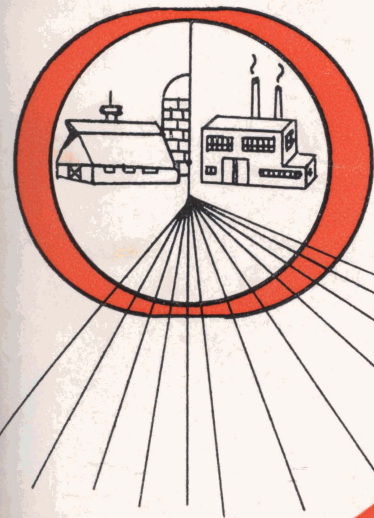
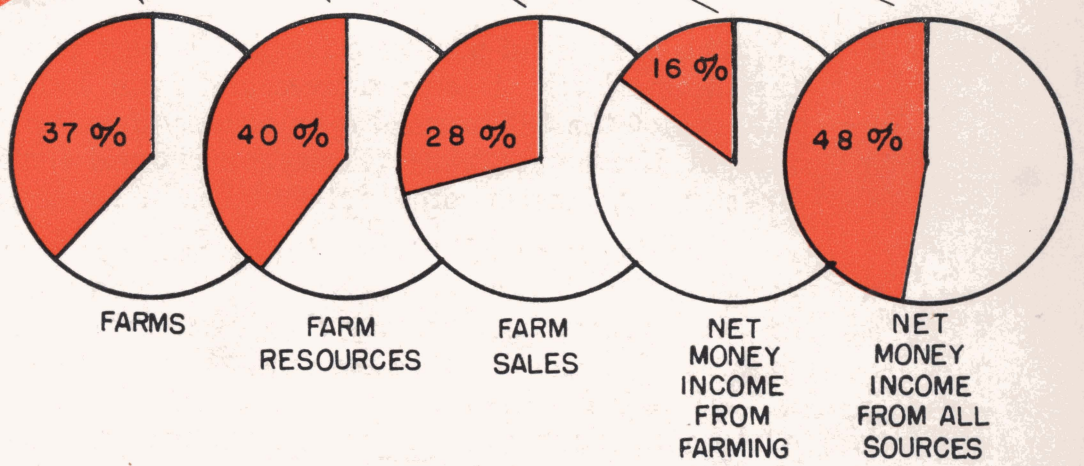
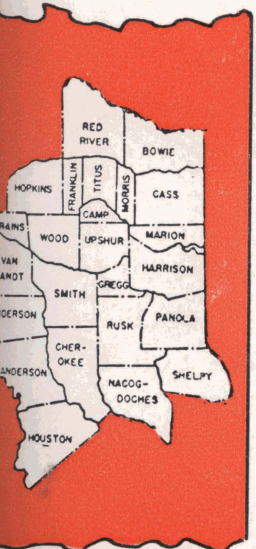


PART-TIME FARMING IN NORTHEAST TEXAS

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**PART-TIME FARM FAMILIES'
SHARE OF THE AREA'S TOTAL**



THE AGRICULTURAL AND MECHANICAL COLLEGE OF TEXAS
TEXAS AGRICULTURAL EXPERIMENT STATION
R. D. LEWIS, DIRECTOR, COLLEGE STATION, TEXAS

IN COOPERATION WITH THE U. S. DEPARTMENT OF AGRICULTURE

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Summary

This analysis of part-time farming is part of a broad study of the income levels, income sources and farm and human resource patterns of the 88,000 rural open-country families in a 24-county area of Northeast Texas (Texas Agricultural Experiment Station Bulletin 940, Incomes of Rural Families in Northeast Texas).

A major farm adjustment in this area has been an increase in part-time farming, or a greater dependence on nonfarm sources of income by farm families. By classifying families based on income sources, 37 percent of all farm families living in the open country in 1955 were classified as part-time farm families. Fifty-five percent of the open-country families were farm families and 45 percent were nonfarm.

Part-time farm operators were classified into four major groups. Group I, 23 percent of all part-time farmers, includes all part-time farms where operators reported no off-farm work, but half or more

of their income was from off-farm sources, principally nonwork sources. Group II includes farm families with the operator reporting from 1 to 99 days of work off the farm, only 11 percent of all part-time farms. In group III, including 23 percent of all part-time farms, operators reported from 100 to 249, or less than full-time work off the farm. Group IV, part-time farms, with operator working off the farm "full-time," or 250 days or more, includes 43 percent of all part-time operators.

Part-time operators controlled 40 percent of the farm and land resources, marketed 28 percent of all farm products sold (in terms of value), but received only 16 percent of the net money return from farming in the area.

Wide differences exist in farm size, organization and operations on part-time farms. The average size was 165 acres; however, almost 70 percent of the farms were less than the average. The median size of farm was 90 acres. Most of the total investment in farm resources of \$16,024 was in land. About half the farms had total farm resource investments below \$10,000.

The efficiency of part-time farm operations was low when measured in terms of farm sales in relation to costs and labor expended. On all part-time farms, gross sales averaged \$1,623, cash farm expenses averaged \$1,420 and net sales averaged only \$203. The median value of farm sales was only \$680.

Other farm income items, including mineral and rent income, value of farm perquisites and "land appreciation" value, averaged \$1,317 per farm and was of more importance to farm operators than income from farm sales.

In an analysis of total farm returns, including monetary and nonmonetary items and a charge of 6 percent interest on total investments as well as a depreciation charge, returns to family labor and management averaged \$421.

The major economic employment activity reported by part-time farm operators was wage or salary work. Such work was reported by 41 percent of the operators. Forty percent of the operators reported farming as a major activity, 9 percent reported self-employment in something other than farming, and 10 percent reported other types of major activities. Few family members, other than the family heads, reported major activities which yielded money income; 16 percent of the children and 12 percent of other persons in the household reported such activities.

All family members, including the operator, worked at farming, and in off-farm jobs an average of 2,850 hours, or the equivalent of about 365 8-hour days. Most of this work (in terms of hours) was work off the farm. However, a considerable amount of farmwork was performed; more than 1,000 hours. There was no significant relationship between the amount of time that family members spent at work on their own farms and the extent of work performed off the farm.

The farm operators and family members in each part-time farm group spent about equal amounts of time at farmwork except the family members in group I. These families spent less time doing farmwork than any other group. The chief difference in the total employment of family members in each group depended on the difference in time put in at off-farm work, which ranged from 640 hours for group I, to 2,616 hours for group IV.

When considering the total amount of available labor in the family, the operators and family members in group IV approached full employment. The other groups, including operators and family members, averaged more than 100 8-hour days of unemployed time. This included more than half of the part-time farm families. Their combined unemployed time amounted to more than one million annual man-days.

In the broad study of farm families in the area, the average net money income for the part-time farm families was substantially above those of other farm families. This relatively higher income was not due to part-time farming since only \$426 net money was derived from farm operations; less than half of this amount was from the sale of farm products. Farm income averaged \$1,382, including nonmonetary returns.

Returns to family labor in off-farm work was much higher than the returns to family labor in farming. Including farm perquisites, total farm returns to family labor and management averaged 39 cents an hour. Per hour returns for labor in off-farm work averaged \$1.39.

Total monetary and nonmonetary returns when combined raised total family income levels by about a third. However, most of the returns from farming are returns associated with living on and owning farmland rather than carrying on productive farmwork. On the average, 70 percent of all returns in farming were returns to investment and only 30 percent were returns to farm labor and management.

PART-TIME FARMING IN NORTHEAST TEXAS

James R. Martin and John H. Southern *

ONE OF THE MAJOR FARM ADJUSTMENTS in low-production agricultural areas has been the shifting of thousands of families from farm to non-farm jobs. Much of the move to nonfarm jobs has been made on a full-time basis. In Northeast Texas, the net migration of population from farms totaled 180,000 persons during 1940-50—a shift of 43 percent of the total farm population of the area.¹ According to the Census of Agriculture, the total number of farms decreased from about 81,000 to 60,000 during this time and further declined to about 49,000 by 1954, or about 40 percent during 1940-54. By 1960 the number of farms had declined to about 32,000, or an overall drop of about 60 percent in 20 years.

A second major adjustment in such areas has been the attempt to supplement farm income by part-time work off the farm. Thousands of farm families who do not want to shift out of farming completely or who want to farm part-time follow this course. This has resulted in an extensive rural pattern of living and land utilization commonly referred to as *part-time farming*. According to the Census of Agriculture, more than a fifth of all farmers in the 24-county study area in 1954 were part-time farmers. From 1939-45, the number of operators in the study area who worked 100 days or more off the farm increased at a faster rate than the general trend of such growth in the United States and other parts of Texas.

This trend toward part-time farming has not been surprising in view of agricultural developments of the last 25 years or so. Perhaps the only surprising feature is that part-time farming has become so widespread, and that a major proportion of rural families in this area depend heavily on nonfarm employment and other off-farm sources for most of their income. The trend and current situation resulted from a combination of circumstances, two of which are important in this area. In Northeast Texas, human and farm resources were such that thousands of operators were underemployed in an economic sense, that is, their farm earnings were appreciably less than comparable workers were receiving in non-farm jobs. At the same time, farmers found themselves unable to adjust to developing technology, particularly to the larger scale of farm

business required. Most of the farms within the area were too small to realize significant internal economics by reorganizing farm resources. Expansion of land resources was difficult because of the capital structure of the small farm operators, and land values that had advanced to levels too high to justify buying for farm purposes. High investments in labor-saving machines and devices were uneconomical on such small farms. Although markets for crops grown in the area were limited, the operators of small farms had no alternative except crop production. The farms were not large enough to support adequate levels of most livestock and timber farming. As these conditions persisted in farming, the development and expansion of industries and businesses with-

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¹Bowles, Gladys K., Net Migration from the Rural Farm Population, 1940-50. U. S. Department of Agriculture Statis. Bul. 176, June 1956.

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in the area and elsewhere furnished more productive employment and consequently higher incomes to those farm operators and family members who could shift to these opportunities.²

Purpose of Report

This report on part-time farming results from a broader orientation study of the resources and levels of income among rural families in a 24-county area of Northeast Texas.³ The farms and families included in the part-time category and analyzed in this report and the basic information used are part of that study. A limitation of this study from the standpoint of part-time farming should be pointed out. Only the rural part-time farmer is included. Many part-time farm operators live in towns or cities of the area and would need to be studied to complete the part-time farming picture.

The purposes of this report are directed specifically to the following questions:

(1) How important is part-time farming in this area, and what is its place in farm production?

(2) What are the employment and income characteristics of part-time farm families?

(3) What is the nature of part-time farming in terms of farm enterprises, resources used and returns to these resources?

Levels of income among part-time farm families and the primary determinants of that income are outlined. Off-farm earnings of family members as well as those of the operator are shown. Also, since many people believe part-time farming may be the answer to some low-income farm problems, the analysis will indicate the apparent place of part-time farming. Is it of real significance in adjustment possibilities for higher income levels in the total economy of the area? Is part-time farming or specific types of part-time farms related to age or other personal characteristics of the operator? What is the apparent efficiency of part-time farming in the area? (A later report on part-time farming will deal further with efficiency and specific adjustment opportunities and will examine the question of whether part-time farming is a permanent adjustment, a transition to or from other types of employment or a residential situation.)

The information presented here will be useful in the Rural Development Program and other efforts to improve economic conditions in rural areas.

²For the economic development background of the area and details on all rural families, see *Incomes of Rural Families in Northeast Texas*, by John H. Southern and W. E. Hendrix, Tex. Agri. Expt. Sta. Bul. 940, October 1959.

³Ibid.

Definition and Classification of Part-time Farming

Definition

The definition of a part-time farm varies considerably in the literature and in common usage. The general understanding perhaps refers to a situation in which the farm operator works off the farm some minimum amount of time each year, say 100 days, in combination with his farm operations. The usual understanding is in terms of small-scale farming, which may be the common situation but is not necessarily a requirement. In most instances, part-time farming has been conceived as a use of the labor resource in a combination of *farm* — *off-farm* work. For this study, a part-time farm was defined as a *farm*⁴ *having gross sales of farm products of \$250 or more, with the operator working 100 days or more off the farm, or receiving half or more of the family gross income from nonfarm sources.*

In the broad study of incomes of rural families in this area, source of income was emphasized as the most important determinant of part-time farming. Comparing income from farm and nonfarm sources, therefore, is the chief factor in classifying farmers as part-time, provided there is at least \$250 in farm sales. Nonwork income, such as old age pensions, military and retirement pensions, rentals or royalties from mineral leases or production and rentals from other property owned is included also. This concept of part-time farming classifies many operators as part-time, even though little or no work is actually performed off the farm, but in all instances some farming is done. In other words, a combination of farm and nonfarm use of labor resources is not necessary. Income is not confined to compensation for labor; it may be a return on property or from other nonwork sources.

This study's definition is broader than the one used by the Census of Agriculture insofar as it does not restrict part-time farming to units with sales of farm products of less than \$1,200. The 1954 Census of Agriculture definition of a part-time farm is:

"Farms with a value of sales of farm products of \$250 to \$1,199 were classified as part-time if the farm operator reported (a) 100 or more days work off the farm in 1954, or (b) the nonfarm income received by him and members of his family was greater than the value of farm products sold."

This definition is useful for many purposes, but it eliminates many farms that are part-time by other criteria or when source of income is the major criterion of classification.

⁴Places of 3 acres or more were counted as farms if the annual value of agricultural products, exclusive of home garden products, amounted to \$150 or more. Places of less than 3 acres were counted as farms if the annual value of sales of agricultural products amounted to \$150 or more. If sales were less than \$250, the farm was classified as residential.

TABLE 1. FARMS BY CLASSES, NORTHEAST TEXAS

Class of farm	Farms ¹		Farms ²	
	Number	Percent	Number	Percent
Commercial	18,371	37.4	15,099	30.9
Part-time	11,010	22.4	17,990	36.8
Residential	19,741	40.2	15,825	32.3
All farms	49,122	100.0	48,914	100.0

¹Data from 1954 Census of Agriculture.

²Data from 1956 Sample.

A more inclusive definition is needed to identify the true characteristics of farm families who depend mainly on nonfarm income as their means of living. Illustrating the importance of such a definition is the fact that 43 percent of all farm operators classified as part-time farm operators in this report have full-time, nonfarm jobs. This large group is discussed in detail later; however, their gross farm sales averaged almost \$2,100 and cash farm expenses averaged only slightly less. The Census' definition of part-time farming is limited to small-scale farming. Operators selling farm products worth \$1,200 or more would not be classified as part-time farm operators even though they have full-time, nonfarm jobs and realize little, if any, net cash income from farm operations. About 30 percent of all part-time farm operators (as defined for this report) produce and sell products worth \$1,200 or more. A comparison of the types of farms as reported by the 1954 Census of Agriculture with the types as defined in this study is shown in Table 1. As a result of the more inclusive definition, more than a third of the farms are classified as part-time, while less than a fourth are so classified by the census.

Although the definition used in this report excludes farms having gross sales of farm products of less than \$250, the distinction between part-time and residential farms is not a sharp one. Many residential farms may be part-time in any particular year. In fact, what is sometimes indicated as a significant change between numbers of part-time and residential farms may be a shift resulting from the sale, or lack of sale, of only an additional small quantity of farm products in any one year. Therefore, part-time farming includes a wide variety of situations, ranging from small-scale units with only a small volume of farm sales to large-scale farming with a large volume of farm sales and large expenditures for equipment and supplies, and from little or no off-farm work to full-time employment off the farm.

Classification of Part-time Farming

Part-time operators might be classified from several viewpoints — for example, the size and kind of their farm operations, their net income from farming or their total net income. However, as the definition of part-time farming used in this study revolves around the amount of time

spent in off-farm work, as well as the amount of income from other nonfarm sources, the classification used is based on these factors, and operators are classified into four groups:

- (1) Group I, no off-farm work (0 days);
- (2) Group II, little off-farm work (1 to 99 days);
- (3) Group III, moderate levels of off-farm work (100 to 249 days); and
- (4) Group IV, full-time off-farm work (250 days or more).

Group I includes all part-time farms whose operators reported no off-farm work. Thus, these operators were in position to devote full time to farming operations and from the viewpoint of the utilization of their own labor resources, they might be classed as full-time farmers. However, the families in group I received half or more of their total family net money income from nonfarm sources. Such a situation arises even though no family member works off the farm, as the family receives income from nonwork sources. Another situation occurs in which one or several family members other than the operator worked off the farm and contributed more to family money income than did gross farm sales. Family situations varied considerably within this classification, but each family had two common attributes: (1) The operator did not work off the farm, and (2) family nonfarm money income exceeded gross farm sales. Group I includes 23 percent, about 4,100 families of all part-time farm operators (Table 2).

Group II includes farm families with the operator reporting from 1 to 99 days of work off the farm. This group averaged 40 days of off-farm work and received half or more of their family money income from nonfarm sources. Here again, family members other than the operator contribute to family income. Also, many families had important nonwork sources of income. The main difference between groups I and II is that farming activities of the operators in group II competed with some limited nonfarm activities in labor or worktime. Only 11 percent of the op-

TABLE 2. NUMBER OF FAMILIES BY GROUPS, PART-TIME FARMS, RURAL NORTHEAST TEXAS, 1955

Group	Families		Average days operator worked off farm
	Number	Percent	
Group I ¹	4,138	23	0
Group II ²	1,979	11	40
Group III ³	4,138	23	132
Group IV ⁴	7,735	43	264
All families	17,990	100	149

¹Farm operators reported no off-farm work.

²Operators reported 1 to 99 days of off-farm work.

³Operators reported 100 to 249 days of off-farm work.

⁴Operators reported full-time, off-farm work (250 days or more).

erators, involving about 2,000 families, are in this group.

In group III, the farm operators reported from 100 to 249 days of work off the farm, averaging 132 days. Thus, they spent considerable time at nonfarm work, yet less than they would have done as full-time nonfarm workers. By definition, nonfarm family income of this group does not necessarily exceed farm sales as the operator worked a minimum of 100 days off the farm. With 100 days or more of off-farm work, the nonfarm activities of the farm operator were important, as the amount of time spent at farmwork could have been limited by time spent at off-farm work or a reverse procedure. This group had about the same number of farm operators and families as group I—23 percent of the operators and about 4,100 families.

Part-time farm families in which the operator reported working off the farm "full-time" are in group IV. In this analysis, 250 days or more of work off the farm was considered full-time. The operators in this group averaged 264 days of work off the farm. Under this classification, a farm operator could work full-time off the farm yet nonfarm income might not exceed farm income. However, no such instances were found. All families in group IV lived on a farm and the operator worked full-time off the farm. A high percentage, 43 percent of the part-time farm operators—about 7,700 families—were in this group.

Since part-time farming includes a wide range of situations, this classification divides the operators into fairly homogenous groups. Also, with such a classification, relevant adjustment problems can be approached. For example, the aspect of part-time farming as a transitional stage from farm to nonfarm status can be examined. Many people regard part-time farming as a transitional adjustment, yet all of the operators in group IV, 43 percent of all part-time farm operators, had full-time, nonfarm jobs. Families in group I, 23 percent of all part-time farm families, must by definition have received most of their money income from nonfarm sources, even though the operator, traditionally the family's "breadwinner," did not work off the farm. Apparently, this latter situation was not a transitional stage of adjustment to nonfarm status.

Slightly more than a third of the part-time farm operators (those in groups II and III) were "part-time," as the term implies; that is, the operator was engaged in farming and also worked off the farm less than full-time. Many of these operators may have been in the process of adjusting their labor from farm to nonfarm occupations; however, they accounted for only a small part of the total number of part-time farm operators. Group II operators, those reporting 1 to 99 days of off-farm work, was the smallest group,

having less than 2,000 families, or only 11 percent of all part-time farm families (Table 2). Therefore, only a small part of current part-time farming can be explained as an adjustment to nonfarm status. The number of operators who worked off the farm as much as 100 days but less than 250 days, group III, totaled about 4,000 families, or 23 percent. This classification reveals a tendency for part-time farm operators to work off the farm on a relatively full-time basis or to work off the farm little or not at all.

Extent of Part-time Farming

Numbers of Part-time Farms and Human Resources Involved

Evidence of the increasing relative importance of part-time farming in this area is the declining number of commercial farms in relation to total part-time and residential farms. According to the 1954 Census of Agriculture, the total number of farms decreased by about 11,000 between 1950-54. Of this decline, about 10,500 farms, or 95 percent, were classified as commercial. Consequently, part-time and residential farms decreased only slightly in absolute numbers, and increased proportionately from about half to nearly two-thirds of all farms during the 5 years. Another clue as to the increasing importance of part-time farming in the area is the trend in land in farms. Although between 1950-54, the area as a whole decreased by 400,000 acres in total land in farms, the land in part-time farms increased by more than 350,000 acres. The land area in commercial and residential farms decreased by more than 650,000 acres and more than 100,000 acres, respectively.

Of the 88,000 rural families in the Northeast Texas study area, more than 39,000, or 44 percent, were classified as nonfarm and almost 49,000, or 56 percent, as farm families in 1956. Farm families were further classified into full-time, part-time and residential farm families. Full-time farm families made up 31 percent, part-time farm families 37 percent and residential farm families 32 percent of all farm families.

The human resources on the part-time farms are estimated to represent 40 percent of the total labor force on all farms in the area. There were 68,000 people living on the part-time farms. This included 39 percent of all rural farm people less than 14 years of age, 41 percent of all farm persons from 14 to 64 years of age and 31 percent of all farm persons 65 years old or more.

Part-time farm operators have relatively high levels of education compared with other farm operators in the area. Almost 27 percent of the part-time farm operators had a high school education or more compared with 19 and 14 percent for the full-time and residential farm operators, respectively. Nearly half of all farm operators with a high school or higher level of edu-

cation were part-time farm operators, while only about a fourth of all farm operators with less than 5 years of schooling were part-time farm operators.

Farm Resources

Part-time farming is not only important in this area in the number of farm operators, but also because 40 percent of the total farm resources (land 40 percent, livestock 42 percent and equipment 39 percent) were held by part-time farmers (Figure 1). The average value of farm resources was \$16,024 with land \$12,803, livestock \$1,846 and equipment \$1,375.

Part-time farmers controlled 29 percent of all the cropland and 33 percent of all idle cropland acres. However, they had relatively more pasture, 42 percent of all pasture and 55 percent of the improved pasture. They also operated 40 percent of all woodland not in pasture. Apparently, much of the previously cultivated land on these farms had been taken out of crops and was no longer considered cropland. All part-time farms averaged 165 acres in size compared with 260 acres for full-time farms.

Farm Output

Part-time farms, representing 37 percent of all farms and 40 percent of the total farm resources, marketed 21 percent of all crops sold and 32 percent of all livestock and livestock products sold.

Part-time farmers produced 22 percent of all cotton sold, 15 percent of all vegetables and 30 percent of all other crops (Figure 2). They marketed 41 percent of the poultry and poultry products. They sold 38 percent of all cattle and other livestock. They accounted for 17 percent of all dairy products sold, but dairying was limited to a few farms. Only 4 percent of all other farm products, including fruits and special crops, were sold by part-time farmers. Sales of wood products made up only a small part of total products sold even though part-time farmers control 40 percent of the woodland not in pasture. Other farm production, not shown in Figure 2, included Government conservation payments and receipts for custom work on other farms. The part-time operators received 43 percent of all conservation payments made to rural-farm operators and 43 percent of all payments for custom work.

Labor Resource Characteristics

The characteristics of resources within classified groups of operators help to explain why some operators do more off-farm work than others. The age level of both the farm operator and other family members was a major difference among the groups.

Age of Family Members

Group I had more older family members and relatively fewer in the productive age groups than

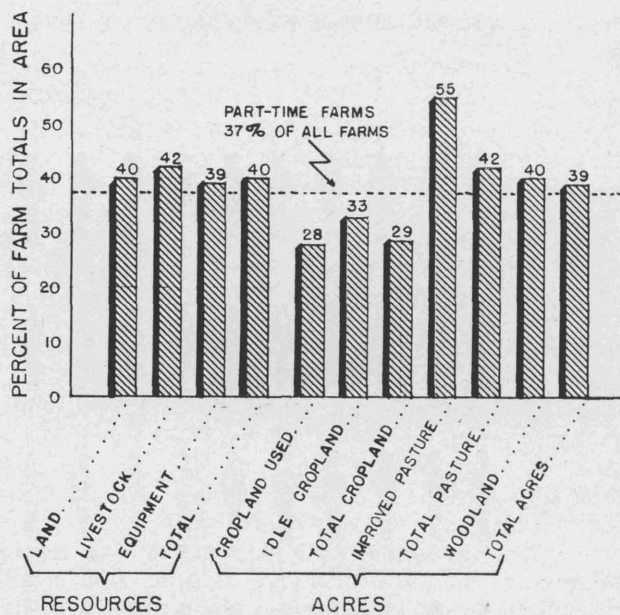


Figure 1. Percent of farm resources and farm acres controlled by part-time farm operators in Northeast Texas.

the other farm groups (Figure 3). More than half of all family members in group I were 55 years of age or older. There was a low percentage of young family members. Group II had less than half as many family members 65 years of age or more as group I and only 29 percent of all family members were more than 55 years old. Group III also had a large number of family members, 46 percent, less than 20 years old and a still smaller percentage of aged family members. Almost half of all family members in group IV were in the productive age group from 20 to 54. Only 3 percent of the family members were

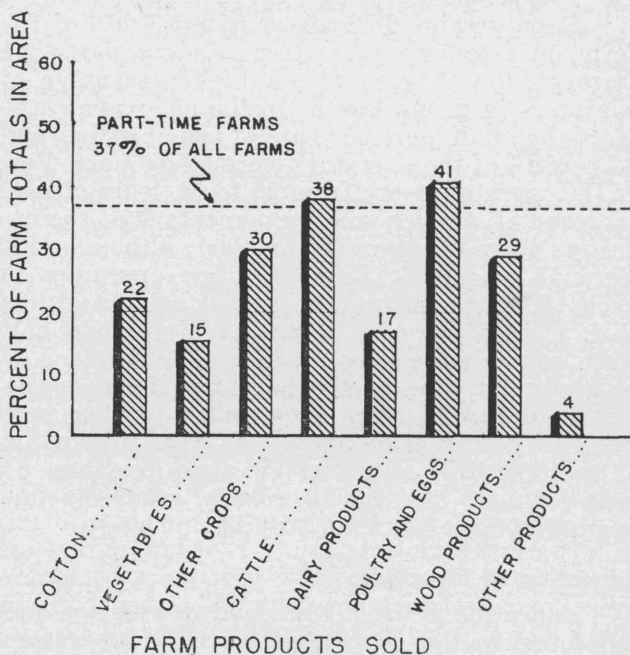


Figure 2. Aggregate farm products sold from part-time farms as compared to all farms in Northeast Texas.

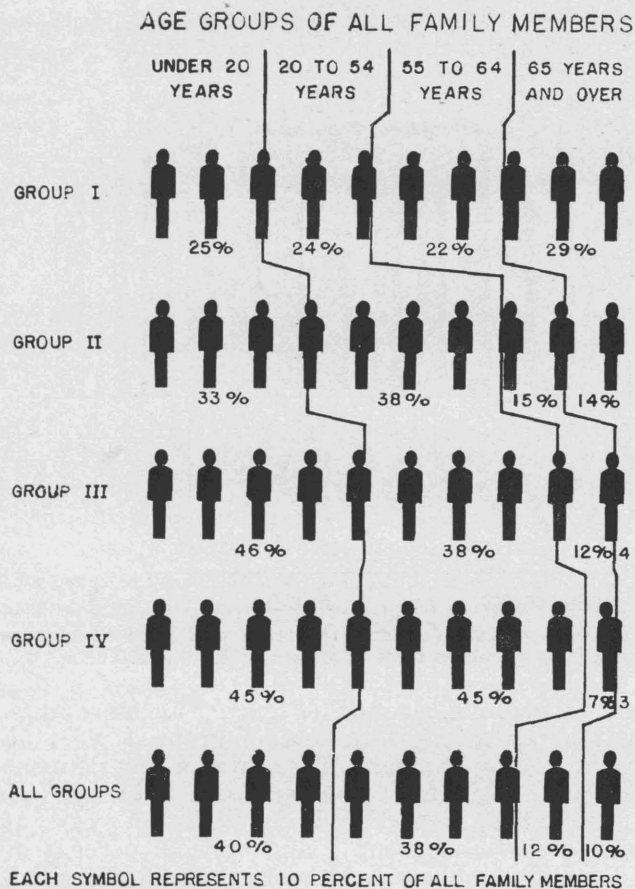


Figure 3. Age distribution of all family members by part-time farm groups, rural Northeast Texas, 1955.

65 years of age or older, and only 10 percent were 55 years of age or more.

Age of Operators

Even greater differences in age levels of the farm operator were apparent among part-time farm groups (Figure 4). A high percentage of operators in group I were in the older age class. More than half were 65 years of age or older, and 86 percent of the operators were 55 or more. Few of the operators were from 35 to 54 years of age. In group II, a much smaller percentage of the operators were 65 years old or older, although half were 55 or more. Relatively few operators in group III were 65 years of age or older, and less than a third were 55 or more. More than half were between the ages of 35 and 54 years. As in group III, few of the part-time farm operators in group IV were aged, but a smaller part were 55 years old or older. A large proportion of the operators in group IV were less than 54 years of age. Among all groups, relatively few operators were less than 35 years of age.

Education of Operators

Education is usually associated with age and consequently the educational level of operators would be expected to vary considerably by groups. The part-time farm operators who worked full

time and 100 days or more off the farm have more education than the operators who did little or no off-farm work. More than 85 percent of the farm operators in group I had completed less than 9 grades in school as compared with 37 percent with the same education level in group IV. Also, only 6 percent of the operators in group I completed high school in contrast to 15, 24 and 43 percent in groups II, III and IV, respectively.

Labor Resources

By converting labor resources to a common denominator, such as man-work equivalents, the relative quantities of labor resources and their utilization may be compared by groups of operators. In this analysis, it was assumed that a male 14 to 64 years of age, not in school and not physically handicapped is equal to one man-work equivalent. Females of the same age, handicapped males and children in school were considered less than one man-work equivalent. (For definition of man-work equivalents, see footnote 1, Table 3.) In actual instances, these measures may be high or low for any given family member or family situation; in general, the computed man-work equivalents are a good relative measure of the labor force among groups of families. Using these criteria, it is estimated that the 49,000 farm families in the area had slightly more

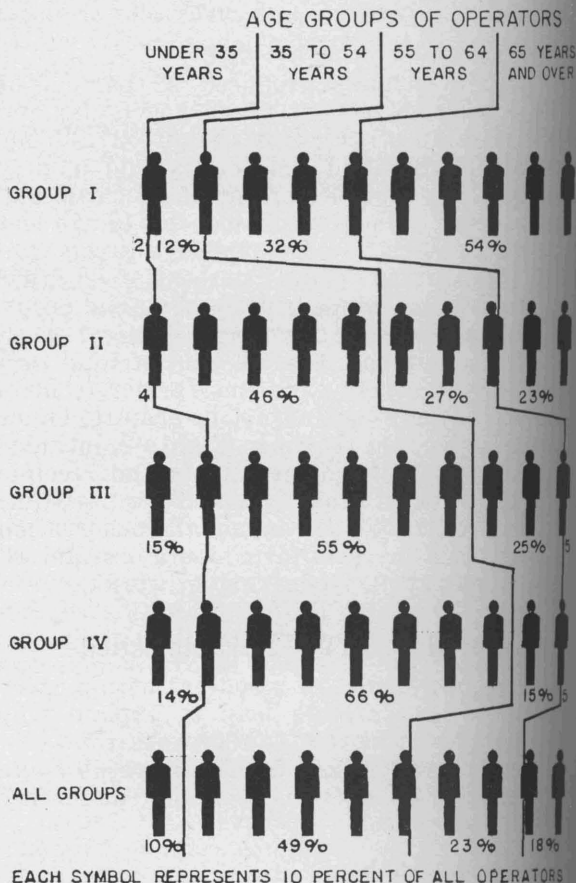


Figure 4. Age distribution of farm operators by part-time farm groups, rural Northeast Texas, 1955.

TABLE 3. FAMILY LABOR RESOURCES, PART-TIME FARM GROUPS, RURAL NORTHEAST TEXAS, 1955

Part-time farm group	Per-centage of fami-lies	All fam-ily mem-bers	Family members ¹				Total
			Not in school			Males in school	
			Males	Handi-capped males	Fe-males		
Percent	Unit						
Group I	23	3.27	0.32	0.13	0.25	0.02	0.72
Group II	11	3.91	.65	.12	.23	.06	1.06
Group III	23	4.01	.73	.11	.31	.07	1.22
Group IV	43	3.92	.83	.10	.29	.07	1.29
Average	100	3.79	.67	.11	.28	.05	1.11

¹Male 14 years to 64 years of age not in school, not handicapped = 1.0 man-work equivalents; male 14 years to 64 years of age not in school, handicapped = 0.5 man-work equivalents; male 14 years to 64 years of age in school, not handicapped = 0.3 man-work equivalents; female 14 years to 64 years of age not in school, not handicapped = 0.3 man-work equivalents; all others = 0 man-work equivalents.

than 50,000 man-work equivalents. The 18,000 part-time farm families had about 20,000 man equivalents, or 40 percent of the total labor force on all farms in the area.

The family heads made up almost two-thirds of the total labor force on all part-time farms. Approximately 54 percent of the labor force were operators 64 years of age or less with no physical limitations, and 10 percent were operators less than 65 with some physical limitation. Other male family members not in school and not physically handicapped accounted for only 6 percent of the labor force; females not in school, with no physical limitations made up 25 percent; and males in school not handicapped accounted for 5 percent.

Part-time farm group I, including all family members, averaged only 0.72 man-work equivalents per family, or only three-fourths of one full-time worker (Table 3). This was due mainly to the relatively high proportion of older family members and farm operators. In this group, all male family members not in school averaged less than one-half of one man-work equivalent, and all male family members with no physical limitations averaged less than one-third of one man-work equivalent. Group II averaged slightly over one man-work equivalent per family, and groups III and IV 1.22 and 1.29 man-work equivalents, respectively, or considerably more than the equivalent of one full-time worker.

Farm Organization and Returns to Farm Resources

Part-time farmers, and their families have various goals and objectives, ranging from farming as a hobby to the goal of a large commercial farm. The social implications of part-time farming are recognized as important. However, these social factors need not hinder an economic evaluation. This report emphasizes the economic or productive aspects of part-time farming.

This section of the report deals with the organization and operation of part-time farms. An attempt is made to establish the economic place of part-time farming and to estimate the total value of farm returns to family labor and management. Some of the factors that limit farm production and the attainment of efficient operations are discussed as a framework for farm organization and operations. These limitations have important implications in dealing with adjustment problems of part-time farmers.

Framework of Farm Organization and Operations

Several conditions of the area, as well as characteristics peculiar to part-time farming, should be considered in order to understand the organizational problems of these farmers. Some of the more important conditions are: (1) Farm resources in this area were once largely committed to the production of a single cash crop, cotton. The competitive position of the area in the production of cotton deteriorated during the past 35 years and no other enterprise of similar economic magnitude has been available to take its place. (2) Since much part-time farming involves a combination of farm and off-farm work, the use of labor in one activity may compete for the use of it in the other. (3) With nonfarm sources of income, part-time farm operators may and often do use off-farm income as a source of operating or investment capital for farming.

Cotton production, at one time the principal source of cash farm income, has rapidly moved out of the area. As a result, the few remaining cotton-producing farms have serious marketing problems. Frequently, cotton must be hauled long distances to gins, and existing gins within the area handle such small volumes that obsolete ginning equipment cannot be replaced. Prices received for cotton are usually low and ginning expenses high. As no other crop has been found to replace cotton, the major source of farm income has shifted from cotton to livestock. Fortunately, the development of industries in the area has made some off-farm work opportunities available. Many farm operators found it easier to obtain off-farm work than to adjust their farm resources to livestock production. As a result, many farm holdings have not increased in size, and although the area is well suited to production of livestock and timber, many part-time farms that were originally operated by full-time farmers and organized for production of cotton are still small. This situation affects the selection of farm enterprises on many part-time farms.

The area of study is not one of high commercial farming; consequently, except those for livestock and timber, farm-product markets are disorganized compared with those in commercial farming areas. Many farm operators are uncertain where they will market, or even if there will be a market for their farm products from one year to the next. For example, vegetables (per-

ishable products) are sometimes harvested and the operator hauls them long distances to markets in different towns only to find the markets are closed. Farm products shipped from other areas of the state often are sold in retail stores at relatively high prices when similar products produced within the area cannot be marketed at any price. Operators of retail stores stated that they did not buy locally because they were not assured of a dependable quality or supply of products. A cannery was utilizing local labor and shipping farm products from distant areas for processing, even though the same products were being produced locally. Cannery officials stated that few products would be bought from local growers because the markets would be flooded by the time the local products were on the market. Since commercial farming is not highly developed for crops, custom operators are not well established in the area. As a result, the small part-time farmer is particularly vulnerable because their small acreages of crops are bypassed by custom operators during rush periods, such as harvest-time.

Labor-use decisions are difficult for part-time farm operators as much part-time farming involves a combination of farm and off-farm work. Labor in one activity may compete for labor in the other. Usually, it is assumed that the operator chooses to use his labor where returns are greatest, whether this is in farming, nonfarm work or a combination of the two. This assumption is valid only when labor resources are completely mobile. The nature of nonfarm employment is such that there is relatively little demand for consistent part-time employment. Also, the quality of labor on part-time farms in this area is such that nonfarm employment is limited. Therefore, many part-time farm operators have short planning horizons, as labor resources cannot move freely from farm to nonfarm work. At any time, the operator may need to decide whether

to use his labor in farming or nonfarm work, but part-time farm operators are not completely "free" in formulating or carrying out planned use of labor. If decisions as to where labor returns are greatest must be made in the "short run," the net effect of any commitment of labor resources to nonfarm uses may be one that reduces farming efficiency or returns to farming. The decision may even be one that reduces total returns in the long run. The nature of nonfarm work is such that it usually demands a fixed amount of labor, such as 8 hours a day, 5 days a week. Maximum returns in farming may demand the use of the operator's labor at a time when it is committed to nonfarm work and not available. This may partly explain some of the farming inefficiencies associated with part-time farming.

At least half of the part-time farm operators have good paying nonfarm jobs with incomes adequate not only for family living but also for farm operation and expansion. This factor affects farm organization and operations in two ways. First, because of outside earnings, part-time farm operators may continue to operate inefficient farms and realize little if any cash returns from farming. Second, with the proper management and nonfarm earnings, part-time farm operators can organize their farm operations as a good source of supplemental income. Of course, these two situations do not exist for all part-time farm operators. Those with little or no off-farm work do not have the alternative of expanding farm resources with nonfarm income as family cash incomes are low even for family living.

Scale of Operations and Organization of Resources

The most predominant characteristic of part-time farms in this area is that wide differences exist in farm size, organization and operations. Part-time farms vary even more in size and in organization of enterprises than do commercial farms. Analysis reveals that few consistencies can be found. Therefore, averages have limited meaning but can be used to generalize broadly the characteristics of the part-time farms.

The range in scale of operations was wide, from 1 to more than 1,500 acres. Most part-time farms were too small for most types of full-time farm enterprises found in the area, but considering the size of farms in some areas of the United States (Figure 5) were still rather large. Average size was 165 acres, but almost 70 percent of the farms were smaller than average. The median size of farm was 90 acres, which represents the central tendencies in farm size.

The part-time farm groups differed slightly as to farm size. The average farm size varied directly with the extent of off-farm work by the farm operators (Table 4), but the extreme average differences between part-time farm groups amounted only to 27 acres. The range and dis-

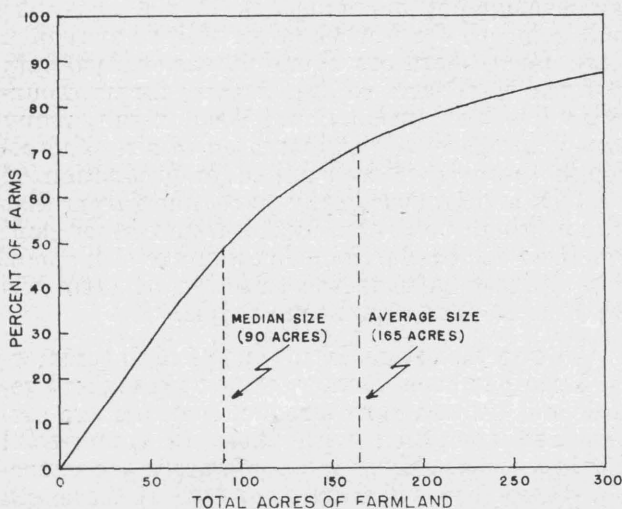


Figure 5. Distribution of farm size on part-time farms, rural Northeast Texas, 1955.

TABLE 4. FARM SIZE AND TOTAL FARM RESOURCES PER FARM, BY PART-TIME FARM GROUPS, RURAL NORTHEAST TEXAS, 1955

Farm group	Farm size	Farm resource			Total
		Land	Livestock	Equip-ment	
	Acres	Dollars	Dollars	Dollars	Dollars
Group I	147	11,502	1,343	588	13,433
Group II	148	11,575	1,974	1,023	14,572
Group III	158	12,321	1,840	1,433	15,594
Group IV	174	14,049	2,086	1,851	17,986
Average	165	12,803	1,846	1,375	16,024

tribution of farm sizes within each part-time farm group were similar to that of all farms as shown in Figure 5. There was a somewhat larger proportion of smaller farms in groups I and II (where operators reported no and very little off-farm work), but the proportional differences were not large. The central tendencies in size of farm was 80 acres for groups I and II, and 100 acres for groups III and IV.

There were no consistent differences in major land use among part-time farm groups. Regardless of size, most farms had relatively large acreages devoted to pasture and a high percentage of the pasture acreage was improved. All farms averaged a little more than three-fourths of the farm in pasture, and a fourth of the total pasture acreage was improved pasture. The average of 19 acres used for crops was less than 12 percent of the total acres in farmland. Almost 30 percent of the total cropland was currently idle. Except for the home garden, many farms had only idle cropland.

Part-time farm operators controlled 40 percent of the total farm resources (land, livestock and equipment) of the area. In terms of capital investment, land is the most important farm resources on most part-time farms. Therefore, like total acreages operated, the range in capital investment is wide, varying from \$1,000 to more than \$120,000. The average resource value of all farms was \$16,024. As with acres operated, the average does not reflect the typical. Only 30 percent of the operators had this much or more invested in total resources. Approximately half of the farms had total farm resource investments less than \$10,000.

Farming in the area is such that part-time operators organize their farm resources in much the same way as do full-time farm operators. Land is the major resource. Part-time farmers average \$5,400 less in total value of farm resources and 95 fewer acres per farm than do full-time farmers, but the resource distribution patterns are similar.⁵ Part-time farmers as a whole had 80 percent of their total investment in land, 11 percent in livestock and 9 percent in equipment, while full-time farmers averaged 79, 12 and 9 percent, respectively.

⁵Southern and Hendrix, op. cit., p. 25.

Although the range in total value of farm resources within each part-time farm group is wide, there may be some relationship between the average value of total farm resources and the extent of off-farm activities by the farm operator (Table 4). Average value of all farm resources increased, mainly because of larger acreages, as the number of days worked off the farm by the operators increased. Total resources of group I averaged \$13,433, with land at \$11,502, livestock at \$1,343 and equipment resources at only \$588. Group II operators had approximately the same level of land resources as group I operators but averaged slightly more than \$1,000 greater in total resources, with \$631 more in livestock and \$435 more in equipment. Group III operators averaged \$15,594 in total resources with \$12,321 in land, \$1,840 in livestock and \$1,433 in equipment. The average value of each type of farm resources was consistently higher for group IV operators, who averaged \$14,049 in land, \$2,086 in livestock and \$1,851 in equipment for a total of \$17,986 in farm resources. The value of livestock and equipment held by part-time farm groups indicates the amount of operating or working capital increased as the average number of days worked off the farm by the operator increased.

Farm Labor

Characteristics of the family labor resources were discussed earlier in this report, and overall utilization of family labor in farming and non-farm activities is the subject of a later section. However, it is necessary to summarize the relation of farm labor resources, in terms of total farmwork performed, to other farm resources, and the extent to which family labor is utilized in farming activities.

By using labor input data development from other studies in the area, estimates of total labor requirements necessary to operate an average part-time farm were computed.⁶ (A division of labor requirements in farming and time spent at off-farm is shown in Table 10.)

Most of the farmwork performed on part-time farms was done by operator and family members. The average part-time farm required slightly more than 1,200 hours of labor, of which approximately 152 hours was hired labor, with the family supplying more than 1,000 hours, or 89 percent, of the total labor. A few of the part-time farm operators hired some custom work, but the relatively small amount of labor involved was insignificant for the farms as a whole.

Although total labor requirements differed to some extent, the proportion of family labor used to carry out necessary farmwork was similar for each group. Groups I, II, III and IV used 72, 136, 104 and 224 hours, respectively, of hired

⁶Magee, A. C. and Stone B. H., Production and Production Requirements of Crops, East Texas. Texas Agricultural Exp. Station Misc. Publication 225, September 1957.

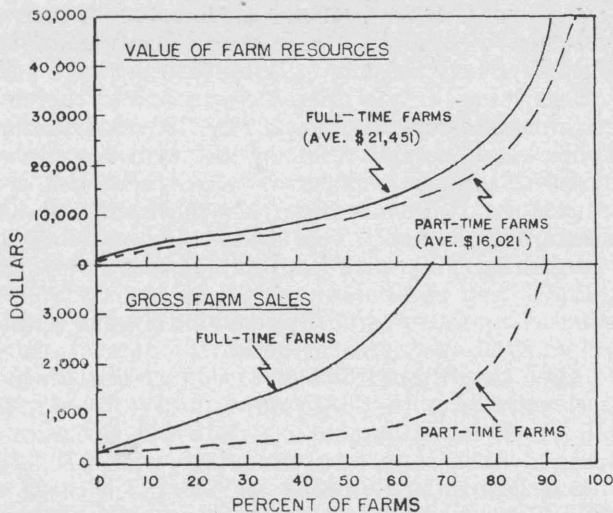


Figure 6. Value of farm resources and level of farm sales on part-time farms and full-time farms in Northeast Texas.

labor, and family members supplied 91, 88, 92 and 82 percent of the total farm labor. Hired labor was of greater importance on units whose operators worked full time off the farm.

Labor resources on most part-time farms were not a limiting factor of production. Even with the nonfarm jobs of the operators and family members, considerable amounts of unused labor or unemployment existed. Only those family members in group IV approached full employment. Because of the personal characteristics of family members, the labor force in group I may be fully employed as far as hours of work are concerned. Although this group averaged 0.72 manwork equivalents per family, no family member for the group as a whole averaged as much as one-third of one manwork equivalent (Table 3).

Tenure of Operator and Length of Residence on the Farm

Tenure status and length of residence indicated that most part-time farm families were well established and residents of long standing in their community. For all operators, 83 percent were owners or part-owners; they had lived at their present residence an average of 17 years. Tenure varied somewhat, but there seemed to be little, if any, relationship between tenure of operator and days worked off the farm.

Groups I, II, III and IV averaged 25, 22, 14 and 13 years of residence, respectively, at their present place. The operator's age was highest for group I and lowest for group IV, indicating that length of residence was a function of age. About 61 percent of the operators in group I reported residing at the present place for at least 15 years. In contrast, only 31 percent of the operators in group IV reported similar length of residence. In groups II and III, 58 and 41 percent of the operators, respectively, reported at least 15 years of residence at the present place.

Farm Sales and Net Money Returns from Farming

Farm sales covered a wide range on part-time farms. On many farms, product sales consisted of two or three calves or only 2 or 3 bales of cotton. At the other extreme, on a few farms, the gross sales of broilers or dairy products were large. Sales on 30 percent of the farms ranged from \$250 to \$400, whereas sales on about 3 percent of the farms ranged from \$10,000 to \$12,000. Farm sales averaged \$1,623, but more than 75 percent of the farms sold less. The median value of product sales was about \$680. Part-time farms (37 percent of all farms in the area) sold only 28 percent of all farm products. Furthermore, relatively few part-time farms were responsible for a large proportion of the total sales. Less than 10 percent of the part-time farms accounted for 50 percent of the aggregate value of farm sales on all part-time farms.

A high volume of gross farm sales is not the chief objective of most part-time farm operators because all operators have sources of income other than farm sales. Most of them seem to want more nonfarm work. The timeliness of off-farm work prevents many operators from raising a large volume of farm products. In any event, the comparison of information on levels of farm sales and resources between part-time and full-time farm operators in the same area tends to show the differences in intensive use of farm resources (Figure 6). Less than 10 percent of the part-time farm operators sold more than \$4,000 worth of farm products while more than 30 percent of the full-time farm operators sold more than this amount. Comparing resource levels and distribution, almost 50 percent of the part-time farms had resource levels of less than \$10,000, while 50 percent of the full-time farms had resource levels of less than \$12,000. Thus, no great differences in total resource levels exist up to the point of central tendencies. However, there was a significant difference in gross farm sales, as 50 percent of the full-time farms had gross sales of \$2,100 or less and 50 percent of the part-time farms had gross sales of \$680 or less.

Farming activities do not decrease with increased off-farm work by the farm operator. Farm sales ranged from an average of \$665 for group I to \$2,091 for group IV (Table 5).

All part-time farm groups averaged more sales from livestock and livestock products than from crops (Table 5). On the average, cattle was the major product sold by groups I, II and III. Group IV sold more poultry and eggs (in terms of value) than any other product, although the sale of cattle was second. Cotton, although a minor enterprise in the area, was the main cash crop for each group, and the value of sales from cotton and cottonseed was greater than the value of all other crops sold.

The sale of wood products was of little importance in all groups. Other products, including

Government conservation payments and custom work, were relatively unimportant except in group III, where the value of custom work averaged \$125.

The level of efficiency on part-time farms is low, as cash farm expenses were high in relation to gross farm sales. Furthermore, net money returns from farming did not increase consistently with an increase in gross sales. Gross farm sales averaged \$1,623 and farm expenses, \$1,420, leaving an average of only \$203 net money return from farming (Table 5). Group IV operators had the highest level of farm sales, \$2,091, and the lowest net money returns from farming, \$36. Group II operators also had high cash expenses in relation to gross sales and averaged only \$130 net money return from farming. The ratio of net money returns from farming to gross sales was low for all groups, averaging only 13 cents per dollar of gross sales. Farms in group IV, whose operators reported full-time, off-farm employment, averaged only 2 cents net farm sales per dollar of gross sales.

Other Farm Income

Although net money returns from farming were low for most part-time farm families, the operation of a farm enables the operator and family to receive income other than from sales of farm products. These other sources of income must be considered in any analysis of part-time farming.

Mineral rent income, that is, income from mineral leases or royalties, is an important source of cash income. For more than 30 years, the leasing of land for production of oil and gas has been of widespread and constant importance in this area. Delay rentals, lease bonuses and income from royalties result in significant income to landowners. Income from this source averaged \$223 per part-time farmer for 1955 (Table 6).

Nonmonetary farm income items include: Value of products used in the home; rental value of the dwelling; and "land appreciation" value. Apparently, the value of home-use products and the rental value of the home are closely related to cash income, as these reduce cash family living expenses. On an average, these families valued their home-use products at \$350. For purposes of analysis, the rental value of the dwelling per family was assumed to be \$30 a month, or \$360 annually. Most farm operators were aware of the appreciation in land values, and this seemed to be important in influencing the holding of farm resources.⁷ For purposes of analysis, it was as-

⁷In analyses of farm returns an appreciation in the value of land is not considered as an "output" related to the farm business. However, in view of widespread lack of cash returns on farm operations, the concern has been for an explanation of the "why" of part-time farming. In interviews, it was found that this "output" in the form of increasing values was as much or more in the minds of part-time operators as was the product output in the form of farm sales.

TABLE 5. FARM SALES AND EXPENSES PER FARM, PART-TIME FARM GROUPS, RURAL NORTHEAST TEXAS, 1955

Item	Group	Group	Group	Group	Average
	I	II	III	IV	
	Number of Families				
	4,138	1,979	4,138	7,735	17,990
	Dollars				
Gross farm sales					
Cotton and cotton seed	181	221	312	203	224
Vegetable crops	34	82	117	48	64
Other crops	8	48	193	18	59
Cattle	305	531	517	532	476
Dairy products	9	78	279	304	206
Poultry and eggs	46	59	298	830	445
Other livestock	39	22	38	27	32
Pulpwood	11	6	15	25	17
Other woodland products	25	0	1	24	16
Government conservation payments	2	17	12	14	11
Custom work	0	15	125	64	58
Other	5		55	2	15
Total	665	1,079	1,962	2,091	1,623
Cash farm expenses	453	949	1,413	2,055	1,420
Net money returns from farming	212	130	549	36	203
Net money returns from farming per dollar of gross sales	.32	.12	.28	.02	.13

sumed that land values have appreciated at 3 percent net per annum. This is a conservative allowance as the rate of increase in land values in this area during the past 25 years has been higher even after adjusting for changes in price levels. At 3 percent per annum, all farms averaged \$384 annually in land-appreciation value. Operators in group I, with the smallest investment in land resources, averaged \$345 and group IV operators, with the largest investment, \$440.

The total value of items other than sales averaged about \$1,300 per farm for all farms in each group (Table 6). From an economic standpoint, therefore, these items were, on the average, more important to the part-time farm operators and their families than the value of net money returns from farming.

TABLE 6. FARM INCOME, OTHER THAN FARM PRODUCT SALES, PER FARM, BY PART-TIME FARM GROUPS, RURAL NORTHEAST TEXAS, 1955

Item	Group	Group	Group	Group	Average
	I	II	III	IV	
	Number of Families				
	4,138	1,979	4,138	7,735	17,990
	Dollars				
Families in class (number)	4,138	1,979	4,138	7,735	17,990
Value of farm products used at home	300	415	368	352	350
Assumed rental value of dwelling at \$30 per month	360	360	360	360	360
Assumed land appreciation value at 3 percent net annually	345	347	370	440	384
Mineral rent income	361	176	48	252	223
Total other farm income	1,366	1,298	1,146	1,404	1,317

TABLE 7. FARM RETURNS TO FAMILY LABOR, MANAGEMENT AND CAPITAL PER FARM, BY PART-TIME FARM GROUPS, RURAL NORTHEAST TEXAS, 1955

Item	Group	Group	Group	Group	Average
	I	II	III	IV	
Families (number)	4,138	1,979	4,138	7,735	17,990
Percentage of all families	23	11	23	43	100
	Dollars				
Gross farm sales	665	1,079	1,962	2,091	1,623
Cash farm expenses	453	949	1,413	2,055	1,420
Net money returns from farming	212	130	549	36	203
Other farm income ¹	1,366	1,298	1,146	1,404	1,317
Total farm returns	1,578	1,428	1,695	1,440	1,520
Equipment depreciation ²	59	102	143	185	138
Farm returns to family labor, management and capital	1,519	1,326	1,552	1,255	1,382
Interest on total farm investment	806	874	936	1,128	961
Farm returns to family labor and management	713	452	616	127	421

¹Includes value of home-use products, rental value of dwelling, value of land appreciation, and mineral-rent income.

²Depreciation of total investment in equipment over a 10-year period.

Total Farm Returns to Family Labor, Management and Capital

The goals of part-time farmers may be such that farm operations are nominal, or are a "by-product" of other returns to farming and rural living. However, an analysis of farm returns to operator and family labor, management and capital is made to show their interrelationship, as well as for comparison with incomes from non-farm sources.

Total farm income consists of net money returns from farming (gross sales minus cash farm expenses), the value of home-use products, rental value of dwelling, land-appreciation value and income from mineral rights. Total returns to op-

TABLE 8. OCCUPATIONS REPORTED BY PART-TIME FARM OPERATORS, RURAL NORTHEAST TEXAS, 1955

Occupation	Percentage of operators
	Percent
Farming ¹	44
Manufacturing and building ²	16
Mechanics and operators ³	11
Retired	8
Retailing ⁴	7
Profession ⁵	6
Other ⁶	8
Total	100.0

¹Includes farming and ranching (farm and timber laborers comprise 3 percent).

²Includes carpenters, bricklayers, industrial workers, and so forth.

³Includes bulldozer operators, utility company and railroad employees, oil and gas field workers.

⁴Includes clerks and owners of retail establishments.

⁵Includes doctors, lawyers, government workers, teachers, and so forth.

⁶Includes domestic and custodial workers and housekeepers.

erator and family labor, management and capital from the farm were derived by deducting a charge for depreciation on equipment from the value of total farm income.

All part-time farms averaged less than \$1,400 in combined farm returns to family labor, management and capital (Table 7). These returns ranged from \$1,255 for group IV, to \$1,552 for group III. When a charge is made for capital invested in the farm business, the average return to farm labor and management on all farms is \$421. With a capital investment charge, the part-time farmers in group IV had a low return of \$127 to farm family labor and management. Farms in this group had high cash farm expenses and interest cost on investment that resulted in this low return to farm labor and management. Farms in group I, whose operators reported no off-farm work, averaged \$713 returns to labor and management—the highest of any group. These farms had relatively low cash farm expenses and a smaller charge on investments. On an average, farms in all groups realized some returns to family labor and management, but considering the amount of time that family members spent at farmwork, returns were low.

Occupations and Labor Utilization

Rural families including part-time farmers in Northeast Texas have had opportunities to use their labor resources in a range of activities. The classification of part-time families as outlined in Table 2 indicates that about two-thirds of these operators worked off their farms 100 days or more annually.

Nonfarm Occupations and Activities

The Census of Agriculture classifies all of these part-time operators as farmers, and 30 percent of them as commercial farmers. However, only 44 percent of the part-time farm operators reported their occupations as farming (Table 8), and in 1955, only 40 percent reported their major economic employment activity as farming. About 41 percent reported wage or salary work as their main activity and about 9 percent were self-employed (Table 9). Only those operators in Groups I and II spent a major part of their total productive activity in farming. In both groups, those who reported retirement as their occupation were doing some farming. Nonfarm occupations were of greater importance in groups III and IV. For example, in group IV, only 18 percent reported farming as their occupation, even though average sales of farm products per operator amounted to about \$2,100.

About 16 percent of the part-time farmers reported construction and manufacturing, including such activities as carpentry, painting, electrification and steel plant operations, as their major occupation. Mechanics' and operators' occupations (bulldozer operators, garage mechanics

and oil and gasfield laborers) were reported by 11 percent; retired 8; retailing 7; and professions 6 percent.

The main activities (not occupations) reported by family members other than the operator were chiefly housekeeping and attending school (Table 9). Only about 1 in 10 wives worked off the farm. In group II, however, 25 percent of the wives reported their main activity as a wage or salary worker. Most of the children—71 percent—attended school, but 14 percent of all children, those usually above school age, reported working for salary or wages. In group I, only 26 percent of the children were attending school. About 17 percent of the children in this group were operating the farm and an equal percentage were in wage or salary work. The diverse activities of the children remaining home were explained because many of the family heads were aged and physically handicapped and the children took on added responsibility. Perhaps for the same reasons, most of the adult children remaining at home were found in these two groups. Only a few persons, including operators and family members, reported "looking for work" as their major activity in 1955 and only a limited number of children who had not left home were in the Armed Forces.

Labor Utilization

Based on the estimated hours of farmwork performed and the hours of off-farm work re-

ported, all part-time families including the labor resources of family members working at both farm and nonfarm activities, averaged a little less than the equivalent time worked by a full-time farm operator, or slightly more than 3,000 hours annually (Table 10). It is assumed that one able-bodied, full-time worker can spend about this number of hours at farm and nonfarm work. Nearly 1,800 hours were spent at work off the farm, with only about 60 hours, or 3 percent, spent in work on other farms. On the average, 1,100 hours were spent at work by the operator and family members on their own farms.

Families in group I worked a total of less than 1,400 hours both on and off the farm, but the characteristics of their labor resources explain the reason for this. As shown previously, nearly 30 percent were retired, almost a third were 65 years of age and over and each family's labor resource was only about 0.72 of a one-man equivalent. The operators in this group did no work off the farm, but other family members put in the equivalent of about 80 8-hour days, including some work on other farms. Work on the farm of families in group I averaged a little more than this, or about the equivalent of 90 days.

On the average, families in groups II, III and IV spent about equal amounts of time at farming. Families in groups II and III spent about as much time farming as in nonfarm work. Families in group IV spent a little less than half as

TABLE 9. MAJOR ACTIVITIES OF OPERATOR AND FAMILY MEMBERS, PART-TIME FARM GROUPS, RURAL NORTHEAST TEXAS, 1955

Farm group and family members	Main activity										
	Farm operator	Unpaid family worker	Farm wage worker	Wage or salary worker	Self-employed	In school	In armed services	Looking for work	Disabled	House-keeper	Other
----- Percent -----											
FAMILY HEAD											
Group I	75								9	3	13
Group II	77		4	15	4						
Group III	45		2	44	5						4
Group IV	9		5	69	17						
All heads	40		3	41	9				2	1	4
WIFE											
Group I				13				2	2	83	
Group II				25						75	
Group III				8	4					88	
Group IV				6	1					93	
All wives				10	1				2	89	
CHILDREN											
Group I	17	3	3	17		26	3		7	17	7
Group II		8		25		59				8	
Group III				10		90					
Group IV				13		86				1	
All children	3	1	1	14		71	1		2	5	2
OTHER PERSONS¹											
Group I	8		8	15		15			15	39	
Group II			14	14		14			14	30	14
Group III		36				9			36	19	
Group IV		9				9			19	44	19
All other persons	2	12	5	7		12			21	34	7

¹Other persons living in household were too few in number for significance. Less than 1.0 percent.

TABLE 10. AVERAGE RESOURCES AND LABOR USED PER FARM, BY PART-TIME FARM GROUPS, NORTHEAST TEXAS, 1955

Farm group	Man-work equivalents per family ¹	Estimated family labor available ²	Time spent		Total of work time	Total unem- ployed
			Off- farm work	Farm- ing		
	Units			Hours		
Group I	0.72	2,160	640	743	1,383	777
Group II	1.06	3,180	1,132	1,003	2,135	1,045
Group III	1.22	3,660	1,536	1,246	2,782	878
Group IV	1.29	3,870	2,616	1,020	3,636	234
Average	1.11	3,330	1,776	1,075	2,851	479

¹Details on manwork equivalents per family are shown in Table 3.

²Assuming that 1.0 man equivalent can spend 3,000 hours at farm and nonfarm activity in a year.

much time in farming as in nonfarm work, even though the operators had full-time, nonfarm jobs.

In the overall use of labor resources, group IV families had the fewest hours of unemployment. The chief difference in the total employment of family members in each group comes from the difference in time put in at nonfarm work, which ranged from 640 hours for group I to 2,616 hours for group IV.

Apparently the labor resources in group IV were rather fully employed. Most of the unemployed labor resources occurred where the operators reported less than 250 days of off-farm work. The unemployed time per man equivalent amounted to about 97 8-hour days, 130 days and 110 days for groups I, II and III, respectively. This means that more than half of all part-time farm families in the area, or more than 10,000, were unemployed about 1 million man-days annually. Due to small acreages and types of enterprises that cannot absorb much additional labor without ma-

ior capital expenditures, the loss of this much productive activity apparently means that the labor in these groups could not find full-time, nonfarm employment, but worked only when jobs were available.

The proportion of the farmwork performed by the operator and other family members was not learned. But the off-farm work, including work on other farms averaged about 222 days per family, and the operator was the chief person employed working an average of 163 days, or three-fourths of the total off-farm work (Table 11). Wives and children accounted for nearly all the rest of the off-farm work. Work on other farms was slight, accounting on the average for only 21 of the total 222 days worked. There was a great deal of variation in the total off-farm work performed by the family head. It ranged from none in group I to 282 days, about 86 percent, of the total of 327 days worked by heads in group IV.

Income and Income Sources

The average net cash income was \$2,530 for all rural families in the area, and \$1,960 for full-time farm families.⁸ All sources of cash income and amounts earned by all family members were included, but not nonmonetary income such as value of home-produced foods and appreciation in value of farmland owned. Cash incomes of part-time farmers averaged about \$3,260 per family, higher than that of any other type of rural family in the area. The median income was \$2,840. About 60 percent of all part-time farm families had cash incomes below the average of \$3,260 (Figure 7).

Incomes by Sources

The families in groups III and IV, whose operators averaged half to full-time nonfarm work, had considerably higher incomes than families in groups I and II. Levels of income were about the same for groups I and II, nearly \$2,100 (Table 12). These families had the least off-farm work, and were more dependent on nonwork income. The income level for families in group III, where the off-farm work of the operator averaged about 150 days, had net money incomes of nearly \$3,000. Net money income of group IV families, whose operators worked full-time in nonfarm jobs, was about \$4,300, or more than double the incomes of families in groups I or II.

The percentage of total net money income from nonfarm work, 73 percent on the average, is further evidence of the importance of non-farm work to the income level of all part-time farm families (Table 12). However, income from non-farm work varies greatly among groups, the percentage rising from 30 percent for group I to about 87 percent for group IV. As previously indicated, except for group I, the operator was the

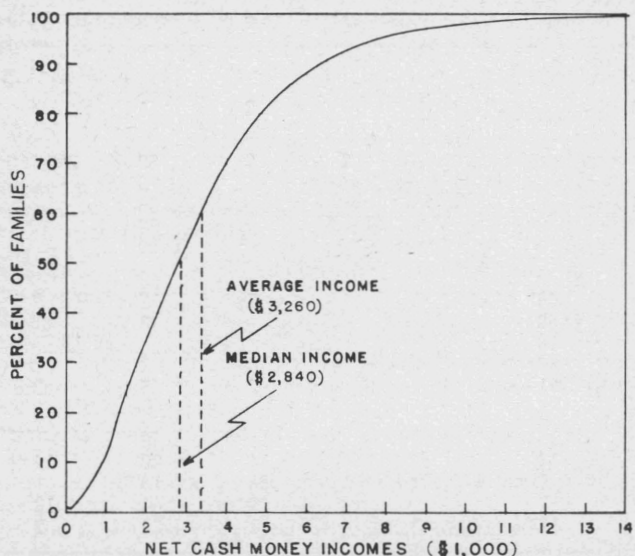


Figure 7. Percent of part-time farm families with specific net cash money income levels in rural Northeast Texas.

⁸Southern and Hendrix, op. cit., pp. 9-10.

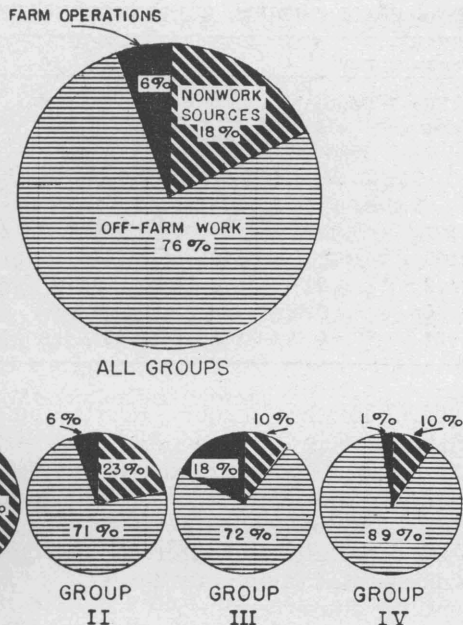


Figure 8. Sources of net money income by part-time farm groups, rural Northeast Texas, 1955.

most important family member working off the farm. He earned, on the average, about 79 percent of the income from off-farm work, and in groups III and IV from nearly 80 to more than 90 percent, respectively.

On the average, nonwork income was the second most important source of income for all part-time farmers. But for group I families, such payments were the most important single income source, averaging 57 percent of the total net money income received (Figure 8). Operators in this group were part-time, not because of work off the farm, but because of the importance of nonfarm income in their total income picture. Only in group III was net money income from farm operations important, on the average, in the total income picture. Even in this group only 18 percent of the total net money income was from farming. For all part-time families, net farm income made up only 6 percent of the total, or about \$1 of each \$17 of income. Income from work on other farms was of only minor importance in the average income for all operators as well as in the average for any group.

TABLE 11. DAYS OF OFF-FARM WORK BY SPECIFIC FAMILY MEMBERS, PART-TIME FARM GROUPS, RURAL NORTH-EAST TEXAS, 1955

Part-time farm group	Person working				Total
	Operator	Wife	Children	Other family members	
----- Days -----					
Nonfarm work					
Group I	0	26	24	12	62
Group II	40	61	24	11	136
Group III	132	24	14	2	172
Group IV	264	27	16	0	307
Average	149	29	19	4	201
Work on other farms					
Group I	0	0	10	8	18
Group II	11	3	6	8	28
Group III	17	0	3	0	20
Group IV	18	0	2	0	20
Average	14	0	4	3	21
Total work off-farm					
Group I	0	26	34	20	80
Group II	51	65	30	19	165
Group III	149	24	17	2	192
Group IV	282	27	18	0	327
Average	163	29	23	7	222

Nonwork Sources of Income

Because of the importance of nonwork income a breakdown of the items making up the total amount needs to be examined. Of the \$586 average for all families, about 55 percent was from property, including mineral lease and royalty payments and rental payments from realty rented out (Table 13). Only 13 percent was of the welfare type of payment. Service-connected benefits and social security and other retirement annuities amounted to about 27 percent of the total. Unemployment compensation and other sources made up 5 percent of the total nonwork income. In group I, nonwork income was of major importance, averaging nearly \$1,200. Almost 60 percent of this was from transfer-type payments, that is, pensions and other benefit payments. The rest was from property income. Income from each of these sources was greater for this group than for any other, because of the greater percentage of older and retired operators and other family members. Transfer payments would be expected to be more important among families in this group. At the same time, greater real prop-

TABLE 12. SOURCES OF INCOME, BY PART-TIME FARM GROUPS, RURAL NORTHEAST TEXAS, 1955

Part-time farm group	Percentage of families	Source of net money income								All sources	
		Farm operation		Work on other farm		Nonfarm work		Nonwork		Amount	Percentage of total
		Amount	Percentage of total	Amount	Percentage of total	Amount	Percentage of total	Amount	Percentage of total		
Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent	
Group I	23	212	10	63	3	623	30	1,185	57	2,083	100
Group II	11	130	6	120	6	1,342	65	484	23	2,076	100
Group III	23	549	19	174	6	1,939	66	293	10	2,955	100
Group IV	43	36	1	91	2	3,767	87	446	10	4,340	100
Average	100	203	6	107	3	2,364	73	586	18	3,260	100

TABLE 13. NONWORK INCOME SOURCES PER FAMILY, PART-TIME FARM GROUPS, RURAL NORTHEAST TEXAS, 1955

Farm group	Percentage of families	Income source									Total
		Mineral leases and royalties	Other property income	Unemployment compensation	Social Security and other retirement	Public welfare aid	Mutual aid agencies	Aid from relatives	Military-service connected benefits	Other sources	
	Percent	Dollars									
Group I	23	361	142	0	145	221	17	20	235	44	1,185
Group II	11	176	27	4	56	65	0	29	126	1	484
Group III	23	48	61	30	30	12	0	0	96	16	230
Group IV	43	252	111	7	17	13	0	0	40	6	446
Average	100	223	97	10	54	67	4	8	107	16	586

erty accumulation among older persons would mean more property income.

Off-farm Work Income Compared to Farm Income

The major source of income on part-time farms was nonfarm work, on the average. The question arises, "How do returns in farm and nonfarm activities compare?"

Total net money returns from farming averaged only \$203 for all operators, or a net money return of 19 cents per hour for farmwork (Table 14). Comparable returns for off-farm work averaged \$2,471, or \$1.39 an hour. Net money returns from farming varied considerably by groups, from only 4 cents an hour in group IV to 44 cents an hour in group III.

Total farm returns to labor and management, which include the value of all farm perquisites, land appreciation and mineral rent incomes less all farm costs, including an interest charge on total farm investments, may be compared with returns for off-farm work (Figure 9). Total farm returns to family labor and management on all farms averaged 39 cents per hour compared with \$1.39 per hour for off-farm work (Table 14).

Total farm returns to family labor and management were greater than net money returns from farming. The added returns — perquisites and other farm outputs—in addition to net money returns were greater than the value of total farm

costs (Table 6). Groups II, III and IV families had relatively high nonmonetary returns from farming and farm returns to family labor, management and capital compared favorably with those farmers in group I. However, high input costs, especially the interest cost on investment, lowered total farm returns to labor and management for these families.

Total farm returns to labor and management per hour of farmwork for family members in group I compare more favorably with returns per hour of off-farm work. These families received about the same value of farm perquisites and other farm returns (returns other than net farm sales) as families in other groups but spent less time in farmwork, which resulted in relatively high total farm returns per hour. Considering the total value of all farm costs and returns, the families in group IV received low returns per hour of family labor and management in farming. If these family members value their labor in farming the same as their labor in off-farm work, substantial losses to labor in farming are incurred. That is, if the hours of farmwork were paid for at the rate of off-farm work and charged as a farm expense, returns to management in farming would be a loss of more than \$1,200. Thus, on the average, from the standpoint of family labor and management, operators who had full-time nonfarm jobs paid for the privilege of being a part-time farmer. This average, of course, does not represent all individual operators as some had

TABLE 14. INCOME FROM FARM AND OFF-FARM WORK OF ALL FAMILY MEMBERS, BY PART-TIME FARM GROUPS, RURAL NORTHEAST TEXAS, 1955

Farm group	Off-farm work family income	Returns per hour of off-farm work	Net money returns from farming	Net money returns per hour of farmwork	Total farm returns to family labor and management	Total farm returns to family labor and management per hour of farmwork
	Dollars					
Group I	686	1.07	212	0.29	713	0.96
Group II	1,462	1.29	130	.13	452	.45
Group III	2,113	1.38	549	.44	616	.49
Group IV	3,858	1.47	36	.04	127	.12
Average	2,471	1.39	203	.19	421	.39

fairly efficient enterprises and consequently favorable hourly returns in farming.

Returns to nonfarm work varied less than returns to farming. Average returns per hour for off-farm work ranged from \$1.07 per hour in group I to \$1.39 in group IV, whose operators worked full-time off the farm. For some types of nonfarm jobs, the returns per hour were greater, ranging up to \$2.00 and more per hour, but again the range in hourly earnings from different nonfarm jobs was not as great as the range in earnings from farm activities.

Total Family Money and Nonmoney Income Levels

Total net money and nonmoney income averaged \$4,216 for all part-time families, or almost a third more than money income only (Table 15). The range in total income was from about \$3,000 for group I to about \$5,300 for group IV (Figure 10). Farm returns to family labor, management and capital averaged almost \$1,400 for all families, which was more than a third of the total income received. Of the total farm income, 69 percent was nonmoney. The importance of farm returns increased as the off-farm activities of the operators and family members decreased. Farm returns to family labor, management and capital ranged from 23 percent of the total family income in group IV to 50 percent in group I. However, there was no relationship between the amount of labor used in farming and the relative importance of farm returns, or the dollar value of returns in farming.

On the average, 70 percent of all returns in farming were returns on investments and only 30 percent were returns to farm labor and management. Thus, most part-time farmers are investors rather than *farmers*.

RETURNS TO OPERATOR AND FAMILY LABOR

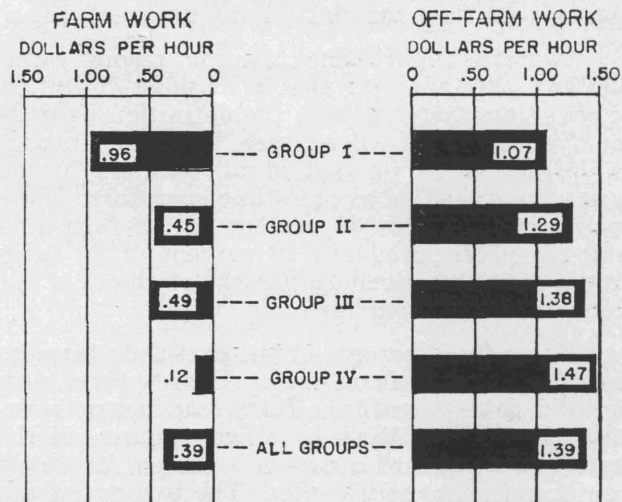


Figure 9. Average farm returns to family labor and management in farming and returns to family labor in off-farm work by part-time farm groups, rural Northeast Texas, 1955.

Role of Part-time Farming

Much has been said and written about the role of part-time farming in the overall agricultural production pattern, as well as its place in the rapidly advancing rural-urban interdependency. This study has examined part-time farming in an important rural region and compared the relative productivity of farm and nonfarm activities of the people living on these farms.

The specific efficiency levels of various types of part-time enterprises and recommended improvements that can be made for efficiency in resource use for greater incomes will be presented in a later report. The current analysis estab-

TABLE 15. TOTAL FAMILY INCOMES PER FAMILY, OR RETURNS INCLUDING NET MONEY AND NONMONEY INCOME BY FARM AND NONFARM SOURCES, PART-TIME FARM GROUPS, RURAL NORTHEAST TEXAS, 1955

Farm group	Families	Net money nonfarm income ¹	Farm income to family labor, management and capital		Total family income	
			Net money returns	Nonmonetary returns	Net money income or returns	Total money and nonmoney income
	Number			Dollars		
Group I	4,138	1,510	573	946	2,083	3,029
Group II	1,979	1,770	306	1,020	2,076	3,096
Group III	4,138	2,358	597	955	2,955	3,910
Group IV	7,735	4,052	288	967	4,340	5,307
Average	17,990	2,834	426	956	3,260	4,216
Percentage of Total Income						
	Number			Percent		
Group I	4,138	50	19	31	69	100
Group II	1,979	57	10	33	67	100
Group III	4,138	61	15	24	76	100
Group IV	7,735	76	6	18	82	100
Average	17,990	67	10	23	77	100

¹Includes returns from off-farm work and all sources of nonwork income except returns from mineral leases and royalties, which is a return from land resources and a farm output.

lished the following points with respect to the general characteristics of and the current situation in part-time farming in the area.

To reflect part-time farming among rural families, this analysis uses a broader definition of part-time farming than the definition used by the U. S. Census of Agriculture. Under this broader definition, 37 percent of all farmers in the area were classified as part-time operators. These operators controlled 40 percent of the farm and land resources, produced 28 percent of all farm products and obtained 16 percent of the total net money returns from farming.

Forty-three percent of the part-time farmers had full-time, nonfarm jobs. Twenty-three percent did not work off the farm, but income earned from off-farm work by other members of the family or income of a nonwork nature improved family incomes significantly. The two major adjustments toward part-time farming, which involved two-thirds of the operators, were in an "all or nothing" situation; that is, doing no work off the farm with major dependence on nonwork income, or working full-time off the farm.

In hours of labor, part-time farm operators and family members did a considerable amount of farming, averaging a little less than 1,100 hours of farmwork. The operators and family members in group IV approached full employment in terms of possible hours of work. The other groups, including operators and family members, averaged more than 100 days of unemployed time.

In view of the quality of labor resources (aged family members with limited off-farm employment opportunities) on part-time farms in which the operators reported no off-farm work (23 percent of all reporting), farming is important for family members. Including nonmonetary returns, returns to family labor, management and capital in farming account for a large percentage of the total income received from all income sources.

A wide difference in returns exists between the time spent in farming and the time spent at off-farm work. On the average, the net money return in farming was 19 cents an hour. Total farm return to family labor and management, including farm perquisites (and rental allowance and an appreciation in land value), minus a charge for the use of farm resources, was 39 cents an hour. Per hour return for labor in non-farm work averaged \$1.39.

The low returns for labor in farming as compared with returns in nonfarm work is evidence of limited off-farm opportunities for employment for many part-time farm operators working less than full-time off the farm and for family members having little or no off-farm employment. Apparently, in an attempt to use their labor resources, they do farmwork and receive low returns for their labor. If this labor were used in off-farm work, incomes would be improved and returns from farming lowered only slightly.

On the average, efficiency of farm operations was low when measured in terms of total output or sales in relation to costs and labor expended. Although some individual operators were more efficient than others, many seemed to be supporting their farm enterprises with their off-farm earnings.

Under the present organization and level of management on most part-time farms, there would be little economic gain in expanding farm resources to permit full employment (from the standpoint of hours worked). Estimated unemployment for all family members on all farms averaged 479 hours. If this time were used in farming at the present level of total returns per hour of family labor and management, the increased total returns (opportunity cost) per family would average less than \$200. These returns are probably too low to justify the additional risk incurred by expanding farm resources in an effort to obtain full employment.

Relative to other part-time farm families, the families with operators reporting full-time off-farm employment (43 percent of all study families) have large amounts of labor. These operators and family members are apparently vigorous and "willing to work," as indicated by their relatively full employment. Their farming activities seem to be an attempt to use their labor resources fully; yet that part of their "full em-

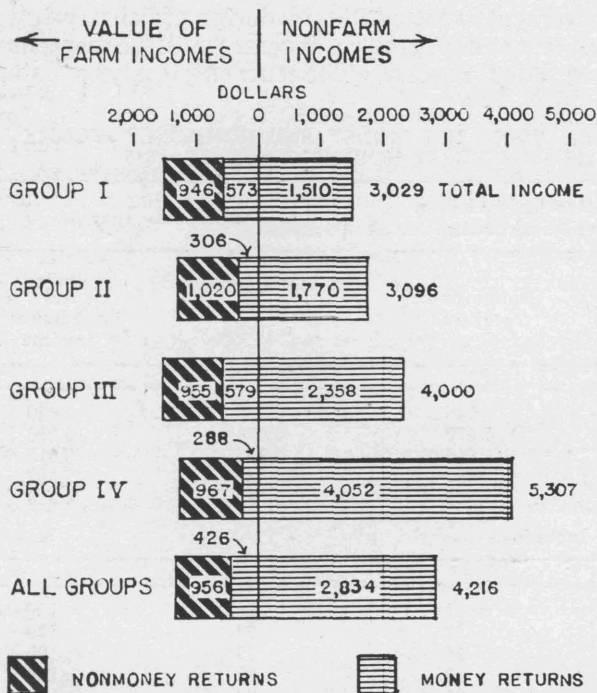


Figure 10. Total money and nonmoney incomes to part-time farm families by part-time farm groups, rural Northeast Texas, 1955.

ployment" involved in farmwork (in hours of work) is wasted from the standpoint of gaining adequate returns for their labor. Under the present level of management, these families had low returns to family labor and management in farming.

With these general points in mind, the question might be asked: "What is the place of part-time farming, and why do operators continue to farm when they get such low returns for their labor?"

Many answers have already been given as to the reason for part-time farming. Much of it may be associated with values and goals of the individual and family—the desire to live in the country; the desire to farm as a hobby; the desire to avoid urban living problems; and the desire to rear children on a farm.

Undoubtedly these desires of the operators and families are important considerations. However, the place and reason for part-time farming in this area may be economic in nature as well as social. Many operators, even when attributing their situation to personal and community objectives, were aware of economic considerations.

Two factors were involved in these economic considerations. The first was that economic farm returns of a nonmonetary nature exceeded the monetary returns—they were real and significant in the total income picture of the family. Obviously products grown on the farm and consumed in the home can mean a great deal in reducing expenses for food. The value of these home-use products was shown previously, as well as the value of other nonmonetary returns (Table 6). These operators reported, on the average, an annual value of home-use products ranging from about \$300 for group I to \$415 for group II. The average for all operators was \$350. If equality and freshness as well as the actual retail value of such products are considered, probably the value of home-consumed products was greater than reported.

Another nonmonetary return, and one mentioned by some operators as "free rent," was the rental value of the home. This rental value, of course, varies by size and other qualities and facilities of the home. Many of these rural homes would probably rent for \$75 or more per month, but for purposes of this study, a conservative estimate of \$30 a month, or \$360 a year, was assumed as the rental value for all homes.

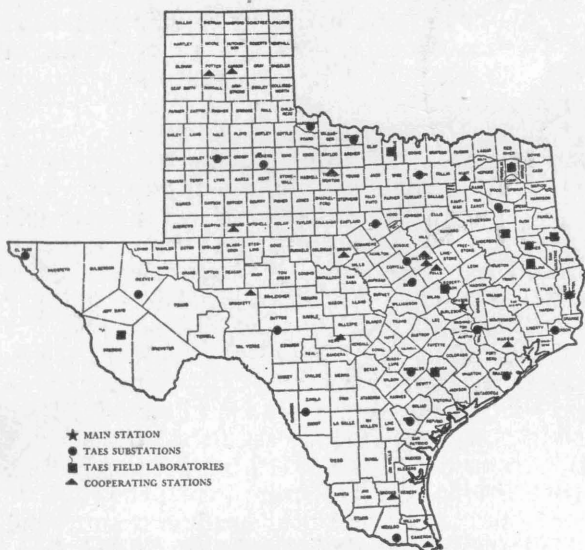
A third nonmonetary return, which is not so obvious but was referred to frequently by oper-

ators as a reason for keeping ownership and some use of farm resources, was the appreciation in the value of land held by the average operator (83 percent owned land resources). As with rent, the land-appreciation value is difficult to judge, but according to land-value trends, the appreciation on a net basis (that is, allowing for taxes, other expenses and price level changes) has amounted to more than 3 percent annually over a period of 25 years or so. Based on this estimate, the average annual land-appreciation value per operator has amounted to about \$384, and for group IV families as high as \$440. The range in land-appreciation value among all operators was as wide as the range in acres of land owned. Many part-time operators had accumulated sizable net assets because of this one noncash income factor. This trend in land-value increase with the obvious result of improved asset position has encouraged maintaining investments in land even though families have quit farming.

These three nonmoney income sources, when combined were equal to about a third of the average net money income of all operators—about \$1,100. Because of assumed equal rental values of homes and since the value of home-used products cannot vary greatly among operators, there was little variation among the four groups in the estimated total amount of nonmoney income. It ranged from about \$1,000 for group I to slightly more than \$1,100 for group IV. Thus, nonmonetary returns are important sources of farm returns.

The second factor involved in the economic consideration of part-time farming was the farm background of operators with economic accumulations of farm resources and a feeling that returns to resources were adequate. This factor is associated partly with the rather rigid character of resource investment in agriculture. Funds once committed by farm families to farm resources do not flow freely to other investments, even though such investments might return more than farming. Incomes from investments with assured returns are probably too low to attract funds that could be obtained by selling farm resources, and people with farm backgrounds generally feel that they are not qualified to make speculative investments that might realize high returns. Opportunity costs of foregoing these higher returns do not seem significant to these families. Operators interviewed often expressed the feeling that "there is no better investment (than land) available to me." The costs of land investment were also opportunity costs since almost all owners held their land debt-free.

State-wide Research



Location of field research units of the Texas Agricultural Experiment Station and cooperating agencies

★

The Texas Agricultural Experiment Station is the public agricultural research agency of the State of Texas, and is one of the parts of the A&M College of Texas.

ORGANIZATION

IN THE MAIN STATION, with headquarters at College Station, are 16 subject-matter departments, 2 service departments, 3 regulatory services and the administrative staff. Located out in the major agricultural areas of Texas are 21 substations and 9 field laboratories. In addition, there are 14 cooperating stations owned by other agencies. Cooperating agencies include the Texas Forest Service, Game and Fish Commission of Texas, Texas Prison System, U. S. Department of Agriculture, University of Texas, Texas Technological College, Texas College of Arts and Industries and the King Ranch. Some experiments are conducted on farms and ranches and in rural homes.

OPERATION

THE TEXAS STATION is conducting about 400 active research projects, grouped in 25 programs, which include all phases of agriculture in Texas. Among these are:

- | | |
|--------------------------------------|---------------------------------|
| Conservation and improvement of soil | Beef cattle |
| Conservation and use of water | Dairy cattle |
| Grasses and legumes | Sheep and goats |
| Grain crops | Swine |
| Cotton and other fiber crops | Chickens and turkeys |
| Vegetable crops | Animal diseases and parasites |
| Citrus and other subtropical fruits | Fish and game |
| Fruits and nuts | Farm and ranch engineering |
| Oil seed crops | Farm and ranch business |
| Ornamental plants | Marketing agricultural products |
| Brush and weeds | Rural home economics |
| Insects | Rural agricultural economics |
| | Plant diseases |

Two additional programs are maintenance and upkeep, and central services.

Research results are carried to Texas farmers, ranchmen and homemakers by county agents and specialists of the Texas Agricultural Extension Service

AGRICULTURAL RESEARCH seeks the WHATS, the WHYS, the WHENS, the WHEREs and the HOWS of hundreds of problems which confront operators of farms and ranches, and the many industries depending on or serving agriculture. Workers of the Main Station and the field units of the Texas Agricultural Experiment Station seek diligently to find solutions to these problems.

Today's Research Is Tomorrow's Progress