1979 Farmland Values

Jerome E. Johnson

The 1979 North Dakota farmland market study estimates that average farmland values increased by 14 per cent to \$415 from \$365 per acre in 1978. The study is based on estimates from farm real estate brokers and other reporters who are familiar with the farmland market in their areas. Sales data were reported and studied for characteristics of buyers, sellers, and of the tracts transferred.

Average value of North Dakota farmland rose an estimated 14 per cent during 1979, to an average value of \$415 an acre from \$365 in 1978. The large 1979 increase is near the rate of inflation, and continues the rapid rise evident in the 11 per cent increase reported for 1978. The annual survey by the Department of Agricultural Economics of farm real estate brokers and other financial service agency reporters provides much useful information on the characteristics of buyers and sellers and the sale tracts being transferred in the rural real estate marketplace.

Previous reports have used the seven state economic areas concept developed in the 1952-54 period. However, the farm management/production economists in the Department feel that the eight farming areas (FA) adopted in this report better reflect current land uses and types of farming in North Dakota. The eight farming areas place

1979 \$295

273

245

250

200

1979 \$265

237

227

230

200

1978

1977

1976

1975

greater pressure on the limited number of estimates obtained in the annual survey, with a particular weakness in the Northwest farming area. However, the 397 actual farm sales reported is close to two-thirds of the number of tracts estimated to have been voluntarily transferred in 1979, and are more than adequate for the purposes of this study.

Estimates of value obtained from our cooperating reporters are averaged by counties and weighted by the acres of land in farms per county to develop the area weighted average estimated values per acre. The calculated averages for the estimated average values of farmland for the last five years are reported in Figure 1 in the farming areas map. The calculated averages represent the average estimated value for average quality farmland and buildings in the reporter's service area for farmland that will continue in agricultural use in the future.

NORTHWEST	NORTHWEST CENTRAL	NORTHEAST CENTRAL	NORTH RED RIVER VALLEY
1979 \$245 1978 210 1977 200 1976 175 1975 120	1979 \$338 291 280 260 235	1979 \$519 410 365 345 290	1979 \$765 618 578 568 558
	Northwest Noi	Southwest Southeast	
SOUTHWEST	SOUTHWEST CENTRAL	SOUTHEAST CENTRAL	SOUTH RED RIVER VALLEY

Figure 1. Estimated Average Farmland Values Per Acre in North Dakota: State: 1979-\$415, 1978-\$365, 1977-\$330, 1976-\$325, 1975-\$258.

\$1001

811

665

640

535

\$440

396

358

350

Dr. Johnson is professor, Department of Agricultural Economics.

The calculated averages in Table 1 and Figure 1 allow an examination of trends in farmland changes during the last year and in the past five years by farming areas. The new grouping of counties probably better reflects current land uses and, therefore, current land values, resulting in considerable shifts in area averages from the older seven state economic areas used in past reports. The levels of land values and their trends are evident in the figures calculated for the eight farming areas, with percentage changes in the last year given in Table 1.

The estimated average values per acre of cropland and pastureland by the eight farming areas are reported in Table 2 for the last three years. Only Richland County has much pastureland in the entire Red River Valley, so the North RRV pastureland values are bracketed to indicate their tentative status. The calculated average estimated values in Table 1 range from 77 to 85 per cent of the cropland value estimates given in Table 2, except for the South RRV figure which is 98 per cent of the cropland estimate.

The average sales prices calculated for the actual sales reported in this study will be presented in Table 4 in the Sales section, but can be compared to the estimates in Tables 1 and 2. Average sales prices obtained from the 397 sales reported to this study closely support the estimated averages from the reporters. Some fluctuation in the figures arises from the number and distribution of reports within and among the eight farming areas over time. We also examined the simple averages for the estimates, and

feel that weighting the estimates is the appropriate procedure. However, the actual sales data reported below are simple averages calculated for each (buyer, seller, or tract) characteristic and for each farming area.

The 1979 averages are based on reports received from 129 reporters. The number of reports varies from year to year, both in total number and in the number from each farming area. The total number is low in Farming Area No. 1—the Northwest. The small number of reports prevents estimating or reporting any county average farmland values.

Reporters in this survey are asked to send in two kinds of information: (1) estimates of the general condition of the farm real estate market in their service areas, and (2) details on actual farm sales. We exclude sale tracts of less than 35 acres and those not intended for continued agricultural use. The estimates and the farm sales data are tabulated for the eight farming areas to develop the averages, and no individual report is revealed. The figures reported are accepted at face value, with no attempt to adjust the data received from the reporters. This sometimes gives some anomalies in the computed averages, but all reports are used and are equally valued in this study.

Estimates of farmland value are felt to be a better indicator of trends in farmland value over time than are actual farm sales data. The estimates of crop and pastureland values per acre are averaged by counties and weighted by the acreage of land in farms in each county to establish the average farmland value for each farming area.

Table 1. Estimated Average Farmland Values in 1979 and 1978, and Changes Per Acre.

Farming	Estimated	Estimated Value In:		Change
Area	1979	1978	Dollar	Percentage
	Dollars	Per Acre		
1 Northwest	245	210	35	17
2 Southwest	265	237	28	12
3 NW Central	338	291	47	16
4 SW Central	295	273	22	8
5 NE Central	519	410	109	27
6 SE Central	440	396	44	11
7 North RRV	765	618	147	24
8 South RRV	1001	811	190	23
STATE	415	365	50	14

Table 2. Estimated Crop and Pastureland Values Per Acre.

Farming		Cropland			Pastureland			
Area	1979	1978	1977	1979	1978	1977		
Dollars Per Acre			Dollars Per Acre					
1 Northwest	316	262	225	140	145	110		
2 Southwest	331	298	255	172	159	143		
3 NW Central	440	384	350	179	169	169		
4 SW Central	339	327	275	207	194	173		
5 NE Central	615	472	447	264	207	250		
6 SE Central	503	467	403	241	205	182		
7 North RRV	886	673	633	(288)	(236)	(199)		
8 South RRV	1021	835	793	377	274	308		
STATE	490	420	380	221	191	182		

The Slow Market Continues

The rate of farm transfers in 1979 continued at a slow pace. The trend in the number of farm transfers per thousand farms is presented in Table 3. The volume of voluntary sales was estimated to be up in 1979 by a whopping 31 per cent over the very slow year in 1978, but the rise in voluntary sales was nearly fully offset by the declines in the rates of all other transfers shown.

Table 3. Estimated Number of Farm Title Transfers Per 1,000 Farms by Method of Transfer, Year Ending March 1, 1970-75, and February 1, 1976-79, North Dakota.

Year	Voluntary Sales	Forced Sales ^a	All Other ^b	Total All Classes
1979	17.2	1.2	9.1	27.5
1978	13.1	1.8	12.2	27.0
1977	15.1	1.4	14.8	31.3
1976	20.2	1.0	10.6	31.9
1975	20.8		9.7	30.5
1974	24.0	0.3	10.0	34.3
1973	26.3	0.3	10.3	36.9
1972	23.6	1.6	12.1	37.3
1971	17.6	1.2	14.1	32.9
1970	21.1	0.4	13.3	34.8

^aForced sales include foreclosures, tax sales, etc.

SOURCE: Annual estimates, published in "Farm Real Estate Market Developments," U.S. Department of Agriculture.

The rate of farm sales is estimated in terms of the number of farm transfers per 1,000 farms in the state. You can estimate the volume of farm sales by multiplying the rate times the number of farms in the state or localize it in terms of the number of farms in your county. Suppose the state has about 40,000 farms. Then the total number of farm transfers was 40 x 27.5 or 1,100 farms in 1979, and there were about 700 voluntary sales in 1979. Similarly, a county with 1,500 farms would have had about 412 total and 258 voluntary farm transfers in 1979.

Most reporters (55 per cent) had about the same number of farms listed for sale in 1979 as they had the year earlier. As in the 1978 report, the brokers in 1979 indi-

cated that about 30 per cent had fewer and 15 per cent had more farms listed for sale than in the previous year.

About one-half of the reporters selling farms said that they had sold one farm in 1979, and about a third had sold two farms. Many commented that farms are often spoken for years in advance, and are often sold directly from the seller to the buyer without the services of a broker. The data (in Table 7 below) on the ages of the buyers indicate that many buyers are parents helping their children get started in farming.

Analysis of 1979 Farm Sales

The reader is cautioned that averages based on farm sales data can greatly vary from year to year, due to the number and location of the sales reported in any one year, the quality of buildings and soils, sizes of tracts sold, and the motives attributed to the buyers and sellers. The 397 sales reported to this study for 1979 were not completely reported for all details. The large increase in number of sales reported reflects the dedication of our regular reporters plus the new group of FmHA reporters added to the 1979 study. The addition of the latter group will greatly increase the representativeness of this report, and their contributions are greatly appreciated. Yet, the number of sales reported for FA No. 1-the Northwest-is hardly adequate to study the changes that may be occurring in that farming area. Also, do not apply the averages reported in this study to any individual farm, since this report offers trends and generalized information about the 1979 North Dakota farmland market.

Table 4 presents the average size and sales price per acre for the 397 sale tracts reported for the 1979 study. Although the figures are only for one year, they do show much variation among farming areas and for the market as a whole. The average tract sold in the 1979 market had an average size of 352 acres, for an average value of \$420/acre, or an average value of \$147,982.

The most common tract size transferred was 160 acres, which accounted for 28 per cent of the tracts sold in 1979. The other common sizes were 5.3 per cent at 80 acres, 4.3 per cent at 240 acres, 11.3 per cent at 320 acres, 3.3 per cent at 480 acres, 4.3 per cent were a section in size and 4 per cent were of two sections or more in size. About 35 per cent were a quarter section in size in the Northwest and Southwest Central farming areas, 40 per cent in the North Red River Valley, and about one-fourth of the tracts sold in the Northwest Central, Northeast Central, Southeast Central, and South Red River Valley farming areas.

Most tracts transferred in 1979 were without buildings, i.e., "bare land." They accounted for 68 per cent of all

Table 4. Average Tract Size and Sales Prices Per Acre By Farming Areas, 1979 Farmland Market Study.

Item	1 North- West	2 South- West	3 NW Central	4 SW Central	5 NE Central	6 SE Central	7 North RRV	8 South RRV	State
Number of Sales	20	74	56	55	26	67	48	51	397
Average Tract Size in Acres Average Sales Price/Acre (\$)	338 267	651 228	370 313	339 278	329 675	263 513	179 916	216 1,071	352 420

^bIncludes inheritance, gift, and all other transfers.

sales. Nine per cent had "good." quality buildings, 9 per cent had "average," and 14 per cent were reported as having "poor" quality buildings. About 70 to 75 per cent of all tracts sold were without buildings in the Northwest, Northeast Central, Southeast Central, and in both the North and South Red River Valley farming areas.

Bare tracts had an average size of 258 acres and an average sales price of \$457 an acre in 1979. Tracts with good quality buildings had the largest average size at 618 acres in size, and sold for an average of \$385/acre. Tracts with "average" quality buildings averaged 517 acres with an average sales price of \$409/acre.

Examining the quality of the land sold showed that 52 per cent of the tracts were rated as having "average" quality land, and sold for an average of \$356/acre. About 34 per cent had good quality land and averaged \$702 an acre. Poor quality tracts averaged \$214 per acre with an average size of 478 acres.

The methods of financing the purchases are presented in Table 5. Conventional mortgages led the 1979 financing scene, closely followed by contracts for deed. All cash purchases sharply declined and reflects much fluctuation in the last three years. Land contracts dominated in the Northwest, Southwest Central, and Northeast Central farming areas, but mortgages led in other areas. Cash purchases averaged 313 acres at an average of \$326/acre. Mortgage financed purchases averaged 296 acres at an average of \$537 an acre. Contract for deed purchases averaged 433 acres with an average purchase price of \$354/acre.

Credit was used to finance 84.5 per cent of all purchases reported in 1979, averaged 360 acres in size, at \$432.50/acre, and average tract value of \$155,816.

Table 5. Per Cent of Farm Sales by Method of Finance.

Method	State Averages For Sales Of				
of Finance	1979	1978	1977	1976	1975
	percent of sales				
Cash	16	37	11	26	37
Mortgage	45	29	36	30	26
Contract for Deed	39	34	53	44	37

The seller financed 35 per cent of all purchases, which had an average size of 446 acres. Federal Land Bank Associations (FLBAs) were involved in 30 per cent of the reported transfers, followed by the Farmers Home Administration (FmHA) in at least 26 per cent of the purchases. The FmHA financed purchases averaged 415 acres, while the FLBA financed tracts averaged 278 acres. One should note that the Bank of North Dakota is also involved with both credit sources in financing beginning farmers.

About the Sellers

Active farmers offered one-third of the tracts sold, with 44 per cent of the acreage reported transferred in 1979. Their tracts sold for an average of \$366/acre with an average size of 475 acres. Retired farmers provided 27 per cent of the tracts, with an average size of 249 acres and

an average price of \$518/acre. Estate settlements were involved in 22 per cent of the transfers, at an average acre price of \$491, and an average size of 285 acres. So-called absentee owners provided 15 per cent of the tracts, averaging 357 acres in size and sold for \$334/acre. These figures are quite typical, since active farmers provided 38 per cent of the tracts in 1978 and 39 per cent in 1977. Retired farmers sold 20 per cent of the tracts in 1978 and 22 percent of the units in 1977.

The most common reasons given for selling were: (1) health or retirement due to age for 32 per cent of the tracts with 37 per cent of the acreage, (2) estate settlement with 28 per cent of the tracts with 22 per cent of the acreage, (3) profit or good price, (4) financial pressures, and (5) to reduce size of operating unit.

The average age of seller (excluding estates) was 57.2 years, with the age distribution reported in Table 6. Sellers ranged in age from 19 to 82 years.

Table 6. Per Cent of Sales By Age of Sellers.

Age Groups in Years	1979	1978	1977	1976	1975
			per cent		
Under 35	5	2	17	4	6
35-44	10	16	8	13	5
45-54	15	15	21	15	22
55-64	33	23	23	19	21
65-74	32	34	18	35	35
75 and Over	5	10	13	14	11

About 5 per cent of the buyers and sellers were related, and these buyers purchased 4.2 per cent of the land sold in 1979. The average purchase price was \$344 an acre.

About the Buyers

About 86 per cent of the buyers lived within the county in which the tract sold was located. Eight per cent lived in a nearby county, 3 per cent in a more distant county, and only one-fourth of 1 per cent came from outside the state. The highest average purchase price was paid by those buyers living in the same county.

The calculated average age of all buyers was 38.9 years, with the age distribution shown in Table 7. The frequency distribution of buyers' ages indicates that the most typical buyer was close to 45 years old, with the calculated average pulled down by the larger than average proportion of buyers under 45 years old.

Table 7. Per Cent of Sales By Age of Buyers.

Age Groups in Years	1979	1978	1977	1976	1975
			per cent		
Under 25	9	7	11	7	14
25-34	28	20	13	25	18
35-44	24	33	21	28	29
45-54	28	30	39	29	27
55 and Over	11	10	16	11	12

Buyers who already owned farmland made up the largest occupational group purchasing tracts in 1979. Other occupational groups included farm renters, followed by businessmen and urban workers. Businessmen bought 9.6 per cent of the tracts, which averaged in size near the market average of 352 acres. Those tracts were purchased at an average price of \$343/acre, which was considerably below the market average of \$420 an acre.

Land Use Before and After Sales

A careful study of the use of the land before and after sale brings out the strength of farm expansion buyers in the market and the limited number of tracts and acreage going into separate or new farms. Farm expansion continues as the single, most dominant force in the farmland market, as shown in Table 8. Buyers seeking to expand their farm units bought 80 per cent of the tracts with 68 per cent of the acreage sold in 1979. The after-sale view also shows that buyers setting up new, independent or separate farm units bought 14.5 per cent of the tracts with 25 percent of the acreage, which means that their farms were much larger on the average than the typical tract sold. After sale, new farms averaged 609 acres at \$290 per acre, while expansion destined units averaged 298 acres at an average of \$485 per acre. Miscellaneous buyers (part-time farmers, rural homes on substantially agricultural lands, etc.) purchased 5.6 per cent of the tracts with 6.7 per cent of the acreage sold for an average price of \$300 per acre.

Table 8. Per Cent of Sales By Types of Buyers.

Type of	State Averages By Year				
Buyer	1979	1978	1977	1976	1975
			per cent		
Single Farm Expansion Buyers	14 80	13 80	10 85	12 85	5 87
Other Buyers	6	7	65 5	3	8

Before sale, 66 per cent of the tracts with 54 per cent of the land had been parts of another farm. About 30 per cent of the tracts accounting for 43 per cent of the acreage had been operated as separate farms. Four per cent of the tracts with 3 per cent of the land had been in other uses, such as rural homes on substantial acreages, or part-time farms

The before and after change in the use of the tracts can be shown by further examining the data. A look at the 30 per cent of the tracts with 43 per cent of the land that had been operated before the sale as separate farms shows that of the 119 tracts involved, 26 per cent continued (after sale) in the same use as separate farms, while 64 per cent shifted to expansion oriented buyers and the rest went to other buyers. Tracts entering the market which had been operated as separate farms had a total of 59,662 acres but only 34,727 acres left the marketplace for operation as separate farms.

Examining the data for land going to expansion buyers shows that a total of 260 sale tracts with 74,752 acres entered the farmland market. Nearly 88 per cent of the tracts with 81 per cent of the acres came out of the market

for use as a part of an existing farm. In addition, 76 tracts with 30,410 acres were formerly operated as separate farms and buyers purchased the land for expansion purposes. Some land formerly operated as parts of an existing farm shifted to become separate or part-time farms or rural homes, but these figures show a net change of 18,904 acres to the farm expansion buyers. So 54.4 per cent of the land had been parts of another farm before sale, while after sale the farm expansion buyers had 68 per cent of the land in the market.

After sale, tracts to be operated as separate or independent farms had cost an average of \$290 an acre, with an average farm size of 609 acres, for an average farm value of \$176.896.

Looking Back 11 Years

The past is said to be but a prologue to the future. The following table shows tremendous changes in the index of farmland values since 1969. The figures presented are the U.S. Department of Agriculture index numbers for the current dollar values per acre for North Dakota and the "48 States" farmland, as given for their February 1/March 1 (1967=100) and November 1 reporting dates:

	North Da	48 Stat	es	
Year	February/March 1	November 1	February/March 1	November 1
1979	413		351	
1978	369	385	308	332
1977	349	360	283	296
1976	310	332	244	269
1975	265	290	214	230
1974	193	229	187	205
1973	142	168	150	170
1972	127	134	132	141
1971	122	125	122	127
1970	120	121	117	120
1969	117	121	113	116

Farmland values rose at a slow rate in the early period through 1972, then the index numbers rose rapidly, with a slowdown in 1977 and another rapid rise in 1979. North Dakota farmland values have more than tripled in the period shown. Unfortunately, the value of the measuring stick, the U.S. dollar, has declined rapidly during the same time period, reducing the amount of "real" change in farmland values. The U.S. Wholesale Price Index, (1967=100), one measure of the value of the dollar, in February 1979 was at an index of 207.6 and in November 1979 was at 226.2. Another measure of the purchasing power of the dollar is the U.S. Consumer Price Index (1967=100), which was at 199.1 in February 1979 and in October 1979 was at 215.5. Dividing the USDA current index numbers for farmland values by either the U.S. Wholesale or Consumer Price Index reveals the amount of "real" increase in farmland values. For example, using the February 1979 indices, the Wholesale Price Index (413 ÷ 207.6 = 1.99) indicates that the real value of farmland has about doubled since 1967. The Consumer Price Index yields a slightly higher estimate of $(2.07 \div 199.1)$. These figures suggest that most of the farmland value increases are a reflection of the declining value of the dollar as price inflation continues. Continued price inflation means more land value increases in current dollars unless there are major changes in crop output or government policies that affect farm costs or returns.