A related problem facing wheat and other farmers is in making the adjustments to the rapid changes in modern technology. Obtaining proper adjustment in mechanization and size of farms is often difficult. As farmers attempt to increase the size of their farm, land becomes difficult to acquire. Thus, many farmers continue to find themselves either operating their land with inefficient equipment or having the modern machinery but being unable to operate efficiently for a lack of sufficient land.

The continual increase in the average size of farms in the wheat areas does not appear to indicate an end to family farms or that the land is rapidly falling into corporate hands. It is an indication that, with modern equipment, the farm family finds it can operate a much larger acreage than was formerly possible. But the decrease in number of families on the land does have economic and social implications for individuals and the community and it means much larger investments in the farm business and fewer families to support local government, local schools, churches, roads, recreational facilities, and community activities. But more prosperous families, though fewer, may mean eventually a more satisfactory community situation than is formed among a larger number of families having very low incomes.

The seasonality of labor requirements is another problem of specialized wheat producers in that most of the work on wheat farms comes during a four to six months period. In many parts of the wheat regions where annual rainfall is 20 inches or less, the opportunities for diversification are limited. Wheat has a decided advantage over other crops and farm operators find their highest returns in specialized wheat production. This does not permit full use of family labor and equipment on a yearly basis. Seasonal labor requirements for a typical wheat farm are as follows:

Monthly Percentage Distribution of Labor Required for Wheat Production ¹

Region	January	February	March	April	May	June	July	August	September	October	November	December
Hard winter wheat—Okla- homa Spring wheat—North Dakota. Soft winter wheat—Illinois White wheat—Washington		2	2 2	15 2 11	4 9	15 2 7 6	21 2 31 28	24 33 20 15	24 26 26 14	12 10 7 13	3 2 5	ī

¹ Hecht, Reuben W.—Farm Labor Requirements in the United States. 1947—Special report by the Bureau of Agricultural Economics U. S. D. A.

Table 71.—Annual Precipitation (Inches of Rainfall) at Representative Weather Stations in the Great Plains Wheat Area: 1931–52

Year	Wood- ward, Okla.	Colby, Kans.	Dalton, Nebr.	Aberdeen, S. Dak.	Dickinson, N. Dak.	Bank, Mont.	Moro, Oreg.	
1931	30	16	13	19	16	9	12	
	29	15	13	20	17	14	11	
	17	18	18	13	12	9	11	
	24	9	12	15	8	12	10	
	21	13	20	24	15	5	7	
1936	18 20 30 20 23	12 15 18 15 16	11 13 22 10 10	14 25 17 22 16	7 16 17 16	12 11 14 8 13	10 15 11 8 15	
1941	46	31	22	21	31	11	13	
1942	26	21	25	28	20	13	16	
1943	21	14	14	22	15	10	13	
1944	33	29	19	28	20	8	8	
1945	22	20	23	19	12	12	13	
1946	27	28	15	22	14	14	8	
1947	24	17	20	21	17	13	14	
	26	20	13	15	16	16	16	
	28	27	19	20	11	10	7	
	31	16	15	18	15	9	16	
	24	23	22	19	17	17	14	
Average	25	18	17	20	16	11	12	

Source: Climatic Summary of United States-United States Weather Bureau.

Wheat production in the Great Plains area is often regarded as a high risk enterprise. The variability in climatic conditions together with insects and diseases results in considerable variation from year to year in wheat production and farm income.

The climatic hazards facing the farmer in this region are illustrated by the variation in annual rainfall (see table 71). The year-to-year variations may exceed 100 percent. Much of the Great Plains is also a high hail risk area. The hazards of crop failure are particularly serious to the farmer who is in debt and has no financial reserves. Added to this crop uncertainty is the high cash cost of operation.

In contrast to conditions of a few decades ago, farmers now have much higher costs for machinery upkeep; he buys all the fuel he needs for power; he spends much more for insect, disease, and weed control; he faces much higher cash living costs and in some areas, spends more for commercial fertilizer. The following data from the Agricultural Research Service studies 4 indicates the increase in total cash farm expenditures per farm:

Type of farm	1937-41	1947-49	1954
Wheat, corn, livestock farms, Northern Great Plains	\$1, 431	\$4, 336	\$4, 457
Wheat, small grain, livestock farms, Northern Great Plains		5, 104	5, 129
Wheat, roughage, livestock farms, Northern Great Plains	1, 306	4, 363	4, 829
Winter wheat farms, Oklahoma and Kansas	1, 839	4, 493	4, 905
Wheat-pea farms, Washington and Idaho	3, 484	7, 117	9, 159

The lack of alternatives is a major problem to many wheat farmers. In many areas they cannot easily shift to other crops or increase livestock whenever conditions seem unfavorable for wheat. Many wheat producers in the Great Plains, however, do combine wheat and livestock production. Through much of this wheat region there is land that is not suitable for cultivation. It can be utilized only by grazing. Consequently, the farmers may keep sufficient livestock to make use of the feed available. This type of farm organization helps to improve the efficiency in use of labor and equipment.

Many have suggested putting much of the Great Plains wheat-land back into grass and using it for livestock production. But farmers who are willing to seed the land back to grass and go into livestock production have important questions to consider. The high investment required for putting land into grass is a deterrent. Establishing grass in the low rainfall areas is difficult, especially since farmers are likely to consider shifts to grass only when conditions are dry and wheat yields are low. Such conditions are not favorable for establishing grass and obtaining a living from livestock. Often the grass seedings fail entirely; or, when the establishment of grass is partially successful, several years are required to produce sufficient feed for livestock production. Under such conditions, the waiting for income from livestock production and the risks involved give rise to important problems to many farmers.

These are some of the production problems wheat farmers face. The fact that in its original state land in the Great Plains was better suited to grazing than to farming does not necessarily provide the answer to the farmer who has such land which has been broken out in a period when wheat was very profitable. And the fact that a man could operate a farm and get ahead financially in the past even though he had little capital to work with, offers little promise to the farmer who is producing wheat in this age of highly mechanized farming.

⁴ Farm Costs and Returns on Commercially Operated Farms—Agriculture Information Bulletin 158. ARS—U. S. D. A.—1956.