Farm Mechanization and Home Conveniences

The cash-grain farms in the spring wheat region are highly mechanized. This has been true for several decades. Wheat farmers were one of the first groups to shift to motive power, for the large fields of fairly level land are excellent for the use of large-size modern machinery. The degree of mechanization and use of modern home conveniences is shown by data in table 45.

Table 45.—Farm Mechanization and Home Conveniences on Cash-Grain Farms in the Hard Spring Wheat Region, and for Subregion 91 by Economic Class of Farm: 1954

Item	Subregion				Economic class of farm for subregion 91					
	89	90	91	105	I	II	III	IV	V	VI
Number of farms	13,280	24,389	8,687	15,071	130	1,372	2,922	2,906	1,086	271
Number per farm:										
Automobiles	1.2	1.2	1.2	1.2	2.1	1.4	1.2	1.1	1.0	.7
Motortrucks	1.2	1.1	1.6	1.7	2.4	1.5	1.0	0.8	0.5	.4
Tractors	2.1	1.9	1.9	1.9	3.9	2.7	2.0	1.7	1.2	1.0
Combines	.9	.9	.8	1.0	1.6	1.0	.9	.7	.5	.3
Percent of farms reporting:										
Automobiles	92	91	90	90	97	96	92	91	85	63
Motortrucks	82	85	75	92	94	92	83	73	48	35
Tractors	96	96	95	96	98	98	97	96	84	82
Combines	80	82	72	80	95	88	81	69	46	26
Corn pickers	10	4	36	4	70	60	41	29	15	7
Field forage harvesters	8	9	8	7	28	19	10	4	1	
Telephones	61	43	52	30	68	67	55	50	36	23
Electricity	91	90	89	85	95	96	94	89	76	56
Television sets	28	17	16	10	19	25	18	15	8	7
Piped water in home	49	38	57	51	88	82	65	46	36	32
Home freezer	39	39	35	52	61	55	40	28	16	8

In subregion 105 a relatively high percentage of farmers own trucks and there is a higher than average number of trucks per farm than in the other subregions. Tractor numbers also varied by subregion and by economic class of farm. The percentage of farms in each class reporting tractors was fairly uniform but the number of tractors per farm varied by economic class of farm as shown by the followlng data:

Subregion	Number of tractors per farm by economic class					
	I	II	III	IV	V	VI
89	4.4	2.8	2.1	1.6	1.4	1.1
90	4.0	2.7	2.0	1.6	1.3	1.1
91	3.9	2.7	2.0	1.7	1.2	1.0
105	3.1	2.3	1.9	1.6	1.2	1.1

The more diversified areas (subregions 89 and 91) had the largest number of tractors per farm. On diversified farms more than one operation requiring power must frequently be performed on the same day, thus the operators of these farms need more power units. Typically the power units on diversified farms are smaller than on farms in subregion 105.

The use of home conveniences is much more related to the economic class of farm than the particular part of the wheat region in which the farm is located. Almost without exception the lower a group of farmers ranks in gross sales, the lower is the percentage of the farmers having modern home conveniences. The small percentage of the lower income groups reporting telephones, electricity, home freezers, and piped water in the home, is a good indicator of the differences in levels of living among farmers in the economic classes. However, it may be expected that telephones and electricity would be less common in the sparsely settled parts of Montana and the western part of the Dakotas than in the Red River Valley. Home conveniences were more common in the hard winter wheat region than in the hard spring wheat region.

Gross Farm Income

The sources and amount of farm income indicate the farm organization and the relative importance of different enterprises (see table 46). In the Red River Valley where wheat was not the dominant crop, farmers had several important sources of income. In the central part of the Dakotas, wheat was the major source of income but livestock and livestock products were important. In subregion 105, in western North Dakota and Montana, wheat provided three-fourths of the gross sales.

Table 46.—Sources of Farm Income on Cash-Grain Farms in the Hard Spring Wheat Region, and for Subregion 105 by Economic Class of Farm: 1954

Item	Subregion				Economic class of farm for subregion 105					
	89	90	91	105	I	II	III	IV	V	VI
Number of farms	13,280	24,389	8,687	15,071	1,317	3,609	4,173	3,775	1,709	488
Sales per farm:										
Wheat...dollars	2,262	2,341	2,111	8,251	34,172	12,393	5,261	2,650	1,388	590
Flax...do	1,080	1,165	739	166	108	159	240	162	91	46
Other crops...do	3,260	1,417	2,289	1,395	6,553	2,157	699	342	203	122
All crops...do	6,602	4,923	5,139	9,812	40,833	14,709	6,200	3,154	1,682	758
Livestock and livestock products dollars	1,156	1,215	1,698	1,329	2,749	1,840	1,458	805	341	131
Gross sales dollars	7,759	6,138	6,838	11,142	43,587	16,549	7,658	3,958	2,023	889
Percentage of gross sales from wheat	29	38	31	74	78	75	69	67	69	66
Gross sales per crop acre dollars	20.54	11.48	15.46	14.49	20.98	20.70	11.46	8.99	6.96	4.39

Gross sales per crop acre were highest in the more diversified area (subregion 89); here the yields are the highest in the area. The differences in sales per crop acre in the other subregions are the result of differences in crop yields, in 1954. In subregion 105, the Class I farmers (about 10 percent of all cash-grain farmers in the subregion) had gross sales exceeding $40,000. These were the large wheat farmers.

The percentage of gross sales on cash-grain farms that came from wheat varied by subregions and by economic class as follows:

Subregion	Wheat sales as a percentage of gross sales by economic class					
	I	II	III	IV	V	VI
89	29	30	29	29	26	15
90	42	39	37	37	39	42
91	40	34	30	31	30	33
105	78	75	69	67	69	66

The importance of wheat as a source of income differs little by the economic class in subregion 90, but declines from Class I to Class VI in the other subregions. This was especially true in subregion 91 where Class VI farmers obtain a relatively small income from wheat.

Livestock sales are relatively important for farms in Economic Classes II, III, and IV but are less important for farms in Classes V and VI. The pattern of the source of income by economic class of farm was similar for all subregions in the hard spring wheat region and in the winter wheat region.