

**Iowa State University**

---

**From the Selected Works of Paul Gallagher**

---

February, 1979

## LDC demand for U.S. Wheat

P. Gallagher, *United States Department of Agriculture*

M. Bredahl, *United States Department of Agriculture*

M. Lancaster, *United States Department of Agriculture*



Available at: <https://works.bepress.com/paul-gallagher/22/>

# LDC DEMAND FOR U.S. WHEAT

by

P. Gallagher, M. Bredahl, and M. Lancaster<sup>1</sup>

**ABSTRACT:** Effects of trade policies and economic variables which exert an influence on international wheat trade between the United States and less developed countries (LDC's) are summarized in this article. A method for statistical analysis of regional U.S. wheat export demand is presented with an application of this method for selected LDC's. A forthcoming article features an analysis of the demand for U.S. wheat in Japan and the European Community.

**KEYWORDS:** U.S. wheat exports, trade policies, less developed countries.

The export demand for wheat, along with other major U.S. crops, has grown dramatically since the early seventies. In the sixties, about thirty percent of U.S. wheat production was shipped abroad. Recently, more than 60 percent has been sold to foreign countries. Significantly, this increase has been in commercial sales, in contrast to the past when food aid programs were relatively more important. The primary objective of this study was an improved understanding of the factors in foreign markets which influence demand prospects for commercial sales of U.S. wheat.

This paper develops techniques which can measure the demand of major importing regions for U.S. wheat. In particular, an empirical model is developed and estimated for less developed countries (LDC's). In a forthcoming article, to appear in a later edition of the *Wheat Situation*, similar results are presented for Japan and Western Europe.

## The Institutional Setting

An exhaustive study of international wheat trade policies requires volumes rather than pages. While certain interesting policies can be highlighted, studies such as those by Hadwiger, Schmitz, or Takayama (see references) provide a more complete discussion.

<sup>1</sup> The authors were formerly with the Forecast Support Group, Commodity Economics Division, ESCS, USDA.

## Major Importers

The importance of several regions to U.S. wheat exports is highlighted in table 1. The percent of U.S. wheat exports to developed countries has been very stable since 1960 (20 to 25 percent of total exports). Japan is generally the most important single importer, accounting for about 10 percent of total U.S. exports, followed by the European Community (EC).

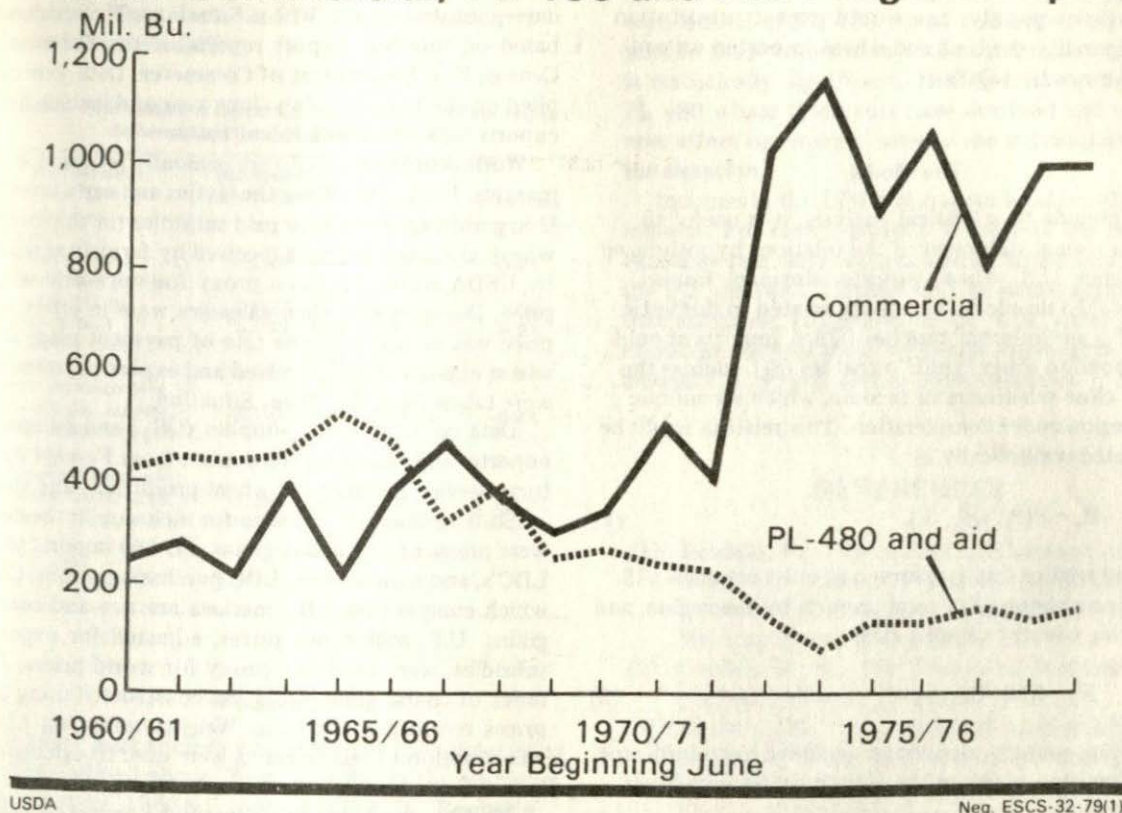
Until the Centrally Planned countries (primarily the USSR and China) entered the market in the early seventies, LDC's accounted for most of the remaining proportion of total exports. The pattern of exports to LDC's illustrates the declining importance of PL 480 and Agency for International Development (AID) exports (figure 1). In the early sixties (1960/61-1963/64), 87 percent of exports to LDC's were made under U.S. food aid programs. While the volume of U.S. wheat exports to LDC's increased from the early sixties to early seventies, exports made under food aid programs fell to about 25 percent of the LDC's total purchases from the United States.

## LDC Price Policies

Import policies of the LDC's vary widely from fixed internal prices to unregulated private market systems. In the analysis that follows, it is assumed that, in the aggregate, the LDC's wheat purchase decisions respond to world prices of wheat, coarse grains, and rice. It is likely, however, that LDC wheat price policies affect the



# Wheat: Commercial, PL-480 and Aid Program Exports



results obtained in this study. To the extent that LDC restrictions on wheat prices interfere with free market prices, the responsiveness of LDC imports is diminished. Statistical analysis should reveal the extent of the relation between world wheat price and LDC imports.

## Major Exporters

The supply side of the wheat export market is dominated by the United States, Canada, and Australia (see table 2). Over recent years, these producers have accumulated and stored large stocks of wheat. This oversupply pressured prices downward and resulted in setting prices and limiting production.

Supplies of Canada and Australia are controlled by monopolistic government agencies. For much of the 1960-1974 historical period, actions of these agencies, by and large, determined the trade shares held by each exporter.

U.S. policies of the fifties, sixties, and early seventies were designed to accommodate growing supplies and stable internal demands. The commercial export market was enlarged by offering a wheat export subsidy. Supplementing the subsidy program, Public Law 480 provided for wheat gifts and long-term credit sales to LDC's.

Table 2—Wheat exports and market share by major wheat-exporting countries

Country	Average for the 1960/61-1963/64 period		Average for the 1972/73-1975/76 period	
	Exports	Market share	Exports	Market share
	M.m.t.	Percent	M.m.t.	Percent
Argentina . . . . .	2.23	5.3	2.53	3.9
Australia . . . . .	5.95	14.1	7.02	10.8
Canada . . . . .	10.82	25.7	12.83	19.7
European Community	3.64	8.6	11.62	17.8
United States . . . . .	19.50	46.3	31.16	47.8
Total . . . . .	42.15	100.0	65.16	100.0

SOURCE: Foreign Agricultural Circular, Grains

In recent years, it has not been as necessary to bolster the U.S. wheat export market. Subsidies have been discontinued and PL 480 shipments have been drastically reduced. However, these factors are relevant to the historical analysis of wheat exports. Traditional tax/subsidy theory suggests that an export subsidy reduces world prices and increases U.S. exports (Cordon, p. 20). Additionally, Fisher and Schultz have argued that



PL 480 shipments influence recipient countries' wheat economies in the same manner as an increase in domestic supplies. Consequently, one would expect substitution between purchased wheat and wheat imported on concessional terms by LDC's.

### The Model

As a prelude to statistical analysis, it is useful to provide a formal statement of the relations hypothesized to influence U.S. wheat exports. Regional import demands ( $M_i$ ) should be negatively related to domestic prices ( $P_i$ ) and internal supplies ( $QS_i$ ). Imports should also respond to other "shift" variables ( $S_i$ ), such as the price of close substitutes or income, which are unique to the region under consideration. This relation could be represented symbolically as

$$M_i = F(P_i, QS_i, S_i). \quad (1)$$

A second relationship is assumed to exist between U.S. exports to a region ( $X_i$ ), total imports by the region, and competing country supplies ( $CS_i$ ):

$$X_i = f(M_i, CS_i). \quad (2)$$

Competing country supplies are included as an indicator of competition between the United States and other suppliers.

Upon combining these relationships, it is possible to express U.S. exports in terms of the factors that influence import demands:

$$X_i = f(P_i, QS_i, S_i, CS_i). \quad (3)$$

Equation (3) forms the basis for the empirical analysis that follows. In the analysis of LDC's, a combined relationship similar to (3) was estimated. In a forthcoming study of developed countries, a relationship like (3) was also used to analyze U.S. exports to Japan. However, for the Western European wheat economy separate demand (equation 1) and share relations (equation 2) were estimated.

Models such as those represented by equations (1), (2), and (3) are simplifications of real world behavior. Results obtained from the aggregated data used in such models should be interpreted as representing general tendencies.

### Analysis for LDC's

Application of the model to the LDC's required definition of the theoretical variables contained in equation 3. Once the variables were defined in terms of available data, ordinary least squares was used to estimate the parameters of the model.

U.S. commercial wheat exports to LDC wheat importers ( $X_i$ ) were taken from the country-of-destination data published in the *Wheat Situation*. These data are based on monthly export reports of the Bureau of Census, U.S. Department of Commerce. Data were compiled on the basis of a July-June year and include flour exports on a wheat-equivalent basis.

World wheat prices ( $P_i$ ) are generally reflected in U.S. markets. However, during the sixties and early seventies, U.S. grain exporters were paid subsidies for shipments of wheat. U.S. average prices received by farmers as reported by USDA were taken as a proxy for the world wheat price. During years when subsidies were in effect, this price was adjusted by the rate of payment made for wheat exports. Prices received and export payment rates were taken from the *Wheat Situation*.

Data on LDC wheat supplies ( $QS_i$ ) and competing exporter supplies ( $CS_i$ ) were taken from Foreign Agricultural Service Estimates of wheat production and stocks.<sup>2</sup>

Shift variables ( $S_i$ ) chosen for inclusion in the model were prices of competing grains, PL 480 imports of the LDC's, and a measure of LDC purchasing power. Grains which compete for LDC markets are rice and coarse grains. U.S. milled rice prices, adjusted for export subsidies, were used as a proxy for world prices. An index of coarse grain prices was constructed using U.S. prices received by farmers. Weights reflecting LDC consumption of coarse grains were used to calculate the index.

PL 480 wheat shipments would be expected to substitute, in large part for commercial purchases by the LDC's. It is unlikely that commercial wheat exports are reduced by 1 bushel for every bushel of PL 480 shipments. Rather, PL 480 wheat is likely taken by customers who lack the foreign exchange needed to fill their domestic requirements. Thus, PL 480 wheat shipments likely add somewhat to total U.S. wheat exports. PL 480 data were taken from USDA data compiled by the Foreign Demand and Competition Division.

Given the modest income levels characteristic of the LDC's, it is likely that income growth in these countries results in expanded demand for wheat. A measure of LDC incomes is difficult, however, due to a lack of information from many countries. An index of purchasing power was constructed from International Monetary Fund (IMF) consumption expenditure data for six important LDC wheat importers—South Korea, Pakistan, Algeria, Morocco, Brazil, and Venezuela, with country data weighted by population. To account for fluctuations in currency values, the income index was deflated by an IMF trade-weighted index of exchange rates for countries that trade with the United States. The result is an approximate measure of LDC buying power in terms of U.S. currency.

<sup>2</sup> Major competitors are Argentina, Australia, Canada, and the European Community.



Population was accounted for in the equation by placing all quantity variables and the income index on a per capita basis. Data on LDC's populations were obtained from the IMF.

Table 3—Estimated per capita LDC commercial wheat import demand equation, 1960/61-1974/75

Independent variable	Estimated coefficient	t-statistic	Elasticity
Price of:			
Wheat (\$/bu.) . . .	-0.069	-1.37	-0.71
Feed grains (Index, 1967=1.0) . . .	0.002	2.11	1.06
Rice (\$/bu.) . . . .	0.005	0.95	0.27
Own supply (bu./capita) . . . . .	-0.226	-2.69	-2.04
Competing exporters supply (bu./capita) . . . . .	-0.101	-1.84	-0.94
PL 480 imports (bu./capita) . . . . .	-0.600	-4.44	-2.95
Income/exchange rate (Index, 1970=1.0) . . . . .	0.204	1.19	1.12
Constant . . . . .	0.618	2.44	---
$\bar{R}^2 = .952$			
S.E.E. = 0.033			

### Results

Ordinary least squares was applied to the model using the data outlined above. Years included in the estimated equation were 1960/61 through 1974/75. Resulting estimates for the equation are presented in table 3.

In general, the estimated coefficients and related elasticities agree with expectations based on economic theory. However, the t statistics for several of the estimated coefficients are relatively low. This is a symptom of high intercorrelations among the explanatory variables, particularly the price and supply variables, and the short time series used.

Elasticities for wheat and feed grain prices indicate that LDC commercial wheat imports from the United States respond to these variables. A 1-percent increase in wheat prices would reduce these wheat imports by 0.71 percent, while a similar increase in feed grain prices would increase wheat imports by 1.06 percent, all else being equal. Rice prices seem to have only a minor impact.

LDC commercial imports of wheat from the United States are strongly related to their own level of supplies. The estimated coefficient for LDC production suggests that a 1-bushel increase in supply results in a decline of 0.226 bushels in their imports.

Competitors' wheat supplies have a somewhat smaller impact on LDC imports from the United States. Over the historical period, 1-bushel increase in competitors' supplies reduces U.S. commercial sales to LDC's by about 0.1 bushel.

PL 480 wheat shipments to the LDC's seem to influence our commercial sales. All else being equal each bushel of PL 480 wheat reduced the commercial sales to these countries by 0.6 bushel. The relationship is statistically significant. However, in recent years, PL 480 wheat shipments have declined and may not now affect commercial sales to the extent indicated by the equation.

Incomes in the LDC's also seem to affect their wheat imports. For each 1-percent increase in the income or exchange rate variable, commercial wheat imports from the U.S. change 1.12 percent. This relationship suggests that economic conditions in the LDC's and foreign exchange markets are of moderate importance to commercial U.S. wheat sales to these countries.

### REFERENCES

- (1) Bredahl, M., "The Effect of Currency Adjustments on Common Market Agricultural Imports," Commodity Economics Division Working Paper, USDA 1977.
- (2) Corden, W. M., *The Theory of Protection*, (Clarendon Press: 1971).
- (3) Fisher, F. M., "A Theoretical Analysis of the Impact of Food Surplus Disposal on Agricultural Production in Recipient Countries," *Journal of Farm Economics*, Vol. 45, No. 4, December 1963.
- (4) Hadwiger, Donald F., *Federal Wheat Commodity Programs*, Ames, Iowa State University Press, 1970.
- (5) International Monetary Fund, *International Financial Statistics*, Washington, D.C., Various Issues.
- (6) Schmitz, A. and D. L. Bawden. "The World Wheat Economy: An Empirical Analysis," Giannini Foundation Monograph Number 32, California Agricultural Experiment Station, 1973.
- (7) Schultz, T. W., "Value of U.S. Farm Surpluses to Underdeveloped Countries," *Journal of Farm Economics*, Vol. 42, No. 4, December 1960.
- (8) Takayama, T., H. Hashimoto, and S. Schmidt, *Protection and Evaluation of Trends and Policies in Agricultural Supply, Demand, International Trade and Food Reserves: Project Report No. 1—Grains AE-4405*, Department of Agricultural Economics, University of Illinois, Urbana.
- (9) U.S. Department of Agriculture, *Foreign Agricultural Circular: Grains*, Washington, D.C., Various Issues.
- (10) U.S. Department of Agriculture, *Wheat Situation*, Washington, D.C., Various Issues.



Table 1.--Total U.S. wheat exports, percent as commercial, non-commercial, and by destination

Crop Year Begin. *	Total Exports	Percent as		Percent as Commercial to		Percent as PL 480 to		Percent as
		Commercial	PL 480 + AID	Developed Countries	LDC's	Developed Countries	LDC's	Cent. Planned Country Imports
	Million bu.	Percent						
1960	659	28.6	62.8	21.3	7.3	6.4	56.4	8.6
1961	723	30.6	61.7	22.4	8.2	4.0	57.7	7.8
1962	635	22.5	67.1	12.8	9.7	1.1	66.0	10.3
1963	845	31.7	53.3	22.0	9.7	1.2	52.1	15.0
1964	710	22.9	70.9	14.6	8.3	1.3	69.6	6.3
1965	867	38.1	55.2	22.5	15.6	0.4	54.8	6.7
1966	744	57.8	39.8	24.5	33.3	0.2	39.6	2.4
1967	761	46.9	51.4	21.0	25.9	--	51.4	1.6
1968	544	55.2	44.7	27.9	27.3	--	44.7	--
1969	607	55.7	44.3	28.0	27.7	--	44.3	--
1970	738	63.6	32.0	34.8	28.8	--	32.0	4.4
1971	632	63.2	36.6	25.9	37.3	--	36.6	0.2
1972	1,186	53.0	11.8	22.1	30.9	--	11.8	35.3
1973	1,148	72.6	5.6	20.0	52.6	--	5.6	21.8
1974	1,039	78.3	12.4	20.2	58.1	--	12.4	9.0
1975	1,164	73.5	10.7	23.5	49.9	--	10.7	15.4

\*July-June crop years

SOURCE: Wheat Situation

TABLE 2.--WHEAT: MARKETING YEAR SUPPLY AND DISAPPEARANCE, SPECIFIED PERIODS, 1974-78\*

YEAR AND PERIODS BEGINNING JUNE 1	SUPPLY				DISAPPEARANCE							ENDING STOCKS		
	BEGIN- NING STOCKS	PRODUC- TION	IM- PORTS 1/	TOTAL	DOMESTIC USE					EX- PORTS 1/	TOTAL DISAP- PEARANCE	GOVT. OWNED 4/	PRI- VATELY OWNED 5/	TOTAL
					FOOD 2/	ALC. BEVER- AGES	SEED	FEED 3/	TOTAL					
MILLION BUSHELS														
1974/75														
JUNE-SEPT.	340.1	1,781.9	2.2	2,124.1	176.6	6/	34.0	21.0	231.6	330.4	562.0	---	1,562.1	1,562.1
OCT.-DEC.	1,562.1	---	0.6	1,562.7	142.4	6/	32.0	-2.2	172.2	283.0	455.2	---	1,107.5	1,107.5
JAN.-MAR.	1,107.5	---	0.4	1,107.9	129.0	6/	0.6	60.9	190.5	255.3	445.8	---	662.1	662.1
APR.-MAY	662.1	---	0.2	662.3	92.8	6/	25.4	-40.6	77.5	149.8	227.3	---	435.0	435.0
MKT. YEAR	340.1	1,781.9	3.4	2,125.3	540.8	6/	92.0	39.1	671.9	1,018.5	1,690.4	---	435.0	435.0
1975/76														
JUNE-SEPT.	435.0	2,122.5	0.7	2,558.1	195.0	6/	33.0	17.2	245.2	428.4	673.6	---	1,884.5	1,884.5
OCT.-DEC.	1,884.5	---	0.7	1,885.3	149.9	6/	35.0	-28.8	156.1	343.6	499.6	---	1,385.7	1,385.7
JAN.-MAR.	1,385.7	---	0.3	1,386.0	148.5	6/	1.0	52.4	201.9	247.3	449.2	---	936.8	936.8
APR.-MAY	936.8	---	0.6	937.4	94.2	6/	30.0	-5.7	118.5	153.7	272.1	---	665.3	665.3
MKT. YEAR	435.0	2,122.5	2.4	2,559.8	587.5	0.1	99.0	35.1	721.7	1,172.9	1,894.6	---	665.3	665.3
1976/77														
JUNE-SEPT.	665.3	2,142.4	0.9	2,808.5	200.4	6/	32.0	-11.0	221.5	398.8	620.3	---	2,188.2	2,188.2
OCT.-DEC.	2,188.2	---	0.4	2,188.6	152.5	6/	34.0	6/	186.6	220.3	406.8	---	1,781.8	1,781.8
JAN.-MAR.	1,781.8	---	0.4	1,782.1	147.3	6/	1.0	65.5	213.8	178.8	392.6	---	1,389.5	1,389.5
APR.-MAY	1,389.5	---	1.1	1,390.6	87.9	6/	25.0	13.9	126.7	151.6	278.4	---	1,112.2	1,112.2
MKT. YEAR	665.3	2,142.4	2.7	2,810.3	588.0	0.1	92.0	68.4	748.6	949.5	1,698.1	---	1,112.2	1,112.2
1977/78														
JUNE-SEPT.	1,112.2	2,036.3	0.8	3,149.4	193.3	6/	33.0	141.1	367.3	381.7	749.0	8.2	2,392.2	2,400.4
OCT.-DEC.	2,400.4	---	0.4	2,400.7	153.5	6/	23.0	5.1	181.6	225.4	407.0	31.8	1,962.0	1,993.8
JAN.-MAR.	1,993.8	---	0.4	1,994.2	145.5	6/	1.0	41.4	187.9	278.5	466.5	44.8	1,482.9	1,527.7
APR.-MAY	1,527.7	---	0.3	1,528.0	94.3	6/	23.0	-4.3	113.0	238.2	351.3	45.7	1,131.0	1,176.7
MKT. YEAR	1,112.2	2,036.3	1.9	3,150.5	586.5	0.1	80.0	183.3	849.9	1,123.9	1,973.8	45.7	1,131.0	1,176.7
1978/79 7/														
JUNE-SEPT.	1,176.7	1,798.7	0.5	2,976.0	191.7	6/	27.0	127.0	345.6	493.3	839.0	48.9	2,088.1	2,137.0
OCT.-DEC.	2,137.0	---	0.5	2,137.5	156.8	6/	33.0	8.2	198.0	308.8	506.8	49.5	1,581.2	1,630.7
JAN.-MAR.														
APR.-MAY														
MKT. YEAR														

1/ IMPORTS AND EXPORTS INCLUDE FLOUR AND OTHER PRODUCTS EXPRESSED IN WHEAT EQUIVALENT. 2/ USED FOR FOOD IN THE UNITED STATES, U.S. TERRITORIES, AND BY THE MILITARY. 3/ RESIDUAL; APPROXIMATES FEED USE. 4/ UNCOMMITTED, GOVERNMENT ONLY. 5/ INCLUDES TOTAL LOANS. 6/ LESS THAN 50,000 BUSHELS. 7/ PRELIMINARY. \*TOTALS MAY NOT ADD DUE TO ROUNDING.



TABLE 3.--WHEAT CLASSES: MARKETING YEAR SUPPLY AND DISAPPEARANCE,  
1975-78 1/

YEAR BEGINNING JUNE 1	SUPPLY			DISAPPEARANCE			ENDING STOCKS MAY 31
	BEGIN-	PRO-	TOTAL	DOMESTIC	EXPORTS	TOTAL	
	NING STOCKS	DUCTION		USE			
MILLION BUSHELS							
1975/76							
HARD WINTER	225	1,058	1,283	323	581	904	379
RED WINTER	37	326	363	141	165	306	57
HARD SPRING	104	327	432	156	160	316	116
DURUM	26	123	150	45	52	97	53
WHITE	43	288	331	56	215	271	60
ALL CLASSES	435	2,122	2,559	721	1,173	1,894	665
1976/77							
HARD WINTER	379	976	1,355	332	418	750	605
RED WINTER	57	336	393	140	181	321	72
HARD SPRING	116	411	528	154	124	278	250
DURUM	53	135	190	57	41	98	92
WHITE	60	284	344	65	186	251	93
ALL CLASSES	665	2,142	2,810	748	950	1,698	1,112
1977/78 4/							
HARD WINTER	605	992	1,597	428	535	963	634
RED WINTER	72	350	422	154	197	351	71
HARD SPRING	250	398	649	161	156	317	332
DURUM	92	80	173	44	62	106	67
WHITE	93	216	309	62	174	236	73
ALL CLASSES	1,112	2,036	3,150	849	1,124	1,973	1,177
1978/79 5/							
HARD WINTER	634	834	1,468	418	615	1,033	435
RED WINTER	71	202	273	131	105	236	37
HARD SPRING	332	380	712	160	190	350	362
DURUM	67	133	201	47	65	112	89
WHITE	73	250	324	68	175	243	81
ALL CLASSES	1,177	1,799	2,978	824	1,150	1,974	1,004

1/ DATA, EXCEPT PRODUCTION, ARE APPROXIMATIONS. 2/ TOTAL SUPPLY INCLUDES IMPORTS. 3/ IMPORTS AND EXPORTS INCLUDE FLOUR AND OTHER PRODUCTS IN WHEAT EQUIVALENT. 4/ PRELIMINARY. 5/ PROJECTED.



Table 4.--Wheat: Farm price, loan rate per bushel and price for equivalent quantity of major feed grain in region, 1977-78 1/

Item	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Simple average	Support rate
- - - Price for 60 pounds (bushel weight of wheat) - - -														
<u>Central and So. Plains (Hd. winter) 2/</u>														
Wheat 1977/78	1.94	1.98	1.94	2.06	2.19	2.37	2.38	2.37	2.44	2.55	2.69	2.69	2.30	2.19
Sorghum 1977/78	1.82	1.75	1.59	1.60	1.74	1.87	1.86	1.87	1.91	2.02	2.16	2.21	1.87	1.79
Wheat 1978/79	2.70	2.70	2.73	2.82	2.95	2.98	2.96							2.28
Sorghum 1978/79	2.15	2.05	1.97	1.97	2.06	2.11	2.12							2.00
<u>Cornbelt (Soft red winter) 4/</u>														
Wheat 1977/78	1.99	1.97	1.88	1.88	2.01	2.35	2.45	2.45	2.48	2.64	2.88	2.89	2.32	2.26
Corn 1977/78	2.30	2.01	1.74	1.70	1.80	2.07	2.16	2.17	2.21	2.33	2.47	2.50	2.12	1.93
Wheat 1978/79	2.88	2.90	3.02	3.08	3.23	3.34	3.37							2.34
Corn 1978/79	2.52	2.40	2.18	2.13	2.12	2.19	2.27							2.18
<u>East and South (Soft red winter) 5/</u>														
Wheat 1977/78	1.95	1.91	1.68	2.00	---	2.30	2.23	---	---	---	---	---	1.95	2.22
Corn 1977/78	2.58	2.20	1.85	1.84	1.95	2.29	2.41	2.34	2.44	2.58	2.69	2.87	2.33	2.03
Wheat 1978/79	2.86	3.02	3.11	---	3.09	3.18	---							2.28
Corn 1978/79	2.85	2.58	2.38	2.32	2.42	2.51	2.61							2.29
<u>Northern Plains (Spring and durum) 6/</u>														
Wheat 1977/78	2.25	2.16	2.16	2.28	2.45	2.59	2.56	2.60	2.62	2.66	2.81	2.84	2.50	2.26
Barley 1977/78	2.10	1.71	1.70	1.71	1.91	2.11	2.14	2.15	2.19	2.21	2.34	2.39	2.05	1.74
Wheat 1978/79	2.79	2.69	2.71	2.78	2.87	2.93	2.86							2.36
Barley 1978/79	2.25	2.00	2.02	2.14	2.22	2.32	2.34							1.92
<u>Pacific Northwest (White) 7/</u>														
Wheat 1977/78	2.47	2.52	2.55	2.45	2.40	2.58	2.62	2.69	2.92	3.07	3.17	3.22	2.72	2.31
Barley 1977/78	2.47	2.44	2.25	2.32	2.10	2.31	2.30	2.36	2.47	2.56	2.64	2.71	2.41	1.99
Wheat 1978/79	3.23	3.29	3.36	3.36	3.30	3.30	3.34							2.41
Barley 1978/79	2.69	2.59	2.54	2.35	2.25	2.32	2.31							2.15
<u>U.S. Average</u>														
Wheat 1977/78	2.03	2.04	2.13	2.16	2.30	2.46	2.47	2.53	2.59	2.67	2.82	2.82	8/2.33	2.25
Wheat 1978/79	2.82	2.80	2.88	2.92	2.99	3.04	3.01						8/2.94	2.35

1/ Simple averages with no adjustment made for relative feed value. Relative feeding value: Corn 1.00; wheat 1.05; barley .90; sorghum .95; reported in Consumption of Feed by Livestock, Production Research Report No. 79, ERS, USDA. 2/ Kansas, Nebraska, Texas, Oklahoma, and Colorado. 3/ Preliminary. 4/ Ohio, Indiana, Illinois, and Missouri. 5/ Pennsylvania, Maryland, Virginia, North Carolina, South Carolina, Georgia, Mississippi, Alabama, Louisiana, and Arkansas. 6/ North Dakota, South Dakota, and Minnesota. 7/ Washington, Oregon, and Idaho. 8/ Season average price including allowance for unredeemed loans and purchases by CCC.

Table 5.--Wheat: Cash prices for leading classes at major markets, 1977-78 <sup>1/</sup>

Major market and Year	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Simple average
	----- Dollars per bushel -----												
<u>No. 1 HRW, Kansas City</u>													
<u>Ordinary protein</u>													
1977/78	2.31	2.35	2.31	2.47	2.56	2.81	2.80	2.82	2.84	3.07	3.21	3.12	2.72
1978/79	3.12	3.14	3.14	3.24	3.42	3.48	3.39						
<u>13% protein</u>													
1977/78	2.51	2.43	2.38	2.53	2.61	2.86	2.87	2.92	2.89	3.09	3.36	3.25	2.81
1978/79	3.20	3.17	3.15	3.26	3.42	3.48	3.40						
<u>No. 2 SRW, Chicago</u>													
1977/78	2.29	2.20	2.08	2.20	2.27	2.59	2.65	2.69	2.64	2.82	3.11	3.14	2.56
1978/79	3.18	3.22	3.32	3.42	3.51	3.68	3.68						
<u>No. 2 SRW, St. Louis</u>													
1977/78	2.15	2.14	1.97	2.01	2.28	2.70	2.74	2.75	2.71	2.90	3.09	2.99	2.54
1978/79	3.05	3.16	3.21	3.23	3.41	3.57	3.50						
<u>No. 2 SRW, Toledo</u>													
1977/78	2.21	2.13	2.03	2.08	2.21	2.53	2.57	2.62	2.55	2.77	3.07	3.03	2.48
1978/79	3.09	3.13	3.21	3.32	3.46	3.73	3.72						
<u>No. 2 SW, Toledo</u>													
1977/78	2.21	2.16	2.04	2.00	2.18	2.52	2.56	2.62	2.56	2.77	3.07	3.03	2.48
1978/79	3.10	3.26	3.45	3.63	3.69	3.87	3.77						
<u>No. 1 SW, Portland</u>													
1977/78	2.79	2.88	2.88	2.80	2.75	2.91	2.97	3.17	3.33	3.41	3.62	3.60	3.09
1978/79	3.60	3.74	3.72	3.77	3.76	3.76	3.71						
<u>No. 1 DK. NS, Minneapolis</u>													
<u>Ordinary protein</u>													
1977/78	2.43	2.29	2.22	2.51	2.61	2.71	2.68	2.73	2.72	2.86	3.08	3.10	2.66
1978/79	3.06	2.95	2.96	3.07	3.21	3.32	3.15						
<u>14% protein</u>													
1977/78	2.65	2.54	2.48	2.75	2.87	2.96	2.92	2.94	2.90	3.03	3.23	3.27	2.88
1978/79	3.21	3.11	3.13	3.26	3.41	3.47	3.32						
<u>Hard amber durum, Mpls. (med.)</u>													
1977/78	2.84	2.84	2.80	3.12	3.42	3.54	3.51	3.62	3.61	3.60	3.72	3.79	3.37
1978/79	3.72	3.56	3.55	3.52	3.69	3.70	3.53						

<sup>1/</sup> On-track prices established at the close of the market.



Table 6.--Wheat and flour: Price relationships at milling centers annual and by periods, 1975-78

Year and periods	At Kansas City					At Minneapolis				
	Cost of wheat to produce 100 lb. of flour 1/	Wholesale price of-			Cost of wheat to produce 100 lb. of flour 1/	Wholesale price of-			Over cost of wheat	
		Bakery flour per 100 lb. 2/	Byprod- ucts obtained 100 lb. flour 3/	Total products Actual		Bakery flour per 100 lb. 2/	Byprod- ucts obtained 100 lb. flour 3/	Total products Actual		
----- Dollars -----										
1975/76										
June-Sept.	9.64	9.15	1.48	10.63	.99	10.37	10.38	1.45	11.83	1.46
Oct.-Dec.	9.55	9.58	1.67	11.25	1.70	10.12	10.66	1.56	12.22	2.10
Jan.-Mar.	9.49	9.29	1.56	10.85	1.36	9.97	10.36	1.47	11.83	1.86
Apr.-May	9.03	8.88	1.53	10.41	1.38	9.68	10.16	1.54	11.70	2.02
Season average:	9.43	9.23	1.56	10.79	1.36	10.04	10.39	1.51	11.90	1.86
1976/77										
June-Sept.	8.47	8.31	1.70	10.01	1.54	8.98	9.64	1.74	11.38	2.40
Oct.-Dec.	6.92	7.05	1.71	8.76	1.84	7.16	8.04	1.72	9.76	2.60
Jan.-Mar.	6.75	6.70	1.63	8.33	1.58	7.02	7.78	1.66	9.44	2.42
Apr.-May	6.12	6.02	1.62	7.64	1.52	6.66	7.02	1.66	8.68	2.02
Season average:	7.06	7.02	1.66	8.68	1.62	7.46	8.12	1.70	9.82	2.36
1977/78										
June-Sept.	5.61	5.86	1.19	7.05	1.44	5.97	6.70	1.23	7.93	1.96
Oct.-Dec.	6.34	6.46	1.33	7.79	1.45	6.69	7.24	1.23	8.47	1.78
Jan.-Mar.	6.77	6.88	1.37	8.25	1.48	6.82	7.52	1.25	8.77	1.95
Apr.-May	7.54	7.86	1.14	9.00	1.46	7.45	8.52	1.08	9.60	2.15
Season average:	6.56	6.76	1.26	8.02	1.46	6.73	7.49	1.20	8.69	1.96
1978/79										
June-Sept.	7.29	7.49	1.27	8.76	1.47	7.27	8.03	1.16	9.19	1.92
Oct.-Dec. 4/	7.83	7.77	1.67	9.44	1.61	7.78	8.15	1.48	9.63	1.85
Jan.-Mar.										
Apr.-May										
Season average:										

1/ Based on 73 percent extraction rate, cost of 2.28 bushels: At Kansas City, NO. 1 Hard Winter, 13 percent protein, and at Minneapolis, NO. 1 Dark Northern Spring, simple average of 13 percent and 15 percent protein. 2/ Quoted as 95 percent patent at Kansas City and standard patent at Minneapolis, bulk basis. 3/ Assumed 50-50 millfeed distribution between bran and shorts or middlings, bulk basis. 4/ Preliminary.

Compiled from reports of Agricultural Marketing Service and Bureau of Labor Statistics, Department of Labor.

Table 7.--Cereal and bakery products: Retail price index, 1967-78

Year	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Average
(Index 1967 = 100)													
1967	99.8	99.7	99.9	99.9	99.7	99.9	99.9	99.8	99.7	99.7	99.8	99.9	99.8
1968	100.1	100.6	100.9	101.1	101.1	101.4	101.4	101.7	101.9	102.3	102.4	102.6	101.5
1969	103.0	103.5	103.5	103.8	104.4	104.7	105.4	105.9	106.6	107.2	107.7	108.0	105.3
1970	108.2	108.7	109.8	110.2	111.0	111.2	111.6	112.4	112.8	113.0	113.9	114.1	111.4
1971	114.2	114.8	114.5	114.6	114.3	114.1	113.8	113.7	114.3	114.8	115.0	114.7	114.4
1972	114.5	114.4	114.4	114.6	114.6	115.0	115.8	116.3	117.8	119.0	120.2	122.1	116.6
1973	123.0	123.5	124.7	132.4	139.0	145.8	148.5	149.7	154.4	158.6	161.4	164.3	143.8
1974	165.3	166.7	168.2	170.4	174.7	177.6	181.7	185.3	187.3	189.1	188.9	187.0	178.5
1975	185.2	184.6	182.6	181.6	181.6	181.9	182.2	182.0	181.1	180.6	180.2	180.8	182.0
1976	181.3	180.9	180.3	180.4	180.1	179.9	179.3	179.9	180.0	181.3	182.6	182.5	180.7
1977	182.8	183.3	182.7	184.9	185.4	187.1	189.0	190.8	194.5	194.4	194.8	198.2	189.0
1978	199.4	201.3	203.1	203.8	205.1	206.6	207.9						

Bureau of Labor Statistics, U.S. Department of Labor.

Table 8.--Wheat: Monthly average export prices at selected ports, 1975-78

Year	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Simple average
- - - - Cents per bushel - - - -													
GULF PORTS: NO. 1 HARD RED WINTER, ORDINARY PROTEIN													
1975/76	346	395	443	450	439	400	388	391	416	415	396	386	405
1976/77	398	387	345	327	303	290	288	296	301	291	278	259	314
1977/78	253	263	260	272	283	304	312	311	315	337	355	337	300
1978/79	344	346	347	356	374	375	370						
EAST COAST NO. 1 SOFT RED WINTER													
1975/76	319	358	405	412	392	354	328	365	391	389	1/	1/	371
1976/77	1/	350	319	312	284	274	278	285	291	278	271	258	291
1977/78	---	229	222	231	246	282	289	294	294	315	340	338	280
1978/79	337	337	344	353	369	382	1/						
PORTLAND: NO. 2 WESTERN WHITE													
1975/76	343	382	442	448	430	389	383	387	408	396	375	361	395
1976/77	362	364	342	331	306	299	284	294	305	298	302	299	316
1977/78	286	292	295	285	282	296	305	320	338	347	369	365	315
1978/79	369	385	379	384	382	384	377						
DULUTH: NO. 2 NORTHERN SPRING, 14% PROTEIN													
1975/76	426	456	489	493	477	434	435	422	444	438	422	425	447
1976/77	442	423	374	344	326	312	303	305	310	303	302	286	336
1977/78	267	255	254	279	290	297	290	292	289	299	321	327	288
1978/79	324	316	319	328	346	350	328						

1/ No price quotes available.

Source: Grain Market News.



Table 9.--Wheat and Wheat Flour: World trade, production, stocks and utilization for 1975/76, 1976/77, 1977/78, and projected levels for 1978/79, years beginning July 1.

Country or region	1975/76	1976/77	1977/78 Preliminary	1978/79 January
- - - Million metric tons - - -				
<b>Exports:</b>				
Canada	12.1	12.9	16.0	14.5
Australia	7.9	8.5	11.1	7.7
Argentina	3.2	5.6	2.6	2.6
Sub-total	23.2	27.0	29.6	24.8
W. Europe	9.5	6.3	7.1	10.5
USSR	0.5	1.0	1.0	1.5
All Others	1.6	2.8	4.2	4.7
Total Non-U.S.	34.9	37.1	41.9	41.4
USA 1/	31.5	25.8	31.1	31.0
World total	66.4	62.8	73.0	72.5
<b>Imports:</b>				
W. Europe	6.4	5.6	7.6	7.0
USSR	10.1	4.6	6.9	5.0
Japan	5.9	5.5	5.8	5.5
E. Europe	5.3	6.3	4.8	3.7
China, People's Rep. of	2.2	3.1	8.6	9.0
All Others	36.5	37.7	39.4	42.3
World total	66.4	62.8	73.0	72.5
(World total including intra EC-9)	(72.9)	(68.2)	(79.2)	(77.5)
<b>Production: 2/</b>				
Canada	17.1	23.6	19.9	21.1
Australia	12.0	11.7	9.3	17.6
Argentina	8.6	11.0	5.3	7.4
W. Europe	48.5	50.7	47.7	58.0
USSR 3/	66.2	96.9	92.2	120.8
E. Europe	28.5	34.7	34.2	35.3
India	24.1	28.8	29.0	31.3
All other foreign	87.4	99.5	89.0	95.3
Total foreign	292.4	356.8	326.5	386.8
USA	57.8	58.3	55.4	49.0
World total	350.1	415.1	381.9	435.8
<b>Utilization: 4/</b>				
USA	19.7	20.4	22.8	22.7
USSR 3/	86.8	92.5	107.1	107.6
China, People's Rep. of	43.2	48.1	49.1	53.0
All other foreign	201.1	218.7	219.1	228.7
World total	350.7	379.6	398.1	412.0
<b>Stocks, ending: 5/</b>				
	63.0	98.4	82.3	106.1

1/ Includes transshipments through Canadian ports; excludes products other than flour. 2/ Production data include all harvests occurring within the July-June year shown, except that small grain crops from the early harvesting Northern Hemisphere areas are "moved forward"; i.e., the May 1977 harvests in areas such as India, North Africa, and southern United States are actually included in "1977/78" accounting period which begins July 1, 1977. 3/ "Bunker weight" basis: not discounted for excess moisture and foreign material. 4/ Utilization data are based on an aggregate of differing local marketing years. For countries for which stocks data are not available, (excluding the USSR) utilization estimates represent "apparent" utilization, i.e., they are inclusive of annual stock level adjustments. 5/ Stocks data are based on an aggregate of differing local marketing years and should not be construed as representing world stock levels at a fixed point in time. Stocks data are not available for all countries and exclude those such as the People's Republic of China and parts of Eastern Europe; the world stock levels have been adjusted for estimated year-to-year changes in USSR grain stocks, but do not purport to include the entire absolute level of USSR stocks.

SOURCE: Foreign Agricultural Service. World Grain Situation: Outlook for 1978/79.

Table 10.--Wheat: World wheat supply and distribution, marketing years 1970-78 1/

Year	Area harvested	Yield	Beginning stocks 2/	Production	Total exports	Utilization total 3/
	Million ha.	Metric ton/ha.			Million metric tons	
1970/71	207.0	1.52	97.4	315.5	56.2	338.9
1971/72	212.9	1.64	74.0	348.8	56.0	341.2
1972/73	210.8	1.63	81.1	343.2	71.7	361.1
1973/74	216.8	1.72	63.1	372.4	72.8	364.7
1974/75	219.9	1.62	70.3	357.2	68.1	363.3
1975/76	225.0	1.56	63.6	350.1	73.7	350.7
1976/77	232.5	1.79	63.0	415.1	70.2	379.6
1977/78 4/	225.9	1.69	98.4	381.9	75.1	398.1
1978/79 5/	226.0	1.93	82.3	435.8	75.3	412.0

1/ Data in this table are based on aggregate of differing local marketing years, and will therefore differ from July-June data appearing elsewhere in this report.

2/ Stocks data are only for selected countries and exclude such important countries as USSR, the People's Republic of China, and part of Eastern Europe for which stocks data are not available; the aggregate stocks levels have, however, been adjusted for estimated year-to-year changes in USSR grain stocks.

3/ For countries for which stock data are not available, or for which no adjustments have been made for year-to-year changes, utilization estimates assume a constant stock level.

4/ Preliminary.

5/ Projected.

Source: Foreign Agricultural Service. World Grain Situation: Outlook for 1978/79, FG-3-79, January 26, 1979

Table 11.--Wheat: World wheat and flour trade (grain equivalent), year beginning July, 1974-78 1/\*

Region and Country	1974	1975	1976	1977 Preliminary	1978 Projected
	Million metric tons				
<b>Exports</b>					
Canada	11.2	12.1	12.9	16.0	14.5
Australia	8.3	7.9	8.5	11.1	7.7
Argentina	2.2	3.2	5.6	2.6	2.6
Sub-total	21.6	23.2	27.0	29.6	24.8
West Europe	8.2	9.5	6.3	7.1	10.5
East Europe	1.7	1.3	2.1	1.9	1.4
USSR	4.0	0.5	1.0	1.0	1.5
Other	0.3	0.3	0.6	2.2	3.2
Total Non-U.S.	35.9	34.9	37.1	41.9	41.4
United States	28.0	31.5	25.8	31.1	31.0
World total	63.9	66.4	62.8	73.0	72.5
<b>Imports</b>					
Japan	5.4	5.9	5.5	5.8	5.3
West Europe	6.0	6.4	5.6	7.6	7.0
East Europe	4.0	5.3	6.3	4.8	3.7
USSR	2.5	10.1	4.6	6.9	5.0
China, People's Rep. of	5.7	2.2	3.1	8.6	9.0
Sub-total	23.6	29.9	25.1	33.6	30.2
Africa 2/	7.7	8.1	8.2	10.8	10.7
Latin America 3/	5.0	6.3	5.5	6.6	7.8
West Asia 4/	4.7	2.4	4.0	5.1	5.1
South Asia 5/	10.8	10.8	6.6	4.4	6.0
Other Asia 6/	2.7	2.5	3.4	3.2	3.2
Others	9.3	6.3	10.0	9.3	9.5
World total	63.9	66.4	62.8	73.0	72.5

1/ Data exclude intra-EC-9 trade, and exclude products other than flour in grain equivalent; U.S. data also adjusted for transshipments through Canada.

2/ Algeria, Egypt, Libya, Morocco, Nigeria, Sudan and Tunisia.

3/ Mexico, Brazil, Chile, Colombia, Peru and Venezuela.

4/ Iran, Iraq, Israel, Jordan, Lebanon, Saudi Arabia, Syria and Turkey.

5/ Bangladesh, India, Indonesia, Pakistan and Sri Lanka.

6/ Rep. of Korea, Philippines and Taiwan.

\* Totals may not add due to independent rounding.

Source: Foreign Agricultural Service. World Grain Situation: Outlook for 1978/79, FG-3-79, January 26, 1979



Table 12.--Wheat: Rotterdam, c.i.f., quotations for cargoes/parcels  
in nearest shipment position, by months, 1973-78 1/

Year beginning	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Simple average
- - - - Dollars per metric ton - - - -													
Canadian No. 1 CWRS - 13.5													
1973	132	167	202	228	222	205	222	239	244	240	214	185	208
1974	204	216	216	213	234	237	232	209	198	182	192	193	210
1975	195	205	210	228	219	222	<u>2/185</u>	<u>2/187</u>	<u>2/195</u>	<u>2/174</u>	<u>2/166</u>	<u>2/169</u>	196
1976	<u>2/188</u>	<u>2/175</u>	158	156	145	141	139	145	146	135	133	134	150
1977	127	122	117	129	137	144	145	153	155	<u>2/148</u>	<u>2/154</u>	<u>2/159</u>	141
1978	<u>2/157</u>	161	163	166	170	77	NQ						
United States No. 2 Hard Winter, 13.5%													
1973	121	144	203	212	206	200	223	230	232	224	183	170	196
1974	177	191	194	204	230	229	219	195	180	176	159	146	192
1975	146	174	188	195	185	173	166	168	181	183	176	169	175
1976	172	176	159	150	139	131	132	133	140	132	130	121	143
1977	114	116	116	120	126	135	137	134	132	139	151	142	130
1978	<u>150</u>	<u>146</u>	147	148	156	161	157						
United States Dark Northern Spring, 14%													
1973	132	146	193	201	194	198	224	240	240	228	182	180	196
1974	209	214	217	214	233	233	228	204	192	179	182	181	207
1975	175	185	196	202	193	182	187	183	193	194	174	178	187
1976	181	176	158	148	138	137	142	145	148	134	130	127	147
1977	115	111	110	121	126	131	132	144	147	147	147	145	131
1978	142	138	140	144	153	159	150						

1/ Hamburg Mercantile Exchange prices for Rotterdam. Averages: Basis daily market quotes. 30 days delivery.

2/ Canadian Western Spring Wheat (CWRS)--No. 2--12.5 protein.

NQ - Not quoted.

Compiled from Foreign Agriculture Grain Circular, Foreign Agriculture Service.

TABLE 13. --RYE: MARKETING YEAR SUPPLY, DISAPPEARANCE, AREA AND PRICES, 1974-78\*

YEAR BEGINNING JUNE 1	SUPPLY				DISAPPEARANCE						ENDING STOCKS MAY 31			
	BEGIN- NING STOCKS	PRODUC- TION	IM- PORTS	TOTAL	DOMESTIC USE					EX- PORTS	TOTAL DISAP- PEARANCE	GOVT. OWNED 2/	PRI- VATELY OWNED 3/	TOTAL
					FOOD	ALC. BEVER- AGES	SEED	FEED 1/	TOTAL					
MILLION BUSHELS														
1974/75	14.2	17.5	0.3	32.0	5.5	1.4	4.2	7.8	18.9	6.5	25.3	---	6.6	6.6
1975/76	6.6	16.0	0.9	23.5	4.2	2.1	4.2	7.6	18.0	1.1	19.1	---	4.4	4.4
1976/77	4.4	15.0	0.2	19.6	3.7	1.9	4.2	5.3	15.1	4/	15.2	---	4.4	4.4
1977/78 5/	4.4	17.3	0.1	21.9	3.6	1.9	4.8	7.4	17.7	4/	17.7	---	4.1	4.1
1978/79 6/	4.1	26.2	0.1	30.4	4.5	2.0	4.9	7.7	19.1	4/	19.1	---	---	11.3
AREA				YIELD		AVERAGE PRICES				NATIONAL AVG. LOAN RATE				
PLANTED		HARVESTED FOR GRAIN		PER HARVESTED ACRE		RECEIVED BY FARMERS		MINNEAPOLIS, NO. 2						
- - - - MILLION ACRES - - - -				BUSHELS		- - - - - DOLLARS PER BUSHEL - - - - -								
1974/75	2.8		0.8		22.3		2.51		2.89		.89			
1975/76	2.8		0.7		21.9		2.36		2.84		.89			
1976/77	2.7		0.7		20.7		2.47		2.87		1.20			
1977/78 5/	2.7		0.7		24.6		2.05		2.53		1.70			
1978/79 6/	3.0		1.0		26.3		2.02				1.70			

1/ RESIDUAL: ROUGHLY APPROXIMATES TOTAL FEED USE. 2/ UNCOMMITTED, GOVERNMENT ONLY. 3/ INCLUDES TOTAL LOANS 4/ LESS THAN 50,000 BUSHELS. 5/ PRELIMINARY. 6/ PROJECTED. \*TOTALS MAY NOT ADD DUE TO ROUNDING.



TABLE 14.—RYE: MARKETING YEAR SUPPLY AND DISAPPEARANCE, SPECIFIED PERIODS, 1974-78\*

YEAR AND PERIODS BEGINNING JUNE 1	SUPPLY				DISAPPEARANCE						ENDING STOCKS			
	BEGIN- NING STOCKS	PRODUC- TION	IM- PORTS	TOTAL	DOMESTIC USE					EX- PORTS	TOTAL DISAP- PEARANCE	GOVT. OWNED 2/	PRI- VATELY OWNED 3/	TOTAL
					FOOD	ALC. BEVER- AGES	SEED	FEED 1/	TOTAL					
MILLION BUSHELS														
1974/75														
JUNE-SEPT.	14.2	17.5	4/	31.7	1.9	0.4	2.1	3.3	7.6	4.2	11.9	---	19.8	19.8
OCT.-DEC.	19.8	---	4/	19.8	1.4	0.4	1.9	2.3	6.0	2.2	8.2	---	11.6	11.6
JAN.-MAR.	11.6	---	---	11.6	1.3	0.3	0.2	1.8	3.6	4/	3.7	---	7.9	7.9
APR.-MAY	7.9	---	0.3	8.2	0.8	0.3	---	0.4	1.5	4/	1.6	---	6.6	6.6
MKT. YEAR	14.2	17.5	0.3	32.0	5.5	1.4	4.2	7.8	18.9	6.5	25.3	---	6.6	6.6
1975/76														
JUNE-SEPT.	6.6	16.0	0.2	22.8	1.4	0.4	2.1	3.5	7.5	0.7	8.2	---	14.7	14.7
OCT.-DEC.	14.7	---	0.2	14.9	1.1	0.7	1.9	1.8	5.5	0.3	5.8	---	9.1	9.1
JAN.-MAR.	9.1	---	4/	9.1	1.1	0.5	0.2	1.6	3.3	4/	3.3	---	5.8	5.8
APR.-MAY	5.8	---	0.5	6.2	0.6	0.5	---	0.7	1.7	0.1	1.8	---	4.4	4.4
MKT. YEAR	6.6	16.0	0.9	23.5	4.2	2.1	4.2	7.6	18.0	1.1	19.1	---	4.4	4.4
1976/77														
JUNE-SEPT.	4.4	15.0	0.2	19.6	1.2	0.5	2.1	1.7	5.5	4/	5.5	---	14.1	14.1
OCT.-DEC.	14.1	---	4/	14.1	1.0	0.5	1.9	1.8	5.2	4/	5.2	---	8.9	8.9
JAN.-MAR.	8.9	---	4/	8.9	0.9	0.6	0.2	1.0	2.7	4/	2.7	---	6.2	6.2
APR.-MAY	6.2	---	---	6.2	0.6	0.4	---	0.8	1.8	4/	1.8	---	4.4	4.4
MKT. YEAR	4.4	15.0	0.2	19.6	3.7	1.9	4.2	5.3	15.1	4/	15.2	---	4.4	4.4
1977/78														
JUNE-SEPT.	4.4	17.3	0.1	21.8	1.2	0.6	2.4	2.9	7.1	4/	7.1	---	14.8	14.8
OCT.-DEC.	14.8	---	---	14.8	1.0	0.5	2.2	1.8	5.5	4/	5.5	---	9.3	9.3
JAN.-MAR.	9.3	---	---	9.3	0.9	0.5	0.2	1.6	3.2	4/	3.2	---	6.1	6.1
APR.-MAY	6.1	---	4/	6.1	0.6	0.3	---	1.1	2.0	4/	2.0	---	4.1	4.1
MKT. YEAR	4.4	17.3	0.1	21.9	3.6	1.9	4.8	7.4	17.7	4/	17.7	---	4.1	4.1
1978/79 5/														
JUNE-SEPT.	4.1	26.2	0.1	30.4	1.1	0.5	2.5	2.3	6.4	4/	6.4	---	24.0	24.0
OCT.-DEC.	24.0	---	---	24.0	1.1	0.6	2.2	3.9	7.8	4/	7.8	---	16.2	16.2
JAN.-MAR.														
APR.-MAY														
MKT. YEAR														

1/ RESIDUAL; ROUGHLY APPROXIMATES TOTAL FEED USE. 2/ UNCOMMITTED, GOVERNMENT ONLY. 3/ INCLUDES TOTAL LOANS. 4/ LESS THAN 50,000 BUSHELS. 5/ PRELIMINARY. \*TOTALS MAY NOT ADD DUE TO ROUNDING.

Table 15.--Rye: Flour and cash prices, 1975-78

Year	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Simple average
MINNEAPOLIS, WHITE FLOUR (Dollars per cwt.)													
1975	6.78	7.01	8.21	8.30	8.35	7.98	7.70	7.86	7.85	8.02	8.01	8.18	7.85
1976	8.94	9.04	8.64	8.60	8.25	8.20	8.24	8.62	8.76	8.82	8.85	8.70	8.64
1977	8.14	6.99	6.52	6.96	7.65	7.92	8.34	8.54	8.80	9.10	9.29	9.52	8.15
1978	9.03	8.45	7.73	7.90	7.90	8.01	8.05						
MINNEAPOLIS NO. 2 (Dollars per bushel)													
1975	2.49	2.58	3.04	3.03	3.01	2.86	2.73	2.82	2.81	2.89	2.88	2.96	2.84
1976	3.24	3.22	2.88	2.90	2.77	2.68	2.70	2.77	2.80	2.82	2.82	2.79	2.87
1977	2.53	1.94	1.79	2.06	2.28	2.46	2.56	2.69	2.82	2.94	3.05	3.22	2.53
1978	2.93	2.59	2.22	2.36	2.33	2.47	2.44						

Table 16.--Rye: Acreage, yield, and production, United States, annual 1969-79

Year of harvest	Acreage seeded <sup>1/</sup>	Acreage harvested	Yield per harvested acre	Production
	<u>1,000 acres</u>	<u>1,000 acres</u>	<u>Bushels</u>	<u>1,000 bushels</u>
1969	3,959	1,291	23.4	30,204
1970	4,196	1,427	25.8	36,840
1971	4,842	1,751	28.1	49,223
1972	3,458	1,050	26.9	28,256
1973	3,380	955	25.8	24,677
1974	2,828	784	22.3	17,506
1975	2,829	729	21.9	15,958
1976	2,652	721	20.7	14,951
1977	2,652	704	24.6	17,312
1978	2,985	995	26.3	26,160
1979 <sup>2/</sup>	3,077			

<sup>1/</sup> Seeded for all purposes in preceding fall.<sup>2/</sup> Preliminary.



## LIST OF TABLES

	<u>Page</u>	<u>Table</u>
<u>WHEAT:</u>		
Supply and Distribution		
United States and World		
Condensed table, annual 1974-78 .....	2	1
By specified periods, 1974-78 .....	19	2
By classes, annual 1975-78 .....	20	3
World, marketing years, 1970-78 .....	26	10
World trade, production, stocks and utilization, annual 1975-78 .....	25	9
Exports		
World wheat and flour trade, July-June, 1974-78 .....	26	11
Prices		
Cash prices for leading classes at major markets, 1977-78 .....	22	5
Farm price and price for equivalent quantity of major feed grain in region, 1977-78 .....	21	4
Wheat and flour price relationships, annual and by periods, 1975-78 .....	23	6
Cereal and bakery products, retail price index, 1967-78 .....	23	7
Export prices by months, at selected ports, 1975-78 .....	24	8
Wheat: Rotterdam, c.i.f. quotations, by months, 1973-78 .....	27	12
<u>RYE:</u>		
Supply and Distribution		
Condensed table, annual 1974-78 .....	28	13
By specified periods, 1974-78 .....	29	14
Acreage, Yield, and Production		
United States, 1969-79 .....	30	16
Prices		
Flour and cash prices, by selected markets, 1975-78 .....	30	15