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# An Economic Study Of The Farming System Of Fifty Farmers Of Rusk County, Texas

Booker T. Hill Prairie View Agricultural and Mechanical College

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"An Economic Study of the Farming System
Of Fifty Farmers of Rusk County, Taxas"

Hill

1958

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## AN ECONOMIC STUDY OF THE FARMING SYSTEM OF FIFTY FARMERS OF RUSK COUNTY, TEXAS

By

Booker T. Hill

A Thesis in Agricultural Economics Submitted in Partial Fulfillment of the Requirements for the Degree of

Master of Science

In The

Graduate Division

of

Prairie View Agricultural and Mechanical College Prairie View, Texas

August, 1956

#### DEDICATED

To my beloved Mother whose encouragement has meant much to me in the continuation of my education

Booker T. Hill

#### ACKNOWLEDGMENT

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The writer is also indebted to the Agriculture Workers of Rusk County. To all these, my teachers and friends, the writer is grateful.

# AN ECONOMIC STUDY OF THE FARMING SYSTEM OF FIFTY FARMERS OF RUSK COUNTY, TEXAS

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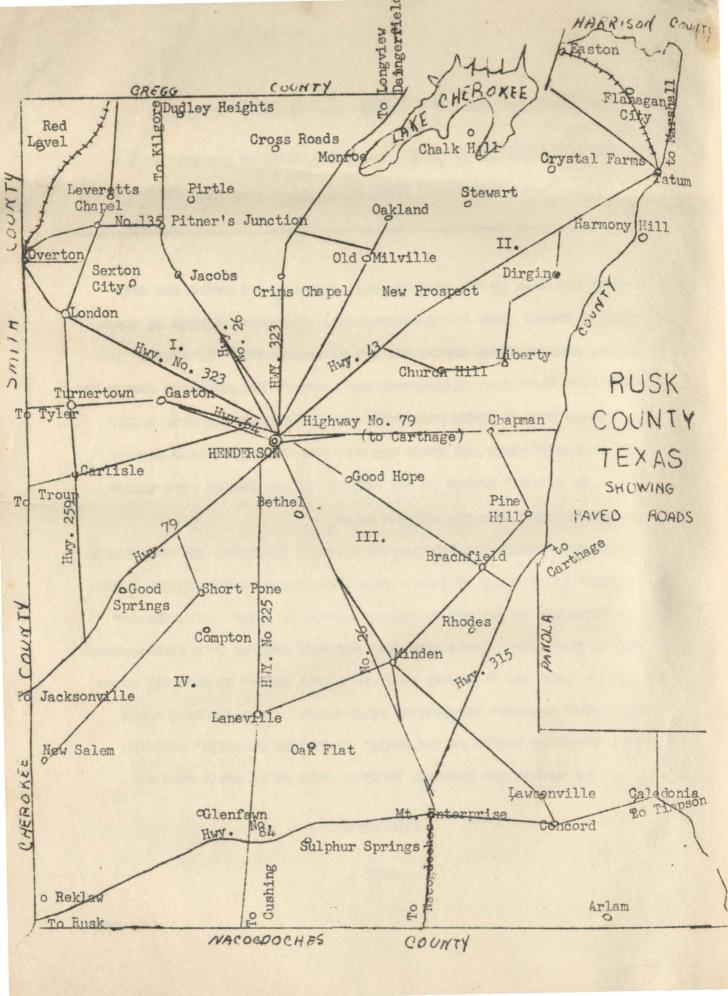
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#### PART I

#### INTRODUCTION

How simple the farmer's problem would be if there were no such things as change in the world, no changes in soils, cultural practices, markets, population, birth-rates, and a thousand other things. But, the principal fact the farmer faces, is that all these things do change. There have been enormous changes in a comparatively few years and he has had to adjust himself to them. For instance, in 1920, farmers had to feed a total population of 105 million people (excluding exports for populations abroad); now about the same number of farmers feed over 150 million here.

In general, people do not realize the difference that exists among farming areas and about 400 sub-type areas have been outlined. With each area is found both small and large farms and even within each size group wide differences are found in the kinds and quantities of the various crops raised and the livestock kept. Therefore, farmers in modern times are dependent upon conditions outside of their fences for over 86 per cent of their income. No longer can each

Yearbook of Agriculture, 1940, p. 6

<sup>2</sup> Farmers Bulletin No. 1961 - Getting Started in Farming, p. 3

<sup>3</sup> Shepherd, Geoffrey S., Marketing Farm Products, p. 5

farmer go his own way as if he were independent of the others and of the rest of the world. That was all right in 1794 for a farmer was as independent as he felt. But, today he is so much affected by the forces at work outside of his farm that he needs to study them.

In modern farming, agriculture has not only become commercialized, it has become highly specialized within itself. With the passage of time, the production of each farm product gradually has become localized in the areas where it can be produced at the lowest cost. When some new lower-cost area is opened up, its product undersells the product from the previous area and eventually the new area partly or completely replaces the old area.

#### A - Statement of Problem

Statistics show that the Rusk County system of farming has been undergoing a change during the past five or ten years. The purpose of this study is to show the extent and soundness of these changes.

#### B - Importance of this Study

To get first-hand information on the farming system of Rusk County, and to determine if the changed system is economically sound.

#### C - Scope

The material on which this study is based was obtained from two sources:

- l. Interviews of all county agricultural workers and their documentory materials.
- 2. By interviews of Rusk County farmers and a questionnaire as a farm survey.

#### D - Method of Procedure

The procedure used by the writer to ascertain the facts concerning the farming system used in Rusk County was the questionnaires, and reviewing of related printed materials. Farm

Is a piece of land held under lease for cultivation, or it may be a tract of land devoted to agricultural purposes. It usually includes a dwelling and farm buildings.

Economic

Is the art of regulating receipts and expenditures; also avoiding waste.

Study

An act or process of acquiring by one's own efforts and knowledge.

Sound

Having sufficient assets to meet all obligations, or thinking correctly.

Change

To cause to vary or become different in appearance.

Statistics

A numerical fact or to analyze numbers.

#### PART II

#### Description of the Area

Rusk County is located in the rolling surface of the piney woods of East Texas, dissected by streams and valleys; on divide between Sabine and Angeline Rivers. In the northwest part of the county is in the East Texas oil field. The terrain of the county is rolling and there is very little level land in Rusk County. The county is named for Thomas J. Rusk who fought at San Jacinto, was Secretary of War in the Texas Republic and later United States Senator from Texas. Rusk County has an annual rainfall of hh.32 inches, alt. 300-750 feet, mean annual temperature of 66° and a growing season of 2h3 days.

Rusk County's largest single enterprise income is from beef cattle; also, there are 60 Grade A dairy farms. Broiler production per year is 2,000,000 birds, as well as a soil conservation program of pasture improvement with 5,000 acres planted in crimson clover. Some other resources are pine, live oak trees, gas, oil, sand and gravel, brick clay and truck crops.

Texas Almanac, 1952-1953, p. 596

The principal crops grown in Rusk County are cotton, corn, sweet potatoes, peanuts, grain sorghum, hay and tomatoes.

The county seat is Henderson with a population of 6,802, more or less. The principal shipping point is Henderson and most of its income is from agriculture.

Table 1

This information was obtained from the County Agent. It shows tenure of farmers in 1955.

	Negro	White
Sroppers ?	1,697	2,597
Share Tenants	418	582
Share Cash Tenants	418	582
Cash Tenants	428	258
Managers	1	5
Part Owners	119	342
Full Owners	681	2,253
Farm Operators	1,317	2,549
Others and Unspecified		133

<sup>5</sup> Texas Alamanac - For 1952-1953, p. 597

#### PART III

#### Analyzing the Farm System

In general, land used for crop production has decreased over the years until in 1950 less than 40 per cent of the so called crop land was used for crops. The balance of the cropland was classed as idle or was in the process of being developed into pastures. Therefore, the importance of livestock production has increased as crop production has decreased. Some measure of the decline in crop production may be obtained from the fact that the total acreage devoted to crops in 1950 were not more than half of the acreages planted to cotton in 1928. In the years from 1940 to 1950 the number of cattle increased was of beef type. A decline in the number of farms has been accompanied by a loss in the number of milk cows kept for home use. This has tended to offset the effect of increasing specialization in dairying.

For the most part the production of cotton and corn still dominate the production pattern. Specialty crops such as sweet potatoes, tomatoes and watermelons have held their own and increased moderately.

From a Production Study: Made by A. & M. College in 1951

#### A - Enterprises That Make Up the System

The enterprise of livestock in Rusk County is expected to continue to increase to the extent that in 1950 the volume of cattle and calf numbers may increase by 13 per cent. A 16 per cent increase in the number of sows appears to be attainable.

The use of hybrid seeds, soil-improving crops, and fertilizers is expected to increase the average yield of crops. The corn acreage has decreased proportionately less than cotton. The decrease has been substantial however, and in line with the decline of crop production in the area and with corn production in the State. Peanut production expanded to almost 10 times the 19hl acreage by 19h3, in response to wartime demands. Since then. acreage has decreased steadily. The 1950 acreage harvested was less than one-third of the 1943 harvested acreage. Some further decrease is expected by 1955. The decrease in acreage, however, would be more than offset by an increase in the average per acre yield which could be obtained through the use of more fertilizer, better varities, and by increasing the rate of seed. It was estimated that the acreage of vegetables and other specialty crops would increase about 10 per cent in response to a high level of demand created by continuous full employment.

Taken from, A Study Made by A & M College, 1951

#### PART IV

#### Presentation and Interpretation of Data

Because of the physical characteristics of the area, mechanization and other technological developments have been adopted more slowly than in most other areas. Keep in mind that East Texas farming is going through almost revolutionary changes. Many cotton growers in East Texas are planting better seed and doing a better job of fertilizing and insect control. Better feeding methods and the use of mineralized feeds, and mineral applications through fertilizers on pastures have brought the beef cattle industry in to prominence. There was a time when it was considered impossible to produce good beef animals in East Texas. That was due to the lack of minerals in the native grasses. There are more beef cattle of good breeding in East Texas than in the ranch country.

<sup>8</sup> Frank A. Briggs, Farm and Ranch, Editor's Letter, April 19, 1955

Presentation and Interpretation of Survey Data

Table II was taken from the questionnaire as to the type of farms these fifty farmers were operating. It reveals that 37 farmers or 7h per cent are doing general farming. There was not one farmer specializing in cotton production. There were three farmers or 6 per cent who were truck farming. Some eight farmers or 16 per cent of the farms were in beef cattle production, and only two or h per cent in dairy production.

To determine the age of the farmers the questionnaire included a question to reveal the ages of the 50 farmers surveyed. The result was as follows: Age 15 to 25, there were no farmers; 26 to 35, there were h farmers; 35 to h5, there were lh farmers; h6 to 55, there were 12 farmers; 56 to 65, there were lh farmers; 66 to 75, there were 9 farmers; 76 and up, there were only 2 farmers.

The questionnaire reveals that when farmers get around the age of 60, they begin to think of developing their farms into ranches and for the most part all of the farmers who had ranches were near the age of 60 years.

The Type of Farming and Age of the

TABLE II

Type of Farming 1		Percent of Farms	Range in Age of Farmers	Number of Farmers
General Farming	37	74	15-25	0
Cotton	0	0	26-35	4
Truck Farming	3	6	36-45	9
Beef Cattle	8	26	46-55	12
Dairy	2	4	56-65	21;
Other type of Farming			66-75 76-0p	9

Table III - reveals the size of the farms as to the number of acres.

From 0 to 10 acres, there were 2 farms (truck farms); 11 to 20 acres, there were 4 farms; farms 21 to 40 acres, there were 2; 41 to 60 acres, there were 8 farms; 61 to 80 acres, there were 3 farms; 81 to 100 acres, there were 6 farms; 101 to 120 acres, there were 9 farms; 121 to 200 acres and over, there were 14 farms.

The questionnaire reveals that when farmers gets around the age of 60 or over, they begin to think of developing their farms into ranches and for the most part all the farmers who had ranches were near the age of 60 or over. There should be farm boys who can get started in the ranch business. I strongly believe that any boy who really wants to be a farmer or rancher can and will be.

Size of Farms by Number of Acres

TABLE III

Number of Acres	Number of Farms	Percent of all Farms
0-30	2	h
11-20	14	8
22-40	2	14
141-60	8	16
61-80	3	6
81-100	6	12
101-120	9	2.8
121-150	3);	
151-175	3/1	
176-200	31);	28
200-and over	2/4	

In Table IV are presented data showing the livestock and crops produced by the fifty farmers. Twenty farmers or ho per cent kept dairy cattle (most all farmers kept a cow for home use only). As to beef cattle, there were 35 farms or 70 per cent of the farms that raised beef cattle, there were 8 farms that kept or grew hogs or 16 per cent that kept hogs for commercial use. Sheep and goats were not kept by these 50 farmers. Hens for laying purposes were kept on 15 farms or 30 per cent of these farms. Only k, or 8 per cent of the farmers produce broilers for the market. There were 6 farms or 12 per cent of the farmers who grew turkeys. There were 5 farms or 10 per cent that kept other types of livestock.

The results are shown in Table IV as to the data collected in connection with crop production. There were 35 farmers or 70 per cent who grew cotton on their farm. There were 30 farmers or 60 per cent who produced corn on their farms. Tomatoes were grown on 15, or 30 per cent of the farms. There were 20 farms or 10 per cent of the farmers who produced watermelons. Peanuts were grown on 10 farms or 20 per cent of the farms. Truck crops were produced on 8 farms or 16 per cent of the farms. For all other crops, there were only 6 farms or 12 per cent of the farms.

Sponsors of the tree farm system believe that if America's forests are carefully managed, there will be no shortage of

forest products. The questionnaire data revealed that there

were 35 farms or 70 per cent of the farmers who were working toward commercial woodland production. 9

The Agricultural Situation, Bureau of Agricultural Economics, November 11, 1952

TABLE IV
Farmers Who Produce Livestock and Crops of Some Type

Livestock	Crops	Number	Per Cent
Dairy Cattle		20	40
Beef Cattle		35	70
Hogs		8	26
Goats		0	0
Sheep		0	0
Hen for laying		25	30
Broilers		4	8
Turkeys		6	12
Others		5	10
	Cotton	35	70
	Gorn	30	60
	Tomatoes	15	30
	Watermelons	20	40
	Peanuts	2.0	20
	Truck Crops	8	26
	Woodland	35	70
	Others	6	12

In Table V, the emphasis has been placed on what the farmer thinks about the trend in Rusk County farming.

First, there is this question: Do you think the farming system of Rusk County is undergoing a change? From the questionnaire came this data. There were 15 farmers or 90 per cent of the farmers who said, "Yes, the farming system is changing." There were only 5 farmers or 10 per cent of the farmers who said, "No, the farming system is not undergoing a change."

The second question: Do you think the farmers of Rusk County are changing their farm enterprises on the farm? There were 41 farmers or 82 per cent of the farmers who said, "Yes, the farmers are changing their enterprises." About 9 farmers or 18 per cent of the farmers said, "No, the farmers aren't changing their farm enterprises."

The third question was: Do you think this farming system change is economically sound? There were 42 farmers or 84 per cent of the farmers who said they thought it was economically sound. There were 8 farmers or 16 per cent of the farmers who said, "No, the farming system in Rusk County is not undergoing economic change.

TABLE V

Farmers Who Say Yes and Those Who Say No As to Whether the System of Farming Is Changing in Rusk County

	Yes	Per Cent	No	Per Cent	Total
Ohn Paradus Sunten To					
The Farming System Is Changing	45	90	5	10	50
Farmers Are Changing Farm Enterprises on the Farm in Rusk County	42	82	9	2.8	50
Do You As a Farmer Think This Change Is Economically Sound?	42	814	8	16	50

In Table VI, in order to determine how sound the change has been the question was asked, "Have you added any new enterprises in the past five or seven years?"

The answer reveals that 18 farmers or 36 per cent of the farmers had changed to a new enterprise in the past five years. There were 29 farmers or 58 per cent of the farmers who said, "No, that they have not added a new enterprise in their farming system in the past five or seven years."

This, I think calls for a word of explanation. Most of the farmers who said, "No," meant they had not changed enterprises when the trend began.

#### TABLE VI

Farmers Who Say They Have or Have Not Added New Enterprises
In the Past Five or Seven Years

Yes Per Cent No Per Cent

For the past 5 or 7

years, have you or have

you not added a new en
terprise in your farming

system?

18 36 29 58

Table VII shows the structure of the farming system has been changing rapidly. The team and plow was an efficient unit for handling small farms and small production and there was small population. As of today, the system and speed of everything in the county have changed. We see that Rusk County farmers are changing to meet the need of their area.

Information taken from the Agricultural Census on the major crops in Rusk County show the cotton acres in 1930 were 163,142, but by 1950 (the last census) the acres were down to 31,387 acres. This is a decrease of 131,755 acres. The corn acres have been on the decrease during the dry years. In 1935, there were 46,752 acres; in 1940, there were 6,112 acres; in 1945, there were 37,164 acres; and, in 1950, there were 18,916 acres planted. Due to the high level of demand created by a continuation of full employment, vegetables have been increasing. In 1930, there were 456 acres and in 1950 there were 3,987, an increase of 3,531 acres.

<sup>10</sup> Study made by A. & M. College, 1951

TABLE VII

# Information Taken from Agricultural Census on the Major Crops

Year Year	Cotton Acres	Corn	Hay Acres	Gow Peas Acres	Peanuts	Vegeta- bles Acres
1930	163,142	40,982	1,224	2,283	1,565	456
1935	67,992	46,752	6,942	6,093	5,000	1,403
1940	52,929	6,112	5,116	36,946	5,724	683
1945	33,178	37,36k	-0-	9,861	5,187	3,668
1950	31,387	18,916	5,313	4,386	705	3,987

Broiler production is comparatively new in Rusk County.

In 1930, Table VIII shows, only 61,349 chickens were sold; in

1940, there were 43,376 chickens sold; in 1949, there were 162,747

chickens sold. In nine years, there was an increase of about

119,371 broilers. The rate of increase is expected to slow down

with the number of broilers catching up with the demand.

There were no figures available for 1950, on hens. Practically no change in the number of hens and pullets is expected, but the trend is toward smaller flocks for home use and larger flocks for commercial production.

Beef cattle numbers also have increased since 1930. In 1930, there were 19,749 cattle and calves and in 1949 there were 37,152. From 1930 to 1949, there were increases of 16,403 cattle and calves. There is a decided trend toward larger farms and to utilize the additional pasture through beef and dairy production. Beef cattle are favored on the larger farms and dairy cattle on small farms.

A Productive Farm Study by A. & M. College in 1951

Information Taken From Agricultural Census on the

TABLE VIII

Major Livestock

Census Year	Chickens Sold	Chicken Eggs Sold By Dozens	And Colts	Cattle And Cattle	Hogs And Pigs	Mules
1930	61,349	319,581	2,966#	19,749*	8,745***	10,007
1935			2,139***	28,384***	11,313***	7,92814
1940	43,376		2,979	23,426	11,983***	6,558#
2944				41,495**		
1945			3,30h==		11,945***	5,173
1949	162,747	193,379		37,152**	7,630***	
1950			3,057			3,027

## World War II and Its Effect on the Farming System

Let us recognize that our Agricultural Industry is gradually becoming a big food and fiber production business. American farming has become more than just a way of life. Agriculture is operating on a gradually shrinking number of farm units. Against a drop of nearly a million farm units since 1935 is a considerable rise in the average size of the individual farm. Several factors and conditions can account for the change. The major impelling factor appears to be the need for greater efficiency in the production of larger yields of food and fiber of the higher quality; this despite the further fact that fewer and fewer people are engaged in farming. In 1945, one farm worker produced enough food and fiber to cloth and feed himself and 14 other persons. He produced twice as much as did one farm worker 50 years ago.

Everything is geared for mass production on a big business scale, and it would be difficult to believe that many countries struggle along at an excert pace, trying desperately to pull themselves up by their own bootstraps while American agriculture has

Agriculture Year Book - 1950-1951, "Science in Agriculture of Tomorrow," p. 71

made tremendous strides. 13 Efficiency is of paramount importance in farming now.

In wartime, when technology moves faster, efficiency becomes even more vital. The fruits of many previous years of research to meet the farmers wartime needs helped us to victory in the second world war. Science and Agricultural Research and its application have advanced even more rapidly.

This advance helped Rusk County farmers to make the change to meet the needs of Rusk County population. The farmers in Rusk County know that there is only so much land on which to produce crops which have been developed. Now that the soils have been put under a terrific strain in the process and lands have gone out of production for one crop and gone into production for another. Of course, some lands have been abandoned altogether through misuse. Thus, farmers were forced to change enterprises and some were forced out of farming.

Strohm, John, Ford 1956 Almenac, "Practical Scientific, Up-to-the-Minute," p. 3

The New Enterprises Which May Have Their Effect on the System of Farming

New Kind of Farming" that is being seen in East Texas today.
Such enterprises as high producing dairy cows, beef cattle, broiler raising and an intensive cage layer poultry operation. Also, good pasture and cover crops. There are legumes grown for seed production and beef production all working hand and hand. Let us not forget other crops and enterprises such as costal bermuda and tree farming. There are around 5,000 acres of crimson clover planted in Rusk County each year. You will find plots of 5 to 10 acres pretty well scattered over the county.

The big excitement in Rusk County or even in the world today revolves around the discovery of what poor land will do in
terms of forage and beef production. Therefore, beef production
is one of the new enterprises that will be discussed.

Another new enterprise is broiler raising. Broilers raised today, as the Rusk County farmer looks at it, can produce as much meat as a man raising 1,000 hogs a year, or a man who puts 300

Successful Farming, 1954, "A Better Living From Your Livestock, p. 6

pounds of gain on 800 beef calves. 15 This can give the hog or beef man some mighty stiff competition, both in economy of meat production and in the price to the consumer.

Successful Farming, 1954, "Broiler Take Over the Poultry Market," p. 102

# Broiler Growing

There has been a rapid expansion of the chicken raising business in Rusk County during the last five to ten years. Notable has been the increase in broiler production. This broiler or young fryer production began in Gonzales County around about 1930. It was the first large commercial production in the State, farm flocks having supplied the market before that time. In recent years, there has been a rapid spread of broiler production throughout East Texas, especially in Nacogdoches, Panola, Rusk and Shelby Counties. The rapid growth of the urban population of Texas has been the principal cause of the rapid increase of poultry production. Though the high price of beef also stimulated it until the decline in beef prices in 1952 and 1953. Therefore, in Rusk County there is a growing feeling that broilers, grassland farming, and beef cattle fit together in the hilly Rusk County. For example, broilers will bring in the quick cash and provide manure for improving the soil. Beef cattle can put on low cost gains by grazing on the abundant grass over a long growing season. Farmers in Rusk County believe that broiler raising is not just something that a farmer does when he can't do anything else. It has been profitable in some of the richest areas in the county as well as in sections where soil fertility is low and the opportunities in other branches of farming are limited.

There are four basic conditions which seem to be fundamental for success with broilers. They are: (1) skilled management; (2) a liking for chickens; (3) credit; and (4) a good market. 16

<sup>16</sup> Successful Farming, 195h, "Broilers Take Over Poultry Market", p. 120

The farmers in Rusk County have seen the handwriting on the wall as the demand and the price on beef drops. They have begun to cut back on their production. However, today there are broiler houses scattered all through the county.

# Beef Cattle Production

Beef cattle raising in Rusk County, due to the small size farm and ranch, has the tendency in recent years to produce a finished product for the market.

This breeding of beef cattle began with the introduction of a few Herefords or White Faced cattle. Now there are Short horn, Aberdeen Angus, Brahma and finally Santa Gertrudis. This is a question that has been asked, "What gets into a man's blood to make him use high priced land for running a herd of beef cattle." Today fewer people and some experts included are giving this cow and calf idea the horse laugh. Due to the fact that there are too many smart operators and men who aren't in the habit of losing money take the cow and calf route instead of the more widely accepted methods of land and livestock management. There's a pronounced swing from a corn and cotton economy to a corn, grass and cow on a strictly grass economy. Farmers, quick on the draw, have plunged in and bought this kind of land, either as a complete farm or as a parcel to add to their original holdings. 17

Rusk County has a large portion of the farms composed of woods or rough, broken or otherwise non-tillable land which is suitable for grazing. Therefore, on many farms it is economically advisable to raise beef cattle. Rusk County farmers have gone a

Successful Farming, 1954, "What's Your Chance With a Beef Cow Herd?" p. 195

long way in the demonstrated ability of low-priced land-producing forage and beef.

While great strides have been made in feeding in recent years, big news in the livestock world is hybrid vigor. Hybrid vigor in livestock is no substitute for feeding and management. Nor does it herald the downfall of purebred livestock, which has meant so much to America. It is a tool which scientists and progressive breeders are using to give farmers good growing animals and birds. Net profit and not blue ribbons is what interests the farmer. 18

Ford 1956 Almanac, "Practical Scientific Up-to-the-Minute,"
p. 136

The Problems of Farmers in Adjusting Themselves to the Future System

We recognize that land not previously used has come into production, either wisely or unwisely. But the fact remains that we
have only a certain acreage of agricultural or potentially agricultural land available in Rusk County or even in Texas. This in the
face of a steadily increasing population, makes one thing sure.

Future research must, above all, keep in mind the need to feed and
clothe more and more people from a limited over all acreage. The
problems of land use, therefore, become paramount. They call for
the best of scientific approaches.

Surpluses and how to dispose of them with a minimum of loss will probably always constitute a problem. Fewer people are working at the job of farming and our productive resources have been over-worked and strained. We are taking all kinds of risks in Rusk County, even in the United States with our resources so as to attain big production. Therefore, we must utilize the best and most modern scientific principles and techniques. We must devise ways and means to conserve our existing and potential resources of soil, water, plants, and animals, and to conserve and maintain our facilities and resources for future production.

Secretary of Agriculture Ezra T. Benson recently said "by 1960 it is estimated that animals will supply only 1% of our work energy, humans only 3% and machines 96%. Thus, while we still apparently

will do three times as much work as horses, it will be only a fifth as much as human beings performed a century ago. However, horses and other animals at that time supplied 79% of the total energy used for work and this is about to be reduced to 1%. This is what we mean by horse sense. 19

Strohm, John, Ford 1956 Almanac, Practical Scientific Up-to-the-Ninute, p. h

# Youth Grow Up

It takes two to make a successful father-son partnership: an understanding father, and a son who is willing to work and knows what he wants. The best possible way for a young man to get started is to make a deal with his dad. You see it's not so much what you have in your pocket as what you have in your head. A man's assets are not all in cash. A young man is like a high-type race horse yoked up with an ox on a poor rundown farm. He can never do more than plod through life dragged down to the level of his farm. But, don't start life on the scale of selling the land while you can get out on this high market. Then, put his money in equipment and rent a good farm, or better still, put his money in bonds until he gets some experience. Few will follow such advice. The young farmer wants to make up for some of the time he spent working with his father. Instead of making up for lost time he will probably, (a) lose more time, (b) lose thousands of dollars due to low income through the years, and drag down his wife and children to a miserable, subsistence-type of existence.

No amount of knowledge gained from books or bulletins will take the place of practical experience in any business that will work for the successful. 21

Pord 1956 Almanac, "Practical Scientific Up-to-the-Minute," p. 44

Doane Agricultural Digest, Veterans Beware, p. 58-59

Let us look at the nation first of all, the nation needs around 80,000 young families starting farming each year to replace those retiring. This is based on a replacement rate of 2.8%, assuming an active farming life of 36 years and with farm units remaining about the same size as at the present time. There are many farm boys and girls available each year, not counting those in towns and cities who want to farm. 22

By an interview of some of the farmers in Rusk County and the County Agent, there is a decided trend toward large farms and toward shifting cropland into pasture to graze both beef and dairy cattle on small farms. Operators of small farms also are turning strongly to poultry production. This is because of the physical characteristics of the area, mechanization and other technological developments.

Therefore, the almost revolutionary change the Rusk County farmers are undergoing, they think is economically sound.

<sup>22</sup> Doane Agricultural Digest, "Business and Agriculture, 1954," p. 51

#### SUMMARY, CONCLUSION AND RECOMMENDATIONS

# Summary

An analysis of the results of the study of the farming system of fifty farms in Rusk County, Texas, has been made. That there have been enormous changes in a comparatively few years and the farmers of Rusk County have had to adjust themselves to the changes. Not many years ago half and half cotton was the chief source of income. There are still many cotton growers in Rusk County, and they are planting better seed and doing a better job of fertilizing and insect control which enable them to produce better and more cotton. Also, pastures have been improved and this calls for better cattle, both dairy and beef. More legumes are (for example there are around 5,000 acres of crimson clover planted in Rusk County each year) planted, some for soil building and as a cash crop. There have been an increase in the number of broilers produced in Rusk County.

There are several factors and conditions that can account for the change in the farming system. Some factors and conditions which have been mentioned in the above reading, are as follows: new varieties of seed for crops a farmer grows; new farm chemicals; new hybrids; trees that grow two or three times as fast as the ordinary trees; the hybrid vigor of livestock and chickens; modern farm machines; and an increase in population with a decrease in farms and farm labor; and there are others. For example, in 1945, one farm worker produced enough food and fiber to clothe and feed him-

self and lh others. He produced twice as much as he did 50 years ago.

In 1930, there were 61,349 chickens sold, but in 1949 there were 162,747. There was an increase of 101,396 chickens sold. Cattle and calves in 1930 were 19,349, and in 1949 there were 37,152, making an increase of 18,803 cattle and calves.

Now looking at the major crops grown in Rusk County, we see in 1930 that there were 163,142 acres of cotton planted and in 1950, only 31,387 acres. While on the other hand in 1930, there were 456 acres of vegetables planted and in 1950 there were 3,987 acres. This is an increase in vegetables planted while the cotton acres decreased.

To make a change in the farming system of Rusk County there have been some new enterprises added. For example, broiler growing; beef cattle production; tree farming; legumes planted for seeds and as a cash crop; coastal bermuda grass; vegetable growing; Grade A dairy barns, and others are among the new ventures.

#### Conclusion

Because of the physical characteristics of Rusk County, mechanization and other technological developments as well as labor shortage, farm experts think this almost revolutionary change in Rusk County farming is economically sound. Therefore, big farms, in general, make more profit than small farms. They have more volume. They usually can use machinery on more agree. They can spread overhead costs over larger output. Certain livestock programs need size to get efficiency.

Observations in Rusk County indicate that some of the poorest land, when converted to improved pasture, has nearly equaled the beef-production possibilities of some of the good rotation pastures in the blackland and prairie areas of the state. Your chances with a beef herd in Rusk County look good, and they are good, but there are also a few places where you can stub your toe.

Frank A. Briggs, Editor of Farm and Ranch, states it this way,
"There remain many small farms in East Texas, but the most of them are
practicing diversification. Therefore, we will probably have small
farms and poor farms in East Texas for all time, but larger farms
and improved practices are becoming the rule.

No amount of knowledge gained from books takes the place of practical experience in farming. Therefore, it is economically sound for a young farmer to start at the bottom of the ladder as a share cropper than as a renter, cash renter and finally an owner. Our agricultural progress has been, and will be, tremendous. But push-botton farming is not here, believe me. In these days of scientific farming and complex machines, never has the man been so important.

Considering the facts revealed as a result of the analysis of the data obtained from the study of fifty farms presented the following recommendations are here offered:

- The farmer should base his changes on the size of a farm, amount of farm labor, age of the farmer, rainfall and the topography of his land.
- 2. To follow that decided trend toward large farms and a shift of cropland (as king cotton) into improved pasture, as well as some of the poor land into grassland farming.
- 3. For the farmer to go slow on developing more than one new enterprise at a time.
- h. Due to the labor shortage a farmer should develop his farming system on the basis of mechanization.
- 5. Before he as a farmer changes to a new enterprise he should consider a few common factors. In order to be a successful farmer, one should be a skilled manager, have a liking for the enterprises, have credit, and have a market for his products.
- 6. Never forget that no amount of knowledge gained from books or bulletins will take the place of practical experience in farming or any other business for that matter.

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APPENDIX

# Farm Survey Form

Name	Age	Negro	White		
Number in family (	Community				
Are you an owner?					
How many acres do you mana,	ge?				
How long have you lived in					
What type of livestock farming are you in?					
Beef Cattle Dairy	Cattle Hogs	Sheep	Goats		
Laying Hens Broilers	Turkeys	Others	****		
What type of crops do you p	produce (give the	number of a	cres of each)?		
Cotton Corn Tomatoes Watermelons Pesnuts					
Truck Crops Others					
How many acres are in woodland?					
What are the major types of crops you produce for commercial Use?					
1	2.		-		
Approximately what is your income from both crops and livestock?					
-			-		
Do you think the system of	farming is changing	ng in Rusk (	County?		
Yes No					
Do You think the enterprises in Rusk County are undergoing a change?					
Yes No					
If Yes, to what enterprises are you changing? 1.					
2.	tration of the second of the s				

If yes, do you think the	his trend is econom	ically sound? Yes
No		
How long have you been	following these en	terprises (years)?
Have you added any new	enterprises in the	past five or seven years?
Yes	No	Name enterprise

Remarks: