wcw.



\$\$\$

Impact of Supply Adjustment on Cash Crop Income .....in North Dakota

> H. W. Herbison Marketing Economist

Fred D. Sobering Farm Management Economist

S 544.3 .N9 A8 no.369

# NDSU LIBRARIES

EXTENSION SERVICE NORTH DAKOTA STATE UNIVERSITY OF AGRICULTURE AND APPLIED SCIENCE

### SUPPLY ADJUSTMENT AND NORTH DAKOTA'S CASH CROP ECONOMY

For better or worse, North Dakota farmers and elevatormen will manage their businesses under a climate of administered supply adjustment for wheat and feed grains in 1962. How much better or worse, and for whom, are questions best answered through exploration of:

- 1. Expected program compliance patterns;
- 2. How costs and benefits of assumed compliance budget out under three possible levels of crop output in 1962;
- 3. Economic importance of price and income-insurance aspects of current supply adjustment programs to central and western North Dakota cash crop producers, and
- 4. Impact of supply adjustment on business volume and earnings of country grain marketing firms, and agribusiness generally.

#### SUMMARY: PROJECTED ADJUSTMENT COSTS & BENEFITS

In the aggregate, subject to minor statistical refinements, projected costs and benefits from expected supply adjustment program compliance in 1962 would work out about like this for North Dakota cash crop producers:

All programs, assuming:	100%	output	70% o	utput	130%	output
Government payments	\$ 20,42	20,000	20,420	0,000	20,42	0,000
Variable costs saved	\$ 19,59	0,000	19,590	000	19,59	0,000
Price benefits gained	\$ 32,78	0,000	23,490	000	43,77	0,000
Gross credits	\$ 72,79	0,000	63,500	0,000	83,78	0,000
Value, production lost Added conservation cost	\$ 31,98 \$ 5,70	0,000 0,000	27,480 5,700	0,000 0,000	51,36 5,70	0,000 0,000
Net 1962 credits	\$ 35,03	0,000	30,240	0,000	26,64	0,000
Credit, retired wheat acres Credit, retired barley acres Credit, retired corn acres	\$ \$ \$ loss	37.24 10.67 -4.04	gain	56.00 13.25 10.38	loss	49.33 9.42 -5.63

As supporting background for the preceding summary, here are projected supply adjustment costs and benefits accruing to cash crop producers in the several corn, barley and wheat divisions in 1962:

## A. PROJECTED CORN ADJUSTMENT

For corn, assuming:	100% output	70% output	130% output
1959-60 planted acres 1961-62 plantings Retired 1961-62 acres	1,350,000 1,030,000 320,000		
Government payments, '62 Variable costs saved Price benefits, all crops	\$ 4,160,000 \$ 4,800,000 \$ 2,040,000	4,160,000 4,800,000 1,400,000	4,160,000 4,800,000 2,700,000
Gross credits Value, production lost Conservation costs added	\$ 11,000,000 \$ 12,400,000 \$ -	10,360,000 7,040,000 	11,660,000 13,440,000 -
Net loss or gain	\$ -1,400,000	3,320,000	-1,780,000

### **B.PROJECTED BARLEY ADJUSTMENT**

For barley:	Subclass Bly.	•	Subclass Malting Bly.		
1959-60 planted acres 1962 acres, estimated Retired acres	2,000,000 1,400,000 600,000		1,660,000 1,826,000		
Assumed 1962 Production Of:	100% output		70% output	130% output	
Government payments, '62	\$ 6,000,000		6,000,000	6,000,000	
Variable costs saved	\$ 7,500,000		7,500,000	7,500,000	
Price benefits, all crops	\$ 5,500,000		3,850,000	7,150,000	
Gross credits	\$ 19,000,000		17,350,000	20,650,000	
Value, production lost	\$ 9,600,000		6,400,000	12,000,000	
Added conservation costs	\$ 3,000,000		3,000,000	3,000,000	
Net gain	\$ 6,400,000		7,950,000	5,650,000	

### C. PROJECTED WHEAT ADJUSTMENT

For North Dakota wheat:	H.R.S. Wheat	Durum Wheat	
1960-61 planted acres	5,258,000	1,362,000	
1962 expected plantings	4,620,000	1,780,000	
Retired acres, estimated	540,000		
Assumed 1962 Production Of:	100% output	70% output	130% output
Government payments	\$ 10,260,000	10,260,000	10,260,000
Variable costs saved	\$ 7,290,000	7,290,000	7,290,000
Price benefits gained	\$ 25,240,000	18,240,000	33,920,000
Gross credits	\$ 42,790,000	35,790,000	51,470,000
Value of production lost	\$ 19,980,000	14,040,000	25,920,000
Added conservation costs	\$ 2,700,000	2,700,000	2,700,000
Net gain	\$ 20,110,000	19,050,000	22,850,000

.

3

٣

#### CASH CROPS SUPPLY ADJUSTMENT NOT ALL BAD OR GOOD

Except in rare instances, budgeting of costs and benefits generally show these thumb-rule situations in 1962:

- 1. Wheat acre cutbacks over minimum, regardless of higher payment rate, pay only those farmers with abnormally high risk costs.
- 2. Retirement of "feed barley" acres not needed for livestock feeding on the farm may pay as well or better than the cash-market in west-central and western North Dakota counties.
- 3. Durum wheat history farms will plant maximum permitted acres.
- 4. Subclass-malting barley producers will do well to increase plantings 10 per cent in the Red River Valley's favored market areas.
- 5. Price benefits tied in with supply adjustment programs nearly offset value of normal cash crop production lost, for the state.
- 6. 1-in-4 farmers will lose, 1-in-4 break even, and 2-in-4 gain by compliance with the wheat adjustment program.
- 7. Price and income insurance features of supply adjustment programs find strong supporters among cash crop producers operating west of the 100th meridian, and least support in the Red River Valley. Both areas have economic reasons for holding those positions.

Within North Dakota's agribusiness complex, impact of removing more than a million acres from cash crop production falls most heavily upon country elevator management. Conservatively, bushel volume shrink from normal handlings could be 25 million or more, and representing the equivalent of about \$3 million or more in gross operating income for country grain marketing firms. On whom, and where will most of that economic burden fall, assuming indicated farmer compliance with 1962 feed grain and wheat adjustment programs? We say:

4

1. Most of this adverse economic impact will fall upon elevator management in south-central and western North Dakota counties where (a) few farmers have durum wheat history to cushion the shock of mandatory bread wheat acre cutbacks, (b) most of the state's projected reduction in barley plantings may occur and (c) soil moisture outlook rules against material increase in fertilizer usage to make fewer acres do a bigger production job.

2. Grain business volume in north-central (durum triangle) counties may be better than usual due to (a) increased durum wheat and malting barley plantings, (b) good price climates, and (c) a moisture outlook conducive to improved fertilizer and weed control practice associated with improved yield output per acre.

3. The Red River Valley's reduced wheat acreage may be partially offset by (a) increased malting-barley and soybean acreage, (b) modest increase in flax output, and (c) stepped-up fertilizer and weed control practice to obtain higher yield output per acre. With luck, elevator men may wind up trading bushels and dollars; without it, business volume could shrink 3 to 5 per cent in '62.

#### EACH MUST MAKE HIS OWN APPRAISAL

The economic viewpoint of the individual may be quite different from that which an economist coldly calculates for 50 thousand farmers in the aggregate. For instance, Bill Jones could have planted 100 acres of wheat last year. In '62 he must divert 10 acres. From ASCS he learns that his payment rates per acre diverted would be \$30 (minimum) and \$40 (maximum). Should he retire an additional 30 acres? Why? Why not? How do you get the right answer?

In the past 5 years Bill's wheat has averaged a strong 40 bushels in Traill county, touching 50 one year and hitting a low of 30 in 1959. He expects to sell wheat this fall for \$2.10. With his pencil, Bill figures out (1) how cash benefits from cutting 30 more acres would compare with (2) loss of income by having less wheat to sell, plus handling another 30 acres of protected fallow.

5

This is what he finds:

Assuming wheat yields of about:	<u>30 Bu.</u>	40 Bu.	50 Bu.
<ol> <li>Payment, 30 acres, would be</li> <li>Cash costs saved would be:         <ul> <li>a. seed, per acre</li></ul></li></ol>	\$ 1200	1200	1200
30 a. times\$193. Gross Credits	\$ <u>570</u> \$ <u>1770</u> \$1890 \$ <u>120</u> \$2010 \$ <u>2010</u> \$ <u>240</u>	<u>570</u> <u>1770</u> 2520 <u>120</u> 2640 -870	<u>570</u> <u>1770</u> 3150 <u>120</u> 3270 –1500

Like Bill, don't guess or take anyone's word for what is best for you. Pretest through simple budgeting of benefits gained minus added costs for your farm, under three possible levels of crop output you might expect.



Growth Through Agricultural Progress

-

Extension Service, North Dakota State University of Agriculture and Applied Science, and U. S. Department of Agriculture cooperating. A. H. Schulz, Acting Director, Fargo, North Dakota. Distributed in furtherance of the Acts of Congress of May 8 and June 30, 1914.