

UPWARD TREND IN 1981 FARMLAND VALUES

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Farmland owners and operators were confronted with many diverse changes and uncertainties in 1981. Various groups interact in the farmland market, including several types of farmers. Their motives and economic strengths vary. Reporters to this survey conducted in late October-November 1981 indicated that land values had slightly declined or softened in some areas. Estimated farmland values for land and buildings are presented in Figure 1. The estimated values in some areas changed little on the average from November 1980 but increased substantially in two farming areas.

Estimated average farmland values for 1980 and 1981 and dollar and percentage changes in the eight farming areas are presented in Table 1. Large increases were reported in the Northeast Central and South Red River Valley areas. Large percentage changes occurred in the Northwest and Northeast Central areas. Four farming areas showed modest increases of 4 to 5 percent. The 1981 increase for the state was \$21 an acre, or 4.8 percent. Little or no change in average farmland value was reported in the Northwest Central and Southwest farming areas.

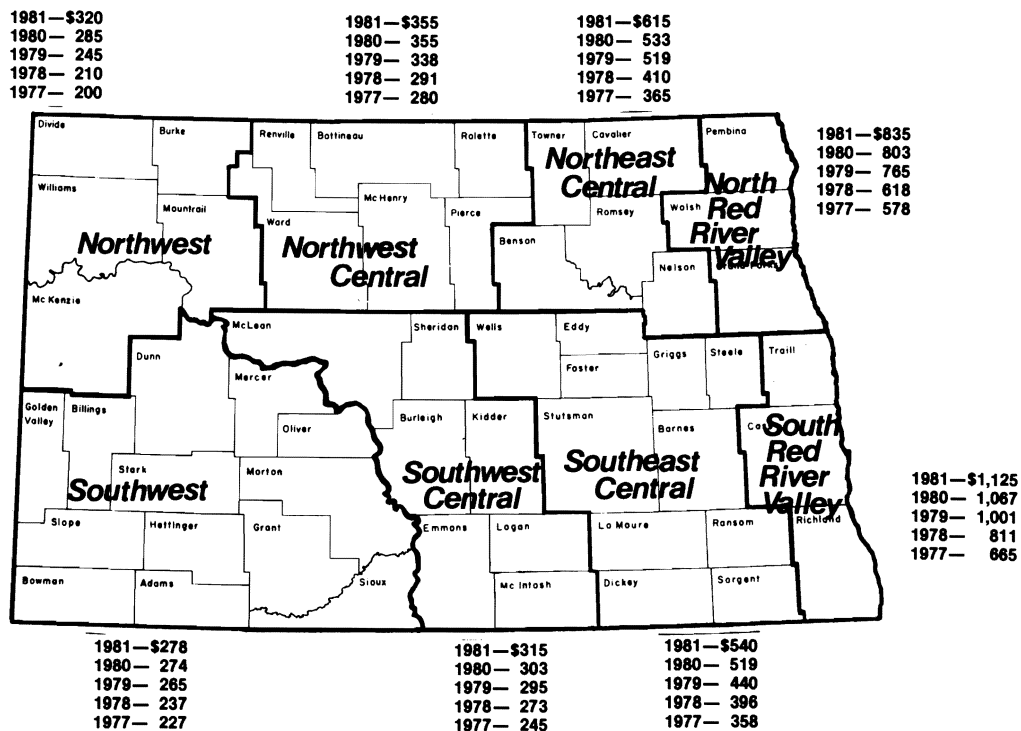


Table 1. Estimated Average Farmland Values in 1981 and 1980 and Changes Per Acre

Farming Areas	Estimated Value In		Dollar Change	Percentage Changes
	1981	1980		
	dollars per acre			percent
Northwest	320	285	35	12.3
Southwest	278	274	4	1.5
NW Central	355	355	0	0.0
SW Central	315	303	12	4.0
NE Central	615	533	82	15.4
SE Central	540	519	21	4.0
North RRV	835	803	32	4.0
South RRV	1,125	1,067	58	5.4
STATE	454	433	21	4.8

Reporters provided estimates for cropland and pastureland which are presented in Table 2. Some farming area cropland averages are down and others are up sharply. State cropland on the average increased an estimated \$30 an acre, or about 6 percent.

Pastureland values were reported to be down in most areas of the state. Estimates of pastureland values often vary a great deal from year to year reflecting both livestock prices and weather conditions. The Valley areas have minimal pastureland, so these averages are weak indicators. Excluding the two Valley areas, three areas showed some increases and three areas indicated some declines by the end of 1981.

Table 2. Estimated Crop and Pastureland Values

Farming Areas	Cropland			Pastureland		
	1981	1980	1979	1981	1980	1979
	dollars per acre					
Northwest	390	334	316	170	134	140
Southwest	322	328	331	175	179	172
NW Central	485	435	440	189	192	179
SW Central	363	353	339	204	201	207
NE Central	705	642	615	244	290	264
SE Central	610	570	503	270	254	241
North RRV	1,050	985	886	242	298	288
South RRV	1,245	1,100	1,021	400	485	377
STATE	533	503	490	217	228	221

The 1981 study used estimates by 131 farm real estate brokers, agricultural representatives, appraisers, and county supervisors of the Farmers Home Administration. Estimates were received from a broad geographical area which increases their reliability.

Reporters are asked for two kinds of data: (1) their estimates of the farmland values and the general condition of the farmland market in their service areas and (2) details on actual farm sales. Estimates and sales data are checked by computer programs for duplicate reporting of sales; then averages are developed for the eight farming areas. Individual reports are not revealed.

The eight farming areas, developed by the farm management/production staff, best represent current agricultural land uses. In any given year the number and location of reporters and reported farm sales may vary. A procedure was developed to reduce anomalies in the calculated averages.

The procedure uses weighted estimates but not the actual sales data. A county average is obtained for each of the four reporter estimates — last year's average, this year's average, cropland, and pastureland. Each county average is weighted by the land in farms in the appropriate county to obtain the weighted average estimated value per acre for each farming area. The calculated averages are for average quality land and buildings in the reporter's service area (or county) that will continue in agricultural use.

Farmland value estimates provide better indications of trends in farmland values than actual sales data. Actual farm sales data can add information about what happened in the market. The averages developed from detailed sales data present considerable insights on recent buyers, sellers, and of the tracts themselves.

A Slow Market Gets Slower

Rate of farm transfers and number of farms listed for sale or actually sold provide three measures of sales movement in the farm real estate market. The estimated rate of farm transfers per 1,000 farms is one measure of sales. Table 3 indicates that the rate of transfers of voluntary and of total sales declined in 1981 and is much lower now than in 1972 and 1973. The estimated rate of foreclosures in 1981 was the same as reported in the two previous years.

Another measure of potential movement in the market used in this survey is the number of farms listed for sale. Reporters are asked if they have more, less, or about the same number of farms listed for sale in 1981 as in 1980. Most brokers (61 percent) said they had about the same number listed in 1981. One-fifth felt they had more and one-fifth had fewer farms listed for sale. In contrast, only one-tenth of the reporters in the 1980 survey had more and two-thirds had about the same number of farms listed for sale in 1980 as in 1979.

A third measure of movement in the market comes from answers to the question on actual number of farms sold in 1981 and 1980. Only answers from brokers were tabulated. Nearly one-third of the brokers in 1981 reported having sold one farm compared to one-fifth in 1980. About 11 percent reported selling two farms and 6 percent had sold three farms in 1980 and 1981. Just over 7 percent reported selling four or more farms in 1981.

The average number of farms sold per broker was 1.5 in 1981 compared to about one in 1980. These low numbers reflect the slow market in general, the common practice of direct sales from landowners to buyers, and family transfers to help children enter farming.

Table 3. Estimated Number of Farm Title Transfers Per 1000 Farms by Method of Transfer, Year Ending March 1, 1972-75 and February 1, 1976-81, North Dakota

Year	Voluntary Sales	Estate Settlement	Foreclosures ^a	All Others ^b	Total All Classes
1981	17.2	3.9	1.2	5.2	27.5
1980	19.2	5.0	1.2	4.1	29.5
1979	17.2	3.9	1.2	5.2	27.5
1978	13.1	5.4	1.8	6.8	27.0
1977	15.1	6.6	1.4	8.2	31.3
1976	20.2	5.3	1.0	5.3	31.9
1975	20.8	5.0	---	4.7	30.5
1974	24.0	7.2	0.3	2.8	34.3
1973	26.3	7.2	0.3	3.1	36.9
1972	23.6	5.9	1.6	6.2	37.3

^aForced sales include transfers to avoid foreclosure.

^bIncludes inheritances, gifts, tax sales, and other transfers.

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

Characteristics of 1981 Farm Sale Tracts

This section examines in detail the characteristics of the 359 farm sale tracts reported sold in 1981. The averages for each characteristic can vary greatly from year to year and from locality to locality for several reasons. The annual surveys vary greatly in the number and geographical location of sales, quality of land and buildings, sizes of tracts, and motives attributed to buyers and sellers. These averages should not be applied to any individual farm. This report only provides information on trends in value supported with generalized information about the 1981 North Dakota farmland market.

The number of sales, average tract size, and average prices per acre are presented in Table 4 for the eight farming areas shown in Figure 1. The 359 sales are well distributed by farming areas with the low numbers in the Northwest and Northeast Central areas. The average size was 320 acres in 1980 compared to 341 acres in 1981. The average price per acre rose to \$506 in 1981 — up from \$432 in 1980 and \$420 in 1979.

The typical farm operating unit in North Dakota averaged about 1,070 acres in 1981 — up from about 1,043 acres in 1980. What is transferred most commonly in the North Dakota farmland market are tracts of land (parts of a farm where the landowner sells a quarter or half section). One-third of the tracts sold were 160 acres and 12 percent 320 acres, the two most common sizes. One-half were 160 acres or smaller; three-fourths were of 320 acres or less in 1981. Accordingly, they are called "sales tracts" or "tracts." Some are farms; most are parts of a larger operating unit.

A tabulation of tracts sold by size reveals that one-third of the tracts were a quarter section in size. The other sizes commonly sold were 12 percent containing one-half section, 4 percent at 80 acres, nearly 4 percent at a whole section, 3 percent at 240 acres, and just over 2

Table 4. Average Tract Size and Actual Sales Prices Per Acre by Eight Farming Areas, 1981

Farming Areas	Number of Sales number	Average Size acres	Average Sales Price/Acre dollars
Northwest	26	324	403
Southwest	45	411	295
NW Central	44	430	385
SW Central	57	539	299
NE Central	22	285	678
SE Central	66	312	659
North RRV	45	168	882
South RRV	54	213	1,060
STATE	359	341	506

percent at 480 acres. The quarter-section size dominated in all areas ranging from a low of 22 percent of the sales in the Southwest area to 42 percent in the Southeast Central area and 44 percent of all sales in the North Red River Valley. Only 18 percent of the sale tracts in the North Red River Valley had over 160 acres, as did 29 percent in the South Red River Valley area. In contrast, 72 percent of the tracts in the Southwest Central area and 69 percent in the Southwest area contained over 160 acres.

Most tracts (67 percent) reported sold in 1981 were bare tracts (i.e., unimproved or without buildings). These tracts accounted for only 44 percent of the land sold with an average size of 225 acres, and their sales prices averaged \$549 per acre. Eleven percent of the tracts had what the reporters rated as "good" quality buildings. The good quality tracts accounted for 22 percent of the land for an average size of 679 acres and averaged \$540 an acre. Another 11 percent of the tracts, also with 22 percent of the acreage, had average quality buildings and an average size of 685 acres, but the sales prices only averaged \$388 per acre. Nearly 11 percent of the sales had poor quality buildings, yet their sales prices averaged \$505 an acre and their average size was

375 acres. Buyers paid almost the same per acre prices for tracts with either no buildings or good-quality buildings. Also, tracts with poor quality buildings sold for nearly as much as those with good quality buildings in 1981.

Bare tracts comprised one-half or more of all sales in each farming area. Farming areas with the lowest proportion of bare tracts were the Northwest Central area (50 percent) and the Southwest area with 53 percent. In contrast, the North Red River Valley area reported 84 percent of the sale tracts with no buildings; 77 percent in the Southeast Central area, and 76 percent in the South Red River Valley area were bare tracts. Bare tracts typically were smaller in size, averaging two-thirds of the size of all tracts with buildings.

Quality of land in the tracts was rated by the reporters. About 38 percent of the tracts were rated to have "good" quality land and sold for an average of \$726 an acre. One-half of the sales had average soil quality and averaged \$402 per acre. Eleven percent of the tracts were given poor quality ratings and their average sales price was \$352 per acre.

Credit was used to finance 88 percent of the sales with 90 percent of the land purchased. These tracts averaged 353 acres in size and sold for an average of \$502 an acre for an average price of \$174,470 per tract.

Methods used to finance the sale tracts are presented in Table 5. Mortgage financed sales accounted for 57 percent of all tracts and 52 percent of the acreage sold in 1981. Average price of these sales was \$573 an acre and average size was 315 acres. Contract for deed purchases were larger at an average size of 425 acres, but carried a lower average price of \$405 an acre. Cash purchases averaged \$566 an acre and 294 acres in size. Cash purchases were most common in the Southeast Central area. Mortgage financing dominated in both the North and South Red River Valley areas at 60 percent of the area purchases. Contracts for deed accounted for 60 percent of the purchases in the Southwest Central area.

The Federal Land Bank Associations (FLBA's) were credited with financing 35 percent of the tracts, but they also jointly financed some tracts. Sellers slipped to second place after being the most frequent source of financing in previous years. Sellers financed 28 percent of the sales which contained one-third of the land reported transferred in 1981. The Farmers Home Administration (FmHA) rose to third in frequency of financing with 18 percent of the sales. But they also jointly financed 7 percent more of the sales with the FLBA's and nearly 9 percent more of the sales with the Bank of North Dakota. The joint financing arrangements help land buyers and raise the importance of the FLBA's and FmHA's as sources of financing. Recent surveys show a decline in the role of "individuals other than sellers" and insurance companies in the market. Sellers nearly always use contracts for deed, while the others commonly use mortgages as their credit instruments.

Some Seller Features

Active farmers continue to be the leading source of land in the marketplace. They provided 35 percent of the tracts with 48 percent of the acreage sold in 1981. Retired farmers sold one-fourth of the tracts with one-fourth of the land sold. About 22 of the tracts came from estate settlements which brought in 16 percent of the land. "Absentee owners" provided 16 percent of the tracts with 10 percent of the land. The larger size tracts came from active farmers, followed by those from retired farmers.

The most common reasons given for selling were: (1) health or retirement due to age for 28 percent of the tracts with 34 percent of the acreage sold, (2) settling of estates had 27 percent of the sales with one-fifth of the land, (3) pressure of debts or possible foreclosure for 17 percent of the tracts with 17 percent of the acreage, (4) good profits brought in 8 percent of the sales, (5) exchange tracts for 5 percent of the tracts, and (6) change of occupation had 6 percent of the tracts with 11 percent of the acreage sold in 1981. This order of reasons and relative proportions of tracts and acreages are similar to figures reported for previous years.

Table 5. Sales by Method of Finance in 1981

Method of Finance	1981	1980	State Averages for Sales of		
			1979	1978	1977
			percent of sales		
Cash	12	31	16	37	11
Mortgage	57	30	45	29	36
Contract for Deed	31	39	39	34	53

Table 6. Sales By Age of Sellers in 1981

Age Groups	1981	1980	1979	1978	1977
	percent of sales				
Under 35	6	5	5	2	17
35-44	12	17	10	16	8
45-54	21	22	15	15	21
55-64	27	32	33	23	23
65-74	31	21	32	34	18
75 and Over	3	3	5	10	13

Average age of all sellers was 56.1 years with an age distribution presented in Table 6. Ages of sellers ranged from 25 to 85 years. The distribution of ages in 1981 indicates somewhat more sales from those 55 to 74 years and fewer from the less than 45 age group. It also continues the trend of the last three years of fewer sales from those 75 years and over in age.

Some Buyer Characteristics

Most buyers lived in the county where they bought their tract. About 86 percent of the sale tracts with 80 percent of the land transferred went to buyers residing in the county of sale. Buyers from a nearby county bought 9 percent of the tracts with 11 percent of the acreage. Buyers from another state bought 3.5 percent of the tracts with nearly 6 percent of the acreage sold in 1981. Out-of-state buyers were somewhat more important in the Northeast Central, Southwest, and South Red River Valley areas compared to other residences. These proportions are similar to figures reported in previous years.

The percentage of buyers related to the sellers rose in 1981. Buyers were related to the sellers for 11 percent of the purchases in 1981, 7 percent in 1980, and only 4 percent in the 1979 report. The increase in percent of tracts bought by relatives also was mirrored in the percent of acreage bought. The 11 percent of buyers who were related to the sellers bought just over 10 percent of the land reported sold in 1981.

Most buyers were landowners when they bought more land in 1981. Landowners accounted for 47 percent of the purchases and bought 47 percent of the land. Renters made up 39 percent of the buyers and purchased 37 percent of the acreage. Tracts purchased by landowners averaged 346 acres and \$580 an acre in price. Renters paid an average of \$454 an acre for tracts that averaged 323 acres in size.

Average age of all buyers was 36.4 years with the frequency distribution presented in Table 7. Buyers ranged in age from 19 to 78 years. A shift to more buyers under age 25 is shown and relatively fewer were aged 55 years and over. The computer tabulation showed a bimodal

distribution with 10 percent of the buyers 30 years old and 10 percent at age 50. The proportion of all buyers aged 45 years and older has been declining in recent years from 39 percent in 1979 to 32 percent in 1980 down to 30 percent in the 1981 survey.

Tract Uses Before and After Sales

The 1981 farmland market can be characterized by the shift in the uses of the sale tracts **before** and **after** sale. The two views offer an insight into the changing landowner scene. The transfers of tracts can be viewed as a flow of land resources over time.

Before sale, about 68 percent of the tracts with 53 percent of the acreage reported sold in 1981 had been a part of another operating unit with an average size of 265 acres. Another large set of tracts entered the farmland market having been operated as separate, owner-operated, independent farm units. They accounted for 28 percent of the tracts with 54 percent of the land entering the market, averaging 537 acres in size. A few sales had been part-time farms or farms of various other uses.

After sale, a new distribution is apparent as presented in Table 8. Expansion buyers added the tracts they purchased to existing, ongoing farms. They purchased 83 percent of the tracts with 69 percent of the acreage. Their tracts averaged 281 acres in size with an average sale price of \$558 an acre. Only 12 percent of the tracts, although with one-fourth of the land, went to be used as separate, owner-operated farms. These farms averaged 701 acres in size and cost an average of \$410 an acre. The average size for all tracts was 341 acres. Expansion buyers bought smaller sized tracts while tracts going for separate farms were just over twice the average size tract reported sold in 1981.

The flow of land can be examined in more detail in the after sale view of the expansion or add-on tracts and those going to separate farms. About 240 tracts entering the 1981 market had been used as parts of another farm and 97 tracts had been separate farms. Three-fourths of the expansion or formerly part of another farm went out of the market for that same use. Expansion buyers

Table 7. Sales By Ages of Buyers In 1981

Age Groups	1981	1980	1979	1978	1977
			percent of sales		
Under 25	15	11	9	7	11
25-34	31	26	28	20	13
35-44	22	31	24	33	21
45-55	24	19	28	30	39
55 and Over	6	13	11	30	16

Table 8. Sales By Types of Buyers In 1981

Type of Buyer	1981	1980	State Averages For		
			1979	1978	1977
			percent of sales		
Single Farms	12	13	14	13	10
Expansion Buyers	83	83	80	80	85
Other Buyers	5	4	6	7	5

bought 76 percent of the tracts that had been parts of another farm, plus 65 percent of what had been separate farm tracts and some other tracts. There was a large net transfer of land to add-on or expansion buyers and a one-tract increase in those in other uses.

The sharp decline was in the number of tracts entering and then leaving the market as separate farms. This study showed 98 separate farms entered the market but only 32 left for use as separate, independent farms. This group picked up eight large tracts which had been parts of another farm.

A Longer View of Land Value Changes

The index of farmland values is based on two surveys a year conducted by the U.S. Department of Agriculture. The two surveys go to two somewhat different groups but measure changes in the farmland market in November and February. The February index was shifted to the 1977 base = 100 to give readers a better feel for price changes. The November survey was ended in 1980. Figures for 12 years are presented below for North Dakota and the "48 states."

USDA Index of Farmland Values

Year	North Dakota		48 States	
	February/March 1 (1977 = 100)	November 1 (1967 = 100)	February/March 1 (1977 = 100)	November 1 (1967 = 100)
1981	145		158	
1980	136		145	
1979	119	434	125	379
1978	106	385	109	332
1977	100	360	100	296
1976	89	332	86	269
1975	76	290	75	230
1974	55	229	66	205
1973	41	168	53	170
1972	36	134	47	141

Prior to 1972 the indices reflected only small increases per year in farmland values. The rise in land values accelerated in 1973, slowed in 1975-78, accelerated again in 1978, and showed a small decline in the 1979-80 period.

Changes in land values can be measured in current dollars or adjusted for what is happening to the dollar. Which index to use to adjust land values for changes in the dollar is a problem. The Consumer Price Index is an appropriate index to use for adjusting prices of consumer-oriented retail goods, but land has several types of demand. Buying land as a producer of raw material suggests using a wholesale or primary producers index. Some buy land for consumptive purposes (scenic home site) and others for speculative, developmental, hedge, and many other reasons.

What does the future hold for land values? Current economic forces affect the various landowner and buyer groups in various and sometimes conflicting ways. Agriculture is not homogeneous, nor are the participants in the farmland market, and society has not articulated its various and sometimes conflicting goals clearly.

Reporters were asked about their expectations for land values in 1982. One-half expected about the same values at the end of 1982 as the survey in November 1981. One-fourth expect to see some declines in 1982 land values which is up greatly from the 6 percent so reporting in the 1980 survey. The decline in optimism occurred in those expecting a 5 percent or larger increase in 1982 land values. This optimistic group declined in 1981 to 22 percent from 51 percent in the 1980 survey. The mood of the reporters is much more conservative or less optimistic than last year.

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TABLE 5. NUMBER OF ANIMAL UNITS REQUIRED TO CONSUME THE SUN MEAL PRODUCED BY THE ON FARM PRESSES USING VARIOUS FEEDING RATES.

Tons of Meal Produced	Number of Animal Units Pounds/Day of Sun Meal ^a		
	1	2	3
33 ^b	367	183	122
38 ^c	422	211	141
71 ^d	789	394	263
322 ^e	3,578	1,789	1,193
966 ^f	10,733	5,367	3,578

^aSun meal supplement was fed for 180 days.

^dMeal production from the 0.35 ton/day press operating 300 days.

^bMeal production from the 1.67 and 5.0 tons/day presses producing 4,800 gallons of sun oil.

^eMeal production from the 1.67 tons/day press operating 300 days.

^cMeal production from the 0.35 ton/day press producing 4,800 gallons of sun oil.

^fMeal production from the 5.00 tons/day press operating 300 days.