

## PART IV

## THE PATTERN OF AGRICULTURE

Farms - Number and Size

Lewis County is an area of medium and small-size farms. A total of 2,230 farms was reported in the Census of Agriculture taken in 1959. This was 563 less than enumerated in 1954. The definition used for a farm in 1959 is more restrictive than that used in 1954 and part of the changes in the number of farms from 1954 to 1959 resulted from the change in definition. Reduction in number of farms as a result of definition was 339. Census data indicate that a peak number of farms may have been reached in 1945 and that farms are now on the decrease. In 1959, Lewis ranked eighth among the counties of Washington in number of farms.

Farm acreage, since 1945, has been decreasing steadily in Lewis County. In 1900, the 1,786 farms contained 224,755 acres or only 14.4 percent of the total land area within the county. By 1945, 4,055 farms in Lewis were accounting for almost 20 percent of the county area. Farm acreage grew to an all-time high of 312,159 acres that year. In recent years, acreage in farms has decreased to 255,012 acres or only 16 percent of county area.

Table 8. Farms, Number and Average Size, Land in Farms  
Lewis County, 1900-1959

Year	Total Farms in the County	Average size of farms in the County (acres)	Total County Area in Farms (acres)	Percent of County area in Farms
1900	1,786	125.8	224,755	14.4
1910	2,261	95.0	214,872	13.7
1920	3,030	74.6	226,162	14.4
1925	3,259	66.0	215,122	13.7
1930	3,380	70.2	237,429	15.2
1940	3,941	69.6	274,275	17.5
1945	4,055	77.0	312,159	19.9
1950	3,396	89.6	304,523	19.4
1954	2,793	104.7	292,394	18.7
1959	2,230	114.4	255,012	16.3

Source: U. S. Census of Agriculture.

Small farms are largely the result of land acquisition and purchase methods and the types of farming. About 70 of the original farms were Donation Land Act (1850) claims of 320 and 640 acres. Several hundred others were 160 acre (quarter sections) obtained as homesteads by pioneers who used the Homestead Act of 1862 to acquire farms. Since 1900 most of these larger units have been subdivided by heirs and owners for sale as smaller farms of 20, 40 and 80 acres. Other farms of 20 to 80 acres were purchased as unimproved, logged-over tracts from land and timber companies. Large numbers of these were sold from the land grant holdings of Northern Pacific Railway Company. The popularity of part-time farming by loggers and mill workers in livestock, poultry and specialty farming has also resulted in many small-scale farming operations.

A grouping of all farms by sizes from the last two censuses shows that the majority were in the small and medium groups ranging from 10 to 99 acres. Farms between 10 and 49 acres in size are the single largest group, numbering 800, according to the 1959 Census of Agriculture. Farms of 50 to 99 acres in size are the second largest group, numbering 495. These two size groups form a present county pattern in which 58 percent of the farms range between 10 and 99 acres. There were only 62 farms out of the county total of 2,230 which were larger than 500 acres. Many of these large farms specialize in growing wheat and hay crops and have large acreages in production. Between 1954 and 1959, the number of small and medium sized farms decreased, while the larger farms of 180 to 259 acres and 500 acres and over increased in number.

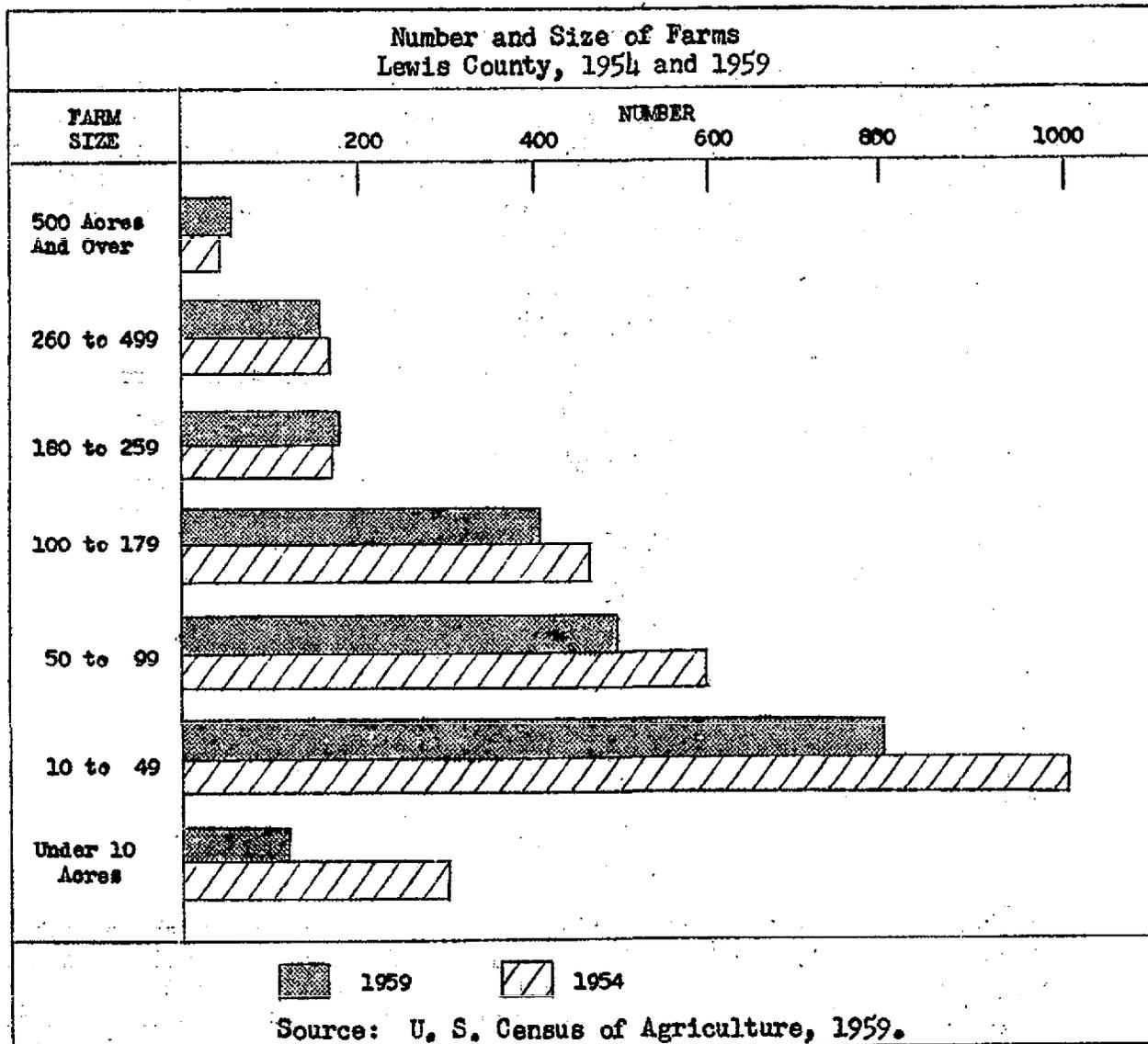


Figure 8. Number and Size of Lewis County Farms, 1954 and 1959.

Types of Farms

Lewis County shows a variety of farms classified by major products according to the 1959 Census of Agriculture. Most common are dairy farms, which comprise 15.8 percent of all Lewis farms. The next most numerous are those raising poultry, accounting for 12.8 percent of all the farms. Third in importance are livestock farms (8.6 percent) with primarily cattle and calves. Over 62 percent of the farms were miscellaneous and unclassified. The pattern is one of diversification between dairy, poultry and a variety of general and specialized farms. Many farmers diversify their operations between two or more cash earning crops and some type of livestock farming.

Table 9. Types of Farms, Lewis County, 1959

Types of Farms	Number of Farms	Percent of all farms in the County	
		1954	1959
Total farms in county .....	2,230	100.0	100.0
Field crop farms .....	20	2.1	.9
Cash-grain .....	20	2.1	.9
Other field-crop .....	--	--	--
Vegetable farms .....	--	--	--
Fruit-and-nut farms .....	10	2.3	.4
Poultry farms .....	286	12.7	12.8
Dairy farms .....	352	20.5	15.8
Livestock farms other than poultry and dairy	191	4.8	8.6
General farms .....	51	4.2	2.3
Miscellaneous and unclassified farms .....	1,398	54.9	62.7

Source: U. S. Census of Agriculture.

Farm Residence and Operation

Lewis County agriculture is characterized by the fact that over one-half of its farmers do part-time work off their farms. Many persons reside on farms but divide their employment between farm work and other industries. In a forested region such as Lewis County, farmers have numerous seasonal opportunities to work in nearby mills, logging operations or for the state and federal forest services. Construction and maintenance work related to highways and hydroelectric service also provides seasonal work.

During 1959, there were 1,322 farm operators who reported doing some off-farm work. Of this number, 1,115 or 50 percent of all the county's farmers worked more than 100 days per year on jobs away from their farms. Almost two-thirds of the farmers earned more from outside work than they did from sales of dairy, poultry and other farm products.

The Census of 1959 also showed that 56 of the county's farmers did not live on the farm they operated. This was about 2.5 percent of the estimated total of farm operators. In some cases, farm operators live in town removed from the crop or livestock farm which they operate in a remote part of the county.

### Farmland Utilization

Crops were harvested from 22.5 percent of the land in farms in 1959. An additional 13.0 percent was in cropland used only for pasture and 4 percent was idle or fallow land. Land is mainly in hay meadows, pastures, pastured woodlands and woodlands covered with Douglas fir, alder and other species and not pastured. Typical of most of western Washington, over 48 percent of farm acreage was un-cleared, remaining in stump land, logged-over land or regrowth timber. The total acreage of such land owned by Lewis County farmers amounted to 124,000 acres in 1959.

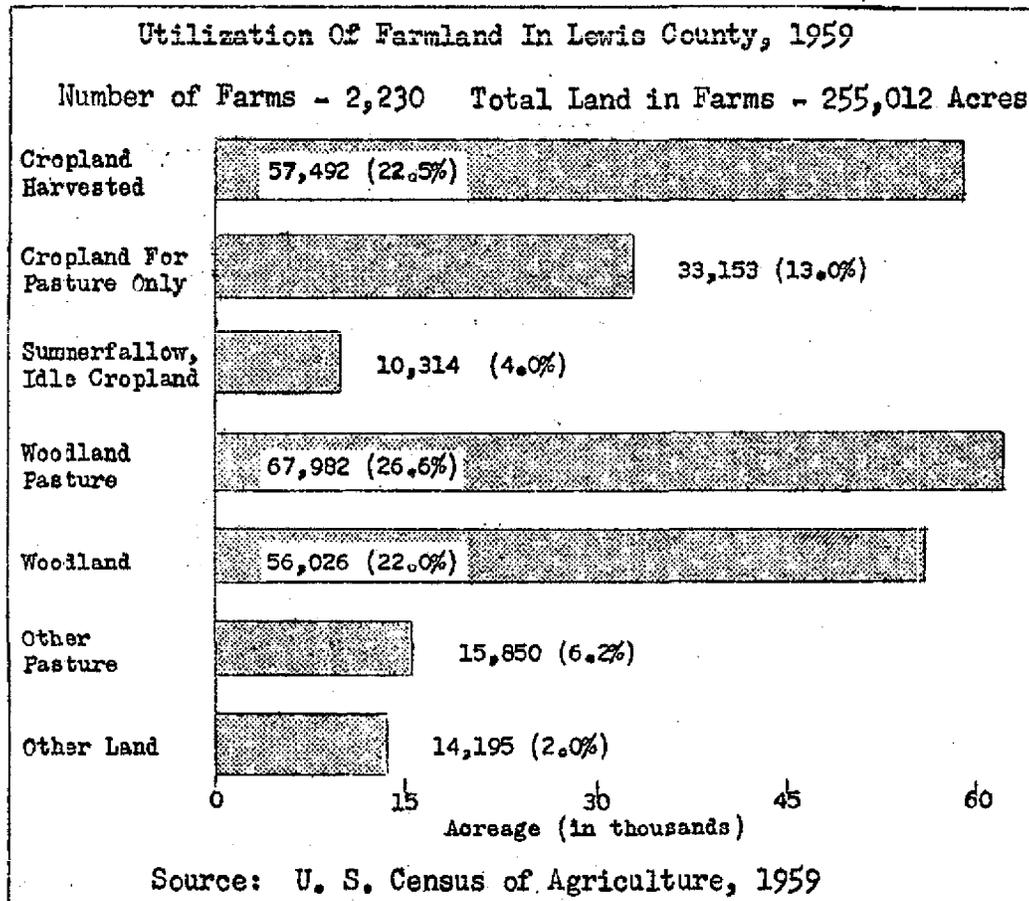


Figure 9. Utilization of Farmland in Lewis County, 1959.

### Farm Values

Value of farmland and farms has increased greatly since 1920. After reaching a high point in the 1920's, valuations of farms decreased almost 17 percent during the 1930's. The depression decade from 1930-1940 saw values of land decline considerably, but there was a tremendous increase from the mid-1940's to the present time. By 1959, an average farm of about 160 acres was worth over \$19,400 in Lewis County, although far below the state average of \$44,075. On a per acre basis the county average was \$169.06, a figure above the state average of \$118.74.

The rise in farm and land values has been caused by several factors. One is the general rise of prices in real estate throughout the western United States. Another factor is the large amount of labor and capital Lewis County farmers have

invested in land clearing, drainage and building improvements since 1920. A third reason is the increase of population, many of whom desire small acreages for part-time farming. A fourth factor causing value increases on many timbered farms has been the expansion in values of standing timber and pulpwood.

Table 10. Value of Farm Land and Buildings  
Lewis County, 1920-1959

Year	County Average Values	
	Per Farm	Per Acre
1920	\$ 6,464	\$ 86.60
1930	6,380	90.83
1940	4,374	62.86
1950	10,091	114.99
1954	15,338	163.19
1959	19,425	169.06

Source: U. S. Census of Agriculture.

### Farm Tenure

A large majority of the farmers in Lewis County own the farm they operate. Many farms have remained in ownership of the pioneer families who established them. Full-owner farms in 1959 constituted 81.1 percent of all county farms and contained 68.5 percent of the farmland. In recent years, part-owner operations have become more important in Lewis County agriculture. Although part-owners account for only 14.3 percent of all farms, they operate 27.6 percent of all the farmland.

Tenancy, or the renting and leasing of entire farms, is not prevalent. Only 96 farms in the county were operated by tenants in 1959. The percentage of farms has declined rapidly since the high of 23.8 percent in 1935. By 1959, the tenant group accounted for only 4.4 percent of all farms in the county and contained less than 4 percent of the farmland. Manager-operated farms contain the smallest acreage of farmland. In 1959, less than 1 percent of the farm operators were managers and they operated only 0.5 percent of the land.

Table 11. Farm Tenancy, Number and Percent of Farms  
by Tenure of Operator, Lewis County, 1925-1959

Year	Number of Farms	Full Owners		Part Owners		Managers		Tenants	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent
1925	3,259	2,774	85.1	147	4.5	4	.2	334	10.2
1930	1,074	593	55.2	253	23.5	38	3.6	190	17.7
1935	1,184	638	53.9	244	20.6	20	1.7	282	23.8
1940	3,941	3,062	77.7	312	7.9	12	.3	555	14.1
1945	4,055	3,404	83.9	358	8.8	8	.3	285	7.0
1950	3,388	2,873	84.8	332	9.7	7	.2	184	5.3
1954	2,793	2,368	84.9	302	10.7	3	.1	120	4.3
1959	2,230	1,809	81.1	320	14.3	5	.2	96	4.3

Source: U. S. Census of Agriculture.

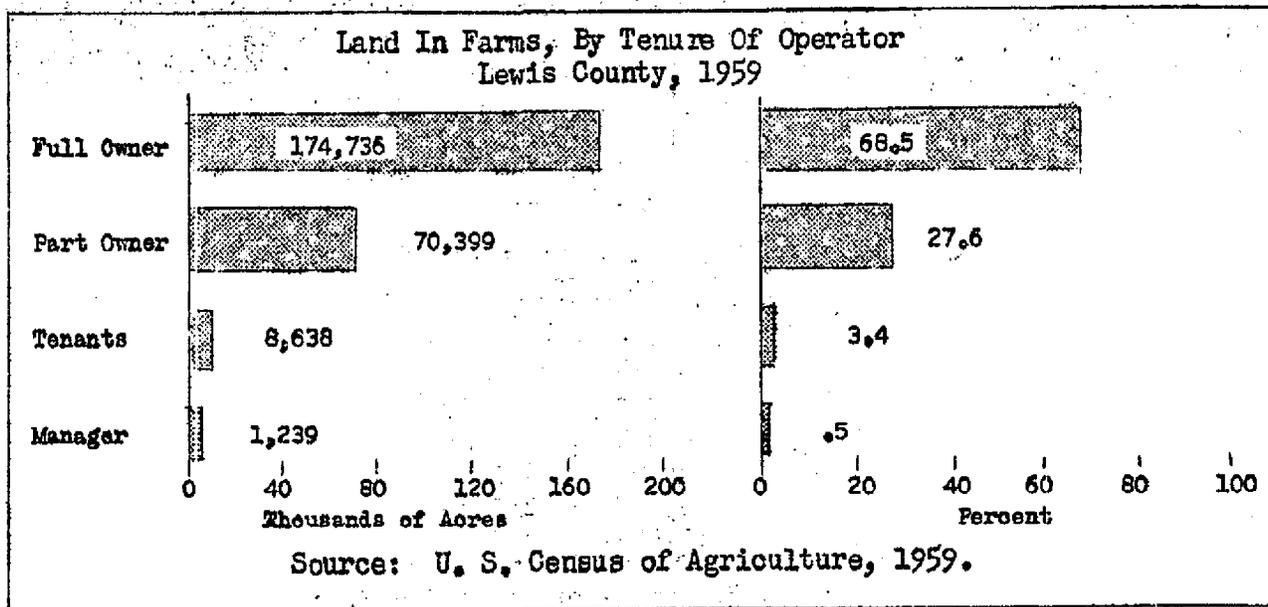


Figure 10. Land in Farms, By Tenure of Operator, Lewis County, 1959.

### Irrigation

Irrigation is becoming more important to Lewis County's agriculture. Because of the dry summer climate and the desire to get higher yields of truck crops and pasture grass, there has been an increasing interest in irrigation. The field crop farms are using more irrigation equipment. Dairymen who depend on the upland pastures find that sprinkler irrigation increases their carrying capacity. The gravelly, glacial soils common in Lewis County require considerable irrigation. The top soil dries out severely in mid-summer. As a result, there has been an increasing investment by farmers in land leveling, distribution systems, wells, pumps and sprinklers.

The number of farms with irrigation in Lewis County in 1959 was small. A total of 214 farms reported some irrigation. This was less than 10 percent of all farms. In 1954, irrigated land was reported by 208 farms and in 1950 by 118 farms. The number of irrigated farms increased 81 percent between 1950 and 1959.

Lewis ranks twenty-second among the counties of Washington in irrigated acreage. The acreage irrigated in 1959 was 5,244 acres, according to the Census of Agriculture. This was 15.6 percent greater than the 4,536 acres reported in 1954 and 145 percent greater than the 2,137 acres reported in 1950. Irrigated land makes up only 2 percent of the land in farms, but in some areas of the county, over 10 percent of the farmland is irrigated.

Of the total of 5,244 acres irrigated in 1959, 3,116 acres or 59.4 percent, were irrigated from surface water sources on the farm; 1,721 acres or 32.8 percent, were irrigated from ground water sources; 357 acres or 6.8 percent, were irrigated from combinations of the above sources. Less than 1 percent of the total acreage was irrigated by water received from irrigation organizations.

The acreage of irrigated crops in 1959 was 1,983 acres. Approximately 3.4 percent of Lewis' harvested cropland received irrigation water in 1959. About 38 percent of the irrigated land is devoted to growing crops.

Table 12. Irrigated Farms: Number and Acreage  
Lewis County, 1950, 1954 and 1959

Item	1959	1954	1950
Number of irrigated farms .....	214	208	118
Land irrigated (acres) .....	5,244	4,536	2,137
Irrigated land in farms according to use:			
Farms irrigating crops .....	93	98	57
Acres of crops irrigated .....	1,983	1,943	878
Acres of other land irrigated .....	3,261	2,593	1,259

Source: U. S. Census of Agriculture.

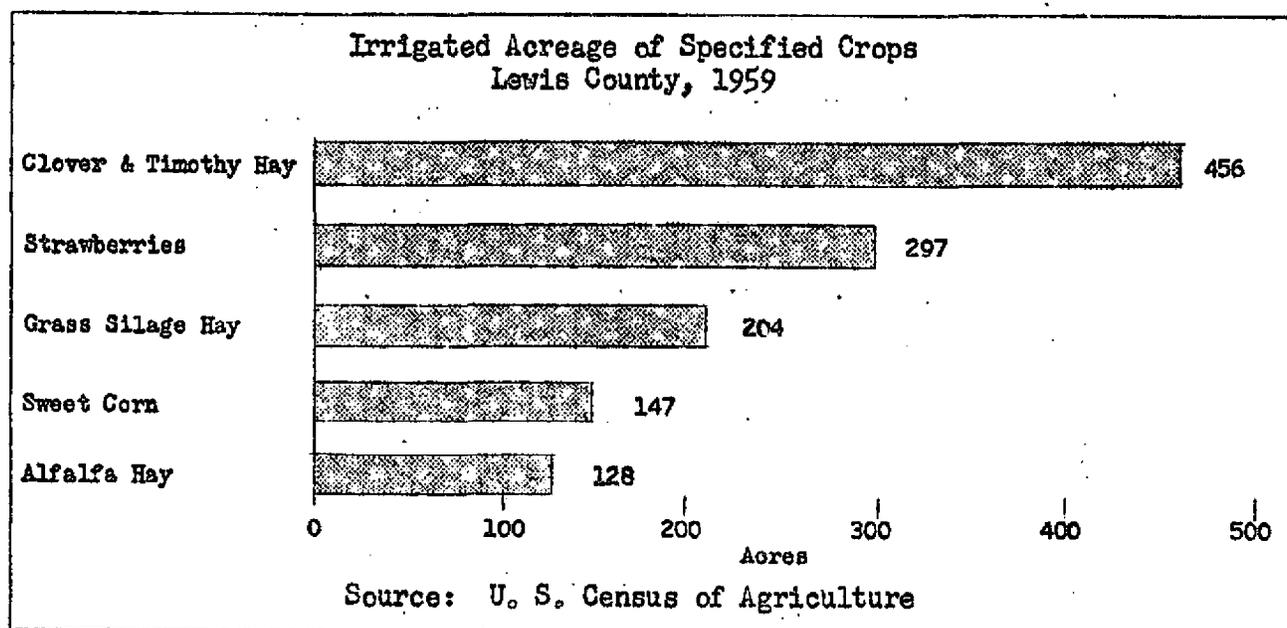


Figure 11. Irrigated Acreage of Specified Crops, Lewis County, 1959.

### Farm Facilities

The capacity of the farmer to produce is significantly related to the items of farm equipment and facilities at his disposal. The 2,230 farmsteads of Lewis County are above or nearly equal to state averages in certain items of equipment and convenience. There is a heavy use of modern farm machinery and a high percentage of farm homes enjoying the modern conveniences of telephones, home freezers and other facilities.

Tractors, motor trucks and automobiles provide most of the power and transportation on Lewis farms. In 1959, 85 percent of the farms reported 3,399 tractors. About 70 percent of the farms had motor trucks. Lewis County ranked eighth among the counties of Washington in numbers of tractors and farm automobiles.

Lewis County is well-mechanized for harvesting field crops. The county ranked seventh in the state in number of field forage harvesters, eighth in pick-up balers and tenth in grain combines in 1959. About 8 percent of the farms had field forage

harvesters. The proportion of farms with pick-up balers had almost doubled in the 5 years from 8.4 percent in 1954 to 16.4 percent in 1959. There was a 3.5 percent increase in the number of farms with grain combines during the same 5 year period.

Lewis County farms are well-equipped with chore equipment and home facilities. In 1959, over 10 percent of the farms had electric milk coolers and 27 percent had milking machines. About eight out of every ten farms had telephone service and over one-half had home freezers.

In recent years, much progress has been made in providing all-weather roads for farm families. For example, in 1950 only 38 percent of the farms in Lewis were located on hard-surfaced roads. By 1959, this proportion had increased to 60 percent. Also for Lewis, 39 percent of the farms were on improved roads (gravel, shell or shale), and the remaining (about 1 percent) were on dirt roads in 1959.

Table 13. Specified Equipment and Facilities on Farms  
Lewis County, 1959

Facility or Equipment Item	Number of Farms Using	Percent of All Farms in County Equipped
Telephone .....	1,858	83.3
Home freezer .....	1,471	66.0
Milking machine .....	615	27.6
Electric milk cooler	238	10.7
Power operated elevator, conveyor or blower ...	467	20.9
Grain combines .....	336	15.1
Pick-up baler .....	365	16.4
Field forage harvester .	176	7.9
Motor trucks .....	1,542	69.1
Tractors .....	1,893	84.9
Crawler tractors .....	319	14.3
Automobiles .....	2,018	90.5

Source: U. S. Census of Agriculture, 1959.