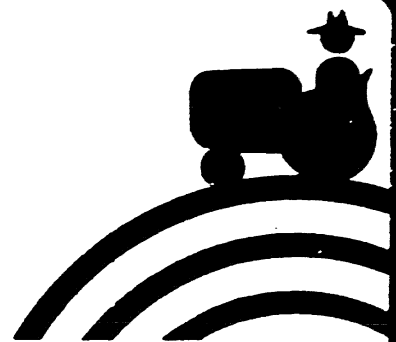


# AGRICULTURAL SUPPLY & DEMAND ESTIMATES



Approved by the World Food and Agricultural Outlook and Situation Board • USDA

#65

December 12, 1977

## HIGHLIGHTS

The December crop report significantly raised the estimate of 1977 cotton production from last month, as indicated yields improved. While part of the increase may move into domestic use and export, most of the additional production is expected to be added to stocks next summer.

Minor changes were made in production estimates for oats and barley. Corn and sorghum production estimates were not updated from the November crop report, although the estimate of corn exports was revised upward by 50 million bushels reflecting further adjustments in projected world import needs. Wheat production was lowered marginally, while rice was upped fractionally. No changes were made in supply and use of soybeans.

Although down slightly from last month's report, 1977/78 ending grain stocks (wheat, feed grains, and rough rice) may exceed 75 million metric tons. This would be a buildup of around 14 million tons with most of the increase in feed grains. However, a drawdown in world grain stocks is projected.

### U.S. FOOD AND FEED GRAINS 1/

Item	1975/76	1976/77	Est. 1977/78	Prob. Var. 2/
Million metric tons				
Beginning stocks	27.3	37.0	61.8	
Production	247.6	255.7	261.0	+4 to -4
Imports	0.6	0.5	0.4	
Total supply	275.5	293.2	323.2	
Feed use	117.3	114.4	125.0	
Domestic use	153.9	151.8	162.8	+8 to -8
Exports	84.5	79.4	84.6	+3 to -3
Total use	238.4	231.2	247.4	
Ending stocks	37.0	61.8	75.9	+10 to -10

1/ Summary of marketing year data for wheat, rice (rough), and feed grains. 2/ See footnotes on grain tables in this report.

**COTTON CROP SHARPLY IN EXCESS OF NEEDS**

U.S. cotton prospects for 1977/78 are highlighted by sharply larger production, relatively static demand, and increasing stocks. The 1977 crop now is placed at 14.4 million bales, 4 percent above earlier indications and 36 percent above 1976 production. Prospective yields are averaging a near-record 523 pounds per harvested acre. So, with production sharply in excess of needs this season, next summer's carryover may total around 6-1/4 million bales, up from 2.9 million last August and the highest since 1969.

Disappearance estimates for 1977/78 have been boosted marginally. While U.S. mill use now is expected to total slightly above last season's 6.7 million bales, exports are projected at about 4-1/2 million. Still, disappearance may not quite match 1976/77's 11-1/2 million bales.

**FINAL CROP ESTIMATES INCREASED FOR BARLEY, LOWERED FOR OATS;  
CORN EXPORT ESTIMATE RAISED**

The final crop estimate for barley was raised 11 million bushels from October, while oat production was lowered 11 million. As a result, there was little change in total U.S. feed grain production, still estimated at a record large 201 million metric tons, 5 percent above a year earlier. Minor revisions for earlier years have been made for oat and barley production. Final estimates of 1977 corn and sorghum crops and earlier-year carryover stocks will be released in January.

Europe's prospective demand for coarse grains appears stronger than previously projected. Thus, U.S. corn export projections have been raised 50 million bushels, bringing the 1977/78 season total to a record large 1.75 billion bushels. No changes have been made in U.S. demand estimates.

**1977 WHEAT, RICE ESTIMATES VIRTUALLY UNCHANGED**

At 2,026 million bushels, the final estimate of the wheat crop was virtually unchanged from November. Projected food use for 1977/78 was lowered slightly because apparent food use (mill grind less product and flour exports) for June-September is running below last year's level. Slight revisions were made in 1975 and 1976 crop estimates.

The final rice crop estimate was boosted only slightly from last month. Total acreage increased but was offset by lower yields. Some revisions also were made in earlier years.

## COTTON: UPLAND AND EXTRA LONG STAPLE 1/

\*\*\*\*\*  
 Commodity : 1975/76:1976/77: 1977/78  
 : : Est. : Proj. : Prob. Variab. 2/  
 \*\*\*\*\*

DOMESTIC measure					
Area	:	Million acres			
Planted	:	9.5	11.7	13.4	
Harvested	:	8.8	10.9	13.2	
Yield per harv.	:	Pounds per acre			
unit	:	453	465	523	
	:	Million 480-lb. bales			
Beginning stocks	:	3/5.7	3/3.7	2.9	
Production	:	8.3	10.6	14.4	+0.2 to -0.2
Supply, total 4/	:	14.1	14.3	17.4	
Mill use	:	7.3	6.7	6.8	+0.3 to -0.3
Exports	:	3.3	4.8	4.5	+0.5 to -0.5
Disappearance,	:				
total	:	10.6	11.5	11.3	+0.8 to -0.8
Difference	:				
unaccounted 5/	:	0.2	0.1	0.2	
Ending stocks	:	3/3.7	3/2.9	6.3	+0.5 to -0.5
Season aver. farm	:				
price (cts./lb.)	:	51.3	65.0	6/	
	:	METRIC measure 7/			
Area	:	Million hectares			
Planted	:	3.8	4.7	5.4	
Harvested	:	3.6	4.4	5.3	
Yield per harv.	:	Metric ton per hectare			
unit	:	0.51	0.52	0.59	
	:	Million metric tons			
Beginning stocks	:	3/1.2	3/0.8	0.6	
Production	:	1.8	2.3	3.1	8/
Supply, total 4/	:	3.1	3.1	3.8	
Mill use	:	1.6	1.5	1.5	+0.1 to -0.1
Exports	:	0.7	1.0	1.0	+0.1 to -0.1
Disappearance,	:				
total	:	2.3	2.5	2.5	+0.2 to -0.2
Difference	:				
unaccounted 5/	:	8/	8/	8/	
Ending stocks	:	3/0.8	3/0.6	1.4	+0.1 to -0.1
Season aver. farm	:				
price (\$/kg.)	:	1.13	1.43	6/	

\*\*\*\*\*  
 1/ Marketing year beginning Aug. 1. 2/ The "probable variability" reflects the SRS estimate of "root mean square error" for production. The chances are about 2 out of 3 that the outcome would fall within the indicated range. Comparable estimates of variability are used for other items in the S/U balance. 3/ Based on Bureau of Census data. 4/ Includes imports. 5/ Difference between ending stocks based on Bureau of Census data and preceding season's supply less distribution. Projected for 1977/78. 6/ USDA is prohibited from projecting cotton prices. 7/ Conversion factor: Hectare = 2.471 acres. Metric ton = 2204.6 pounds or 4.59 480-pound bales. Kilogram = 2.2046 pounds. 8/ Less than 0.05 mil. MT.  
 \*\*\*\*\*

## FEED GRAINS AND CORN (Domestic Measure) 1/

```

*****
Commodity      : 1975/76 :1976/77 : 1977/78
                :          :Prelim. :Proj.: Prob.Variab.2/
*****
FEED GRAINS:   :
  Area         :          :          :          :          :
    Planted    : 122.3   128.6   128.2
    Harvested  : 104.3   106.2   106.6
  Yield per harv. :          :          :          :          :
    unit       : 1.94    2.00    2.08
                :          :          :          :          :
                :          :          :          :          :
    Beginning stocks : 16.8   19.0   32.9
    Production      : 202.8  212.0  222.0      +4 to -4
    Imports         : 0.5    0.4    0.3
    Supply, total   : 220.1  231.4  255.2
    Feed           : 127.2  122.9  131.2      +8 to -8
    Food, seed, & :          :          :          :          :
      indust. uses : 18.8   19.8   20.4
      Domestic,   :          :          :          :          :
        total     : 146.0  142.7  151.6      +8 to -8
    Exports        : 55.1   55.8   56.9      +3 to -3
    Use, total     : 201.1  198.5  208.5      +9 to -9
    Ending stocks  : 19.0   32.9   46.7      +6 to -6
CORN:           :
  Area         :          :          :          :          :
    Planted    : 78.2   84.1   82.4
    Harvested  : 67.2   71.1   69.6
  Yield per    :          :          :          :          :
    harv. unit : 86.2   87.4   91.5
                :          :          :          :          :
                :          :          :          :          :
    Begin. stocks : 359    398    879
    Production    : 5,797  6,216  6,367      +140 to -140
    Imports       : 2      3      1
    Supply, total : 6,158  6,617  7,247
    Feed         : 3,558  3,539  3,775      +200 to -200
    Food, seed, & :          :          :          :          :
      indust. uses : 491    515    530      +10 to -10
      Domestic,   :          :          :          :          :
        total     : 4,049  4,054  4,305      +200 to -200
    Exports      : 1,711  1,684  1,750      +100 to -100
    Use, total   : 5,760  5,738  6,055      +250 to -250
    Ending stocks : 398    879    1,192      +200 to -200
    Season avg. farm :          :          :          :          :
      price ($/bu.) : 2.54   2.20   2.00 - 2.20
*****

```

1/ Marketing year beginning October 1 for corn and sorghum; June 1 for barley and oats. 2/ The "probable variability" reflects the SRS estimate of "root mean square error" for production. The chances are about 2 out of 3 that the final outcome would fall within the indicated range. Comparable estimates of variability are used for other items in the S/U balance.

## FEED GRAINS AND CORN (Metric Measure) 1/ 2/

```

*****
Commodity          : 1975/76 :1976/77 :    1977/78
                   :          :Prelim. : Proj.:Prob.Variab.3/
*****
FEED GRAINS:      :
Area              :          Million hectares
  Planted         :   49.5   52.0   51.9
  Harvested       :   42.2   43.0   43.1
Yield per harvested :      Metric tons per hectare
  unit           :   4.36   4.47   4.67
                   :          Million metric tons
Beginning stocks  :   15.2   17.2   29.8
Production        :  184.0  192.3  201.4      +4 to -4
Imports           :    0.5   0.4   0.3
  Supply, total   :  199.7  209.9  231.5
Feed              :  115.4  111.5  119.0      +7 to -7
Food, seed, and  :
  industrial uses :   17.0   18.0   18.5
  Domestic, total :  132.4  129.5  137.5      +7 to -7
Exports           :   50.0   50.6   51.6      +3 to -3
Use, total        :  182.4  180.1  189.1      +8 to -8
Ending stocks     :   17.2   29.8   42.4      +6 to -6
                   :
CORN:
Area              :          Million hectares
  Planted         :   31.6   34.0   33.3
  Harvested       :   27.2   28.8   28.1
Yield per harvested :      Metric tons per hectare
  unit           :   5.41   5.49   5.75
                   :          Million metric tons
Beginning stocks  :    9.1   10.1   22.3
Production        :  147.3  157.9  161.7      +3.6 to -3.6
Imports           :    0.1   0.1   4/
  Supply, total   :  156.5  168.1  184.1
Feed              :   90.4   89.9   95.9      +5.1 to -5.1
Food, seed, and  :
  industrial uses :   12.5   13.1   13.5      +0.2 to -0.2
  Domestic, total :  102.9  103.0  109.4      +5.1 to -5.1
Exports           :   43.5   42.8   44.4      +2.5 to -2.5
Use, total        :  146.4  145.8  153.8      +6.4 to -6.4
Ending stocks     :   10.1   22.3   30.3      +5.1 to -5.1
Seas. av. price($/MT):  100     87   79 - 86
*****

```

1/ Marketing year beginning October 1 for corn and sorghum; June 1 for barley and oats. 2/ Conversion factors: Hectare = 2.471 acres; Metric ton = 2204.6 pounds (feed grains); 39.368 bushels (corn). 3/ The "probable variability" reflects the SRS estimate of "root mean square error" for production. The chances are about 2 out of 3 that the final outcome would fall within the indicated range. Comparable estimates of variability are used for other items in the S/U balance. 4/ Less than 0.05 mil. metric tons.

## SORGHUM, BARLEY, AND OATS (Domestic Measure) 1/

```

*****
Commodity          : 1975/76 :1976/77 :      1977/78
                   :          :Prelim. : Proj.: Prob.Variab. 2/
*****
SORGHUM:          :          :          :          :
Yield per harv. unit : 49.0    48.6    55.4
                   :          :          :          :
                   :          :          :          : Million bushels
Beginning stocks    : 35      52      91
Production         : 760     724     779      +35 to -35
Imports            :
  Supply, total    : 795     776     870
Feed               : 508     433     475      +50 to -50
Food,seed,& indust. : 6        6        6
  Domestic, total  : 514     439     481      +50 to -50
Exports            : 229     246     225      +25 to -25
  Use, total       : 743     685     706      +60 to -60
Ending stocks      : 52      91      164      +50 to -50
S.av.farm price($/bu): 2.37    1.95    1.85-2.05
BARLEY:           :          :          :          :
Yield per harv. unit : 43.9    44.9    43.8
                   :          :          :          :
                   :          :          :          : Million bushels
Beginning stocks    : 92      129     126
Production         : 374     372     416
Imports            : 16      11      10
  Supply, total    : 482     512     552
Feed               : 182     163     150      +25 to -25
Food,seed,& indust. : 147     157     164      + 5 to -5
  Domestic, total  : 329     320     314      +25 to -25
Exports            : 24      66      60      + 5 to - 5
  Use, total       : 353     386     374      +20 to -20
Ending stocks      : 129     127     178      +20 to -20
S.av.farm price($/bu): 2.43    2.29    1.65-1.85
OATS:             :          :          :          :
Yield per harv. unit : 49.0    45.7    55.6
                   :          :          :          :
                   :          :          :          : Million bushels
Beginning stocks    : 224     208     168
Production         : 642     546     748
Imports            : 1        1        1
  Supply, total    : 867     755     917
Feed               : 558     487     540      +50 to -50
Food,seed,& indust. : 87      90      90      + 5 to -5
  Domestic, total  : 645     577     630      +50 to -50
Exports            : 14      10      10      + 2 to -2
  Use, total       : 659     587     640      +40 to -40
Ending stocks      : 208     168     277      +35 to -35
S.av.farm price($/bu): 1.46    1.55    1.05-1.15
*****

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1/ Marketing year begins 10/1 for sorghum, 6/1 for barley & oats.  
2/ The "probable variability" reflects SRS estimate of "root mean square error" for production. The chances are about 2 out of 3 that the final outcome would fall within the indicated range. Comparable estimates of variability are used for other items in the S/U balance.

## SORGHUM, BARLEY, AND OATS (Metric Measure) 1/ 2/

```

*****
Commodity          : 1975/76 :1976/77 : 1977/78
                   :          :Prelim. : Proj.: Prob.Variab. 3/
*****
SORGHUM:          :          : Metric tons per hectare
Yield per harv. unit : 3.07   3.05   3.48
                   :          : Million Metric tons
Beginning stocks    : 0.9    1.3    2.3
Production         : 19.3   18.4   19.8   +0.9 to -0.9
Imports           :
  Supply, total    : 20.2   19.7   22.1
Feed              : 13.0   11.1   12.1   +1.3 to -1.3
Food,seed,& indust. : 0.1    0.1    0.1
  Domestic, total  : 13.1   11.2   12.2   +1.3 to -1.3
Exports           : 5.8    6.2    5.7   +0.6 to -0.6
  Use, total       : 18.9   17.4   17.9   +1.5 to -1.5
Ending stocks      : 1.3    2.3    4.2   +1.3 to -1.3
Seas. av. price ($/MT): 93     78     73-81
BARLEY:           :          : Metric tons per hectare
Yield per harv. unit : 2.36   2.42   2.36
                   :          : Million metric tons
Beginning stocks    : 2.0    2.8    2.7
Production         : 8.1    8.2    9.1
Imports           : 0.4    0.2    0.2
  Supply, total    : 10.5   11.2   12.0
Feed              : 4.0    3.6    3.2   +0.5 to -0.5
Food,seed,& indust. : 3.2    3.4    3.6   +0.1 to -0.1
  Domestic, total  : 7.2    7.0    6.8   +0.5 to -0.5
Exports           : 0.5    1.4    1.3   +0.1 to -0.1
  Use, total       : 7.7    8.4    8.1   +0.4 to -0.4
Ending stocks      : 2.8    2.8    3.9   +0.4 to -0.4
Seas. av. price ($/MT): 112    105    76-85
OATS:             :          : Metric tons per hectare
Yield per harv. unit : 1.76   1.64   1.99
                   :          : Million metric tons
Beginning stocks    : 3.3    3.0    2.4
Production         : 9.3    7.9    10.9
Imports           : 4/     4/     4/
  Supply, total    : 12.6   10.9   13.3
Feed              : 8.1    7.1    7.8   +0.7 to -0.7
Food,seed,& indust. : 1.3    1.3    1.3   +0.1 to -0.1
  Domestic, total  : 9.4    8.4    9.1   +0.7 to -0.7
Exports           : 0.2    0.1    0.1   4/
  Use, total       : 9.6    8.5    9.3   +0.6 to -0.6
Ending stocks      : 3.0    2.4    4.0   +0.5 to -0.5
Seas. av. price ($/MT): 101    107    72-79
*****

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1/ Oct. 1 for sorghum, June 1 for barley/oats. 2/ Conv. factors: Hectare=2.471 acres; metric ton=39.368 bu.(sorghum); 45.930 (barley); and 68.894 (oats). 3/The "probable variability" reflects SRS estimate of "root mean sq. error" for production. Chances are about 2 out of 3 that final outcome would fall within indicated range. Comparable estimates of variability are used for other items in S/U balance. 4/Less than 0.05 mil. MT.

## WHEAT AND RICE (Domestic Measure) 1/

```

*****
Commodity      : 1975/76 : 1976/77 : 1977/78
                :          : Prelim. : Proj.:Prob.Variab.2/
*****
WHEAT:        :          : Million acres
Area          :
  Planted     : 74.8    80.2    74.8
  Harvested   : 69.4    70.8    66.2
Yield per harvested : Bushels per acre
  unit        : 30.6    30.3    30.6
                :          : Million bushels
Beginning stocks : 435     664     1,111
Production      : 2,122   2,142   2,026
Imports         : 2       3       2
  Supply total  : 2,559   2,809   3,139
Domestic       :
  Food         : 559     553     550     +10 to -10
  Seed         : 95      88      80      +5 to -5
  Feed         : 68      107     220     +30 to -30
Domestic, total : 722     748     850     +45 to -45
Exports         : 1,173   950     1,100   +100 to -100
Disappearance, total : 1,895   1,698   1,950   +135 to -135
Ending stocks   : 664     1,111   1,189   +135 to -135
Season average farm :
  price ($/bu.) : 3.55    2.85    2.15-2.35
RICE:
Area          :          : Million acres
  Allotment    : 1.80    1.80    1.80
  Planted      : 2.83    2.49    2.26
  Harvested    : 2.82    2.48    2.25
Yield per harvested : Pounds per acre
  unit        : 4,558   4,663   4,412
                :          : Million cwt.
Beginning stocks : 7.1     36.9    39.7
Production      : 128.4   115.6   99.2
Imports         :
  Supply, total : 135.5   152.9   138.9
Domestic       : 40.2    42.8    45.3     +2 to -2
Exports        : 56.5    65.6    68.0     +5 to -5
Disappearance, total : 96.7    108.4   113.3   +5 to -5
Ending stocks   : 36.9    39.7    25.6     +5 to -5
Diff. unaccounted : +1.9    +4.4
Season average farm :
  price ($/cwt.) : 8.34    7.01    8.50-9.50
*****

```

1/ Marketing year beginning June 1 for wheat, Aug. 1 for rice.

2/ Chances are about 2 out of 3 that the final outcome would fall within the indicated range.



## WHEAT AND RICE (Metric Measure) 1/ 2/

```

*****
Commodity      :1975/76 :1976/77: 1977/78
                :      :Prelim.:Proj.: Prob. Variab.3/
*****
WHEAT:        :
Area          :      :      :      :      :
  Planted     : 30.3  32.5  30.3
  Harvested   : 28.1  28.7  26.8
Yield per harvested :      :      :      :      :
  unit        : 2.06  2.06  2.06
                :      :      :      :      :
                :      :      :      :      :
  Beginning stocks : 11.8  18.1  30.2
  Production      : 57.8  58.3  55.1
  Imports         : 0.1   0.1   0.1
  Supply total    : 69.6  76.4  85.4
Domestic        :
  Food           : 15.2  15.1  15.0  +0.3 to -0.3
  Seed           : 2.6   2.4   2.2   +0.1 to -0.1
  Feed           : 1.9   2.9   6.0   +0.8 to -0.8
Domestic, total : 19.6  20.4  23.1  +1.2 to -1.2
Exports         : 31.9  25.8  29.9  +2.7 to -2.7
  Disappearance, total: 51.6  46.2  53.1  +3.7 to -3.7
Ending stocks   : 18.1  30.2  32.4  +3.7 to -3.7
Season average farm :
  price ($/MT)   : 130   105   79-86
RICE:          :
Area          :      :      :      :      :
  Allotment     : 0.73  0.73  0.73
  Planted       : 1.15  1.01  0.92
  Harvested     : 1.14  1.00  0.91
Yield per harvested :      :      :      :      :
  unit          : 5.11  5.23  4.95
                :      :      :      :      :
                :      :      :      :      :
  Beginning stocks : 0.32  1.67  1.81
  Production      : 5.82  5.24  4.50
  Imports         :
  Supply, total   : 6.15  6.92  6.30
Domestic        : 1.82  1.94  2.05  +0.09 to -0.09
Exports         : 2.56  2.98  3.08  +0.23 to -0.23
  Disappearance, total: 4.39  4.92  5.14  +0.23 to -0.23
Ending stocks   : 1.67  1.81  1.16  +0.23 to -0.23
Difference unaccounted: +0.09  +0.20
Season average farm :
  price ($/MT)   : 184   155   187-209
*****

```

1/ Marketing year beginning June 1 for wheat, August 1 for rice.  
2/ Conversion factor: Hectare = 2.471 acres; Metric ton = 2204.6 pounds or 36.7437 bushels (wheat); 22.046 cwt (rice). 3/ Chances are about 2 out of 3 that the final outcome would fall within the indicated range.

\*\*\*\*\*

INTERAGENCY COMMITTEE MEMBERS

WHEAT: Bruce R. Weber, Chairman, ASCS; James J. Naive, ERS;  
Donald J. Novotny, FAS.

RICE: George H. Schaefer, Chairman, ASCS; James J. Naive, ERS;  
Donald J. Novotny, FAS.

FEED GRAINS: Orville I. Overboe, Chairman, ASCS; James J. Naive,  
ERS; Donald J. Novotny, FAS.

COTTON: Charles V. Cunningham, Chairman, ASCS; Russell G. Barlowe,  
ERS; Gordon H. Lloyd, FAS.

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NOTE TO USERS

Totals on tables in this report may not add and conversions  
between measures may not be exact due to rounding.

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