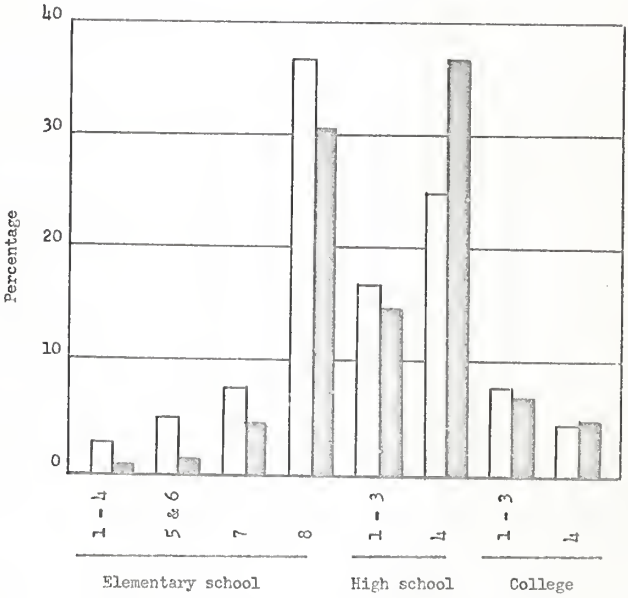

Fig. 12. Changes in years of school completed for population of 25 years old and over, rural farm, 1950 and 1960.

1950 1960

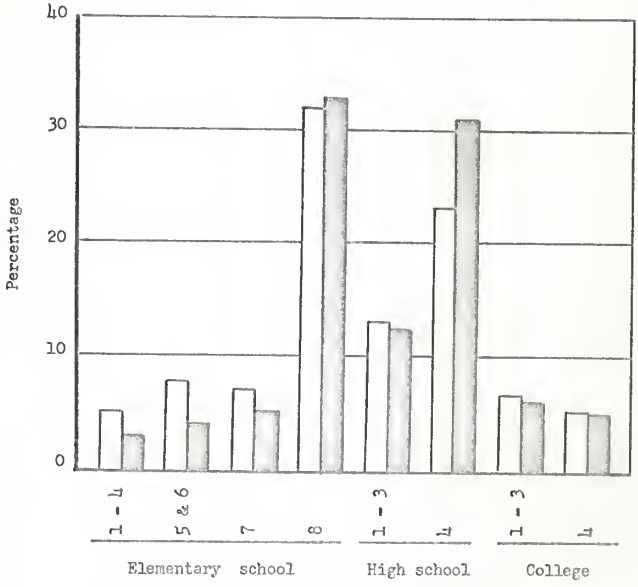

Fig. 13. Changes in years of school completed for population of 25 years old and over, rural non-farm, 1950-1960.

1950 1960

Source of information: U.S. Census of Population, 1950 and 1960.

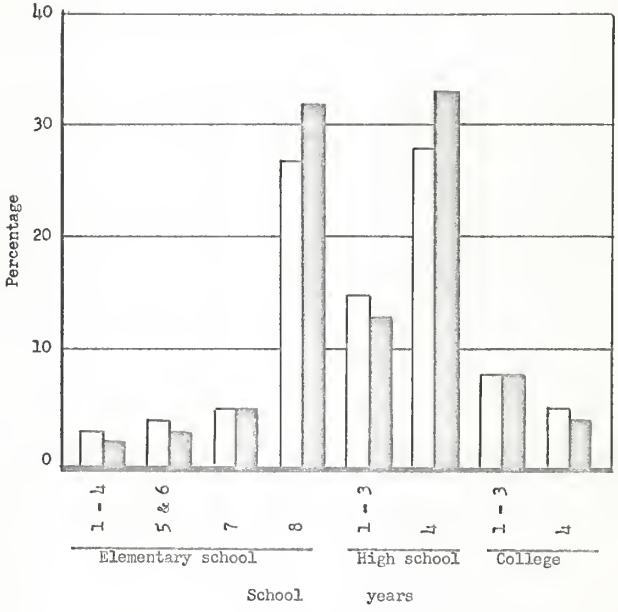

Fig. 14. Comparison of years of school completed by rural population of 25 years old and over State of Kansas and Decatur County, 1960.
Decatur County
The State of Kansas

Source of information: U.S. Census of Population, 1960.

II. POPULATION TRENDS

Population distribution by townships

Like most other Kansas counties, the population distribution in Decatur County is mainly concentrated in the small towns which are mostly located along the railroad lines. Besides those rural towns, the County's population was scattered on the farms. It would be easier to understand the distribution of population by the breakdown of the county into townships.[10]

Decatur County is divided into 25 equal-sized townships, each with an area of approximately 6 square miles. Oberlin, the county seat, has most of the population in the county. Almost 40 percent of the county's population, namely 2,337 are living in Oberlin.[11] Lincoln township, with a population of 733, ranks second in the county's population distribution. Other townships with a high population are Jennings, 648, Dresden, 494, and Pleasant Valley, 444. All the rural towns in Decatur County are along railroads.

The growth of those rural towns came in the same period as the construction of railroads.[12] Early settlers built their first houses along the railroad lines and later they were developed as towns. Compared with railroads, highways came into the county at a much later date. The major highways passing through the county were mainly for interstate transportation. County roads connected the rural towns. There were no towns built along highways in Decatur County. Even the county seat, Oberlin, located at

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[10] Townships were minor civil divisions in the county. Political units recognized as incorporated places which are not themselves minor civil divisions and unincorporated places are shown indented under the minor civil divisions in which they are located.

[11] 1960 U.S. Census of Population.

[12] The first railroad come into Decatur County in 1885.

the junction of U.S.Highways 83 and 36 was originally the terminal of railroads. However,the growth of those towns was slowed down after most of the railroads were completed.

Finley 126	Beaver 139	Sherman 85	Harlan 119	Grant 93
Logan 96	Liberty 97	Olive 121	Roosevelt 84	Lincoln 733
Sappa 91	Oberlin 2,337	Center 112	Allery 76	Garfield 106
Bassett-ville 96	Summit 66	Custer 90	Jennings 648	Pleasant 144
Cook 79	Prairie 124	Dresden 194	Lyon 84	Allison 130

Fig. 15. Population distribution by townships,Decatur County, 1960.

Source of information: U.S.Census of Population 1960.

Population growth of Decatur County

Decatur County is a western Kansas rural area. It has been facing the problem of population decline since the beginning of the century. In 1910, the county had a peak population of 8,976 before it started to decline. In 1930, the Great Depression brought little population increase to Decatur County, but it declined again substantially thereafter. By 1960, the county's population had decreased to 5,778.

In the analysis of the population change, it would be meaningful to compare Decatur County with the State of Kansas and the national population growth trend. The comparison is shown in figure 16on the following page. It is obvious that Decatur County failed to follow the state and the national population growth trend. During the fifty year period of 1910-1960, the United States gained 48 percent in population while the State of Kansas increased 28 percent. But Decatur County lost about 35 percent of its population during the same period.

The growth of population in both the nation and the state came mostly in the urbanized area;[13] regions without major urban centers did not enjoy the benefit. The increase of population in Kansas was mainly in the eastern Kansas urbanized areas; most of the counties in western Kansas did not share the gain. On the contrary, those counties lost population at a noticeable rate every year. Urbanization has not benefitted the rural areas; instead, it has damaged it.

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[13] An urbanized area, according to the 1960 U.S. Census of Population definition, contains at least on incorporated city of 50,000 inhabitants or more.

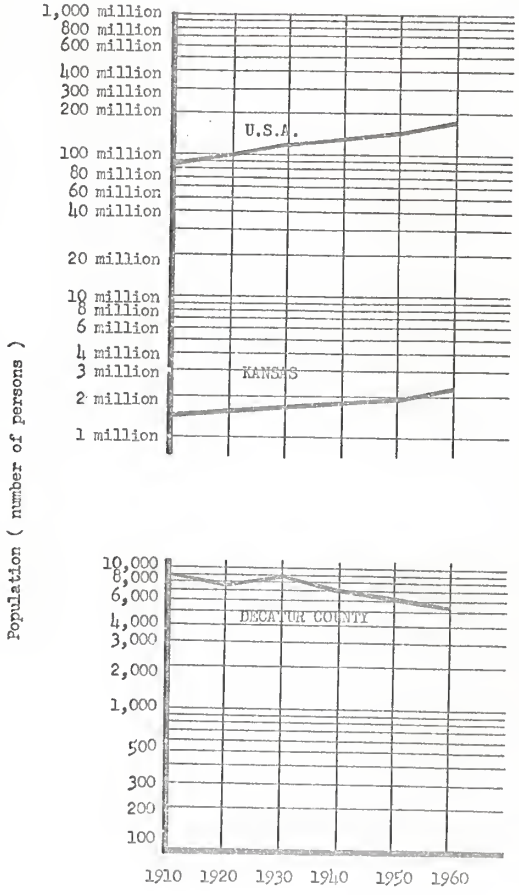

Fig. 16. Comparison of population change U.S.A., Kansas, and Decatur County, 1910-1960.

Oberlin's growth and Decatur County's decline have increased the percentage of Oberlin's share in the county's population. In 1910, for instance, Oberlin had only 12 percent of the county's population, but after fifty years, more than 40 percent of the county's population were living in Oberlin. The detailed population figures and changes are indicated in the following table:

TABLE II

Changes in population of
Decatur County and Oberlin

		1910	1920	1930	1940	1950	1960
Decatur County	Population	8,976	8,015	8,211	7,280	6,185	5,778
	Real change		-961	+196	-931	-1,095	-407
	Percentage change		-11%	2%	-11%	-23%	-7%
Oberlin	Population	1,157	1,247	1,629	1,878	2,019	2,337
	Real change		+901	+382	+249	+141	+318
	Percentage change		+ 8%	+30%	+17%	+ 8%	+15%

Source of information: U.S.Census of Population, 1910-1960.

Although Oberlin has continuously gained population, it does not help to keep the county's population from further decline. In other words, as Oberlin's population is increasing, the county is still losing population at a noticeable rate. The increase of Oberlin's population was not a net county gain,[14] because those who moved into Oberlin were those who had lived in other rural areas in Decatur County. Those people include retired farmers and those who had quit farming to try to make a living in non-agricultural employment in Oberlin.

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[14] Population migration from outside into the county.

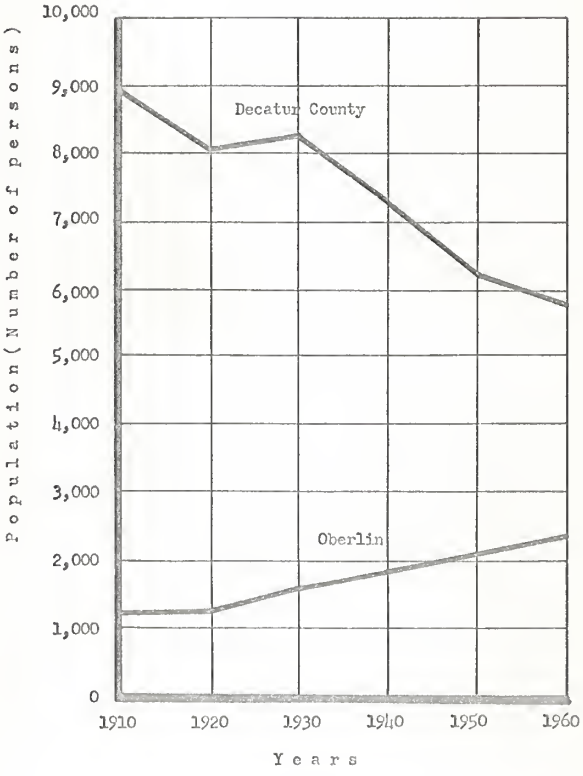

Fig. 17. Population change of Oberlin and Decatur County, 1910 to 1960.

Figure on the following page indicates the above-mentioned fact. In that figure, the upper solid line indicates the accumulative decrease of Decatur County's population. The lower solid line indicates the accumulative increase of Oberlin's population. The broken line on the top indicates the amount of population the County would have lost if Oberlin's population had not increased.

As shown in the previous chart the change of population of Oberlin and Decatur County are in opposit directions but the trend of change is related. This situation is illustrated in table III on page 40. According to the two population curves, it is obvious that the change of both Decatur and Oberlin is related. In other words, the County decreased less when Oberlin gained more and the County decreased more when Oberlin gained less in population. For instance, in 1910, Oberlin had gained 8 percent of population while Decatur County lost 11 percent. But in 1930, Decatur County had gained 2 percent instead of decling while Oberlin had gained 30 percent.

Besides the above-mentioned characteristics of Oberlin's population, it has a very high percentage of people over 65 years of age. If we take a look at the 1960 U.S.Census, the United States had only 9 percent of its population over 65 years of age, but the State of Kansas had 11 percent, Decatur County had 16 percent and Oberlin had 21 percent. For this reason alone, it is logical to say that Oberlin had become the retirement center of the County.

Birth and death rate analysis

Birth and death rates are two major factors which determine the population growth. The net increase or decrease of population is obtained by subtracting the deaths from the births. If the birth rate is constantly

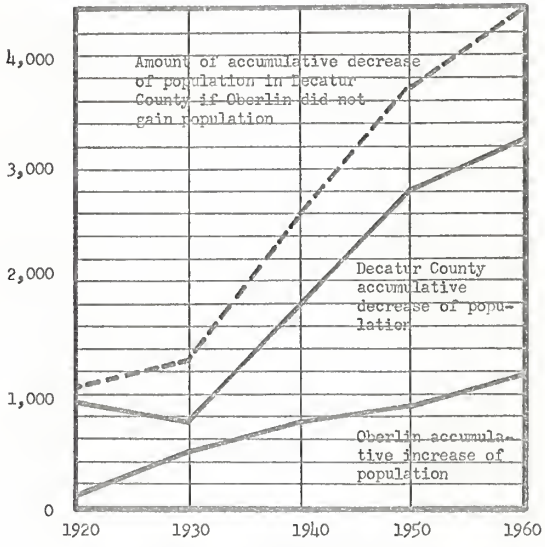

Fig. 18. The accumulative change of population in Oberlin and Decatur County, 1920- 1960.

TABLE III

Accumulative change of population of Decatur County and Oberlin, 1920-1960.

Year	Decatur Co.	Change	Accu. Change	Oberlin	Change	Accu. Change
1910	8,976			1,157		
1920	8,105	-961	961	1,247	+90	+ 90
1930	8,211	+196	796	1,629	+382	+ 472
1940	7,280	-931	1,727	1,878	+249	+ 721
1950	6,185	-1095	2,822	2,019	+141	+ 862
1960	5,778	-407	3,229	2,337	+318	+1180

Source of information: U.S. Census of Population, 1910-1960.

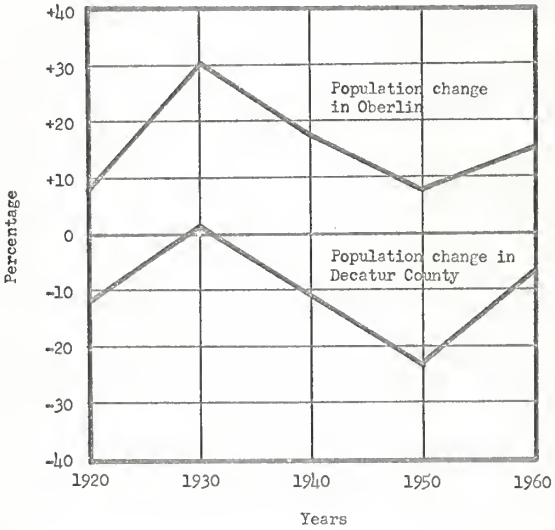

Fig. 19. Comparison of percentage change of population in Oberlin and Decatur County, 1920-1960.

higher than the death rate,population will presumablly be increased. If it happens in the opposite way,the population will be then decreased. The population growth will stay stable if the death and birth rates are always balanced. But all the above-mentioned facts will not be true if the factor of migration is involved.

In order to analyze the birth and death rate of Decatur County's population,data have been obtained from the county Courthouse. According to the number of the births and deaths,the birth and death rates were calculated. The births and deaths rates are shown numerically and graphically on pages 43 and 44.

As shown in figure 20,the birth and death rates in the past 28 years fluctuate from year to year. The birth rate started to increase in 1940 and reached its peak around the 1950's but dropped again in 1960. In order to obtain a meaningful result in the population projection,both the death and birth rates will be tested to try to find out the relationship between the rates and the changes of the years.

The death rate has an up-down-up trend during the past 28 years. It decreased from 1940 all the way to its bottom in 1955 and then climbed up again after 1965. It will be difficult to predict the future trend of the death rate,but presumablly it will decrease gradually due to the improvement in medicine and the resultant increase in life expectancy.

The trend of migration

Since Decatur County's birth rate has always been higher than the death rate,it supposedly will gain population every year. But as a matter of fact,the county has been losing population for many decades. Under this circumstance,a certain amount of population is evidently moving out of the county each year.

TABLE IV

The estimation of birth and death rates in Decatur County, 1939-1967.

Year	Population	Death	Death rate	Birth	Birth rate
1939	7,454	81	10.86	96	12.87
1940	7,280	63	8.65	87	11.95
1941	7,002	77	10.99	105	14.99
1942	6,724	64	9.51	107	15.91
1943	6,474	73	11.27	116	17.91
1944	6,225	68	10.92	118	18.95
1945	6,284	54	8.59	106	16.86
1946	6,343	48	7.56	120	18.91
1947	6,359	66	10.37	149	23.43
1948	6,375	64	10.03	136	21.33
1949	6,280	70	11.14	128	20.38
1950	6,185	98	15.84	126	20.53
1951	6,250	34	5.44	153	24.48
1952	6,184	52	8.40	139	22.47
1953	5,997	37	6.16	131	21.84
1954	6,048	41	6.76	136	22.44
1955	6,094	27	4.43	133	21.82
1956	6,015	51	8.47	134	22.27
1957	6,015	38	6.31	120	19.95
1958	6,046	48	7.93	127	21.00
1959	6,011	58	9.64	86	14.30
1960	6,121	53	8.65	86	14.04
1961	6,009	57	9.48	97	16.14
1962	6,134	44	7.17	77	12.55
1963	6,118	55	8.98	101	16.50
1964	6,062	52	8.57	142	23.42
1965	5,986	47	7.85	79	13.19
1966	5,954	51	8.56	90	15.11
1967	5,791	68	11.74	73	12.60

Source of information: Decatur County Courthouse, April, 1968.

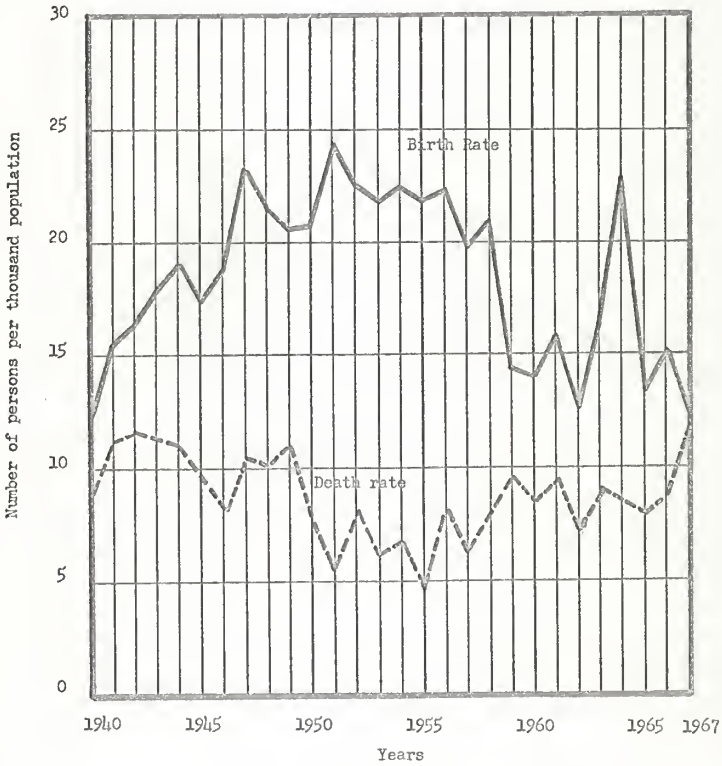

Fig. 20. Change in birth and death rates in 1940-1967, Decatur County.

Source of information: Decatur County Courthouse.

The amount of out-migration can be estimated by subtracting the actual population from the theoretical population:

Out-migration = population of the year - population of the previous year + net natural increase[15]

According to the estimate of out-migration,a theoretical population growth curve and an actual population growth curve can be obtained. The difference between the two curves indicates the amount of out-migration. As shown in figure 22 of page 47 ,there were only three years,namely,1945,1960 and 1962, witha slight in-migration. In the population projection,"in-migration" thus will be ignored. The actual amount of out-migration is shown by figure which clearly shows the movement of the population.

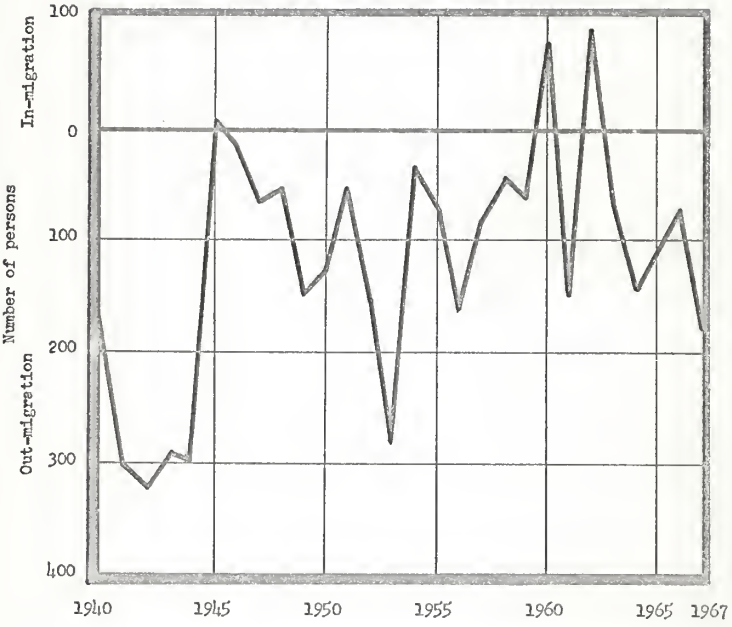

Fig. 21. Actual amount of In- and Out-migration in Decatur County, 1940-1967.

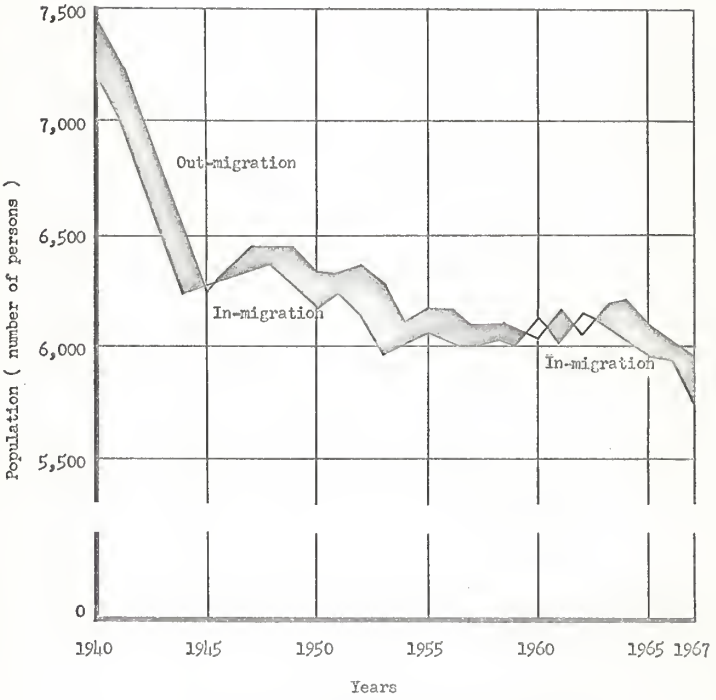

Fig. 22. Movement of migration in Decatur County, 1940-1967.

III. POPULATION PROJECTION

Since Decatur County's population is continually decreasing at a noticeable rate, the estimation of its future population is of significance for its future planning and development. In this section, a population projection for the year of 1980 will be presented.

In the population projection, it will be necessary to apply a model which should be suitably fitted to Decatur County's population change trend. Since the county is losing population every year, out-migration is a very important factor in Decatur's population growth pattern. The model used for the projection, thus, must involve out-migration.

Walter Isard has suggested several methods for population projection in his book "Methods of Regional Analysis".[15] Among those methods, only one method has taken " migration " into account. This method is called "Inflow-outflow Analysis". As he states in chapter 2 in his book:

> ".....Inflow of population is defined as the sum of birth and in-migration and outflow as the sum of deaths and out-migration. In general form the relationship is:
>
> $$P_{t+\theta} = P_t + (A P_t + R) - (B P_t + Q)$$
>
> Where A is the birth rate during period θ
> B is the death rate during period θ
> R is in-migration during period θ
> Q is out-migration during period θ ....."

In this model, all the population variables--namely, birth rate, death rate, in-migration and out-migration--have been included. In order to obtain a meaningful result for the projection, all the rates will be precisely calculated and tested before being actually applied in the model.

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[15] Walter Isard, Methods of Regional Analysis, published by M.I.T. Press, Cambridge, Mass., 1960.

Review of the Decatur County population growth trend in the past 28 years, 1940-1967, shows that only three years have a slight amount of in-migration.[16] All the other 25 years have a certain amount of out-migration. In the population projection, in-migration will therefore be ignored.

As indicated in figure 20 of page 44, there was a sharp decrease of population in the 1940-1945 period.[17] This sharp decrease was presumably influenced by the Second World War; it could not be considered as normal population decline. The 1940-1945 five years period will therefore be ignored in the population projection.

The birth rate, death rate, and migration rate are three major factors involved in the population projection model. In order to obtain a meaningful and logical result from the projection, all these rates will be tested before being applied in the model.

The purpose of the testing. The purpose of the test is to detect the relationship between the rate of change and time. If, for instance, the rate of change itself is changing with time, a different annual rates will be used in the model. If the rate of change has no relation to time, an average rate of change could be used in the model.

Methods of testing. A linear regression line will be used for the test. The linear regression line is in the following form:

$$\hat{Y} = \bar{Y} + B (X_i + \bar{X})$$ [18]

---

[16] Only 23 years were used in the projection.

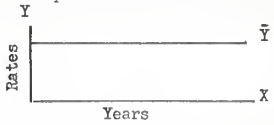
[17] The Second World War was ended in 1945.

[18] Holly Fryer, Methods and Concepts of Experimental Statistics, Allyn and Bacon, Inc. Boston, 1966. Chapter 6, page 212.

Where $\hat{Y}$ is the linear regression line
X_i is the coded year
$\bar{X}$ is the average of the coded years
$\bar{Y}$ is the average of the rates of birth, death, and out-migration
B is the regression coefficient which indicates the change per unit resulting in the change in y unit.

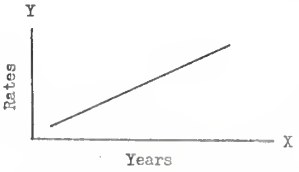
In this equation, $\hat{Y} = \bar{Y} + B (X_i - \bar{X})$, B is the determinant of the relationship between the rates and the years. B is the slope of the regression line. It indicates the relationship between the rates and the years as follows:

a. If B = 0, the linear regression line is parallel with the X axis, there was no relationship between the rates and the years.



b. If B < 0, there is a negative relationship between the rates and the years; in other words, the rates are decreasing as the years are passing.

c. If B > 0, there is a positive relationship between the rates and the years, that is the rates are increasing as the years change.



Testing of birth rates. According to the linear regression equation, $\hat{Y} = \bar{Y} - B (X + \bar{X})$, B is the slope of the regression line. B can be calaulated by its estimate b.

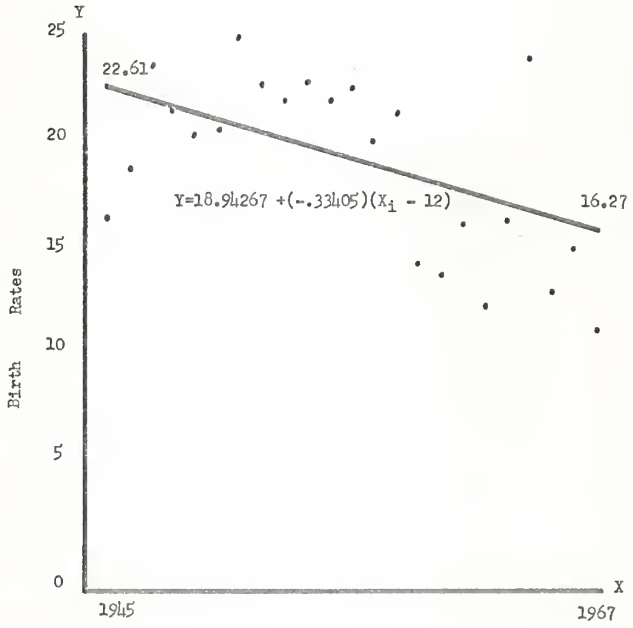


Fig. 23. Distribution of the birth rates.

$$b = \frac{\Sigma\left[\left(X_i - \bar{X}\right)\left(Y_i - \bar{Y}\right)\right]}{\Sigma\left[\left(X_i - \bar{X}\right)^2\right]} = -.33405$$

Steps of test

1. Set Hypothesis

   Ho: B = 0 (There is no relation between the birth rates and years)
   Ha: B ≠ 0 (There is some relationship between them)

2. Set α $\alpha = 0.05$

3. Using T test, where $T = \frac{b - 0}{S_b} = -3.29572$ with 21 degrees of freedom

4. Find region of rejection

   $T \geq 2.080$ and $T \leq -2.080$

5. Reject Ho--reject the hypothesis that there is no relationship between birth rate and the year.

6. Conclusion: There is a relation between the birth rate and the year. The birth rate decreases every year at a rate b=-.33405. In the population projection model, the following equation will be used for calculating the birth rate for every projected year:

   $Y = 18.94267 + (-.33405) (X_i - 12)$

Testing of death rates. According to the linear regression equation, calculate the value of b:

$b = -0.02079$

Steps of the test

1. Set hypothesis

   Ho: B = 0 (There is no relationship between death rate and year)
   Ha: B ≠ 0 (There is some relationship between them)

2. Set α $\alpha = 0.05$

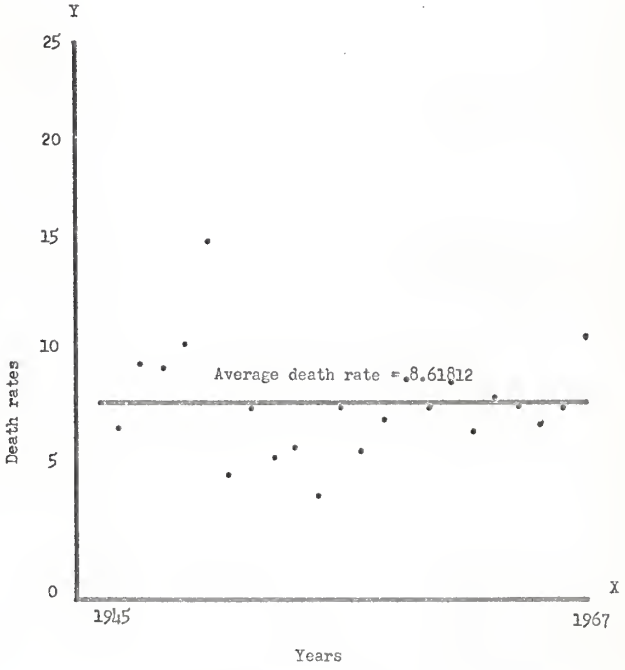


Fig. 24. Distribution of death rates.

3. Using T test, where $T = \frac{b - 0}{S_b} = 0.2748$

4. Find region of rejection

$T \geq 2.080$ $\quad$ $T \leq -2.080$

5. Fail to reject Ho---Accept the hypothesis that there is no relationship between the death rate and the year.

6. Conclusion: There is no relationship between the death rate and the the changes of the years. In the population projection model, an average death rate will be used.

Testing of out-migration rate. According to the linear regression line equation, calculate the regression coefficient, b, and then do the same test as in birth and death rate:

$b = 0.13346$

Steps of the test

1. Set hypothesis

Ho : $B = 0$ (There is no relationship between the out-migration
Ha : $B \neq 0$ rate and the change of the years)
(There is some relationship between them)

2. Set α $\quad$ $\alpha = 0.05$

3. Using T test where $T = \frac{b - 0}{S_b} = 0.13346$

4. Find region of rejection

$T \geq 2.080$ $\quad$ $T \leq -2.080$

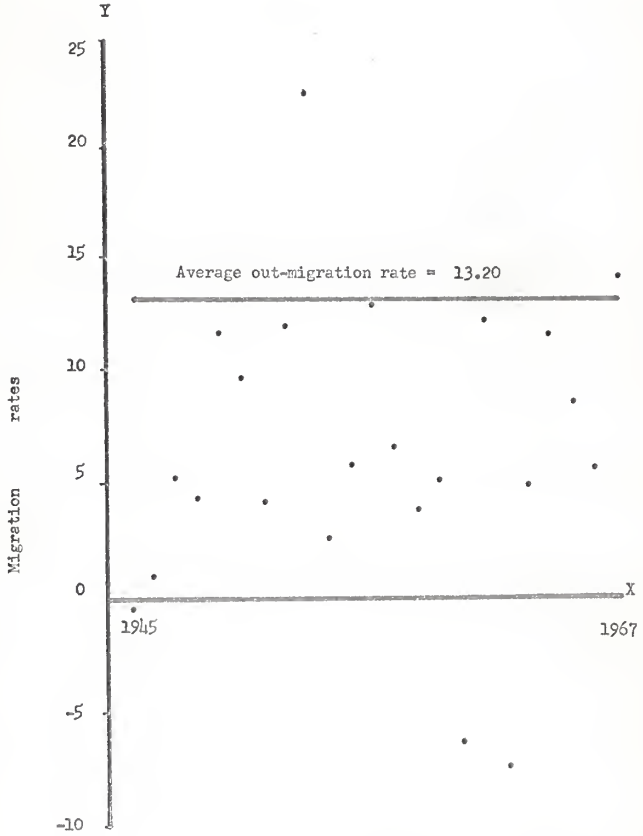


Fig. 25. Distribution of out-migration rates and in-migration rates, 1945-1967.

5.Accept Ho--Accepted the hypothesis that there is no retionship between the out-migration rate and the changing of the year.

6.Conclusion: An average out-migration rate will be used in the population projection model.

1980 population projection. The test shows that the birth rate decreased with the changing of the years and that death and out-migration rates had no relation to the changing of the years. In the population projection model,therefore,the rates will be obtained as follows:

Birth rate $Y = \bar{Y} - B (X_i - \bar{X})$
$Y = 18.94267 + (-.33405) (X_i - 12)$

$\bar{Y} = 18.94267$
$\bar{X} = 12$
$B = -.33405$

Death rate Use average death in the 23 years
= 8.61812

Out-migration Use average death rate in the 23 years
= 13.20825

By use of the above-mentioned rates in the population projection model, $P_{t+Q} = P_t + A P_t - (B P_t + Q)$,the estimated population from 1968 to 1980 will be obtained.

TABLE V

Estimated population for 1968-80

Year	Birth rate	Birth number	Death rate	Death number	Out-migration rate	Out-migration number	Projected population
1968	14.93407[1]	87	8.61812[2]	50	13.20825[3]	40	5,751
1969	14.60002	84	"	50	"	42	5,709
1970	14.26597	82	"	50	"	44	5,665
1971	13.93192	79	"	49	"	45	5,602
1972	13.59787	77	"	49	"	46	5,574
1973	13.26382	74	"	48	"	48	5,526
1974	12.92877	72	"	48	"	49	5,477
1975	12.59472	69	"	47	"	50	5,427
1976	12.26067	67	"	47	"	52	5,376
1977	11.92662	64	"	46	"	53	5,322
1978	11.59257	62	"	46	"	54	5,268
1979	11.25852	60	"	46	"	56	5,212
1980	10.92447	57	"	45	"	57	5,155

[1] Birth rates obtained from $Y = \bar{Y} - B (X_i - \bar{X})$

[2] Average death rate.

[3] Average out-migration rate.

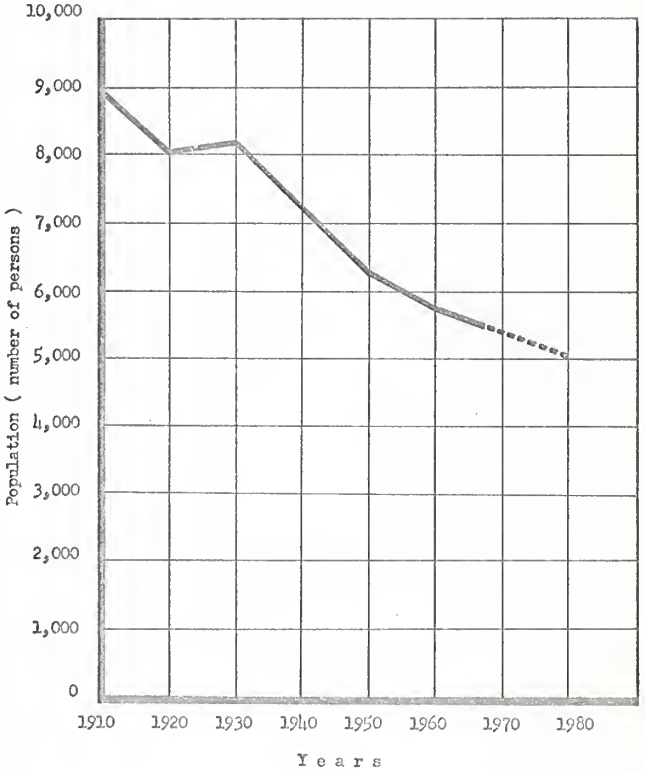


Fig. 26. 1980 population projection for Decatur County.

TABLE VI

Number of birth, death, migration and their rates in the 23 year period of 1945-1967.

Year	Population	Birth	Birth rate (1/100)	Death	Death rate (1/1000)	Out-migration	Migration rate (1/1000)
1945	6,284	106	16.87	54	8	- 7	1.12
1946	6,343	120	18.92	48	7	13	2.04
1947	6,359	149	23.43	66	10	67	10.42
1948	6,375	136	21.33	70	10	56	8.70
1949	6,280	128	20.38	98	11	153	23.78
1950	6,185	127	20.53	34	15	124	19.65
1951	6,250	153	24.48	52	5	54	8.56
1952	6,184	139	22.48	37	8	153	24.14
1953	5,997	131	21.84	41	6	281	44.75
1954	6,085	136	22.45	27	6	34	5.58
1955	6,094	133	21.82	51	4	70	11.35
1956	6,015	134	22.28	38	8	162	26.22
1957	6,015	120	19.95	48	6	82	13.46
1958	6,046	127	21.01	53	7	48	7.78
1959	6,011	86	14.31	57	9	63	10.37
1960	6,121	86	14.05	44	8	- 77	12.73
1961	6,009	97	16.14	55	9	152	24.67
1962	6,134	77	12.55	52	7	- 92	15.22
1963	6,118	101	16.51	47	8	62	10.03
1964	6,062	142	23.42	51	8	146	23.51
1965	5,986	79	13.19	68	7	108	17.72
1966	5,954	90	15.11	51	8	71	11.78
1967	5,791	73	12.60	68	11	168	28.19

Source of information: Oberlin Chamber of Commerce, April, 1968.

IV. SUMMARY

A study of the analysis in this chapter shows that Decatur County obviously has been losing its population in the past few decades and that this situation is going to be continued in the future. Although population in the county seat,Oberlin,is increasing,it can not prevent the decline. Oberlin's population will continue to follow the county's change trend,in other words,Oberlin will grow more while the county will decline less and it will grow less while the county will decline more. Another common characteristic found both in Oberlin and in Decatur County is the high percentage of the aged people and low percentage of the young adult group. The percentage of those who are 65 years of age or older in Oberlin is 21% and in the county it is 16%.

The educational level of the rural farm and rural non-farm population has approximately the same trend,but the rural farm population has a higher percentage of people who have completed high school and 1 to 3 years in college. If the county level is compared with that of the state,Decatur County has more high school graduates,but fewer college graduates than those in the State of Kansas.

The data of the 23 years from 1945-1967 shows that the birth rate is always higher than the death rate,but that a high out-migration rate has offset the net gain of population and hasresulted in the decline of the population. In the past 23 years,only three years showed a slight gain in population,the remaining 20 years showed decline. In-migration, therefore is not significant in Decatur County.

In order to obtain a precise population projection in this chapter, a statistical method has been applied. The three major factors which

dominate the population growth, birth, death and migration rates have been statistically tested before being used in the projection. The projection shows a reduction in the population from 5,778 in 1960 to 5,117 in 1980.

The population in Decatur County is decreasing and will continuously decrease. If this decline trend is to be stopped or reversed, the best approach will be to attract industry which will offer employment so that the community can prevent its younger generation leaving the county and can lure people from outside to settle in Decatur County.

CHAPTER IV ECONOMIC ANALYSIS

Agriculture and retail trade are the two major income sources of the rural farm and rural non-farm population in Decatur County. Agriculture supports the fars;retail trade supports the small towns. The changes and status of employment in the past ten years will be used to study the relationship between the decline of population and of employment. The age distribution in the labor force and the family median income level of the county will also be studied in this chapter.

In the analysis of agriculture,all elements which are related to farms will be studied. Land utilization,types of farms,major agricultural production and the characteristics of the farm operator have all been taken into account in this chapter. Land utilization and types of farms decide the quantity and variety of farm production which in turn decides the income of the farms. Livestock and field crops were essential products in the growth trend in the past decades. The lack of irrigation indicates the hardship and risk involved in farming. The change in the size and number of the farms is the basic cause of the decline of the population in this county.

Retail trade activities in Decatur County have been mostly concentrated in the small towns,especially in the county seat,Oberlin. A separate study of Oberlin will be presented in this chapter. In order to show the influence of Oberlin in the retail trade activities in the surrounding areas,an experimental regional study will be described in this chapter. Since Mc Cook,Nebraska,is the strongest competition in retail trade in the surrounding areas of Oberlin,a study of the trade areas for these two major commercial centers was undertaken.

I. EMPLOYMENT AND INCOME

Employment status

Decatur County is an agriculture-oriented county. The major employment group therefore is agriculture. Thirty-one percent of the rural farm population and four percent of the rural non-farm population are employed in agriculture. As shown below manufacturing is very weak in this county. Other major groups of employment are retail sales and services. Public administration also provides a large amount of employment for the county.

TABLE VII

General characteristics of employment in Decatur County

	Rural farm %	Rural non-farm %
Population under 14 years of age	33	24
Not in labor force	31	39
Agriculture	31	4
Manufacturing	0.2	1
Other industries	26	32

Source of information: U.S.Census of Population,1960.

Changes in employment

Comaprison of the 1950 and the 1960 employment shows that the major change occurred in tha agricultural group. Employment in agriculture decreased from 1,321 in 1950 to 896 in 1960,a 32 percent decline. Following the decline of the county's total population,most types of employment were also declining. The only noticeable increase in the employment group was in mining. It increased fourteen-fold during this ten year period. In 1950

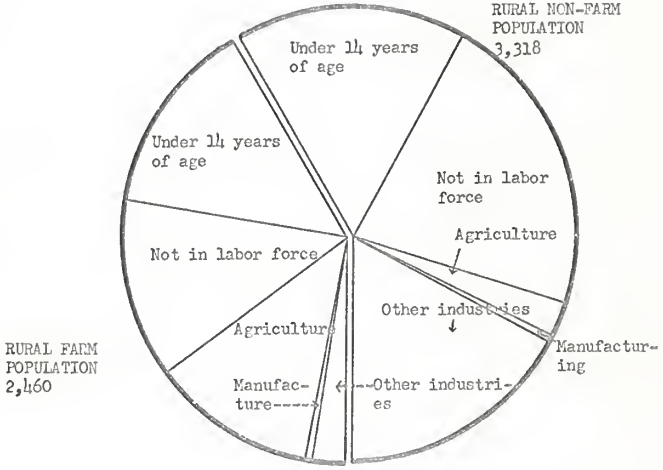


Fig. 27. Percentage distribution of employment in Decatur County, 1960.

Source of information: U.S. Census of Population 1960.

only two people were engaged in mining,but in 1960 there were 28. Because of the increasing population in the towns,service indutries had a little increase,but retail and wholesale business were going down. The above-mentioned growth trend is shown in figure 28 on the following page.

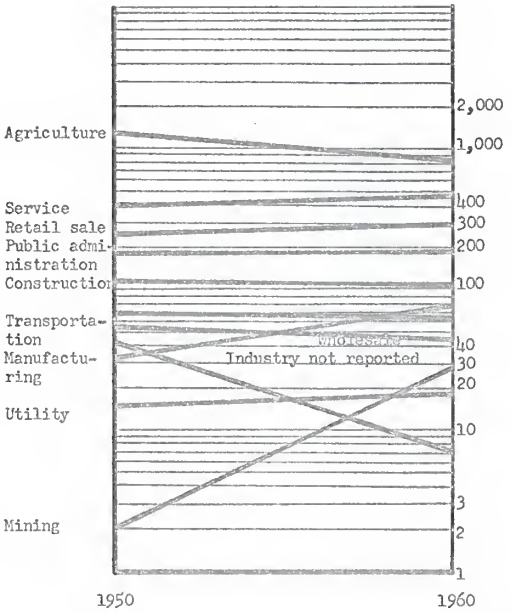


Fig. 28. Change in employment status between 1950-1960, Decatur County.

Source of information: U.S. Census of Population, 1950 and 1960.

TABLE VIII

Change in employment in Decatur County, 1950-1960.

Types of employment	1950	% of total	1960	% of total	% Change	Change in % total
Agriculture	1,321	55.0%	893	43.3%	-32%	-11.7
Mining	2	.1%	28	1.3%	+1300%	1.2
Construction	122	5.2%	110	5.4%	-9%	.2
Manufacturing	36	1.5%	68	3.3%	+88%	1.8
Transportation	69	2.4%	67	3.2%	-2%	.8
Utility	16	.4%	17	.8%	+6%	.4
Wholesale	55	2.3%	43	2.0%	-21%	- .3
Retailsale	279	11.3%	289	14.0%	+3%	.7
Services	432	17.4%	444	21.6%	+4%	4.2
Public Administration	92	3.4%	93	4.6%	+1%	1.2
Industry not reported	41	1.0%	7	.5%	-82%	.5
	3,374	100.0%	2,059	100.0%		

Source of information: U.S. Census of Population, 1950 and 1960.

Age distribution in labor force

Decatur County has a very high percentage of people in the upper active age group.[1] Thirty-eight percent of the total labor force was between the ages of 45 and 64. Of those who had already reached retirement age, eleven percent still remained in the labor force.

TABLE IX

Comparison of percentage distribution of age group in labor force, Decatur County and the State of Kansas.

Age group in labor force	Decatur County Number of Persons	Decatur County Percentage	Kansas Number of Persons	Kansas Percentage
14-17	87	4.20	35,506	4.20
18-24	147	7.69	117,754	13.90
25-34	337	16.26	168,572	19.89
35-44	486	23.45	186,417	22.00
45-64	782	37.75	286,091	33.76
65 and over	233	11.25	52,992	6.25

Source of information: U.S.Census of Population, 1960.

Compared with the state, Decatur County has a smaller percentage of its population in the young age group but a larger percentage in the age group over 35, especially of those over 65.[2] The higher percentage of the aged population is a unique characteristic of Decatur County.

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[1] "Active age group" was defined as those who from 15 to 64 years of age.

[2] Decatur County has 16 percent of the total population over the the age of 65.

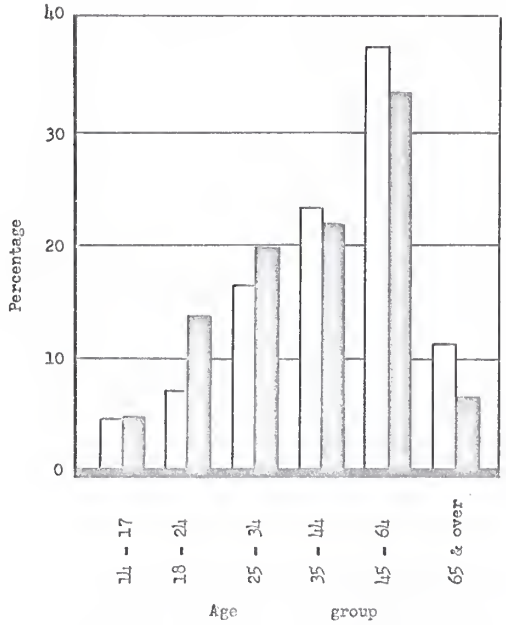

Fig. 29. Comparison of age distribution in labor force, Decatur County and the State of Kansas, 1960.

State of Kansas Decatur County

Income level

The level of income is the typical indicator of the living standard and purchasing power of a population. But this indicator did not work out well in Decatur County. In 1960,for the total of 1,597 families,the median family income was $ 3,958. Compared with the State of Kansas and the national level,Decatur County was $ 1,419 below the state and $ 1,859 below the national level.[3]

The percentage of families with an income of under $ 3,000 and with an income of over $ 10,000 indicates the wealth of the population and the distribution of its income. Comparison of the 1950 data with those of 1960 show that Decatur County had a favorable increase. In 1950,38 percent of the families of the county had less than $ 3,000 of income,but in 1960 it dropped to 33 percent. Those who had an income over $ 10,000 had a 5 percent gain from 1950 to 1960.

TABLE X

The growth of family income in Decatur County,1950 and 1960.

Income group	Number of families		Real change ($)	Percentage Change
	1950	1960		
Under $1,000	410	106	-304	-286 %
$1,000-$1,999	285	174	-111	- 63 %
$2,000-$2,999	275	253	- 22	- 8 %
$3,000-$3,999	270	272	2	0.7%
$4,000-$4,999	175	190	15	7 %
$5,000-$5,999	90	185	95	51 %
$6,000-$6,999	60	125	65	52 %
$7,000-$9,999	120	182	62	34 %
$10,000 & over	55	110	55	50 %

[3]The median family income of the State is $5,377 and of the nation is $ 5,817.

In general, the distribution of family income in rural farm and rural non-farm population was similar. They both had a relatively high percentage of population in the $ 2,000 -$2,999 and the $3,000-$3,999 income group. But the rural non-farm population had double that percentage for the $ 10,000 and over income group. The distribution of family income for the rural farm and non-farm population is presented graphically on the following page.

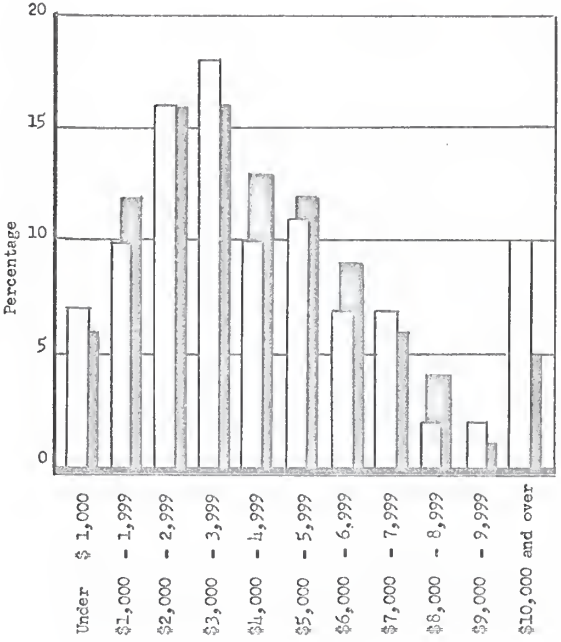

Fig. 30. Comparison of rural farm and rural non-farm family income distribution in Decatur County, 1960.

Rural farm Rural non-farm

Source of information: U.S. Census of Population 1960.

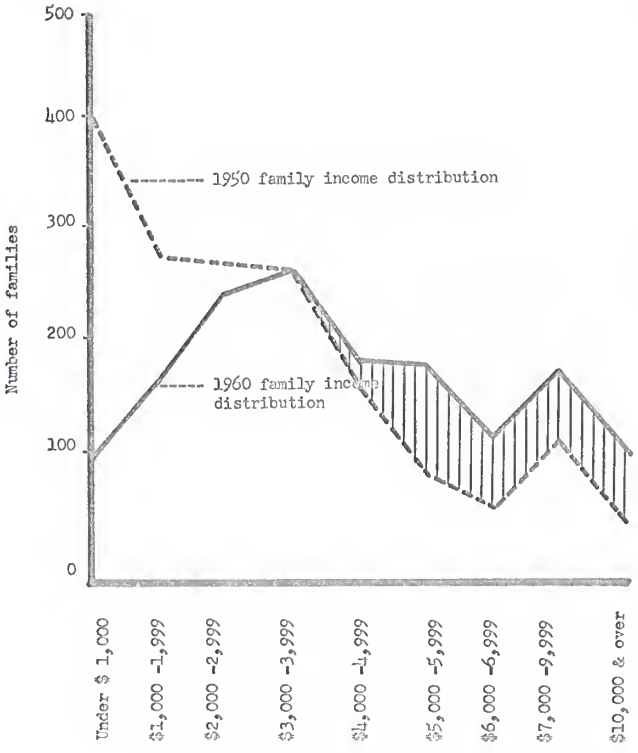

Fig. 31. Comparison of family income level in Decatur County, 1950-1960.

Source of information: U.S. Census of Population 1950 and 1960.

II. AGRICULTURE

Land utilization and types of farms

Since the major industry in Decatur County is agriculture,the utilization of land is an important indicator of the success or failure of the agriculture activities. For instance,if the percentage of idle and poor cropland increases,the agricultural production and the farm income will decrease. The utilization of land,therefore,directly influences the county's economy.

In 1964,98.4 percent of the total land was used for farm operation. Livestock and field crops are the two major uses of the farm land. Livestock is the most important farm production in the county as it used 39.8 percent of the total land and contributed 69 percent of the farm income. Most of the livestock was raised on the farms as the county had only six ranches in 1964.

Although a total of 55.6 percent of the county's land was used for crop production,only about half of the cropland was actually in use. For instance,only 28.1 percent of the land was harvested in 1964 and 27.5 % of the land was not in use in the same period.

The percentage of land utilization varies slightly every year according to several factors. The variable climate and the use of fertilizers are the major factors which directly influenced the yeild of crops. The change of climate is not controllable by manpower. Drought and killing frosts damage agricultural production in the area. For instance,due to drought 1,337 farms had a crop failure in 1934 and 1,078 in 1939. The failure of agriculture affected the county's economy substantially.

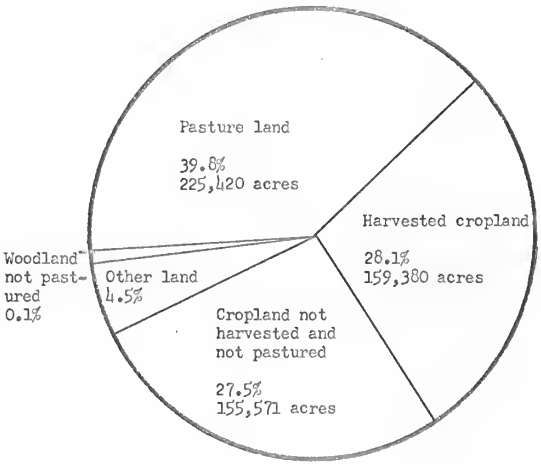

Fig. 32. Percentage distribution of land utilization, 1964

Source of information: U.S. Census of Agriculture 1964.

The proportion of specific land utilization does not change substantially. Every year, approximately a stable proportion of the land will be used for a certain type of agricultural production, but the result of the utilization is not controllable. Figure 33 on the following page compares the land utilization in 1959 and 1964 which gives an indication of the change in various land uses.

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[4] Land used for miscellaneous productions.

[5] Those were land either to lie fallow or not in use.

TABLE XI

Land utilization in Decatur County,1959 and 1964.

Utilization	1959		1964	
	Acres	%	Acres	%
Cropland harvested	185,268	32.32	159,380	28.14
Cropland for pasture	12,495	2.18	8,124	1.43
Woodland pastured	3,827	.67	539	.09
Woodland not pastured	307	.05	699	.12
Other pastured land	209,238	36.50	216,757	38.26
Other land (house,etc.)	26,161	4.56	25,331	4.47
Cropland not harvested and not pastured	135,864	23.70	155,571	27.46
Total	573,160	100.00	566,401	100.00

Source of information: U.S.Census of Agriculture,1959 and 1964.

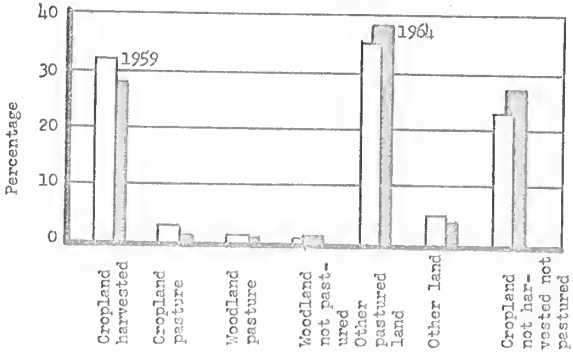

Fig. 33. Comparison of land utilization in Decatur County,1959 and 1964.

TABLE XII

Types of farms in Decatur County,1960.

Types of farms	Number
Fieldcrop farms	233
Poultry farms	1
Diary farms	7
Livestock farms	355
General farms	42
Miscellaneous farms	74

Source of information: U.S.Census of Agriculture,1964.

Livestock analysis

Livestock is the largest single source of income in Decatur County. The livestock farms contributed 69 percent of the county's farm income. A favorable grazing season and an abundant supply of feed grains are predominant requirements for livestock raising. Fortunately,those conditions are quite ideal in Decatur County.

Most of the livestock on field crop farm land ranks as either major or minor production. The county had only a few ranches still in operation in 1964. The most important livestock was cattle. Besides cattle, hogs and pigs,sheep and lambs are also of importance.

Cattle. Since 1956,cattle raising in Decatur County has grown increasingly both in number and in value. In 1956,the county had 39,300 heads of cattle valued at approximately 3 million dollars,which ranked first as the county's income earner. The value of the cattle reached its peak of 7 million dollars in 1963,but has declined slightly since then.[7]

Hogs and pigs. Hogs and pigs in 1964 were minor livestock in the county. The value and number of hogs and pigs increased in the period of 1956-1965. In 1956,the total number of hogs and pigs was 9,800 heads valued at $ 137,200. Ten years later,the number jumped up to 16,400 and was valued at $ 355,900.

Sheep and lambs. Stock sheep and lambs were not so important as cattle in Decatur County. The value of sheep and lambs has increased until 1963. In 1956 the county had a total of 5,000 head and was valued at $ 60,200. It reached 5,900 head and was valued at $ 400,200 in 1963. Both the number and value of sheep and lambs have dropped noticeably in

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[7] Source of information:Farm fact,1956,1963.

Chickens and eggs. Chicken raising is not so popular today as it was in 1940. In 1940,more than 80 percent of the 1,174 farms raised chickens,but in 1964 only 21 percent of the total farms still interested in raise chickens. The value of chickens had dropped from $ 61,000 in 1956 to $ 30,400 in 1965. The value of eggs also declined. In 1964 the county produced about 230,000 dozen of eggs valued at approximately $ 60,000.

Other livestock products. The county had approximately 3,000 milk cows in 1955 which produced milk valued at $ 300,000. But ten years later, only 1,000 milk cows were still used for milk production and its value also has decreased to $ 190,000.

In general,livestock production showed a growth trend after 1956, but it had a sharp decrease in 1960,then rose again until 1963. After 1963,almost all the livestock dropped but at different rates.

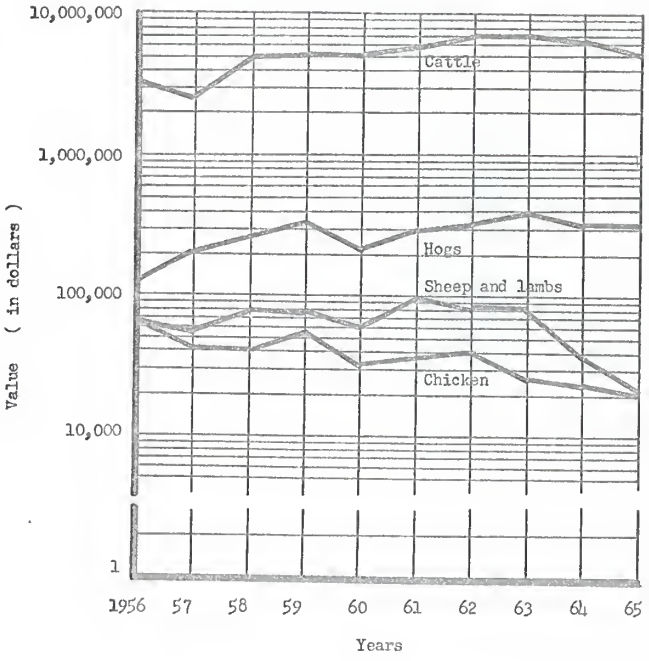

Fig. 35. Growth of value of livestock and poultry, Decatur County, 1956-1965.

Source of information: Kansas State Board of Agriculture Farm Fact, 1956-1965.

Field crops analysis

Urbanization and specialization have taken jobs away from the farms,but not away from total agricultural production. Although the number of farms has decreased in the past few decades,as a result of the increase of large-sized farms,the total value of field crops has been increasing.

Decatur County had a total field crops value of approximately 4 million dollars in 1956 and then increased to its peak of 8.8 million dollars in 1960. The value of field crops doubled in the five year period. Although,after 1960,the value of field crops decreased,it was still higher than the 1956 level.

The growth in the value of field crops and in the total acres harvested has little relation to the change in the number of farms. This trend is illustrated in the figure on page 83.

Wheat is the main field crop in Decatur County. Besides wheat, the county also grows sorghums,corn,rye,oats and barley. All the field crops will be discussed in more detail in the following pages.

Wheat. Wheat is the number money maker among all field crops in Decatur County. It brought approximately 3.7 million to the county in 1960. But the value of wheat has dropped in the past few years because of undesirable weather. The value of wheat dropped to 1.4 million in 1964 and 2.2 million in 1965.[8]

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[8] Source of information: Kansas Board of Agriculture,Farm Fact, 1960,1964 and 1965.

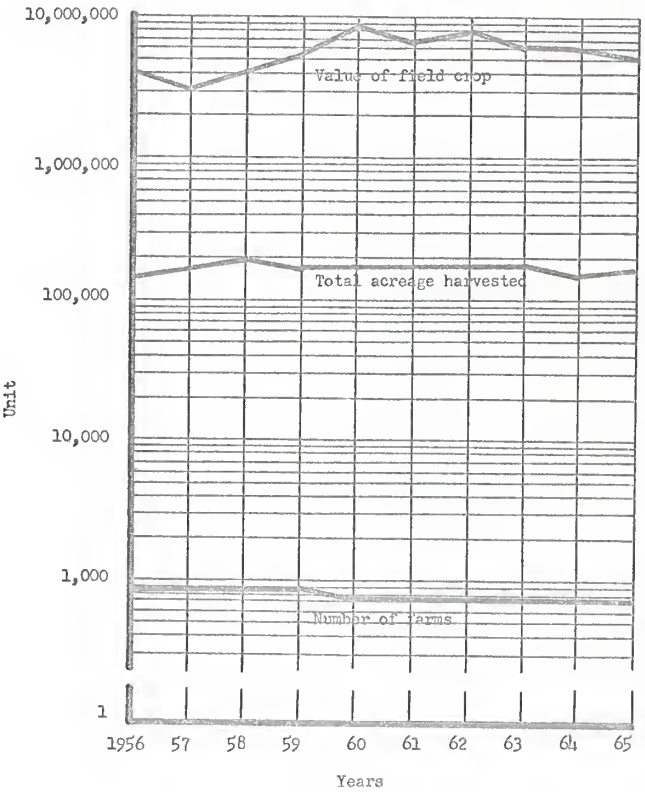

Fig. 36. The growth of number of farms, total land harvested and the value of crops in Decatur County, 1956-1965.

Source of information: Kansas State Board of Agriculture, Farm Fact, 1956-1965.

Sorghums. The value of sorghums had a slight increase in the last ten years. In 1956, sorghums were valued at $ 170,000 but only eight years later, it jumped to 1.1 million dollars. After 1963 it began to decline slightly. In 1964, the acreage of sorghums was decreased, and besides, the climate in that year was unfavorable for field crops. This resulted in reduction of sorghums production in 1964 to a value of $ 835,000, a 28 percent decrease from 1963. The value of sorghums continued dropping until it was $ 757,000 in 1965.

Corn. Corn production in Decatur County was in a downward trend except for a slight increase in 1962 and 1965. The value of corn was $ 750,000 in 1958 but in 1964 this figure dropped all the way to $ 100,000.

Other field crops. Oats, barley and rye are minor field crops in Decatur County. The production and value of oats, barley and rye has fluctuated in the last ten years. The value of rye has grown tremendously in this period, being valued at $ 2,540 in 1959 and $ 89,700 in 1962.

In general, the future of field crop production depends on a combination of factors. The climate is the most important factor for all the crops, but the amount of land used and the marketing price are also factors which more or less influence the field crops.

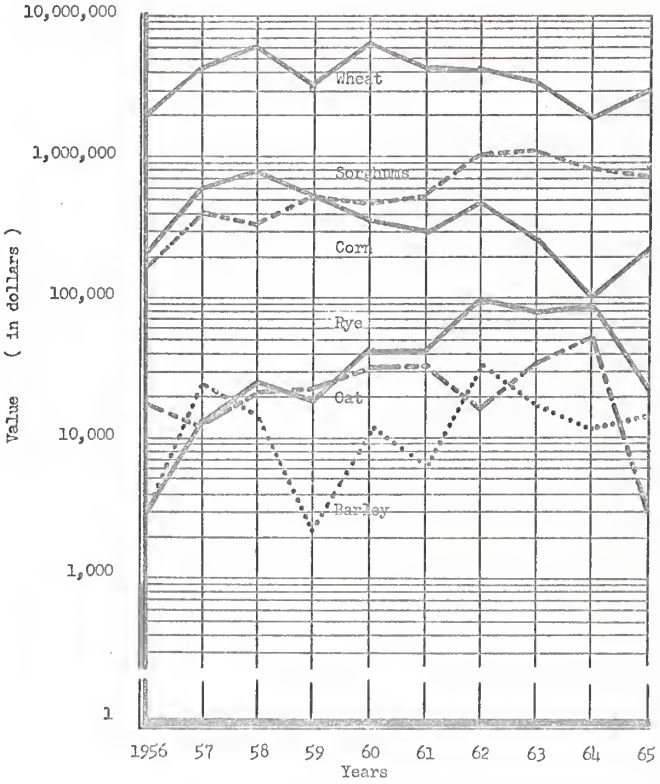

Fig. 37. The growth of field crops, in value of dollars, Decatur County, 1956-1965.

Source of information: Kansas State Board of Agriculture, Farm Fact, 1956-1965.

TABLE XIII

Number of farms, acres harvested and value of crops.

Year	Number of farms	Total acreage harvested	Value of field crop
1956	870	157,065	$ 3,347,500
1957	870	181,155	$ 3,353,590
1958	870	185,755	$ 4,542,270
1959	870	183,160	$ 5,495,660
1960	796	185,065	$ 8,884,750
1961	796	176,940	$ 7,356,990
1962	796	172,000	$ 7,722,830
1963	796	177,700	$ 6,947,000
1964	796	156,412	$ 4,643,590
1965	796	173,260	$ 5,512,640

Source of information: Kansas Board of Agriculture, Farm Fact, 1956-1965.

TABLE XIV

Value of livestock, 1956-1965.

Year	Cattle	Hogs	Sheep and lambs	Chicken
1956	$ 3,057,000	$ 137,200	$ 60,200	$ 61,200
1957	$ 2,891,000	$ 201,520	$ 56,750	$ 47,580
1958	$ 4,804,400	$ 285,100	$ 73,220	$ 48,720
1959	$ 5,482,000	$ 345,100	$ 73,560	$ 55,180
1960	$ 5,491,000	$ 212,500	$ 62,730	$ 32,760
1961	$ 5,902,000	$ 309,400	$ 93,350	$ 38,880
1962	$ 6,748,800	$ 348,000	$ 88,690	$ 40,500
1963	$ 7,780,000	$ 400,000	$ 87,400	$ 28,500
1964	$ 6,509,200	$ 340,700	$ 37,300	$ 25,050
1965	$ 5,271,500	$ 355,900	$ 23,800	$ 30,400

Source of information: Kansas Board of Agriculture, Farm Fact, 1956-1965.

TABLE XV

Value of field crops, 1956-1965.

Year	Wheat	Sorghums	Corn	Oats	Barley	Rye
1956	$ 1,096,000	$ 173,180	$ 216,000	$ 2,800	$ 18,310	$ 2,540
1957	$ 2,288,000	$ 547,200	$ 604,900	$ 25,400	$ 137,800	$137,800
1958	$ 3,729,000	$ 487,300	$ 750,400	$ 16,300	$ 202,800	$ 22,300
1959	$ 1,976,000	$ 534,200	$ 514,400	$ 2,100	$ 219,000	$ 20,300
1960	$ 3,762,000	$ 498,400	$ 386,400	$ 13,000	$ 325,000	$ 41,400
1961	$ 2,574,000	$ 585,900	$ 307,400	$ 6,700	$ 336,200	$ 41,000
1962	$ 2,236,000	$ 1,076,200	$ 486,400	$ 26,500	$ 160,100	$ 89,700
1963	$ 2,024,000	$ 1,170,400	$ 282,800	$ 17,100	$ 36,900	$ 76,200
1964	$ 1,440,000	$ 835,100	$ 100,000	$ 12,900	$ 54,100	$ 79,000
1965	$ 2,289,000	$ 757,800	$ 223,700	$ 14,400	$ 3,800	$ 24,700

Source of information: Kansas Board of Agriculture, Farm Fact, 1956-1965.

Irrigation

Good crops depend on good irrigation system and a desirable climate, byt a good irrigation system can more or less remedy the inadequacy of rainfall. The State of Kansas has not yet developed a good irrigation project for this area. Most of the counties in the state have only a limited amount of land under irrigation projects.

In Decatur County,only 10.8 percent of the total land was irrigated in 1964. In the same year,the state had 5.5 percent of the total farm land under irrigation. In 1964,among the 692 farms in Decatur County,only 74 farms had wholly or partially built up their irrigation system. Most of the irrigated farms was between 200 and 500 acres.[9]

TABLE XVI

Number of irrigated farms
in Decatur County,1964.

Size of farms (in acres)	Number of irrigated cropland farm	Total of cropland farm	Percentage of total cropland
1 - 9	-	3	0 %
10 - 49	4	12	33 %
50 - 99	6	8	75 %
100 - 199	16	30	53 %
200 - 499	35	154	22 %
500 - 999	12	243	4 %
1,000 and over	1	201	0.4 %
Total	74	651	

Source of information: U.S.Census of Agriculture,1964.

[9]Source of information:U.S.Census of Agriculture,1964.

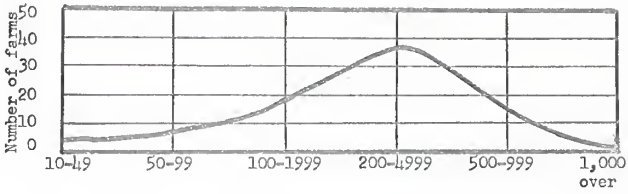

Fig. 38. Farm size extent of irrigated cropland in 1964.

Source of information: U.S.Census of Agriculture,1964.

Irrigation in Decatur County has improved slowly in the last few years. In 1959,the county had only 56 irrigated farms but by 1964,9 more farms started irrigating. This is a 3.8 percent increase in the five year period. In the same period,the state had a 9.9 percent increase.

There was a close relationship between irrigation and the size of the farms. The number of farms with irrigation decreases as the size of the farms increases. Most of the irrigation was found in farms under 500 acres in size. Only 4 percent of the farms of 500-999 acres were irrigated. Among farms having over 1,000 acres,only 0.4 percent were irrigated. This situation illustrates the fact that the success or failure of the county's agriculture depends almost entirely on the climate which,at the present time,was not controllable by man.

Changes in number and size of the farms

The number of farms in Decatur County has decreased in the past few decades,but the size of the farms has increased. This trend helped to keep the total acreage of farmland in balance in that period.

Decatur County had a territory of 575,360 acres in 1964. 98.4

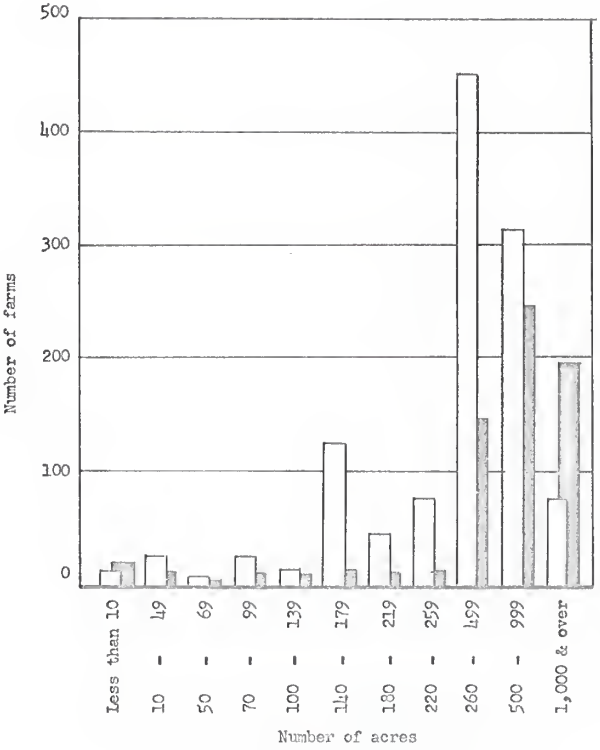

Fig. 39. Changes in farm size, 1940 to 1964.

1940 1964

Source of information: U.S. Census of Agriculture, 1940 and 1964.

percent,or 566,415 acres,were used for agricultural production. Only 1.6 percent of the total land was occupied by other uses including housing lots and streets of the rural communities. In 1930 the average size of the farms was only 416 acres,but by 1964 it had increased to 818 acres. The average size of the farms had almost doubled during the 34 years.

The number of the farms decreases as the size of farms increases. The county had 1,340 farms in 1930,but as result of farm consolidation snd the change of occupation of the farmers,only 692 farms remained in operation in 1964. Due to the increase in size of farms,the total farm land did not follow the decling trend of the number of farms. In 1930, the county had 558,183 acres of farmland,but it had a 1.4 percent increase in 1964,instead of a decline. The change in size,number and total acrcage of farmland are indicated in figure 40 on page 92.

The change of the farm size in the last 24 year period of 1940-1964 has been used to illustrate the growth trend in figure 41 on page 94 . It is obvious that farms under 1,000 acres had faced an over-all decline at a noticeable rate. Only farms of over 1,000 acres in size had increased 158 percent in the same period. In 1940,for instance,the county had only 77 farms over 1,000 acres in size,but in 1964,there were 199.

Three farm size distribution curves have been presented on page 94,which help to illustrate the past,present and future growth trend in farm size. In the 1940 distribution curve,the majority of the farms fell in the range of 260-499 acres. But by 1964,it had changed to the 500-999 acre group. If one assums that the present situation will be continued at the same rate,it is estimated that,in the next 24 years,namely in the period of 1964-1988,the number of farms over 1,000 acres in size will double again and reach approximately 513 farms. In the same period,the

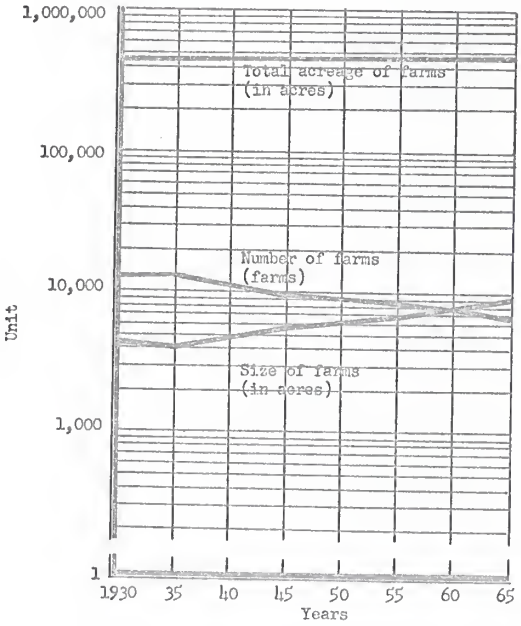

Fig. 40. Change in size, number and total acreage of farms in 1930-1965, Decatur County.

Source of information: U.S. Census of Agriculture 1930-1965.

500-999 acre group will decrease from 245 in 1964 to 191 in 1988. The 260-499 acre group will also decrease from 143 in 1964 to 46 in 1988. The 1988 farm size growth trend will form a new distribution curve, the majority of the farms will have 1,000 acres or more. The 1988 growth trend is also illutrated in figure 41 on page 94.

The estimation of the future growth of the size of farms was obtained as follows:

1. There were 77 farms with more than 1,000 acres in 1940. In 1964, 24 years later, this number had reached to 199, a 158 percent increase in the 24 years. If one assume that this growing trend will be continued in the next 24 year period, namely, from 1964 to 1988, the number of farms over 1,000 acres in size will be 513.
   1940: 77 farms larger than 1,000 acres.
   1964: 199 farms larger than 1,000 acres.
   199-77=122 $\frac{199}{122}$ = 1.58 a 158 % increase
   199·158% = 314 increase in the next 24 year period.
   314+199 = 513 estimated number of farms over 1,000 acres in size.

2. There were 315 farms of 500-999 acres in 1940 and 245 in 1964, a 22 percent decrease. If one assume that the present situation will be continued, there will be another 22 percent decrease in the next 24 years, namely from 1964 to 1988. The number of farms of 500-999 acres in 1988 will be 191.
   1940: 315 farms of the size of 500-999 acres.
   1964: 245 farms of the size of 500-999 acres.
   315-245 = 70
   $\frac{70}{245}$ = .22 = 22% decrease in 1940-1964
   245 · 22% = 54 decrease in the next 24 years.
   245-54=191 number of farms of 500-999 acres in 1988.

3. There were 460 farms of 260-499 acres in 1940 and 143 in 1964, a 68 percent decrease in the 24 year period. If the present situation will be continued, there will be only 46 farms of the same size in 1988.
   1940: 460 farms of the size of 260-499 acres.
   1964: 143 farms of the size of 260-499 acres.
   460-143 = 317 decrease in 1940-1964, a 68 percent decrease.
   143· 68% = 97 number of farms of 260-499 acres will decreasc in 1964-1988.
   143-97=46 farms of 260-499 acres left in 1988.

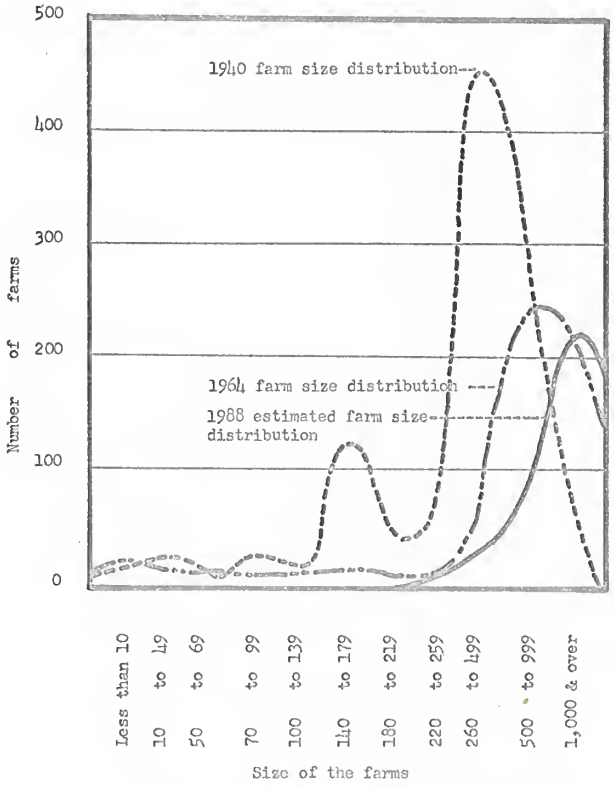

Fig. 41. Distribution of farm size in 1940, 1964, and projected 1988.

Source of information: U.S. Census of Agriculture, 1940, 1964.

TABLE XVII

Number and size of farms,
1930 to 1965

	1930	35	40	45	50	55	60	65
Number of farms	1,340	1,414	1,174	987	923	859	796	692
Size of farms	416	402	478	572	621	670	720	818

Source of information: U.S.Census of Agriculture,1930-1965.

TABLE XVIII

Change in farm size,1940 and
1965.

Farm size	1940	1965	Change
Less than 10	12	24	12
10 to 49	26	14	-12
50 to 69	4	3	- 1
70 to 99	25	7	-18
100 to 139	16	10	- 6
140 to 179	126	17	-109
180 to 219	42	13	-29
220 to 259	75	14	-61
260 to 499	460	143	-317
500 to 999	315	245	-70
1,000 and over	77	199	122

Source of information: U.S.Census of Agriculture 1940 and 1965.

Age distribution of the farm operators

Compared with the median age of the county's population, the farm operators have a relatively high average age. In 1960, the median age of the people in the county was 34.9, but the average age for the farm operators was 50.2. In the same year the State of Kansas had a median age of 29.8 and an average for farm operators of 51.3.

In 1960, 64 percent of the farm operators were above 45 years old and 16 percent had already reached the retirement age, but still remained in the labor force. In 1960 there were 893 farms working on the 844 farms, with an average of 1.05 persons per farm. It is estimated that in 1980 there will be 779 persons supposedly working on 454 farms and that the average will be 1.70 persons per farm. As for the availability of farm jobs, 38 percent or 353 persons would possibly not have an opportunity to work on the farms. Those surplus people will have to leave the farm land either voluntarily or involuntarily.

The estimation of the future need for farmers was obtained from following calculation:

Average annual decrease of farms = 19.5 farms per year.
Number of farms in 1980 = 796(1960)-390(20 years decrease)=406
1960 total population 5,778
1960 rural farm population 2,460 (42% of the total population)
1980 estimated population 5,155
5,155 • 42% = 2,165 (1986 rural-farm population)
In 1960, 36 % of the rural-farm population were employed in agriculture, if this rate remained in the same in 1980,
2,156 • 36% = 779 779 persons will supposedly employed in the 406 farms.
The average person per farm will be 1.91.
According to the rate in 1960, 406 farms in 1980 can only offer 426 farm jobs.
779 - 426 = 353
353 persons will not have jobs on the farm land in 1980.

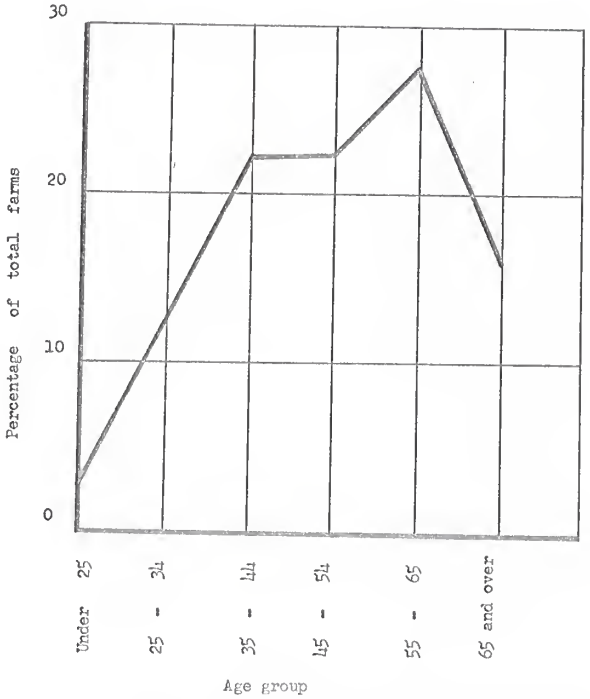

Fig. 42. Age distribution of the farm operators, by farms, 1964.

Source of information: U.S. Census of Agriculture 1964.

Ownership of the farms

The number of farms owned by farmers are low in Decatur County. Only 27 percent of the total farmers worked on their own land in 1964. About half of the farmers still owned their land by partnership with the landlord or other farmers. The farm manager system started rather late in Decatur County. In 1964, there were only 3 farms with a farm manager. Approximately 23 percent of the county's total farms were managed by tenants who worked under contracts with the land owner, paying in cash or grain or both.

TABLE XIX

Ownership of the farms in Decatur County, 1959 and 1964.

Ownership	All farms		Percentage Change	Cropland (acres)		Percentage Change
	1959	1964		1959	1964	
Full owner	223	189	-15%	101,848	86,581	-15%
Part owner	361	339	- 6%	334,868	357,730	6%
Manager	2	3	50%	1,120	3,540	216%
Tenants	210	161	-23%	135,324	118,564	-12%
Total	796	692				

Source of information: U.S.Census of Agriculture, 1959 and 1964.

This table shows the percentage change of ownership of farms between 1959 and 1964. In this period, farms under full ownership, part ownership or tenant management all faced decline. Only farms under managers have increased about 50 percent. As the acreage of the farm land rose, only manager farms increased 216 percent. Farms under other forms of ownership faced either a decline or a slight increase.

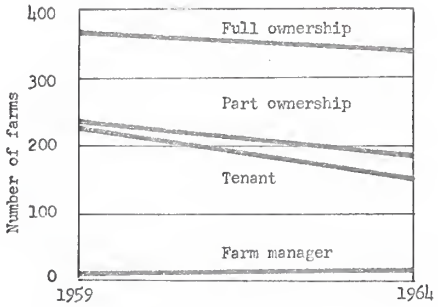

Fig. 43. Changes in ownership of farms, 1959-1964.

Source of information: U.S. Census of Agriculture, 1959 and 1964.

The above figure indicates the change in ownership of farms in the 1959-1964 period. It is obvious that the only increase was that of the manager farms, which had a 50% increase. It is hoped that the farms will continue increasing their size so that they can efficiently use large and flexible farming equipment. As the size of farms grows bigger and bigger, these farms will eventually become enterprise-type businesses stead of family-type farms. More experienced managers are expected to be educated in the colleges and universities.

III. RETAIL SALES AND SERVICES

The changing business activities:Oberlin

The increase of Oberlin's population did not proportionally increase its business activities. Since Oberlin is the shopping center of the county, the decline of the county's population has actually influenced Oberlin's business activities. As has been mentioned before,the increase of Oberlin's population,in fact,is due to internal migration in the county. Those who moved into Oberlin were those who had lived in the rural area of the county before. The population of Oberlin increased,but its customers did not increase. This indicates the reason why the increase of Oberlin's population did not help the growth of its business activities.

If one compares the 1950 and 1968 data,as shown in figure 44on page 101,one see that almost all the activities in retail sales and services have faced a decline. Grain companies and motor companies are the only two activities which have gained a little during this period. Some of the functions that could be found in 1950 no longer exist in 1968. For instance, there were two photo studios and three seed houses in 1950,but none of them was still in operation in 1968.

The growing population in Oberlin did not increase retail sales but it slightly increased service activities. Because of the increasing population in town and the increasing traffic volume in the two Interstate highways,three more motels and two more gas stations were added. Oberlin has more barber and beauty shops,more attorneys,but fewer doctors and dentists in 1968 than it did in 1950. The change in service activities is illustrated by figure 45 on page 102.

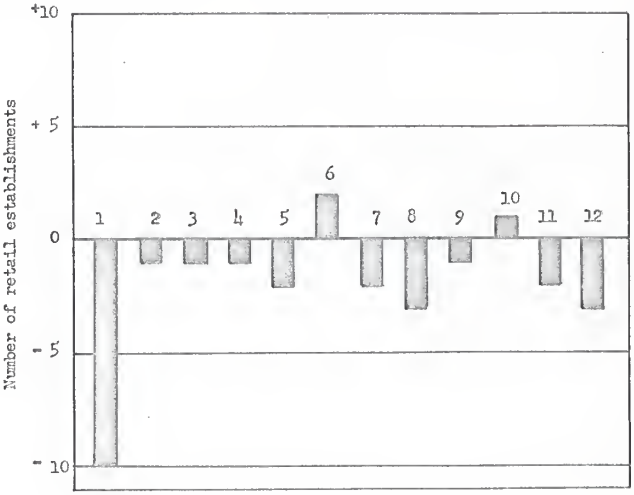

Fig. 44. Change in retail establishments of Oberlin, 1950-1968. (Information obtained from Oberlin Chamber of Commerce)

TABLE XX

Changes in retail establishments in Oberlin, 1950-1968.

Establishments	Number of establishments 1950	1968	Changes
1 Appliance & Hardware	15	5	-10
2 Restaurants & Cafes	9	8	- 1
3 Clothing Stores	4	3	- 1
4 Drug Stores	2	1	- 1
5 Furniture Stores	3	1	- 2
6 Grain Company	2	4	+ 2
7 Floral & Gift Store	4	2	- 2
8 Grocery Stores	8	5	- 3
9 Lumber Company	2	1	- 1
10 Motor Company	4	5	+ 1
11 Photography Studio	2	0	- 2
12 Seed House	3	0	- 3

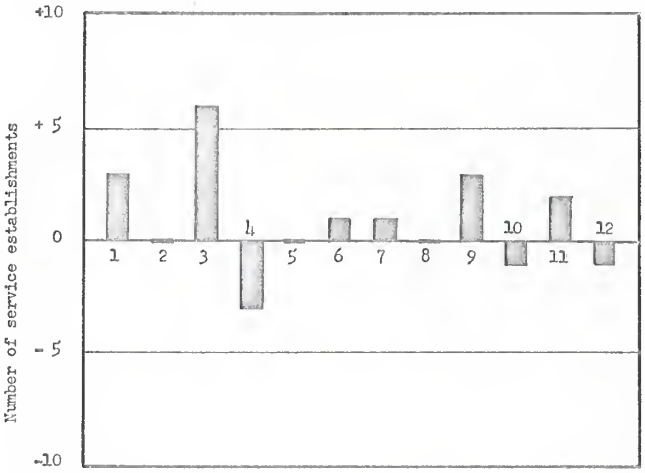

Fig. 45. Changes in service establishments in Oberlin, 1950-1968.

TABLE XXI

Changes in service establishments of Oberlin, 1950-1968.

Establishments	Number of establishments 1950	1968	Change
1 Accountant & Attorney	3	6	+3
2 Banks	2	2	0
3 Barber & Beauty Shop	5	11	+6
4 Dentist & Doctor	6	3	-3
5 Cleaners & Laundries	3	3	0
6 Electric Service	2	3	+1
7 Funeral Home	2	1	+1
8 Hospital	1	1	0
9 Hotel & Motel	2	5	+3
10 Machine Shop	2	1	-1
11 Service Station	14	16	+2
12 Shoe Repair	2	1	-1

Retail competition:Oberlin

There are three major towns in the area surrounding Oberlin,Norton, Atwood,and Mc Cook.[10] Norton,situated 33 miles east of Oberlin,is the county seat of Norton County. Atwood,27 miles west of Oberlin,is the county seat of Rawlins County. Mc Cook,the largest town among the three,is 27 miles north of Oberlin. Mc Cook has the most population and the largest downtown area. It had a population of 8,301 in 1960,compared with Norton's 3,345 and Atwood's 1,906. The following figure shows the location of the three towns.

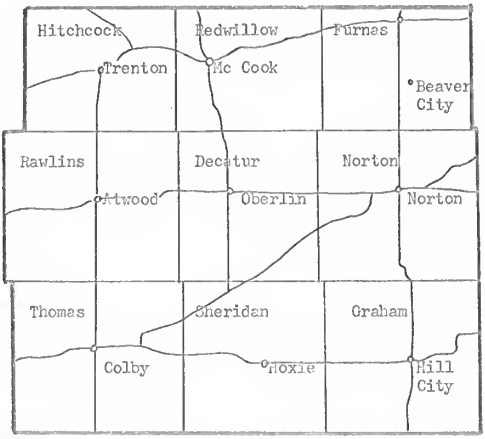

Fig. 46. Location of Oberlin and surrounding towns.

[10]Other towns are either too small in size or too far from Oberlin to be considered as they had little influence on Oberlin.

Mc Cook,the county seat of Redwillow County,Nebraska,is at the intersection of Interstate Highways 83 and 34. In 1960,Mc Cook had 64 percent of the county's population. Its 8,301 population was highly concentrated in a 2.2 square mile are which had a high density of 3,773 persons per square mile. The high concentration of Mc Cook's population resulted in an efficient downtown and attracted shopping centers. The better choices and the more resonable prices of the commodities in its dicount centers have drawn shoppers from its surrounding area. For years,Mc Cook has been the biggest threat to Oberlin's retail activities. More and more Oberliners prefered to drive 27 miles north to shop in Mc Cook instead of shopping in their own town.

One may get a rough idea about the threat of Mc Cook to Oberlin by comparing the percentage distribution of the population,retail establishments and retail sales of the counties. It's difficult to detect significant differences between the two counties. As shown in the following table,the differences between the two counties are slight. But,if we take the percentage of population of Mc Cook and Oberlin into account,the difference in retail sales between Mc Cook and Oberlin will be noticeably greater.

TABLE XXII

Percentage comparison of population, retail establishments and retail sales in Redwillow and Decatur County.

Counties	Population	% of total	Retail establishments	% of total	Retail sales	% of total
Redwillow	12,940	70%	207	72%	$ 26,685,000	76%
Decatur	5,778	30%	81	28%	$ 8,575,000	24%

Source of information: County and City Data Book,1960.

Since Mc Cook has 64 percent of Redwillow County's population and Oberlin has 40 percent of Decatur County's population, the percentage of population, retail establishments and retail sales will be different in the two cities.

TABLE XXIII

Percentage distribution of population, retail establishment and retail sales in Mc Cook and Oberlin.

Cities	Percentage of the two-county total population	Percentage of the two-county total retail establishment	Percentage of the two-county total retail sales
Mc Cook	45 %	46 %	69 %
Oberlin	12 %	11 %	10 %

Source of information: Calculated from the following method:

Mc Cook had 64% of Redwillow County's population.
Oberlin had 40 percent of Decatur County's population. If one add this factor into the percentage in the above table, one may obtain the ratio as following:

72% • 64% = 46% Mc Cook's share of retail establishments
28% • 40% = 11% Oberlin's share of retail establishments
76% • 64% = 69% Mc Cook's share of retail sales
24% • 40% = 10% Oberlin's share of retail sales
70% • 64% = 45% Mc Cook's share of population
30% • 40% = 12% Oberlin's share of population

Mc Cook has 45 percent of the two-county total population, 46 percent of the total retail establishments and 69 percent of total retail sales. Oberlin has 12 percent of the total population and only 11 percent of total retail establishments and 10 percent of the retail sales.

If one calculates the Mc Cook-Oberlin ratio of their percentage in population, retail establishments and retail sales, one may clearly see the differences between Mc Cook and Oberlin.

TABLE XXIV

Mc Cook-Oberlin ratio in population, retail establishments and retail sales.

Cities	% of population	M/O ratio	% of retail establishments	M/O ratio	% of retail sales	M/O ratio
Mc Cook	45%	3.6	46%	4.1	69%	6.9%
Oberlin	12%		11%		10%	

Source of information: Calculated by $\frac{\text{Mc Cook}}{\text{Oberlin}}$.

If one assumes that the trade area of any city is proportionate to its population, one may determine a theoretical trade area by population. If one further assumes that the actual amount of retail sales decides the trade area one can determine another theoretical trade area by retail sales. For instance, the distance between Mc Cook and Oberlin is 27 miles, figured according to the proportion of their population, the theoretical trades by population of the two cities will be the solid curves. If one divided the distance by the percentage of slaes, one arrives at the theoretical trade area by sales as shown by the dashed curve on the map of the following page.

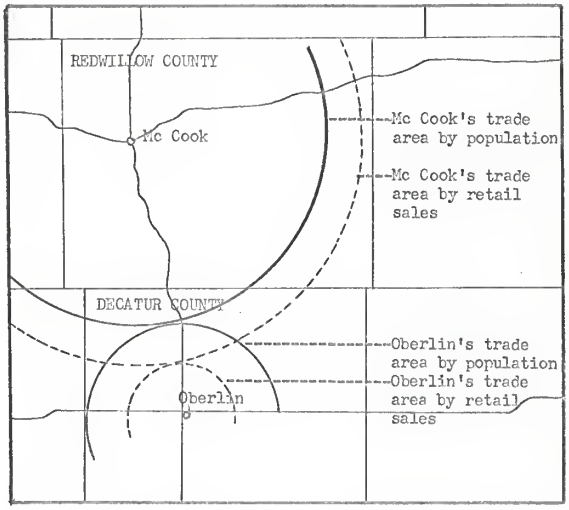

Fig. 47. Trade area of Mc Cook and Oberlin.

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[11]The theoretical trade area of population and retail trade only presented a rough idea, which were obtained by the following calculation:

The distance between Mc Cook and Oberlin is 27 miles.

The two theoretical trade areas obtained by comparing the population and retail sales of the two cities:

$$\frac{\text{Oberlin population}}{\text{Oberlin + Mc Cook population}} = .30 \text{ or } 30\%$$

27 miles. 30% = 8.1 miles----Oberlin theoretical trade area by population.

$$\frac{\text{Oberlin retail sales}}{\text{Oberlin + Mc Cook retail sales}} = .17 \text{ or } 17\%$$

27 miles . .17% = 4.6 miles----Oberlin theoretical trade area by retail sales.

Experimental analysis of Decatur County business condition

The analysis of the previous section has indicated that Decatur County's retail activities were in an unfavorable condition. But if the nine-county region was taken into consideration,the county's retail activities are found to be more favorable condition.

The county's regional share of its population,retail sales and retail establishments can be determined by dividing one percentage by the other. The retail sale-population ratio,for instance,is obtained by dividing the percentage of the county's retail sales by its percentage of population. This ratio indicates the following relationship between retail sales and population:

a.If the ratio equals 1,it means that the county's retail sales have reached its theoretical share.

b.If the ratio is smaller than 1,it means that some of the county's population have been attracted to shop outside the county.

c.If the ratio is larger than 1,it means that the county has attracted some shoppers from other counties.

By the same token,the ratio of retail sales-retail establishments and of retail establishments-population can be determined. The ratio indicates the relationship between retail sales and retail establishments and retail establishments and population.

The retail sales-retail establishments ratio indicates the following relationship between retail sale and retail establishment:

a.If the ratio equals 1,it means that the county's retail establishments have its theoretical share of sales.

b.If the ratio is smaller than 1,it means that the county's retail sales

has not reached its theoretical share.

c.If the ratio is larger than 1,it means that the county's retail sale has exceeded its theoretical share.

The retail establishments-population ratio indicates the relationship between retail establishments and population as following:

a.If the ratio equals to 1,it means that the county's population theoretically has the right proportion of retail establishments to support its need.

b.If the ratio is smaller than 1,it means that the population may need more retail establishments.

c.If the ratio is larger than 1,it means either that the county has too many retail establishments or that the county needs more population to support the "surplus retail establishments".

TABLE XXV

Regional percentage distribution of population,retail establishments and retail sales.

Counties	Percentage of regional population	Percentage of regional retail establishments	Percentage of regional retail sales
Hitchcock	7%	7%	6%
Redwillow	20%	20%	28%
Furnas	13%	15%	12%
Rawlin	9%	7%	5%
Decatur	10%	9%	13%
Norton	13%	12%	10%
Thomas	12%	12%	13%
Sheridan	7%	6%	4%
Graham	9%	12%	9%
Total	100%	100%	100%

Source of information: Calculated from 1960 U.S.Census of Population.

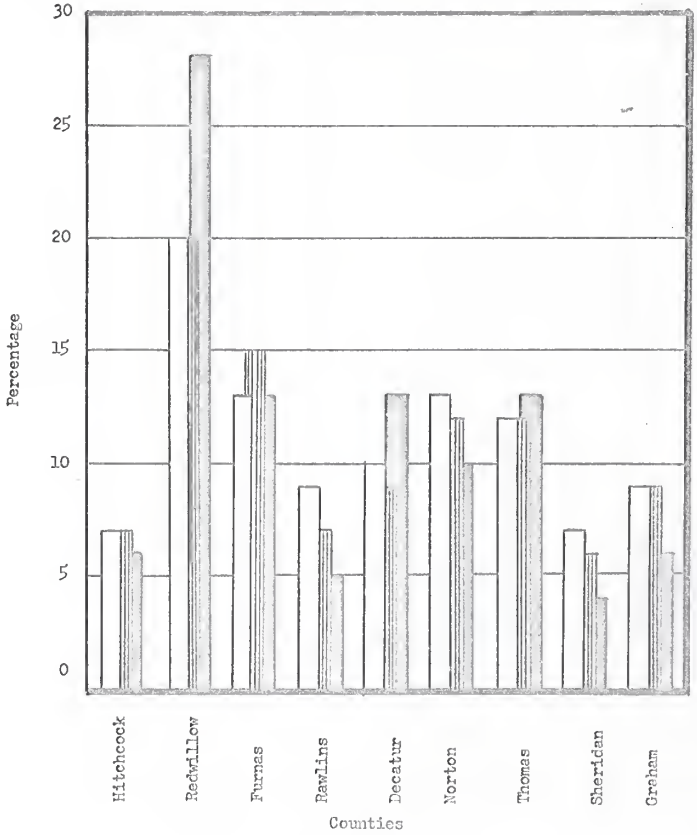

Fig. 48. Comparison of percentage of county's population, retail establishments and retail sales, 1960.

Population | Retail establishments | Retail sale

Source of information: U.S. Department of Commerce, County and City Data Book, 1967.

TABLE XXVI

Retail sale ratio of the counties in the nine-county region.

Counties	Retail sale-population ratio	Retail sale-establishment ratio	Retail establishment-population ratio
Hitchcock	.85	.85	1.00
Redwillow	1.40	1.40	1.00
Furnas	.92	.80	1.15
Rawlin	.55	.71	.77
Decatur	1.30	1.44	.90
Norton	.76	.83	.92
Thomas	1.08	1.08	1.00
Sheridan	.57	.66	.85
Graham	1.00	.75	1.33

Source of information: Calculated from the previous table.

By use of the above-mentioned method, the combination of the three ratios would indicate the overall business condition of each county. The larger the retail sale-population ratio, the better the business condition. The larger the retail sale-retail establishment ratio the better the business condition, but, the smaller the establishment-population ratio the better the business condition ratio will be obtained by the following method:

$$\frac{\text{Retail sale-population ratio} \cdot \text{retail sale -establishment ratio}}{\text{Retail establishment-population ratio}} = \text{Business Condition Ratio}$$

By using the calculated ratios on the above table, the Business Condition Ratio can be obtained as follows:

TABLE XXVII

Business Condition Ratios of the nine counties, 1960.

Counties	Business Condition Ratio
Hitchcock	0.72
Redwillow	1.96
Furnas	0.63
Rawlins	0.51
Decatur	2.06
Norton	0.68
Thomas	1.16
Sheridan	0.40
Graham	0.56

Source of information: Calculated from the previous table.

Redwillow County has 40 percent more retail sales than its theoretical share judged by population and retail establishments. The percentage of retail establishment and population is almost the same in the two counties. Decatur County has 30 percent more retail sales than its population, and 44 percent more retail sales than its retail establishments, but it has a lower percentage of retail establishments. By use the formula on page 111, the "Business Condition Ratio" was obtained, obviously, Decatur County has favorable conditions in its business activities.

As indicated in the previous section, retail activities in Decatur County are unfavorable. But if the region is taken into account, Decatur County is in a much more favorable situation than are most other counties. Its business condition ratio is the highest in the region; it even is higher than that of Redwillow County, which contains the regional shopping center, Mc Cook. Under this circumstance, the question why some people in Decatur

County still want to shop in Mc Cook will be raised. Although Decatur County has better business conditions than does Redwillow County, Mc Cook is higher in its population rank than is Oberlin. Mc Cook is presumably more functional in its retail sales and services than are smaller towns in Decatur County. Mc Cook, for instance, has much more choice among commodities in its discount centers and much more variety in farming equipment. People in Decatur County evidently have to go to Mc Cook to seek satisfaction of needs which was lacking in their own county.

TABLE XXVIII

Comparison of Redwillow and Decatur County in population, retail sale and retail establishment ratio.

Counties	Retail sale-population ratio	Retail sale-retail estab. ratio	Establishment-population ratio	Business Condition Ratio
Redwillow	1.40	1.40	1.00	1.96
Decatur	1.30	1.44	.90	2.06

Source of information: Calculated from previous table.

IV. SUMMARY

Compared with the state level, Decatur County has a relatively low family median income. But this situation is improving as the percentage of those families under $3,000 is decreasing and those over $10,000 is increasing. In general the distribution of family median income in the rural farm and rural non-farm population is similar, but the rural non-farm population has a higher percentage of persons who earn an income more than $10,000 a year.

Livestock and field crops are two major types of agricultural production which occupy the most land and contribute the most income to the county. Livestock raising in Decatur County is continually increasing and hopefully will be increasing in the future. Field crop production has flutuated through the past years. Due to the lack of irrigation, field crops involve much more risk in the growing and harvest seasons. In order to assure part of the farm income, most of the farms are raising livestock on their field crop land.

Irrigation is a very important factor in Decatur County. Only 10 percent of the total farm land was irrigated in 1960 and most of it was in farms less than 500 acres. As the tendency of the farms is to become larger and larger, the irrigation system had become more and more important. But, at the present time only 0.4 percent of those large farms was irrigated. This illustrates the fact that in case of drought weather, the large farm will be seriously damaged.

The change in the size and number of the farms is the major cause of the county's population decline. In the past few decades, the size of the farms has doubled while the number of the farms has decreased almost

fifty percent. The total acreage of the farm land has increased instead of declining due to increase of the large-sized farms. The average size of the farms shows a tendency toward large farms. In 1940, for instance, the average size of the farm fell in the 260-499 acre group, but by 1964, it had increased to the 500-999 acre group. It was estimated that twenty years later most farms will have over 1,000 acres.

Since agriculture is the major source of employment, the decrease in the number of farms has resulted in a 32 percent decrease of employment in agriculture in the ten year period of 1950-1960. Only mining and manufacturing showed a slight increase during the same period.

One of the unique characteristics of the farms in Decatur County is its high percentage of the aged farmers. In 1960, for instance, the average age of the farmers was 50.2 while the median age in the county is 34.9 and that of the state was 29. 64 percent of the farmers were above the age of 45 and 16 percent above 65.

Only a small percentage of the farmers worked on their own land. More than half of the farmers still owned their land by partnership with the landlord or other farmers. The farm manager system had just started but increased very fast as the size of the farms became larger and larger. The farm are expected to become enterprise-type businesses instead of family-type farms in the future.

Because of the concentration of the county's population in Oberlin, and the decrease in the county's population, the retail activities in Oberlin have decreased and services have increased. Although retail trade in Oberlin is unfavorable compared with that of Mc Cook in an adjoining county. Decatur County is in good condition in its retail trade activities compared

to the nine county region.

CHAPTER V FINDINGS AND SUGGESTIONS

Findings

Review of the discussion and analysis of the previous chapters indicates that Decatur County, obviously, has faced the problem of population decline for many decades. Tho county is losing its population at a noticeable rate every year, and this situation will continue in the future.

Generally, the population decline in the rural area is the result of industrialization and the improvement of agricultural methods and technology. Agriculture, like most other industries, has adopted more economic and productive methods and technology. Because of the use of more efficient, large-sized farming machines, the size of the farms has become larger and larger and the number of farm operators has become less and less. Agricultural employment opportunities thus have been reduced with the decrease in the number of farms. Under such a circumstance, a large number of the farm workers have to leave the farm, either voluntarily or involuntarily.

In the rural towns, because of their low income level and the strong competition of the neighborhood shopping centers, local business has been depressed and very few employment opportunities are available. Those who are looking for jobs have to go to the larger urban centers.

Agriculture is the major source of income in Decatur County. The predictable weather and the lack of irrigation have resulted in an uncertainty of production. Drought, frost and hail have been detrimental to agricultural production and have directly influenced the income of the farm workers. The low income of the farm population means less buying power. This factor alone has depressed local business activities.

The decline of the county's population, the loss of business functions, and the deterioration of the central business districts have resulted in the stagnation of rural towns such as Oberlin. The rise in the percentage of the aged in those towns has weakened the willingness to accept new ideas and methods. The concentration of the aged people has enabled those towns gradually to become retirement centers of the county instead of growth centers.

In order to show the relationships among all the factors behind the decline, a block diagram is presented on the following page. It indicates the cause-result effects of all the factors which were discussed in the previous chapters.

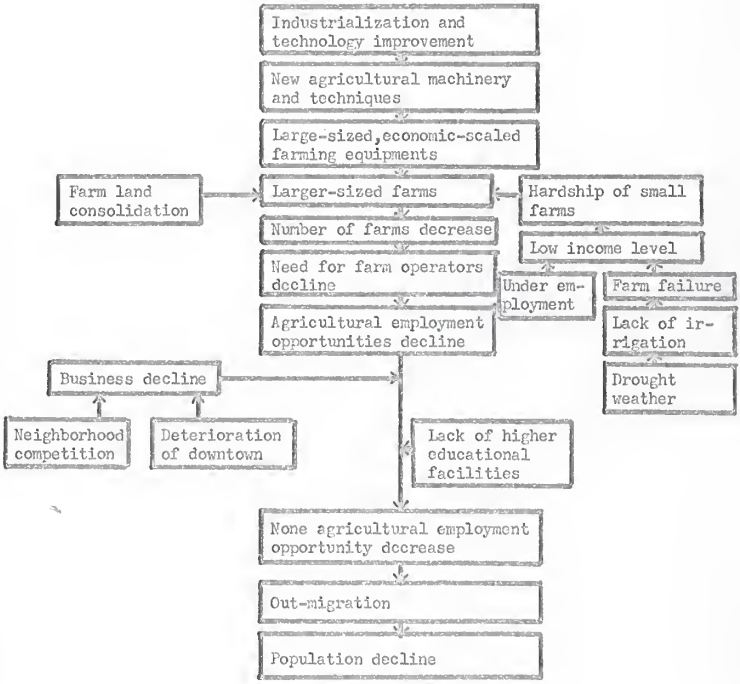

Fig. 49. The pattern of decline in Decatur County.

Suggestion

Potential of tourist industry. The Indian raid has become an unique part of the history of Decatur County. All the historical evidence and records of the raid have been preserved and are exhibited in the Decatur County Historical Museum. The development of this attraction for tourists could be very meaningful to the county. If the Museum were well arranged and located,a number of people who travel on U.S.Highways 83 and 36 would be attracted to the Museum. Oberlin,the county seat,would possibly prosper through the tourist industry.

The museum,presently located at the south end of Penn Avenue,Oberlin's main business street,is seven blocks from the intersection of the two highways. It is inconveniently located for those who travel on the highways to visit the museum. A location near the intersection would be ideal for the museum,although it would not stimulate purchases in the business district. Besides the significance of the location,the museum needs more space for display and a sequential theme which would tie all the exhibits together to tell the story about the last Indian raid in the State of Kansas. Advertisements on the two highways would also be very important. Signs which indicated the location of the museum should be set up at the intersection and along the roadside.

Besides the materials of the last Indian raid in Kansas,the Decatur County Historical Museum has a large amount of collection of items about the early settlers of Kansas. If well-designed and properly financed,the Decatur County Historical Museum could become one of the best museums in the state.

In order to attract more tourists to Oberlin,a number of other

things have to be considered. The beautification of the environment, especially of the downtown business district,for instance,is one of the major attractions for the tourists. Recreational facilities,such as parks, golf courses,theaters,restaurants and pleasant hotels and motels are also very important to keep the tourists to stay longer in Oberlin.

Possibility of developing the volcanic ash industry. Volcanic ash is one of the recent items in product research by the State of Kansas Geological survey. In the laboratory,Kansas volcanic ash has been tested in forms for new industrial application. Crushed,cracked,screened and bonded ash has been tested for various interesting products. Treated ash in Kansas has some unique characteristics and a potential for development.

Volcanic ashes are a newly-discovered Kansas resource,and are available in forty counties in the state. Pleistocene ash has been found in most of the western Kansas counties. Pliocene ash has been found in only three counties,Decatur,Norton and Philips.

Decatur County has two locations of volcanic ash deposits. Kansas geologists believed that the ashes came from volcanoes somewhere west or southwest of the state. Explosively thrown into the air and carried over Kansas by winds after the ash particles settled to the ground,surface water collected them into the present locations. Volcanic ash in Decatur County came from the Pliocene epoch of geologic time,which began about eleven million years ago.

The use of volcanic ash is very widespread in the United States. Both the raw material and the treated ash is very useful. In the West, volcanic ash has been added to concrete used in dams and buildings. It could also be used in place of fine sand in concrete blocks. The ash has

natural cementing properties and as a fine aggregate would fill small pore spaces to produce a denser concrete. Concrete containing volcanic ash continues to increase in strength as it ages.

Raw volcanic ash has been applied as top dressing on Kansas blacktop highways to improve the reflectivity of the road surface. Twenty years ago the ash was widely used as the abrasive material in household cleansers.

Volcanic ash may also be used as a flex material in ceramic bodies and glass. The ash,if mixed with other materials,can be used for pottery production. It is also ideal for production of various tourist souvenirs. As Decatur County developes its unique historic attraction for tourists,the development of souvenir production would be profitable. The county should encourage local businessmen to invest in the volcanic ash industry by using the volcanic ash deposits in Decatur County and the surrounding counties.

Feasibility of downtown business district redevelopment. In order to prevent the county's population from further decline,one of the approaches considered by the local leaders is the redevelopment of the central business district in the county seat,Oberlin.

The redevelopment plan for the Oberlin downtown business district contains a two block pedestrian mall which would feature a commercial center,an agriculture center and possibly a historical center. The plan for the mall includes fountains,flowers,trees,a seating area and play area for children. Store fronts on both sides of the street will be redecorated and remodeled.

Since Oberlin was built in the nineteenth century,most of the construction in town has deteriorated. Redevelopment of the downtown business district has been considered the best approach for beautification of the town. Because of the redevelopment,travelers could be attracted to visit

and shop in town. Oberlin could thus improve its economy by increased trade.

Oberlin is situated at the intersection of U.S.Highways 83 and 36. In taking advantage of the location,a large number of travelers could be attracted to the mall or the museum. The most vital problem of the local people is how to get more travelers to shop in the mall and not just visit it. It is easy to understand that travelers are not neccssarily shoppers and no one can guarantee that they will shop while they are visiting the mall.

Decatur County has favorable business activities as it's sales already are greater than its theoretical share,it would be difficult for Oberlin to gain more sales with the present retail facilities. The only way to attract more customers is to increase the variety of commodities available in the town and to expand the retail sales and service functions,but both of these factors have to be supported by more population. The redevelopment of the downtown business district would primarily help to develop the tourist industry.

Mc Cook gives Oberlin the strongest competition in retail sales and services in the region. Construction of the mall alone may not make Oberlin competitive with Mc Cook,since Mc Cook has a greater population and has more functions for both retail sales and services than does Oberlin. This explains why people in Decatur County are shopping in Mc Cook.

There are towns in which construction of a mall has increased retail sales and services. Atchinson,Kansas,for instance,is estimated to have had a twenty percent increase in its retail sales in the first year after the construction of its mall. But it is very easy to understand this result in Atchinson if one compares Atchinson and Oberlin in a fifty mile radius trade

area ring. In the fifty mile radius of Atchinson, three large cities are involved; Topeka, Kansas City and St. Joseph with a total population of approximately one million. But a fifty mile ring around Oberlin would contain only about 60,000 population. In this situation Oberlin hopefully could be the regional shopping center only if it had little competition from Mc Cook. In other words, it is almost impossible for Oberlin to compete with Mc Cook if its population remains the same.

Potential of meat packing industry. Decatur County is in the high plains region of northwestern Kansas. Rainfall in this area is relatively low and irrigation systems are inadequate. The unfavorable weather, such as hail, drought, frost and storm have been killers of the harvest and are detrimental to farm income almost every year. In order to assure a stable source of income, most of the farms have to raise livestock, either as a major or a minor farm product and as a matter of fact, the value of livestock, especially of hogs and cattle, has increased noticeably during the past ten years. In the period of 1956-1965, for instance, the value of cattle increased 67 percent whil for hogs it increased 150 percent.

The increase in value of livestock in Decatur County indicates the fact that livestock raising was profitable. Compared with field crops, livestock takes much less risk from unfavorable weather and the income is thus much more dependable. Besides, the favorable grazing seasons and an abundant supply of feed in this area have been advantageous factors. Obviously, livstock raising is an important approach for stablizing the farm income. Not only should livestock raising be encouraged, but related industry should also be developed in the county.

Although Decatur County and its surrounding area have a sufficient

source of livestock available, the meat products in the local markets have been imported from large urban centers. It is not convenient or economical to ship the raw material to those centers and then to ship back the products to Oberlin. The possibility of establishing a local meat packing plant should be studied and encouraged. The purpose of introducing the meat packing industry would be to increase employment opportunities in the county and to supply the meat required locally instead of competing with the large urban centers.

Because of the advantages of the U.S. highways 83 and 36, abundant underground water, and the availability of raw materials, Oberlin may be a suitable location for the meat packing plant. The market area of the plant could be extended along the two highways in four directions. The boundary of the market area would be wherever the price of meat products from Oberlin equaled that from other locations.

Changes have taken place in the meat packing business during the past 15 years. The sprawling old meat packing plants, once virtually the trade-marks of Kansas City and other midwestern rail centers, have almost vanished. Battling sharp new competition and saddled with hopelessly outmoded facilities, the big meat packers are moving to smaller cities and locating modern plants close to livestock sources. Swift and Company, the largest of the packers and listed among the top 15 U.S. industrial corporations, closed 25 large plants and opened 260 new smaller ones in the ten year period of 1956-1966. New plants were mostly built in the cattle country, such as Clovis, New Mexico; Grand Island, Nebraska; and Guymon, Oklahoma; and Talleson, Arizona.

The trend in the meat packing industry has been toward specialized

plants and locations in rural area. Meat packing is a risky business. The American Meat Institute survey reports that 18 of 113 packers lost money in 1966. The cost of livestock and other raw material uses about 78 cents from each $ 1 of sales. Meat packers have to seek more profitable products like wieners, sausage, bacon and canned meats, which in most of the cases, can be produced in smaller-size plants. In order to increase the employment opportunities in Oberlin, the meat packing industry should be considered for this area. Community action must be proposed by the citizens in their search for solutions through the assistance of the State Chamber of Commerce, the State Department of Economic Development and other agencies.

Summary

These suggestions for improving the economy of Oberlin and Decatur County are merely possibilities. None of these should be accepted as realities for development. An investigation of the cost-benefit ratio of each of these suggestions would be required, in order to maximize development. The multiplier effect of each suggestion on the related activities of the area would also have to be determined. There are possibly other suggestions for improving the economy that should be identified and studied.

BIBLIOGRAPHY

A. BOOKS

Fryer,Holly C. Concepts and Methods of Experimental Statistics. Boston: Allyn and Bacon,Inc,1966.

Peterson,William. Population. New York:The Macmillan Company,1966.

John Friedmann and William Alonso. Regional Development and Planning, a Reader. Cambridge,Massachusetts: The M.I.T.Press,1964.

Isard,Walter. Methods of Regional Analysis;An Introduction to Regional Science. Cambridge,Massachusetts: The M.I.T.Press,1960.

Merriam,Daniel F. The Geologic History of Kansas. Lawrence:The University of Kansas Press.

B. REPORTS

U.S.Department of Commerce,United States Census of Population. 1910,1920, 1930,1940,1950 and 1960.

U.S.Department of Commerce,Bureau of the Census. County and City Data Book,1967.

Engineering Experiment Station,Kansas State University. An industrial Survey of Oberlin,Kansas,1950.

Kansas State Board of Agriculture. Farm Fact. 1950,1951,1952,1953,1954, 1955,1956,1957,1958,1959,1960,1961,1962,1963,1964,1965,1966.

The Kansas Conservation Needs Committee. Kansas Soil and Water,1961.

C. MISCELLANEOUS

Field Survey: April 15,April 29,1968. Survey area including Oberlin,Kansas, Mc Cook,Nebraska,and Decatur County.

APPENDIX

Impact of unit growth

The previous discussion indicates the potential for future development in Decatur County. Community action which is the collective effort and involvement of a large number of people in this county must be carried out. Community action programs and ambitious projects which result in a basic change in the environment will be a major stimulus to gorwth,a stimulus that usually involves attracting industry,increasing cducational facilities and developing recreational facilities,or similar dramatic changes. The quality and extent of retail outlcts bears only a weak relationship to increase in the population. The best a small town can offer as a retail center is inferior to what can be offered by a larger urban center and it therefore does not serve as an effective device for the rctention of population.

The increase in employment opportunities has a significant meaning for Decatur County. If a certain number of jobs is offered every ycar,the county is expected to gain population. The increase in basic employment has a multiple effect on the increase in population. If fifty jobs were added annually in industry in Decatur County,for instance,it would mean a growth of 150 persons per year based on an average family size of three people. If each basic job will create one non-basic job,the actual growth of the population will be 300. According to this rate,if Decatur County can attract more population than the amount of loss every year,the county will definitely gain population.

An increase in basic jobs in the community will also make other economic activities in the county prosper. An increase in population will bring a need for more schools,hospitals and recreational facilities,and besides it will also increase retail sales and bank deposits. A study made by

the Chamber of Commerce of the United States shows that an increase of 50 industrial workers will add $ 180,000 more retail sales,53 more passenger cars,$ 135,000 more bank deposits,37 secondary employees and 2 more retail stores.

Since the federal government has become aware of the crises both in the nation's urban and rural areas,programs and proposals have been made to solve the two problems together. Rural improvements can stop the rural migration to the cities and it,in turn,will help to solve urban problems. A rural job development bill was introdueed into the Congress in 1967. The Bill would provide industries in the rural area by encouraging private industries to establish their branches in rural area and hire at least half on the employees from local sources. The legislation would stimulate the development of new job-creating industry in the rural areas and also provide the blend of public resposibility and private initiative needed to expand the quantity and quality of economie opportunity in the rural areas.

The State of Kansas has made an effort to attract industry to locate their plants in the state. A record of $ 189 million in new expanded manufacturing facilities was invested by 181 industrial firms in Kansas in 1967. The industrial expansion provided more than 8,000 additional jobs with an annual payroll of $ 45 million. 89 manufacturing plants went into production in 64 Kansas communities in 50 of thc State's 105 counties. Of the 89 new industries,64 are classed as "home grown" and 25 are branch plants and new plants which moved in from other states. Wichita nad Newton led with six new plants each,and Salina and Hutchinson had four each. As shown in the following map,two plant have been located in Decatur County's neighboring counties at Atwood and Colby. Besides those already-added plants,15 firms

have announced plans for new Kansas manufacturing plants during the past year with an estimated capital expenditure of $ 26 million. When they go into operation, those plants will provide more than 700 new jobs with annual payrolls exceeding $ 4 million.

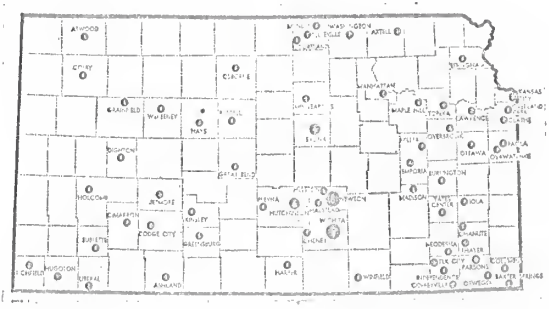

Fig. 50. Distribution of new industrial plants in Kansas in 1967. The figures indicate the number of the plants.

Source of information: Topeka Journal, January 30, 1968.

If the declining trend of population in Decatur County is to be stopped or reversed, action must be initiated by the local citizens to attract industries to locate in this county. Improvement of environment and transportation in the county is of importance. Better educational facilities and a way of life comparable to that of the city must be made available both for the young generation and the rest of the citizens. Redevelopment of the central business area, which attempts to make the retail shopping area more attractive, would be also a fundamental approach to attract industry to come. If the citizens in this county are enthusiastic about changing the atmosphere of the county, a prosperous future for Decatur County is foreseeable.

ANALYSIS OF CHANGE IN A RURAL COMMUNITY: A CASE STUDY OF DECATUR COUNTY, KANSAS

by

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B.A., National Taiwan University, 1961

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Population decline has become a common phenomena in rural America. The decline is caused by a number of factors which are primarily the result of the process of urbanization and a changing agricultural technology. The attraction of urban centers draws people from rural areas while the lack of employment opportunities forces people out of the rural areas. Young people leave the farms and small towns while the aged and the young are left behind. This phenomena is found in rural Kansas as it is elsewhere in rural America.

The population in Decatur County has declined since the beginning of the century. The decrease of population has seriously affected the retail trade activities in the community centers. The decline of retail activities in the community centers. The decline of retail activities is a result of the decline of employment opportunities of the farm and non-farm population. The retailers now have to change occupation or move to another location.

Although the rate and degree of urbanization is more noticeable in the cities, it also has variable effects in the rural area. Counties with the larger community centers gain population and enjoy a relatively higher income level, while counties with no major towns face a population decline and have a relatively low median income. The accelerating effect of this change has resulted in the large community center becoming larger and larger while the small one continues to decline. Decatur County is also suffering in retail trade due to the strong competition of the trade facilities in a neighboring community.

Since agriculture is predominant in the rural counties, the change in agricultural technology resulted in the decline in the county. The innovation of farming technology has enlarged the size of farms but has reduced the need for the former number of farmers. Small farms are no longer

profitable and are absorbed. After the displaced farmers migrate from the farm to the small towns,they will again be discouraged by the lack of jobs and eventually will have to leave the area.

There was only a small percentage of farmers in Decatur County who owned their farms. Most of the farms are owned under partnership,leased by tenants or operated by farm managers. As the size of farms continues to increase,a family can no longer profitably operate a small farm. The larger farm needs business management,mass purchase of machinery and materials,etc. In view of the present situation of the increase in the number of larger farms,one may expect that there will be fewer small or family-operated farms in the future;instead,the large corporation-type farm will prevail.

Livestock and field crops are two major products of the farms in Decatur County. Because of the lack irrigation systems,the production of field crops is more a risk than is raising livestock. In order to earn part of their income,most of the farmers raise livestock on their farms. This situation has made livestock the number one income source in the county. In fact,the value of livestock,especially of cattle,has steadily increased in the past decade while the value of field crops has fluctuated.

Since the county's population is in a downward trend,it is necessary to determine how to stop or reverse this trend for futural economic development of the county. If compared with the surrounding counties,Decatur's retail trade is in a good condition,but the increase of retail activities alone can not help to gain economic development. The most useful approach for increasing economic development in the county is to increase basic jobs, which can be achieved by attracting industries to Decatur County for the employment of the local people. It will not only increase the tax base but

also increase secondary or service jobs in retail trade. This increase in job opportunities will result in a population growth which in turn will increase retail trade.

This thesis has presented several approaches for the futural development of the county. The potential of tourist industry and of agriculture-related industry,for instanco,have been carefully studied in this thesis. The application of these approaches still needs further research and analysis. However,if the county want to grow,alternative strategies of development are needed.