



VI

## The northern prairie area

*This article is the eighth in a series concerning agriculture in the Ninth district. The material used as a basis for this article is taken from the research that is in progress in conjunction with the Upper*

*Midwest Economic Study. Each article discusses a particular "type of farming" area as delineated in the study. In the current issue, the economic picture in Area VI is discussed.*

Spring and durum wheat is the major output of an expanse of land roughly bounded by the Red River Valley on the east and the Missouri River on the west. This region, which lies wholly in the state of North Dakota, can be generalized as a small grain, livestock-producing area and has been denoted Type-of-Farming Area VI in the scheme used to delineate the various agricultural sections of the Ninth district.

This area represents a transition in soil types and climate from the subhumid region of the Red River to the semiarid northern plains. Annual precipitation varies from a little over 25 inches along the eastern edge to a little less than 15 inches as the northwestern border is approached. The section is subject to hot summer winds and occasional drought; the number of days without killing frost ranges between 110 and 120.

A mellow soil with a high percentage of organic matter explains in part the dominance of spring grown wheat and other small grains. Large scale operations are favored by a generally flat land surface and freedom from trees, brush and stones. The production of winter wheat and row crops is precluded to a large extent by a cold climate and a relatively short growing season. Along the Missouri River and its tributaries the terrain be-

comes rough and broken and the type of farming is largely given over to cattle grazing.

The amount of land in farms in Area VI in 1959 totaled 24.2 million acres. This total represents an increase of 1.6 percent in land in farms since 1944. The proportion of land devoted to crops was 72 percent with 21 percent of the farm land classified as open pasture. Woodland and other uses accounted for the remaining proportions. Within the area, the extent of land devoted to crops varied considerably depending on terrain. In the southwestern part, the land is rather rugged with the result that almost one-half of the farm acres were permanent pasture. In the north central and northeastern parts of the area, the proportion of land in crops is almost 80 percent of all farm land.

The average farm size in Area VI rose from 611 acres in 1949 to 713 acres in 1959, an increase of about 17 percent. Over the same period the number of farms declined from 39,278 to 33,930, a fall of nearly 14 percent. The pattern of this shift is shown in table 1. Most noticeable is the persistent increase in the relative importance of farms of over 500 acres and especially in the 1,000-acre or more class.

The movement toward larger and fewer farms is

reflected in the change in the distribution of farms when classified according to economic size. This measure of farm size, which involves the grouping of farms according to the gross value of farm products sold, indicates a substantial increase in the proportion of farms in the Group I commercial farm category (farms with product sales of \$10,000 or more). As shown in table 2, the proportion of farms in the Group I class moved from 12.9 percent to 24.5 percent. Over the same period of time, 1949-1959, the noncommercial farm category (sales of less than \$2,500) dropped off sharply. The proportion of farms in the Group II commercial class (sales of between \$2,500 and \$10,000) experienced a moderate decline during the 10-year period. In 1954, the average acre size of these farms was: Group I, 1,251 acres; Group II, 657 acres; and noncommercial, 333 acres.

### Farm production

The value of farm production in Area VI averaged \$289 million per year during the period 1954-1958. The sales of crops accounted for 68 percent of the total cash receipts for all farms with wheat sales alone making up about 40 percent of the total receipt figure (table 3 on the next page). Flaxseed at 14 percent of total sales and barley at 10 percent were the next most important crops in terms of value.

The sales of livestock and livestock products, which accounted for more than 31 percent of total product receipts, were dominated by cattle and calves. Over all, the cattle and calves generated 17 percent of the total receipts, ranging from 25 percent in the southern part to 15 percent in the northern. Dairy products, while accounting for a little over 7 percent of total receipts, were somewhat more important in the south. Hogs and sheep and lambs were of relatively minor importance as a source of income. There was little change in the distribution of sources of receipts with an apparent decline in crops in favor of relatively greater livestock sales.

The table also indicates that, except for a greater importance of dairy products, the commercial farm groups conform to about the same patterns of cash receipts. On the other hand, the noncommercial farms emphasized livestock production to a much greater extent.

Both groups of commercial farms also followed about the same pattern of cropland use. Acreages of specific crops for the entire area were allocated in the following manner over the 1954-1958 period:

Spring wheat	21 percent of crop acres
Durum wheat	5 percent of crop acres
Barley	13 percent of crop acres
Oats	6 percent of crop acres
Flaxseed	13 percent of crop acres

TABLE 1—PROPORTION OF FARMS IN SPECIFIED ACREAGE SIZE CLASSES, 1949, 1954 AND 1959, AREA VI

Year	All farms	Less than 100 acres	100-219 acres	200-499 acres	500-999 acres	1,000 acres and over
			(percent)			
1949	100.0	3.3	8.2	37.8	37.6	13.1
1954	100.0	3.4	7.1	34.2	39.3	16.0
1959	100.0	2.8	6.2	28.3	41.5	21.2

Source: Census of Agriculture.

TABLE 2—NUMBER OF FARMS BY SIZE IN SPECIFIED SALES VOLUME GROUPS, 1949, 1954 AND 1959, AREA VI

Year	(number)	All farms (percent)	Group I	Group II (percent of total)	Non-Commercial
1949	39,278	100.0	12.9	62.9	24.2
1954	37,603	100.0	11.6	63.5	24.9
1959	33,930	100.0	24.5	58.9	16.6

Source: Census of Agriculture.

**TABLE 3—CASH RECEIPTS DISTRIBUTION  
AMONG COMMODITIES BY GROUPS  
OF FARMS, 1954-1958, AREA VI**

	All farms	Commercial		Non-commercial
		Group I	Group II	
(percent of total receipts)				
<b>Crops</b>	<b>68</b>	<b>72</b>	<b>67</b>	<b>58</b>
Wheat	40	41	39	34
Flaxseed	14	15	14	11
Barley	10	11	10	9
Oats	2	2	2	1
All other	2	3	2	3
<b>Livestock</b>	<b>32</b>	<b>28</b>	<b>33</b>	<b>42</b>
Cattle and calves	17	17	17	20
Hogs	3	3	3	3
Dairy products	8	4	9	14
All other	4	4	4	5

There was variance, however, in the relative importance of these crops within the area. For example, the proportion of spring wheat acres in the eastern part amounted to about 10 percent of total cropland, while more than 26 percent of the cropland in the northwestern part was planted to spring wheat. Durum wheat was relatively more important in the north central sections and flaxseed in the northern.

A wide range in climate and soils accounted for a considerable variation in the yields per crop acre. Yields generally tended to diminish when moving across the area from east to west. Spring wheat yielded 18 bushels per acre in the east and 13 bushels per acre in the west. Barley yields ranged from 26 bushels per acre to 20 bushels per acre.

Regardless of location or crop, the per acre yields on the Group I farms were significantly higher than on the Group II or noncommercial farms. The larger farms produced an average spring wheat yield of 20.7 bushels per acre over the 1954-1958 period as compared to 15.1 bushels and 11.4 bushels on the Group II and noncommercial farms, respectively. The comparative yields for barley were 28 bushels per acre on the

Group I farm, 22 bushels per acre on the Group II and 17 bushels per acre on the noncommercial.

Area VI also contains a substantial livestock industry. An examination of past records, however, does not reveal any trend toward an increase in livestock production; changes in numbers are due largely to cyclical fluctuations. Cattle and calves numbered just under one million head in 1959. Over a 20-year period, the number of cattle and calves fluctuated between a high of 1,159 thousand head in 1954 and a low of 700 thousand in 1945. Sheep and lambs declined in number from 448 thousand in 1940 to 219 thousand in 1949. During the 1950s, sheep and lambs were increased and in 1959 were reported at 414 thousand head. Hog numbers also exhibited a strong cyclical pattern, ranging in number from 89 thousand head to 236 thousand. In 1959, there were 140 thousand hogs reported in the area at the time of inventory. Contrary to the pattern found in other livestock numbers, the number of milk cows has declined steadily over the past 20 years. The number of milk cows in 1959 was 190 thousand head, a 40 percent decline from the 1940 level.

### Capital investment

Agricultural activity in Area VI represents a sizable capital investment. Over the 1954-1958 period, the value of capital amounted to an annual average of about \$1.3 billion. Group I farms controlled about 23 percent of the total investment and Group II farms, 64 percent. Real estate accounted for 66 percent of all capital invested by the commercial farms, followed by machinery and equipment at 25 percent and livestock at 9 percent. The relative importance of these items was fairly uniform among the groups of farms as well as throughout the area.

Cattle and calves represented nearly 91 percent of the total livestock investment on commercial farms. The investment in hogs accounted for 4 percent, while sheep, lambs and other livestock made up the remaining proportion.

Some indication of the advantage of large scale operations can be seen in the machinery and equipment investment per crop acre. During the 1954-1958 period the larger Group I farms operated with an average machinery investment of \$17.12 per crop acre. The figures for the Group II commercial farms and noncommercial farms were \$18.50 and \$21.00 per acre, respectively. Thus, the larger farms were better able to utilize each dollar invested in their machinery and equipment.

The per farm investment of the Group I farm averaged \$68,432, more than twice the \$34,165 investment per Group II farm. The average non-commercial farm represented an investment of \$17,519.

### Production expenses

The agricultural plant of Area VI required an annual average production expense outlay of \$175 million for operations over the 1954-1958 period.

Cash operating expenses accounted for about 68 percent of the total with depreciation making up the remaining 32 percent (table 4). The proportion of the total representing depreciation was somewhat higher than was generally true in other areas of the Ninth district because of a larger machinery investment. Depreciation also tended to be a relatively larger part of total production

expenses on Group II and noncommercial farms than on Group I farms in the area.

The most important single category of expense items on all groups of farms was petroleum products used in the operation of farm equipment. That item accounted for more than 17 percent of total production expenses. More than 10 percent of the expenses on Group I farms went for hired labor, while Group II and noncommercial farms expended 5 and 3 percent on hired labor, respectively. Machine hire accounted for a relatively greater share of total expenditures on the smaller farms than on the Group I farms with the opposite relationship holding for feed purchases. Only in the case of machine hire on noncommercial farms did these items amount to more than 5 percent of production expenditures.

### Labor utilization

Evidence supporting the conclusion that the past trend in farm size and number adjustment will continue can be found in an examination of the area's ability to utilize farm labor efficiently. When comparing the amount of labor available for farm tasks with the labor requirement standards, it was found that only 66 percent of the entire labor force of Area VI was being effectively utilized. This figure tended to vary, of course, de-

TABLE 4—PRODUCTION EXPENSES AND RELATIVE IMPORTANCE OF SELECTED ITEMS, BY GROUPS OF FARMS, 1954-1958, AREA VI

	All farms	Commercial		Noncommercial
		Group I	Group II	
		(thousands of dollars)		
TOTAL production expenses	174,966	45,679	108,567	20,720
		(percent)		
Production expenses	100	100	100	100
Cash farm expenses	68	74	67	63
Hired labor	6	10	5	3
Feed	5	6	5	5
Gas, oil, etc.	17	15	18	18
Fertilizer and lime	1	2	1	.....*
Machine hire	3	2	3	4
Other cash expenses	36	39	35	33
Depreciation	32	26	33	37

\*Production negligible.

pending on the size of farm and its location. The larger Group I farms were much more efficient in labor use, achieving a utilization figure of 77 percent. The Group II farms utilized 70 percent of the labor efficiently, a figure quite respectable when compared to Group II farms in other parts of the district. Noncommercial farms were utilizing only 49 percent of their labor. Where livestock production was more intensive — generally in the southern part of the area — labor utilization on all farms reached about 80 percent of what could be done if modern techniques had been applied to farm chores. In the northwestern grain section the utilization figure for all farms dropped to 59 percent.

In the grain section, the utilization figure must be qualified due to the seasonal nature of produc-

tion. In the analysis of labor use it was impossible to eliminate seasonality from the farm operators' workload. Thus, the figures tend to understate the true condition. Nevertheless, the figures indicate, both in terms of what could be done if farm size were increased and modern technologies were applied and in terms of the degree of labor utilization achieved in other parts of the district, that considerable amounts of farm labor are currently underemployed.

#### Farm income

The average gross farm income, including cash receipts from farm marketings, direct government payments and noncash income (rental value of the farm home and the value of farm products consumed), amounted to \$8,415 annually over the 1954-1958 period in Area VI. The breakdown

Per farm gross income expenses and net income, 1954-1958 average, Area VI

	All Farms	Group I	Group II	Non-Comml.
Cash receipts from farm mktgs.	7678 00	21242 00	7356 00	2151 00
Government payments	248 00	518 00	251 00	112 00
Noncash income	489 00	692 00	476 00	428 00
Gross farm income	8415 00	22452 00	8083 00	2691 00
Cash expenses	3162 00	7681 00	3028 00	1387 00
Depreciation	1491 00	2748 00	1520 00	829 00
Production expenses	4653 00	10429 00	4548 00	2216 00
Net income	3762 00	12023 00	3535 00	475 00
Estimated costs of capital and operator's labor	3888 00	5672 00	3933 00	2939 00
Returns to management	-126 00	6351 00	-398 00	-2464 00
Net cash income	4773 00	14079 00	4579 00	876 00

of farms into economic classifications, however, shows wide differences among the groups. The Group I farms earned an average gross farm income of \$22,452 per year, reflecting the greater productivity of these farms. The average Group II farm grossed \$8,083 or just over one-third that of the larger farm. The noncommercial farm earned a gross farm income of only \$2,691 per year.

The advantage of farm size is brought out more clearly when considering net returns. After deducting cash expenses and depreciation from gross income, the average Group I farm earned a net return of \$12,023 as compared to a net income of \$3,535 on the Group II farm and \$475 on the noncommercial. Thus, the net income of the Group II farm was less than 30 percent of that of the Group I farm. Moreover, the net income of the Group II farm was only 43 percent of its gross, while the Group I farm realized a net income that was 53 percent of its gross income.

Another way of viewing the differences in the productivity between the groups of commercial farms is to estimate the return the operator receives for his managerial ability. To do this, a capital cost estimated at 5 percent of total investment plus the operator's alternative wage equal to the prevalent hired farm labor rate, was deducted from net income. The resulting figure is an estimate of what the farmer received over and above what could have been earned had his capital been invested elsewhere at 5 percent and his personal labor hired out at the going farm wage. In terms of this estimate, management on the Group I farm earned a return of \$6,351 while the Group II farm manager received no return, and in fact, would have gained \$398 in income had he chosen the alternative of investing the capital and working for someone else.

This information is summarized in a slightly different form in table 5. Annual total inputs were derived by adding capital costs and the operator's alternative wage cost to production expenses. As can be seen, the Group I farms used

TABLE 5—ANNUAL AVERAGE TOTAL INPUTS, GROSS INCOME AND NET INCOME, 1954-1958, AREA VI

	Group I	Group II	Ratio of Group I to Group II
Total inputs	\$16,101	\$8,481	1.9
Gross income	22,452	8,083	2.8
Net income	12,023	3,535	3.4

almost twice the value of inputs as Group II, but received almost three times the gross income. In other words, for each dollar of input on the Group I farm, a gross return of \$1.39 was generated. On the Group II farm, each dollar of input generated only \$.95 of gross income.

The viability of a farm can in some ways be better evaluated in terms of net cash income. Net cash income, or the difference between cash farm receipts plus direct government payments and cash expenses, averaged \$14,079 and \$4,579 on the Group I and Group II farms, respectively. This is the income that must cover family living expenses, replacement of worn out or obsolete equipment, and the repayment of debt. The average amount received by the Group II farm over the 1954-1958 period appears to be below the minimum that could be reasonably expected to maintain adequate standards both for the family and for the farm enterprise. Consequently, many of these farms, which accounted for nearly 65 percent of the total farm land, are likely to be consolidated in the future.

#### Off-farm income

The discussion of income so far has pertained only to that generated by farm production. Many farm operators in Area VI supplement farm incomes with off-farm work. While available data do not permit the measurement of that increment to income, it is possible to determine the degree to which farms use this income alternative and, to some extent, its importance. As shown in table 6, 8 percent of the farmers in the area worked off

*(Continued on page 11)*

# Current conditions . . .

The rediscount rate was increased from 3 percent to 3½ percent in mid-July. Regulation Q also was changed by the Federal Reserve authorities, allowing interest payments up to 4 percent on time deposits of three months or more. These actions were instituted for balance of payments reasons. In a press statement accompanying the rate change announcement, the Board of Governors said the move did not constitute a change in the System's policy of maintaining monetary conditions conducive to fuller utilization of manpower and other resources in this country. It is hoped that the action taken by the monetary authorities together with action on the proposals made by the President in his balance of payments message to Congress on July 18 will curtail this country's long continued balance of payments drain without effects adverse to the domestic economy.

In the Ninth Federal Reserve district, economic activity at midyear appeared to be moving along on an even keel. Total nonagricultural employment and personal income, two of the most comprehensive measures of business conditions, have remained relatively stable. For the month of June, nonfarm employment showed almost no change from a month earlier on a seasonally adjusted basis. Bank debits and department store sales have continued to gain.

On the other hand, iron ore shipments from the Lake Superior region were down 6.1 percent in June from a year earlier and off 15.3 percent for the first half of 1963 compared with the same period a year earlier, reflecting to some extent a heavy carryover of ore stocks from the 1962 shipping season.

District crop production for 1963 may not

equal last year's near-record levels. Total wheat production may be about 5 percent less with oats, barley, flax and rye production also down from last year. Corn and soybean production, however, may exceed that of last year, since acreages were expanded from last year's levels. With less over-all crop production and about the same level of prices, cash farm income from 1963 crops will likely be somewhat less than in 1962. On the other hand, livestock production and marketings may continue at high levels throughout 1963, reflecting large inventories of animals on farms at the year's start. Cattle and most other livestock prices had recovered from the early season slump and at mid-year were not substantially different from year-ago levels; livestock income, therefore, may equal or exceed that of a year earlier. In total, 1963 cash farm income may about equal that of 1962.

Ninth district banking trends at midyear were generally favorable. Total deposits gained more than loans during June, with a resultant slight decline in loan-deposit ratios. Bank credit (adjusted loans and total investments) increased more in June than in any other June since 1958, which, together with the deposit trend, suggests financial strength and expansion.

*The following selected topics describe particular aspects of the district's current economic scene:*

## **DISTRICT BANKING DEVELOPMENTS**

Expansion tells the story of the district financial structure during the first six months of 1963. Total deposits, adjusted loans and total investments for all Ninth district city and country

member banks were larger in June than in May (except total investments by city member banks which decreased slightly). Total deposits, adjusted loans and total investments increased in the first half of 1963 over the first half of 1962. All Ninth district member banking statistics are larger this year than last, and larger in June than May, with the above mentioned minor exception. To the extent that member banking statistics indicate what the Ninth district economy is doing — it is expanding.

The month of June registered the largest June increase in total member bank credit since June of 1958. Total member bank credit grew at a 1 percent faster annual rate this year than last year. While both city and country member banks increased bank credit, country member banks accounted for the major portion of the total increase in bank credit. Of the two bank credit components, adjusted loans and total investments, adjusted loans accounted for the bulk of the total increase during the last twelve months. Over half of the increase in adjusted loans came from country banks. The strong rise in the adjusted loan component of bank credit lends itself to optimism about future economic trends.

Time deposits of district member banks continued to grow, with country member banks accounting for almost two-thirds of the total increase in time deposits. While time deposits grew more rapidly this year than last in country banks, the rate of growth for city member banks decreased markedly this year over last. Demand deposits grew during the last 12 months with the major portion of the growth occurring in country banks. Total deposits of Ninth district member banks have been growing at a faster rate this year than last. The loan-deposit ratio fell in June, because deposits increased more than loans. Reserves and borrowing by member banks at the Federal Reserve bank increased during June. Member banks decreased their purchases of federal funds while increasing their sales, thus becoming smaller net borrowers of federal funds.

## RESIDENTIAL BUILDING

Home building in the district, as in the nation, has risen to a new high and has become an important factor in sustaining the momentum of business activity. The number of dwelling units authorized by building permit in the first five months of this year was 12.6 percent above the comparable last year total, and 1962 was considered to be a satisfactory homebuilding year.

The building of single houses in the first five months of this year about equaled the number a year earlier on the basis of permit authorizations; the expansion in district home building this year has been primarily in the multifamily private residences. In the Twin Cities, this type of building has risen to over 60 percent of total residential construction. Structures in numerous communities are being built for senior citizens. The sharp rise in the building of multifamily private residences is in response to a growing demand for such units from two widely differing age brackets, the newly married couples and the older people whose children have left home. The number in both groups has been growing rapidly.

A factor contributing to the apartment house boom in Minneapolis during the first half of the year was a new zoning ordinance which became effective July 19. The ordinance requires that a larger portion of the parcel of land be used for grass plots and plantings.

The multifamily structures in the Twin Cities are built by residential contractors for eventual sale or for investors. Some builders complete the structures, rent the units and then sell them. Others hold the properties for five or six years in order to take advantage of the capital gains and accelerated depreciation provisions in the Internal Revenue Act. Moreover, after such a period, the occupancy rate and cash flow have been established and, if they are satisfactory, the properties sell easier.

Practically all of the multifamily structures are financed through conventional mortgage loans.

Only a few of the large structures in the Twin Cities are FHA insured.

The vacancy rate on rental units in the North Central states declined last year, according to U. S. Bureau of Census surveys. The first quarter 1962 rate was 9.2 percent and in the first quarter of this year, 7.8 percent. Spot surveys made by real estate firms and financial institutions reveal a decline in the vacancy rate on rental units in the Twin Cities. The downward trend is also reflected in the number of classified newspaper ads. The number of "for rent" ads in the Minneapolis papers continued to rise through 1962, but turned down sharply in the first half of this year, while the number of "wanted to rent" ads, in the same period, turned up substantially. The number of "for rent" ads in the St. Paul paper has continued the up-

ward trend in the first half of this year but at a more moderate rate, and the number of "wanted to rent" ads has risen at a faster rate than in the latter half of 1962.

The vacancies in the Twin Cities metropolitan area are concentrated in the older apartments and in fairly new units located in some suburbs. There was little building of multifamily units for many years and rents rose to an abnormally high figure. Now, many tenants are upgrading their living quarters by moving into new units. A typical new one-bedroom apartment rents from \$115 to \$130 per month and two-bedroom units from \$130 to \$145. The vacancy rate is also quite high in some relatively new apartments located in a few suburbs served rather infrequently by public transportation.

## CROP PRODUCTION

The July crop production estimates of the U. S. Department of Agriculture indicate that, with the exception of corn and winter wheat, this year's grain harvest will be smaller than that of 1962 (see table). The largest drop in the district is expected in the production of rye, due to sharply reduced acreages for harvest in the Dakotas plus a 4- to 5-bushel decrease in per acre yield estimates.

Total district wheat production is also expected to be reduced with current estimates placing the crop at 268.7 million bushels, down 5.6 percent from last year. This occurs in spite of a 2.6 percent

increase in planted wheat acreages. The explanation is, of course, a decline in anticipated yields, although the yield per acre figure is expected to reach above normal levels. A review of wheat production by classes brings out an unusual pattern. As stated, total acres planted to wheat increased only 2.6 percent, but the distribution among classes varied considerably. Thus, spring wheat acres were up 15.4 percent, but a reduction in anticipated yields has reduced the estimated output 4.7 percent from last year. On the other hand, winter wheat acres are down 11.8 percent, which is

TABLE 1—ESTIMATED CROP PRODUCTION—1963 AS A PERCENT OF 1962

	Spring	Winter	Durum	All wheat	Corn	Oats	Barley	Flax	Rye
Minn.	140.0	88.0	84.8	133.5	114.4	109.9	120.6	141.6	126.4
No. Dak.	85.5	.....*	61.0	77.0	180.8	68.0	80.7	83.2	55.0
So. Dak.	100.9	229.9	56.7	118.0	101.0	89.3	78.8	94.1	49.6
Mont.	99.1	137.5	51.7	113.1	114.0	85.8	84.6	190.0	65.6
4 States	95.3	147.6	60.5	94.4	111.4	91.8	86.0	96.5	58.8
U. S.	94.2	107.1	60.9	101.6	105.6	93.6	86.9	96.5	71.2

\*Production negligible.

TABLE 2—PLANTED CROP ACREAGES—1963 AS A PERCENT OF 1962

	Spring	Winter	Durum	All wheat	Corn	Oats	Barley	Flax	Soybeans
Minn.	120.1	82.6	100.0	117.5	106.0	100.0	88.0	104.0	105.0
No. Dak.	110.0	.....*	87.0	102.2	98.0	99.0	112.0	112.0	249.2
So. Dak.	124.0	86.0	66.2	106.0	112.0	99.0	83.1	105.1	113.8
Mont.	120.0	89.0	64.0	98.7	82.9	96.1	87.0	200.0	.....*
4 States	115.4	88.2	83.2	102.6	107.0	99.3	99.0	109.6	109.1
U. S.	112.9	108.9	83.3	108.2	105.8	97.2	95.5	108.8	104.3

\*Production negligible.

offset by sharply increased yield expectations primarily in South Dakota—with a resulting expectation that output will be up 47.6 percent from last year. Acres planted to durum wheat are down 16.8 percent from last year with production expected to reach 43 million bushels as compared to 71.1 million bushels in 1962, a drop of 39.5 percent.

The production of corn in the district is expected to reach 438.6 million bushels, up 11.4

percent from last year. Planted acres in Minnesota and South Dakota, the district's leading corn states, were up 6 percent and 12 percent, respectively. Corn yields are expected to reach 63 bushels per acre in Minnesota, 3.5 bushels higher than last year and 6.4 bushels higher than the 1957-1961 average. In South Dakota, corn yields, at an anticipated 38 bushels per acre, are down 4.5 bushels from last year but 6.2 bushels higher than the 1957-1961 average. —END

(The northern prairie area: continued from page 7)

the farm for 100 days or more during 1954, and 6 percent earned more from off-farm work than from farm sources. Of course, the noncommercial farm operators were much more dependent on this source of income than commercial farmers.

The area as a whole, however, ranks low in comparison with other Types-of-Farming areas in terms of the proportion of farmers who add to their incomes in this manner. This is undoubtedly due to the absence of the large urban centers that are necessary to absorb the labor potential.

#### Summary

The structure and problems of agriculture in Area VI are, in many respects, similar to those of

other areas in the Ninth district. A rather large proportion of the farms, about 75 percent in 1959, fall into the Group II and noncommercial classifications. Many of these smaller farms, as was shown

TABLE 6—OFF-FARM EMPLOYMENT OF FARM OPERATORS, BY GROUPS OF FARMS, 1954, AREA V.

	Working off-farm	Working off-farm 100 days or more	With off-farm income greater than farm income
	(percent of operators)		
All farms	26.0	8.0	6.0
Group I	19.5	3.7	1.6
Group II	23.2	5.0	2.8
Noncommercial	36.8	18.5	17.1

in the previous pages, are at a distinct disadvantage in terms of productivity and income-earning potential. In essence they lack some or all of the resources—land, capital and managerial ability—that make the Group I farms viable growing enterprises. The one resource that is in plentiful supply is labor and, in fact, the excess of farm labor or its underemployment is a sign of the need for over-all resource adjustment.

The underemployment of labor exists in spite of a marked decline in farm numbers and population. The release of the excess labor as farm adjustment proceeds is one of the most difficult problems facing the area. The problem of labor release is compounded by the fact that the advances made in farm technology reduce labor needs at a rate faster than the mere consolidation of farms would suggest. At any rate, the known productivity and income potential of the larger, more efficient farms combined with a dissatisfaction and inability to exist for a sustained period under conditions of low incomes are the twin forces that insure a continuation of the trend toward fewer and larger farms.

An estimate of the decline in farm numbers indicates that in Area VI a decline of 21 percent will occur between 1959 and 1975.\* This would mean a total of 26,900 farms would still be in operation. Conversely, the average acreage size of farms is estimated to increase from 713 acres to 900 acres.

A second problem of the future—more unique to Area VI and the Northern Plains in general—is the area's dependence on the production of small

grains, primarily wheat. Due to the limitations of physical factors, primarily climate, and the distance to major markets, alternative types of farm production are severely restricted. The current capacity to produce spring wheat in the face of the present surplus supply situation can only mean a downward adjustment in crop acres devoted to that crop. In the study just cited it was projected, under the assumption that demand and supply were in balance, that by 1975 there would be a 23 percent reduction in cropland acres devoted to wheat and other major feed grains in Area VI. Except for limited use for specialty crops, the excess acres are likely to be converted back to grassland. Such a shift has implications not only in terms of land values but in terms of the acre size required to provide an economically favorable unit.

Current and prospective trends in the consumption of meat, particularly beef, however, considerably brighten the future prospect for Area VI. Concern is already being expressed over the adequacy of present pasture and range lands and their ability to support the beef herds that will be needed in the near future. As the demand to put land into this use increases, the transition to grass from what is now marginal wheat land will be that much easier economically. Moreover, the area might also share in an expanded fed cattle market if it can develop more livestock feeding enterprises.

The adjustments that will take place in Area VI are not going to occur without a price in terms of disrupting the present pattern of agriculture. Whether this price is low or not will depend in large part on the ability of the people in the area to understand the problems and to create an environment that will smooth the path of adjustment.

\*See *Upper Midwest Agriculture: Alternatives for the Future* by Learn, Cox and Herder, Study Paper No. 6, Upper Midwest Economic Study, U. of Minn., Dec. 1962