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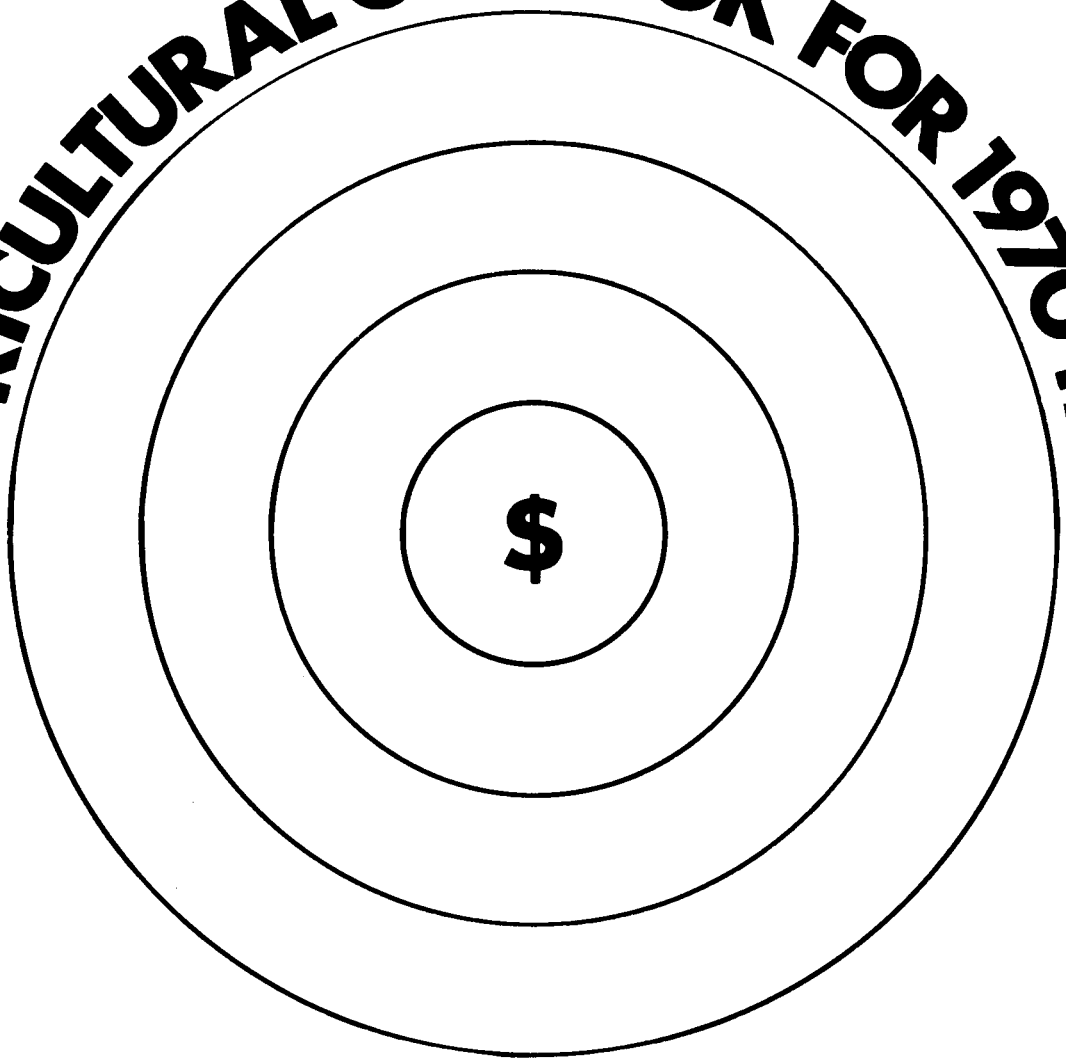
AGRICULTURAL OUTLOOK FOR 1970-1971



DEPARTMENT OF AGRICULTURAL AND APPLIED ECONOMICS

AGRICULTURAL EXTENSION SERVICE
UNIVERSITY OF MINNESOTA

AGRICULTURAL OUTLOOK 1970-71

by

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AGRICULTURAL INCOME

During the past few years, Minnesota farmers specializing in crop production have been in a net income squeeze while livestock producers have enjoyed rising incomes. However, during the early 1960's livestock producers had difficulty covering their production costs and showed relatively poorer incomes than crop specialists.

The early 1970's will be a repeat of the early 1960's. Livestock and livestock product prices will decline under increasing supplies during the 1970-71 marketing year. Hog prices will be sharply lower. Beef prices will be under pressure. Poultry and egg prices will be down. Milk prices will stabilize.

While livestock prices decline, input prices will go up as inflation continues. Labor will continue to be the input that increases in cost most rapidly. This will encourage additional substitution of mechanized livestock operations for those requiring high labor inputs.

Small livestock producers unable or unwilling to spread family labor costs over a larger volume will suffer sharp income losses. These losses will not be easily offset by increasing the non-farm income component of family income due to the continued high unemployment levels in the year ahead.

Careful cash flow budgeting will be necessary, especially in the next couple of years, to make ends meet. Hogmen, cattle feeders, and poultrymen will find fewer dollars available for capital goods replacement. Dairymen will see less change from recent years but they will miss the upward movement in milk prices.

Since two-thirds of the cash receipts of Minnesota farmers is from livestock (see Table 1), the expected reduction in livestock prices in the year ahead will have a real impact on the economy of Minnesota.

However, income prospects for crop farmers looks somewhat brighter for the coming year. High livestock numbers coupled with an unusually strong export demand have reduced crop carryover stocks to the point that prices have moved off the support floors. Production and utilization prospects for the coming year suggest that crop prices will be sustained at higher levels for the next marketing year. If inflation is dampened, this will result in some improvement in income to crop farmers.

For the United States, 1969-70 farm income was near record levels. For the calendar year of 1970 net income will be over the 16 billion dollars despite declining livestock prices during the last half of the year.

Odds are that net income in 1970-71 will be reduced because of lower livestock prices and higher production costs. Estimates of the changes we expect in the different components of farm income in the year ahead are shown in Table 2.

Table 1. Percentage Distribution of Cash Receipts From Marketings Average 1967-69

Group	United States	Western States	West North Central States	Minnesota
	Percent	Percent	Percent	Percent
Livestock and Products	58.3	48.4	69.3	68
Meat Animals	35.4	32.2	57.0	38
Dairy Products	13.3	9.6	8.6	22
Poultry and Eggs	8.9	5.6	3.3	6
Miscellaneous Livestock	0.7	1.0	0.4	2
Crops	41.7	51.6	30.7	32
Food Grains	4.9	6.0	6.6	3
Feed Crops	9.7	6.5	13.8	13
Cotton	2.6	3.0	0.2	--
Oil-bearing	6.4	---	7.8	9
Tobacco	2.9	---	---	--
Fruit and Nuts	4.5	12.4	0.1	--
Vegetables	6.2	14.5	0.8	3
Other Crops	4.5	9.2	1.4	--

Table 2. Farm Income, 1968/69, 1969/70 and estimates for 1970/71

Item	Unit	1968/69	1969/70	1970/71
Livestock products				
Volume of marketings	1957-59 100	125	126	130
Prices received	do.	118	130	124
Cash receipts	Bil. dol.	26.9	29.6	29.0
Crops				
Volume of marketings	1957-59 100	132	131	133
Prices received	do.	101	101	103
Cash receipts	Bil. dol.	18.9	18.9	19.6
Total cash receipts	Bil. dol	45.8	48.5	48.6
		(Seasonally adjusted annual rates)		
Cash receipts	Bil. dol.	46.0	48.3	48.6
Non-money income and Government payments	Bil.dol.	7.0	7.4	7.3
Realized gross farm income	Bil. dol.	53.0	55.7	55.9
Production expenses	Bil. dol.	37.2	39.4	40.9
Realized net farm income	Bil. dol.	15.8	16.3	15.0

-- Paul R. Hasbargen

FARM PROGRAMS

AT A GLANCE: The Food and Agriculture Act of 1965 expires with this year's crop. This is the law that authorized our present price-support and production-adjustment programs.

The House, with the support of the Administration, passed a bill on August 4th. The Senate, at the time of this writing, had not yet acted. Therefore, the nature of the commodity programs to take effect next year are still a matter of speculation. But the provisions of the House bill may suggest some of the main features that will eventually be adopted.

Feed Grains

The major features of the feed grain title of the House bill are compared in Table 1 with the feed grain program in effect for this year's crop. Under the House bill, by complying with the set-aside - that is, by diverting feed grain or other crop land - participating farmers would become eligible for feed grain loans and payments. Having complied with the set-aside provisions, participating farmers would then also be permitted to plant their remaining acres to any combination of crops they desire.

The total support rate under the House bill would be $1.35/bushel for corn and would apply to 50 percent of the base production - the same as the 1970 program. However, the support payment for corn under the House bill would be the difference between $1.35 per bushel and the average market price for the first five months of the marketing year, with a minimum payment of 32 cents per bushel. Under the 1970 program the support payment for corn is 30 cents per bushel.

The loan rate under the 1970 program is $1.05 per bushel while the House bill specifies that the loan rate shall be set by the Secretary of Agriculture between 0 and 90% of the parity price. This is a controversial feature of the House bill since it grants the Secretary considerable discretion in establishing the loan rate, which the Administration has indicated should be closely aligned with market prices. It should be noted however, that in the event market prices fell, the impact would be partially offset since the support payment applicable to 50 percent of the base production would be increased a compensating amount to maintain the total support rate of $1.35 per bushel.

The House bill, like the 1970 program, would make possible the diversion of additional land for payment beyond the minimum required for participation. Advance price support payments to participants of 32 cents per bushel would be required under the House bill, and would be paid as soon after July 1 as possible.

A feature of the House bill that might come under the greatest scrutiny by the Senate is the loan level provisions. Influential Senators have indicated a strong preference for loan levels expressed in relation to parity prices.

Wheat

The House bill continues the main features of the two price plan as presently provided for under the 1965 Act. As in the feed grain proposal, in order to be eligible under the program, a wheat farmer must abide by the set-aside provisions as specified by the Secretary of Agriculture.

The loan level for wheat for participating farmers would be set between 0 and 100% of parity. In setting the loan level, the Secretary would be instructed to consider "competitive world prices of wheat", "feeding value of wheat in relation to feed grain", and "the level at which price support is made available to feed grains." Under the 1970 wheat program the loan rate is $1.25 per bushel. Just as in the feed grain proposal, the lack of a parity-related minimum price support level is a source of controversy which might be changed in the negotiation to come between the House and Senate.

The bill provides for certificate payments to participating producers on an amount of wheat equal to the amount of U.S. food consumption. As under the present program, these payments would bring the return to producers on this wheat up to the parity price. Advance certificate payments to participating farmers are provided for under the bill.

Dairy

An important dairy feature of the bill continues and amends the authority for the dairymen's Class I base plan in federal market order areas provided by the 1965 Act. This provision so far has not been used a great deal. However, considerable interest could develop if CCC purchases under the dairy price support program expand rapidly over the next 3 to 5 years.

The bill also removes the mandatory butter-fat price support program on farm-separated cream. Removal of this provision would not affect the general level of dairy supports, but would permit the Secretary greater latitude in setting CCC buying prices for butter, cheese and nonfat dry milk. Under the present law, the need to support fat in farm-separated cream imposes a needless restriction on the price at which butter is purchased by CCC and hence the market price. Since fat consumption, not only in butter but also fluid products continues to decline, while on the other hand the delivery of farm-separated cream is no longer so important, there is fairly widespread support for this change in the dairy support program.

Another feature of the dairy title extends the Secretary's authority to donate dairy products owned by CCC to the armed services and the Veteran's hospitals

while another extends the indemnity payments for pesticide contamination.

Wool

The House bill would extend the National Wool Act as amended, and continues the incentive payment price of 72 cents per pound for shorn wool.

Payments Limits

The House bill would provide for a payment limit of $55,000 per farm for each of the three major commodity programs. The payments considered under this limit would include only price support payments, set-aside payments, diversion payments, public access payments and marketing certificates. Price support loans, CCC storage payments, and other payments such as those under the wool and sugar programs would not be subject to the limitation.

Minnesota farmers would not be directly affected by a payment limitation of $55,000 per crop. Nation-wide, in calendar year 1969, only 1,100 farmers received payments of this magnitude. None of them were located in Minnesota. Even a payment limit as low as $20,000 would affect very few Minnesota farmers. In 1968, 23 Minnesota farmers received payments in excess of $20,000.

Implications

The greater latitude granted to the Secretary by the House bill in setting loan levels has been pointed out. The purpose is to more closely align the commodity programs to market conditions. The controversial nature of this feature has also been noted.

The set-aside feature of the bill also merits some attention. Granting, as it does, greater flexibility in farmer's choice of cropping patterns, price alignment between crops would become increasingly important. Otherwise drastic shifts between crops might result. Anticipating this, the bill provides that the Secretary may may impose planting restrictions during a two-year period to provide a transition to the set-aside.

Table 1. Major provisions of feed grain programs.
Corn example under House Bill and 1970 program.

	House Bill	1970 Program (1965 Act)
Loan rate	0-90% of parity price	$1.05/bu.
Support payment	difference between $1.35/bu. and 5 mo. market average (32 cents/bu. minimum)	.30/bu.
Total Support rate	$1.35/bu.	$1.35 (60-90% of parity)
Base production supported	50%	50%
Additional diversion for payment	possible	yes
Advance payments	32 cents/bu. July 1	no (possible)
Condition of eligibility	set-aside	20% of feed grain base

--Martin K. Christiansen

FEED GRAINS

AT A GLANCE: Total feedgrain supplies for 1970/71 look lower than last year, but utilization will probably be higher. Domestic livestock numbers are now expected to be up substantially, although rate of feeding may be down. It looks like total feedgrain consumption will be up. Exports may hold around the 1969/70 level. Demand will dip into stocks, pushing price above 1969/70 levels. Look for Minneapolis corn prices at about $1.35 in the spring of 1971.

The Feedgrain Situation

Total feedgrain utilization will set another record in the 1969/70 crop year. High rate of utilization has been paced by domestic livestock feeding. Exports ran moderately higher than those from the 1968 crop. Market prices averaged a few cents above a year ago.

Prospects for 1970/71 are now for a slightly smaller total supply than in 1969/70. Carryover going into the new crop year will be about 45 million tons. Production will probably be about 174 million tons. Total supply will likely be 2 - 3% under a year ago. Livestock numbers consuming the 1970/71 supply are expected to be higher by about 8%. Although exports will probably be down, total utilization will probably exceed production, creating a demand sufficiently strong to pull down stocks next spring and summer.

Corn

Corn is the major Minnesota feedgrain, so let's focus on it briefly.

1969 Review:

Total corn production in 1969 was 4,578 million bushels. Carry over was 1,113 million. Total supply available for the 1969/70 crop year was 5,692 million bushels. This was a record.

But utilization also was high. More cattle fed to heavier weights, expanded hog farrowings in spring and summer, and bountiful flocks of broilers and turkeys combined to consume more corn than ever. By the end of this crop year (September 30, 1970) about 3,800 million bushels of corn will have been fed to U.S. livestock. Total domestic corn utilization will probably exceed 4,200 million bushels, since 393 million bushels are now estimated to have gone for feed, industrial and seed uses. Exports have been moving rapidly, but higher late summer corn prices may slow the pace. Thus, it looks like about 575 million bushels of last

year's crop will be exported by September 30. This means that total disappearance of corn in the 1969 marketing year will be about 4,874 million bushels. This exceeds 1969 production. Stocks on October 1, 1970 will be down to about 880 million bushels. This is 230 million bushels less than the stocks on hand October 1, 1969.

The high rate of utilization relative to production put upward pressure on corn price in the spring and summer of 1970. For the U.S. as a whole, weighted yearly average farm price is about 4 cents above the price received for the 1968 crop. The seasonal rise was 17 cents from November to July, and briefly to 30 cents in the spurt of late August.

Minnesota corn price performance was disappointing in the early part of the marketing year. There was only slight price rise from November through March, despite more bouyant prices in other parts of the country. For example, the average Ohio price for all grades of corn delivered in January was 19 cents above Minnesota. Differentials in regional demand, coupled with transportation problems, accounted for the difference. However when river movement began and supplies became short elsewhere, Minnesota prices moved up sharply. From the end of March to mid-June, Minnesota corn price rose about 15 cents. Prices eased off in late July, but soared upward in August, propelled by fear of Southern leaf blight damage to the 1970 crop in major production areas of the U. S.

1970/71 Outlook:

Assuming the August 1 USDA projection approximates the 1970 harvest, producers will haul nearly 4,700 bushels of corn out of the field this fall. This would be just short of the 1967 record. It will be produced from 57,991,000 acres expected to be harvested -- up 6% from 1969. On August 1, yield was projected at 80.9 bushels per acre -- down from 83.9 in 1969. When anticipated production is added to stocks expected to be on hand October 1, total corn supply for the 1970/71 crop year is 5,574 million bushels. Although smaller than the 1969 supply, it is slightly larger than in most years since 1960.

This supply is not burdensome balanced against expected utilization. Livestock numbers are moving up significantly. Larger feedlot placements, poultry hatches, and sow farrowings all point to high feedgrain utilization. The level of sow farrowings may be of particular importance for this winter's corn market in Minnesota.

Rate of feeding per animal unit may be down by 4 - 5% in 1970/71. There was a record rate of feeding in 1969/70, but livestock/feed price ratios are not expected to be as favorable in the coming year. One would not expect livestock to be fed to weights as heavy as in 1969/70. However, lower feeding rates are not expected to offset numbers increase. Net increase in utilization will probably be approximately 4%.

Supplies of competing feedgrains will likely be lower than in the past year. Grain sorghum production is expected to be 8.5% under last year. Oats and barley production will also be under the 1969 crop. Hence, corn utilization for feed will likely be up by more than 4% -- to just under 4 billion bushels.

An important competitive factor to watch is potential wheat feeding. Although total wheat production is down in 1970, supplies are ample to be moved into feedlots at competitive prices. If corn prices are at the levels of late August, wheat becomes a competitive feed grain. The U.S. had about 2.2 billion bushels of wheat on hand after the 1970 harvest.

Corn exports in 1970/71 will probably be lower than in 1969/70. More feedgrain is available from the Southern hemisphere and U.S. corn prices will likely be higher. Also, many observers are pessimistic about restrictive attitudes toward world trade. Current expectations suggest an export projection of about 475 million bushels of corn.

Corn used in feed, industry, and seed has been trending upward about 8 million bushels per year. Increase in 1970/71 will likely be at about the same rate. Hence, about 401 million bushels will be used in food, industry, and seed in 1970/71.

In total, we now project 1970/71 corn utilization to be 4,874 million bushels. This is nearly 200 million bushels more than indicated August 1 production. It means reduction in stocks by October 1, 1971 to 700 million bushels -- less than two month's supply at average rates of utilization.

All these developments point to higher expected prices for the 1970 Minnesota corn crop. Past experience suggests the projected amount of stock draw-down could be associated with approximately a 5¢ season average price increase. Normally, it would also mean a fairly sharp seasonal price rise as "free stocks" dwindled by early summer of the year following harvest. This means a Minneapolis cash corn price of about $1.35 per bushel by late spring. The season's price peak is often reached in the June-July period.

Oats and Barley

Minnesota grows substantial amounts of oats and feed barley. But, since corn is the dominant feed grain, one normally expects other feedgrain prices to shift parallel with corn.

Total oat production on August 1 was forecast to be about 5% under 1969. The crop is estimated at 903 million bushels. Carryover is slightly above a year ago. Total supply for 1970/71 will be about the same as 1969/70. Given the livestock feeding expectations, a moderate oats price increase is to be expected.

Look for oats to be priced about 3¢ per bushel above last year.

Total barley production on August 1 was estimated at 410 million bushels. This is 2% less than the 1969 crop. Adding the 230 million bushel carryover, and subtracting non-feed uses, feed barley supply will be about 500 million bushels. This is about the same as lat year's supply. Given the likely demand situation, prices should run slightly higher than last year. Look for feed barley to average about 4¢ above 1969/70.

CORN SUPPLY AND UTILIZATION

Year beginning Oct. 1	Supply				Utilization				
					Domestic				
	Carry-over	Pro-duction	Imports*	Total	Feed	Food, Industrial Seed	Total	Exports*	Total Use
			Million Bushels						
Aug. 1964-68	1,102	4,168	1	5,271	3,302	368	3,670	583	4,253
1966	840	4,117	1	4,958	3,284	364	3,648	487	4,135
1969	1,113	4,578	1	5,692	3,844	393	4,237	575	4,812
1970**	880	4,693	1	5,574	3,998	401	4,399	475	4,874
1971**	700								

* Includes grain equivalent of products

** Based partially on estimates, Mid-August 1970

--Willis E. Anthony

SOYBEANS

AT A GLANCE: Total supplies for 1970/71 will be down from last year. Utilization should trend upward. Domestic demand for livestock feed should increase. Export demand may increase, but not at the record pace of last year. Increased processing plant capacity will likely reduce crushing margins. Price in the $2.85 range by spring of 1971 appears reasonable.

Review of 1969/70:

In light of the past year's experience, projecting an outlook for soybeans is a hazardous endeavor. Let's review what happened. The 1969 crop of 1,117 million bushels was a record. The carryover of 324 million bushels was also a record high. Total supply was 1,441 million bushels -- 172 million more than the year before. The previous record increase in utilization was 100 million bushels. The average annual increase in utilization since 1960 was about 50 million bushels. Thus, supplies looked burdensome to the market and virtually every observer expected price would be governed by the government loan rate. This didn't happen.

Cash beans at Minneapolis did sell in the $2.25 - $2.30 range during harvest. But, price rose during the winter and spring. As the season moved into mid-summer, we did not see the usual price decline. By July, soybeans were 20 cents per bushel above the previous year.

What happened? The short answer is that demand for oil and meal were strong in both domestic and export markets.

Domestic demand for soybean oil was strong for two reasons. Total fats and oils utilization was up by 415 million pounds. Meanwhile domestic nonsoybean oil supply was down 279 million pounds. The resulting increase in domestic soybean oil utilization was 694 million pounds, roughly equivalent to 65 million bushels of beans.

Domestic soybean meal utilization also was a record high. By August 30, it is expected to be 1,861 thousand tons. There were several contributing causes. Decrease in animal protein meal was 493 thousand tons. Other vegetable protein meal use was down 257 thousand tons. At the same time, livestock numbers were up and feeding rate per animal was up. The former allowed for a 764 thousand ton increase and the latter for another 347 thousand ton. The 1,861 thousand ton meal increase consumed an extra 78 million bushels of beans.

Exports were also extremely high for all fats, oils, and protein meal. Soybean oil exports were up 330 million pounds. Soybean meal exports were up 4 million tons. Exports of soybeans as beans were up 128 million bushels. Hence, total increase of

exports as beans and bean equivalent of oil and meal accounted for 183 million bushels and had a dramatic impact on demand for soybeans.

Increases in utilization of this magnitude might have been expected at significantly lower prices. But such was not the case. Demand obviously was sharply higher. Domestically, higher livestock numbers and heavier fed weights clearly meant some demand increase. But the big factor was export demand backed with dollars.

The source of the export demand increase is still murky. Observers attribute it somewhat to lower world supplies of sunflower oil and fish oil. But, there also appears to have been much greater demand by developing countries. In particular, Latin America, Eastern Europe, Africa, and the Mid-East bought large quantities of oil; while Japan, Western Europe, and others were willing to trade more dollars for meal.

Outlook for 1970/71:

In the context of the market situation for the 1969 crop, the outlook for 1970/71 must be construed with optimism.

Based on the August 1 USDA forecast, soybean supply will be less than a year ago. The crop is forecast at 1,114 million bushels. The carryover on September 1 may be about 215 million bushels. This would make a total supply of 1,329 million bushels -- about 8% less than one year ago. Subtracting "pipeline" requirements, this is roughly the size of 1969/70 utilization. Hence, supply ought not be burdensome.

Demand is less certain. Domestically, livestock numbers are expected to be up. Potentially lower livestock/feed price ratios and lighter fed weights will temper the impact of rise in numbers. Larger supplies of competing fats and oils will also be available. A 3% increase in domestic soybean use looks probable at the past year's product price levels. Exports may not rise at the past year's rate, but the trend should continue upward unless prices rise sharply.

Combining domestic and export utilization tendencies, it is clear that the supply is short relative to demand. This may lead to a product price rise and/or a sharp decline in exports to put them more in line with years prior to 1969/70.

Will all this mean higher soybean prices? The answer is: it should. Crushing margins during the past year have been the highest in many years, averaging about 65 cents in the September-May period. Processors have been operating at full capacity all year without building up stocks of oil and meal. But there have been significant additions to plant capacity, such that one would expect more normal margins in the coming year as processors more actively bid for beans to maintain utilization of plant. If product prices continued at the same level as last year, we could expect soybean

prices as much as 40 cents per bushel higher, on the average, than 1969/70. Some observers are now expecting to see soybeans at about the $3.00 per bushel level in the spring of 1971. Two critical factors are the rate of export and the degree to which expanded crushing capacity will result in trimmed crushing margins.

In past years, price at this level has sharply curtailed use. We would expect price rise to stop short of $3.00 -- perhaps at about $2.85 - $2.90, basis Minneapolis.

SOYBEAN SUPPLY AND UTILIZATION

Year beginning Sept. 1	Supply			Utilization			
	Carry-over	Production	Total	Seed, Feed, etc.	Crushings*	Exports**	Total
	Million Bushels						
1964-68	78	911	989	52	552	256	859
1969	324	1,117	1,441	61	725	415	1,201
1970**	215	1,114	1,329	67	772	415	1,254
1971**	75						

* Does not include oil and meal exports

** Based on estimates Mid-August, 1970

--Willis E. Anthony

BEEF

AT A GLANCE: Prices on slaughter cattle and feeder cattle are expected to decline through the fall months. Supply and demand conditions suggest that cattle prices in the year ahead will average lower than in the past year. Feeder and feed prices will both be higher than last fall. Returns over feed costs will be less than average.

Feeder Cattle

There are more yearling feeders available than a year ago because slaughter increases have been small relative to the January 1 inventory increase. The supply of calves is also considerably higher than a year ago because of the increased calf crop and the decrease in calf slaughter. These number change estimates were arrived at by the process shown in the following table.

Table 1. Estimated Changes in Feeder Cattle Supplies on July 1, 1970 vs. July 1, 1969.

Item	Yearlings	Calves
	Number Change From Year Earlier	
On Hand January 1		
Calves other than dairy	+ 1,000,000	xx
Yearlings other than dairy	+ 600,000	xx
Calf Crop	xx	+ 850,000
Imports	+ 100,000	+ 50,000
TOTAL SUPPLY CHANGE	+ 1,700,000	+ 900,000
January-September Disposition		
Steer and Heifer Slaughter	+ 400,000	xx
Calf Slaughter	- 100,000	- 300,000
On feed October 1	+ 200,000	xx
TOTAL DISPOSITION CHANGE	+ 500,000	- 300,000
ESTIMATED CHANGE IN AVAILABLE FEEDERS	+ 1,200,000	+1,200,000

Beef prices are such that herd expansion will continue. However, since expansion will come in part from slower culling, the rate of heifer with-holding for replacement stock will not change enough to materially affect feeder supplies.

Range conditions are above average in the western states. However, pastures are dry in the western cornbelt and the southern plains. Therefore, yearlings from this area will be moving into commercial feedlots quite rapidly during the early fall.

The demand for feeder cattle is moderate. Feedlot capacity continues to expand rapidly in the southern plains. But, profits on recent feedlot turns have not been high. And feeders are facing the prospects of higher feed grain prices.

Prices on feeders will decrease from August levels by late fall. Feeder steers may be down by $2.00 to $3.00 per cwt. by November and calves by $3.00 or $4.00. This would put Kansas City quotations at $32.00 to $34.00 for choice yearlings and $36.00 to $38.00 for choice calves.

Slaughter Cattle

During the first half of 1970 steer and heifer slaughter was up only 3% over 1969. Fed cattle marketings were up 5%. Nonfed steer and heifer slaughter was down enough to partially offset the fed cattle number increase.

Weights were substantially above the light weights of a year ago. Thus, the increase in steer and heifer beef production has been relatively greater than the numbers increase. However, the increased supplies were taken at fairly strong prices due to the strong inflation and increases in the demand for beef. Choice steers have brought more than $30 since February. Prices were above year earlier levels during the first half year except in May and June.

For the last half of 1970, slaughter supplies will be up about 4% over year earlier levels. But slaughter weights will be the same or lower. Despite this modest increase in supplies, slaughter prices will probably drift down as pork and broilers provide stronger competition at the meat counters this fall.

Slaughter of steer and heifers in early 1971 is certain to be up again. Our balance sheet indicated that there is a large increase in yearling animals that will be available for feeding in the next nine months.

Since placements during the first half year were only slightly larger than in 1969, a large increase can be expected in placements of heavier cattle this fall. Thus, relatively large increases - up to 10% - in fed cattle marketing could occur next spring.

Demand for beef will not be enough to take such a supply jump without causing lower prices. Population increase plus its changing mix will require 2% more beef. But increased consumption of competing meats will erase that gain. Consequently the only demand increase that will count will be that from increased per capita incomes.

The outlook here is not bright. As the administration continues to battle against inflation, unemployment levels may climb and the nations output will remain rather sluggish. The rate of inflation may be slowed to less than 5% but real income gains will almost disappear. Thus, income gains and inflation will add only about 4% to the demand side.

Thus if supplies are up 7 to 8% -- even with lighter slaughter weights, prices would be a dollar or two less than this past spring. That would put Chicago choice prices at less than $30 and net sales prices to many Minnesota farmers of $28 or less.

Potential slaughter increases in late 1971 appear to be of the same size as the coming nine months. However, there is the possibility that the distribution of marketings will allow some price recovery in the third quarter. And, if demand conditions improve somewhat by then, increased demand could at least match the probable one million plus increase in steer and heifer slaughter in the 1971-72 marketing years.

Profit Prospect

The following table shows what net selling price is required to cover all feedlot costs under two different levels of feedlot costs situations for calves and yearlings. ($23 and $25 for calves, $26 and $28 for yearlings)

If a net selling price (net after marketing costs) of $28.00 is obtained next spring -- yearling steers would have to be bought for less than $30.00. Since they are not available at this price I would rate the current outlook for profits on yearlings as very poor for the average feeder.

The profit prospects on calves do not appear much brighter. However, odds of obtaining returns that will more than cover feed and cash costs are considerably higher on calf feeding programs.

Table 2. Breakeven Fed Cattle Prices Needed for Typical Feeding Programs with Different Feedlot Costs.

Laid-in Feeder Price	Steer Calves 425-1025#		Yearling Steers 650-1100#	
	Feedlot Costs			
	$23	$25	$26	$28
	--- Fed Cattle Price Needed to Cover all Costs ---			
26	24.24	25.41	26.00	26.81
28	25.07	26.24	27.18	28.00
30	25.90	27.07	28.36	29.18
32	26.73	27.90	29.55	30.36
34	27.56	28.73	30.73	31.54
36	28.39	29.56	31.91	32.73
38	29.22	30.39	33.09	33.91
40	30.04	31.22	34.27	35.09
42	30.88	32.05	35.45	36.27

--Paul R. Hasbargen

HOGS

AT A GLANCE: Barrow and gilt prices over the 12 month period, ending August 1970, averaged approximately $25.00 per cwt., an increase of 12 percent from the same period a year earlier. Increased supplies will cause prices to decline during the last 4 months of 1970. Prices are expected to be at or below the $20.00 level through much of this period. Increased supplies with only slight strength in demand will put pressure on barrow and gilt prices over the first half of 1971 compared with a year earlier. Changes in the 1971 spring pig crop will be critical for late 1971 marketings and prices. Low profits could be in the picture if 1971 spring farrowings increase by more than 5 percent from 1970 levels.

Market Developments

Prices and feeding ratios in the hog enterprise have been above average over the past 5 1/2 years. The average price for barrows and gilts at eight terminal markets over the period July 1965 to July 1970 averaged approximately $22.00 per cwt., compared with the $16.00 per cwt. levels during the 1955-59 and 1960-64 periods. The hog-corn ratio has averaged about 18.6 to 1 since 1965, up sharply from the lower levels of the two previous 5 year periods (Table 1).

Table 1. Hog Price and Feeding Ratios

Year	Average Price Barrows & Gilts 8 Major Markets	Hog-Corn Ratio U. S.
1970 (Jan-July)	$ 25.44	21.0
1969	23.71	20.3
1968	19.19	18.0
1967	19.37	16.3
1966	23.45	18.5
1965	21.30	17.7
1960-64 average	16.13	15.0
1955-59 average	16.64	14.1

Monthly average barrow and gilt prices over the first 7 months of 1970 moved in a range of from a $23.53 per cwt. low to a monthly average high of $28.25 per cwt. The average of $25.44 per cwt. for the period was 14 percent above the average of $22.25 per cwt. level established over the same period in 1969.

Hog producers marketed 5 percent fewer hogs during the first seven months of 1970 compared with a year earlier. On a per capita basis, supplies were down 6 to 7 percent. This reduction along with a stronger demand for pork resulted in the substantial price advance over 1969.

Prospects for the Remainder of 1970

Demand for pork is expected to remain 2 to 4 percent above year earlier levels for the remaining months of 1970. This expected increase can be credited to increased population, higher incomes and reduced competition from competing products.

Hog supply indicators point to increased marketings during the fall months of 1970 compared with a year ago. The June 1 Hogs and Pig Report estimated an increase of 13.0 percent in sow farrowings during the spring of 1970. Estimated inventories of hogs and pigs on farms June 1 showed an increase of 10 percent from a year earlier in light weight pigs headed for market this fall. Part of this potential increase in slaughter numbers can be adjusted downward due to the holding back of more female stock for breeding purposes this fall.

Although hog weights have been running above year earlier, they could be about the same to slightly below a year ago by this fall. Thus, potential increase in pork production could be less than slaughter numbers. Total pork production is expected to be up 9-12 percent this fall compared with last year. The estimated increase in demand indicates that only about 2-4 percent of this increase can clear the market without depressing prices from 1969 fall levels. Assuming that each 1 percent of the remaining increase will affect prices by 1.9 to 2.3 percent, barrow and gilt prices this fall could be expected to drop 15 to 22 percent below a year ago when prices averaged about $25.00 per cwt. on seven major markets. This would put them in price range of from $22.00 in early September to a low of below $18.50 per hundred in December.

Hog Situation and Outlook 1971

The price and profit situation during the first half of 1971 will be heavily influenced by the 1970 fall pig crop (June-November). Most indicators point to substantial increases in farrowings during this period. Intentions stated in the June 1 Hogs and Pigs Report indicated a planned expansion of 17 percent. The hog-corn ratio during the breeding season for this farrowing period was approximately 21.6 to 1. The level of sow slaughter this summer, relative to the total number of marketings, indicates that sows are being held back from slaughter.

We expect that farrowings this fall will increase by 12 to 14 percent. Projecting this into the first six months of 1971 means increased supplies of pork of from 9 to 11 percent over a year earlier.

The demand for pork is not expected to increase materially in 1971 when compared to a year earlier. This prediction is based on an assumed slowdown in economic activity and stronger competition from poultry and beef at the retail counter because of higher supplies and lower prices.

Supplies of pork during the last half of 1971 will depend on whether or not hog producers follow the increases expected this fall with continued increased farrowings in the spring of 1971. The probability is quite good that they will. Profits experienced this summer and fall will be much lower than a year ago but not so low so as to trigger a reduction in subsequent farrowings. Also, many hog producers do not adjust quickly to changing short-run situations. They put more emphasis on longer run trends. Thus, the 1971 spring pig crop could be up by 4 to 7 percent over year earlier.

Price and Profit Prospects - 1971

Barrow and gilt prices on 7 major markets during the first half of 1971 are expected to average well below the average price of $25.50 per cwt. established over the first half of 1970. Based on the supply and demand estimates made here, a reduction in the average price level to a predicted range of from $18.00 to $19.50 is highly probable.

Profit prospects for this period will also depend heavily on expected production costs, particularly corn prices. Feeding ratios could be down significantly if corn prices move into the $1.30 - $1.40 per bushel range during the feeding period for hogs marketed in the first half of 1971.

The price situation during the latter months of 1971 will depend heavily on hog producers' actions in the spring of 1971. If they expand only slightly, or adjust farrowings downward in anticipation of lower profits in the period ahead, prices could hold near expected 1970 fall levels. However, if farrowings in the spring of 1971 move to 4 to 7 percent above year earlier levels, significantly lower prices could develop in late 1971.

--Kenneth E. Egertson

DAIRY

AT A GLANCE: With a slower than usual decline in cow numbers, modest increases in U.S. milk production can be expected during the coming year. Higher retail milk product prices and increasing unemployment are causing rather sharp declines in the commercial disappearance of milk. As a result government purchases are increasing, so that the milk price situation is strongly influenced by price support levels. Cash receipts from milk may increase modestly but increased costs will likely cause net earnings to drop slightly.

Prospects for remainder of 1970

The decline in U.S. milk production that has been going on since the record milk production year of 1964 appears to be bottoming out. Production is presently running slightly over a year ago (plus 0.3 percent) with total production for the year expected to reach at least 116.5 billion pounds, compared with 116.2 billion pounds in 1969 (Table 1). This slight upturn in production has been caused by a marked slow-down in the rate of decline in cow numbers. (1.6 percent between June 1969 and 1970 compared with a more normal 2-1/2 - 3 percent) and a normal increase in production per cow (200 lbs. per cow).

Table 1. U.S. Milk Supply and Disappearance, 1969, with Projections for 1970 and 1971.

	1969 1/	1970 2/	1971 2/
	Billion Pounds		
Production	116.2	116.5	117.0
Less farm use	4.4	4.1	3.8
Marketings	111.8	112.4	113.2
Beginning commercial stocks	3.9	3.8	4.0
Imports	1.6	2.0	2.0
Total "Supply"	117.3	118.2	119.2
Ending Commercial Stocks	3.8	4.0	4.0
Net Gov't Removals	4.5	6.3	8.0
Commercial Disappearance	109.0	107.9	107.0
Total "Disappearance"	117.3	118.2	119.2

1/ Dairy Situation, July 1970
2/ Estimates by the authors

When adjustments are made for reductions in farm use and beginning stocks together with likely increases in total imports, the total "supply" to be accounted for appears to be up almost a billion pounds in 1970. Indications are that ending commercial stocks will be up slightly. However, sharp rises in dairy product prices at retail and increased unemployment have caused a relatively sharp drop in commercial disappearance. Thus, net removals by government are showing a marked increase.

Milk prices for the first half of the year averaged about 5 percent above a year earlier. Expected increases in production during the second half of the year will likely hold prices close to last years levels. Manufacturing grade prices have been close to new support levels ($4.66 per cwt.) since April 1. They too are expected to rise seasonally, but less than in recent years. Thus, cash receipts for the year are expected to be up 3 - 4 percent, due to both modest increases in production and the noted price increases. However, increased costs of production will likely leave net earnings near 1969 levels.

Prospects for 1971

Looking to 1971, most factors point to a continued modest up-turn in milk production. Favorable milk prices and a less restrictive labor supply situation both point to continued slower than normal declines in cow numbers. Production per cow can also be expected to increase at normal rates as favorable milk/feed price ratios persist. However, strong beef prices and the reluctance of individuals to subject themselves to the rigors of daily dairy chores are factors which will likely moderate any production increases.

In Table 1, we project a billion pound increase in the total "supply" of milk for 1971. Increases in production and beginning stocks account for 700 million pounds of the increase, while normal reductions in farm use account for the balance. On the disappearance side we projected ending stock at 1970 levels, and a continuing erosion of the amount passing through commercial channels. With supplies and demand moving in opposite directions, net government removals tend to grow rapidly, percentage-wise. With a budget conscious administration increases in the cost of these removals can not be ignored either.

This all tends to signal the return of a support-price dominated dairy price outlook. Manufactured milk prices can be expected to hover near support levels. Price increases on fluid milk will likely be more modest than in the recent past. These factors together with a small increase in production suggest only a modest increase in cash receipts in 1971.

Cost increases, however, will likely more than off-set increase receipts, thus reducing net earnings from milk.

A Longer-run Look

In planning the future of his dairy operations, the farm operator must take a longer-run look at the over-all dairy outlook, the competitive position of dairying in his area, and the ability of his herd to compete over time.

Turning first to the longer-run outlook, it appears that during the next 3 to 5 years milk prices may average near present levels. Modest increases in production coupled with a decline in commercial utilization point to increased government purchases. It appears therefore that for planning major changes in operations, the possibility of a slight shading of milk prices from current levels should be considered.

Dairying in Minnesota continues to further concentrate in a narrowing band of counties extending from the Southeast corner of the state, northwesterly past the Twin Cities, to about Detroit Lakes. In 1969 the area accounted for 71 percent of the cows and nearly 74 percent of the state's production. The Red River Valley and the Northeast have declined in importance. The Southwest has increased somewhat, due largely to higher than average increases in production per cow.

Access to a Class I milk market, location in a densely settled dairy area and land better suited to forage than to feed grains appear to be key locational factors.

For a given herd to compete over time the operator must be skilled enough to hold feed costs below $1.90 per cwt of milk produced, to obtain 12,000 pounds of milk per cow and to manage a one-man operation of 35 to 40 cows or a two-man operation of 75 cows, including the raising of necessary forage and grain.

--Kenneth H. Thomas
Martin K. Christiansen

POULTRY

AT A GLANCE: The poultry industry will find itself in a year of adjustment in 1971. Supplies of eggs, broilers and turkeys are all expected to be above 1970 levels. This coupled with lower priced beef and pork, will cause prices for all those commodities to be lower than the 1970 figures. Profit margins can be expected to be narrowed considerably for all poultry commodities as prices move below last year levels and feed costs rise.

Eggs

Prices for large eggs during the coming 12 months should average 33 to 35 cents in the national market or 7 to 9 cents lower than the comparable period last year. Prices to Minnesota producers are expected to average 27 to 30 cents over the same period.

This projection is based on a larger total laying flock. On August 1 of this year the flock was 1.4% larger than a year ago. The egg-type chick hatch ran substantially above year ago levels from January through June of this year and the fall hatch is expected to be similar to last year. This, together with the same to slightly weaker demand for eggs in the year ahead accounts for the expected lower prices.

In looking at profit prospects for egg producers major consideration must be given to the possible blend price over the laying period in comparison to costs. Blend prices can be approximated at 3 to 4 cents lower than large egg prices giving a national average blend price of 29 to 32 cents. This puts the blend price for Minnesota producers in the range of 23 to 26 cents a dozen. This coupled with feed costs which will likely run 5 to 6% higher spells very narrow profit margins for producers over the next 12 to 15 months. As an example, average out of pocket cost for egg production in Minnesota last year was about 23 cents a dozen not including labor.

Broilers

Prices of broilers on a wholesale basis in mid-August were running 6 cents a pound less than a year earlier. Projected market supplies of broilers are expected to continue above year earlier levels at least through the first quarter of 1971.

Larger supplies coupled with greater numbers of swine and beef means lower prices in March of 1971 and possibly beyond. Fourth quarter 1970 wholesale

prices are now estimated to be 23 to 25 cents while early 1971 prices should range between 23 and 26 cents.

Profit margins will be considerably narrower for producers as suggested by lower selling prices and higher feed costs over this period.

Turkeys

New York turkey prices were 1-1/2 cents over year ago levels in mid-August. Prices will likely move up to the 40 cent level during the last quarter of 1970. This increase will not be as great as last year due to an estimated 16% increase in the supply of turkeys on farms and in storage as of June 1.

While it is too early to predict the 1971 turkey crop, current feeding ratios would indicate some growth can be expected. Current poult hatch is running well ahead of last year as of August 15.

With increased price pressure from pork, beef, and broilers in the year ahead coupled with a good possibility of a larger turkey supply we would anticipate turkey prices below 1970 levels in the coming year. January through June 1971 New York prices could range in the 40 to 42 cent range for Toms. As the industry moves more to year around production and marketing of fryers in the year ahead, supplies will be heavy and fryer prices will move well below the Tom market.

Profit margins in turkey feeding, just as with broilers, will be tighter in the year ahead with prices down and feed costs higher.

----Richard O. Hawkins

SHEEP AND LAMBS

AT A GLANCE: Price prospects for market lamb producers appear favorable for the remainder of 1970. Demand should remain strong with supplies reduced about 5 to 8 percent. Feeder lamb prices will likely average about the same as a year earlier. Fed lamb prices during the first half of 1971 should remain good but average moderately under the levels established a year earlier. Profit prospects for native sheep flocks appear good in 1971. However, due to increased feedlot costs and expected lower slaughter prices, returns to lamb feeding will be lower than a year earlier.

Native Ewe Flock Situation

On January 1, 1970, the number of sheep and lambs on U.S. farms and ranches totaled 20,395,000 head, down almost 1 million head from a year earlier. This declining trend has dated back to 1960 when we had over 33 million head. A further decline of from 2 to 3 percent is expected by January 1, 1971. Lamb consumption per capita of 3.4 pounds in 1969 was very small relative to other meats. Lamb consumption will probably be about the same in 1970 as a year earlier.

The 1970 lamb crop was estimated at 13.4 million head, a 2 percent reduction from a year earlier.

Commercial sheep and lamb slaughter during the first 7 months of 1970 was down 2 percent from a year earlier. Lamb slaughter for the remaining months of 1970 is expected to continue below year earlier levels because of the smaller lamb crop.

Choice slaughter lamb prices during the first 7 months of 1969 averaged about the same to $2.00 per cwt., lower than a year earlier. This trend is expected to continue through the fall months of 1969, putting choice lamb prices at South St. Paul in a range of from $26.00 to $28.00 per cwt.

Based on the decline in the 1970 lamb crop, lamb slaughter in the first half of 1971 will be down from 1970 levels. This situation along with only a moderate decline in demand should be reflected in continued good lamb prices through the first half of 1971. The expected range on choice lambs in South St. Paul is from $25.50 to $27.50 per hundred weight.

Profit prospects look good for the well managed ewe flock in 1971.

Lamb Feeding

Profits in lamb feeding operations in the 1969-70 feeding year were generally down from the excellent conditions a year earlier. The major factors contributing to this situation were the higher feeder price level in the fall of 1969 and little improvement in slaughter prices received in spring of 1970 compared with a year earlier.

Fewer lambs are expected to be placed on feed this fall than a year earlier. Movements of feeder lambs into feedlots will be later than in 1970 due largely to good pasture conditions in sheep range areas.

The demand for feeder lambs will be about the same this fall as last year. Choice feeder lamb prices on lambs laid into Minnesota feedlots will likely range between $27 - $29 per cwt. or about the same as a year earlier.

Production costs are expected to be above those of the 1969-70 feeding year. Profit prospects for the 1970-71 feeding year rank moderately lower than a year earlier.

--Kenneth E. Egertson