



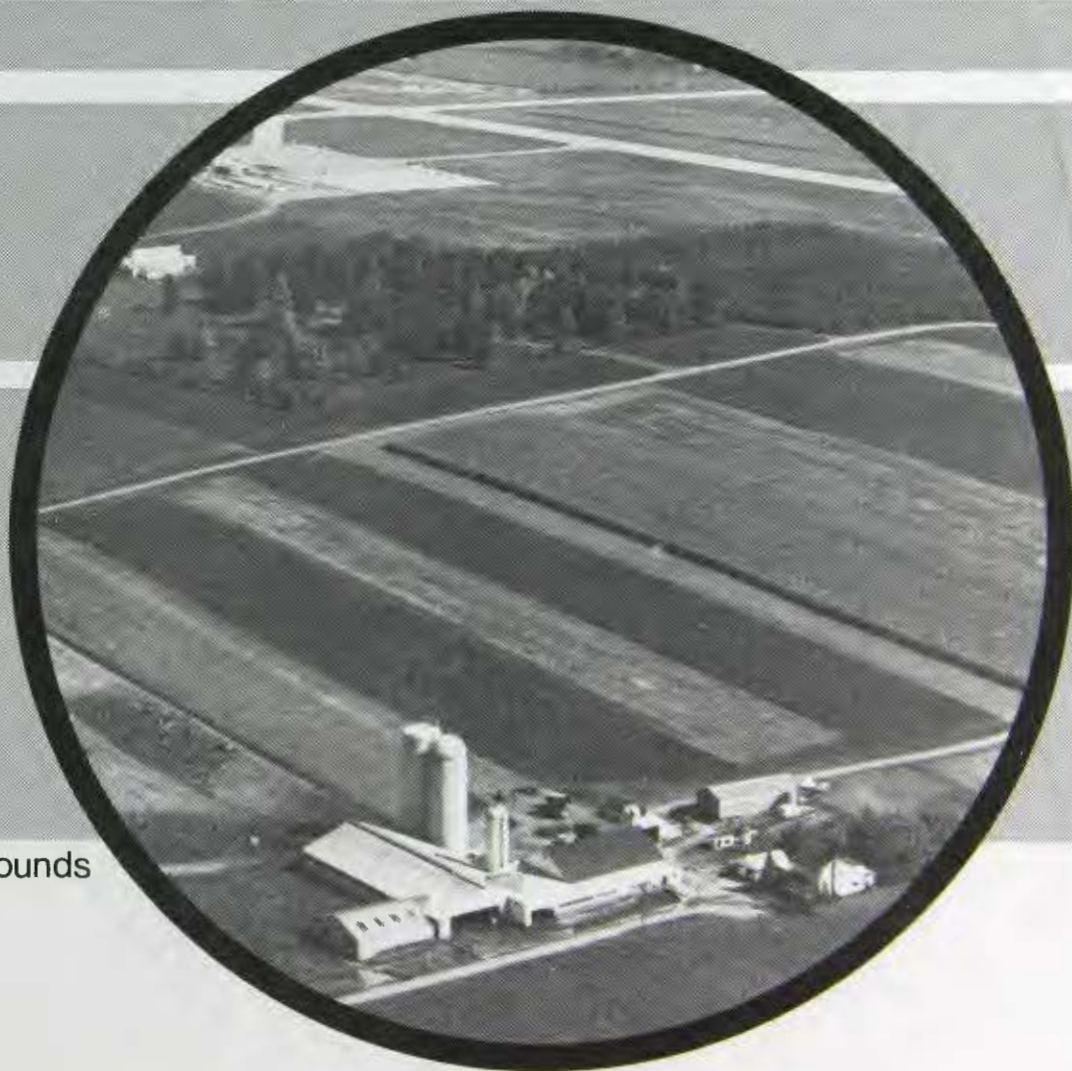
United States
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Cropland Use and Supply

Outlook and Situation Report



Cropland use rebounds

Introduction

The availability of cropland for future production is currently of less concern than in the mid-1970's when crop production was increased to supply an expanding export market. Interest continues, however, in changes in use within the cropland base, regional shifts in cropland use, and the potential for increasing the intensity of cropland use and for expanding the cropland base through conversions of pasture and forest land.

Current trends and near-term outlook for cropland used for crops—the land input to crop production—are the focal points of this report. Uses of other cropland and the potential for conversion of other land to cropland are also examined. Terms used in this report are defined as follows:

Cropland—cropland harvested, crop failure, cultivated summer fallow, cropland used only for pasture, and idle cropland.

Cropland used for crops—cropland harvested, crop failure, and cultivated summer fallow.

Cropland harvested—acreage on which intertilled and closely sown crops, tree fruits, small fruits, planted tree nuts, and wild hay are harvested.

Crop failure—mainly acreage on which crops failed because of weather, insects, and diseases, but includes some land not harvested due to lack of labor, low market prices, or other factors. Excludes acreage planted to cover and soil improvement crops not intended for harvest.

Cultivated summer fallow—cropland in subhumid regions of the West cultivated for a season or more to control weeds and accumulate moisture before small grains are planted. Other types of fallow, such as cropland planted to soil improvement crops but not harvested and cropland left idle all year, are excluded.

Cropland used only for pasture—land currently in pasture as part of a long-term crop rotation of field crops and pasture. Also included are cropland pastured rather than harvested for crop production and some land used for pasture that could have been cropped without additional improvement.

Idle cropland—land in cover and soil improvement crops and completely idle cropland. Includes acreage diverted from crops to soil conserving uses under Federal farm programs.

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Summary

Cropland used for crops—cropland harvested, cropland on which crops failed, and cultivated summer fallow—is expected to total 370 million acres in 1984. This is up 11 percent from last year when about 76 million acres were idled in acreage reduction programs. Only about 30 million acres were diverted in 1984 as producers responded to higher crop prices. Cropland used for crops peaked at 390 million acres in 1981, when there were no diversion programs.

Cropland used for crops next year will be directly affected by the 1985 farm programs for wheat, feed grains, cotton, and rice, and by expected crop prices and production costs when farmers make planting decisions.

Domestic demand for agricultural commodities in fiscal 1985 is projected to be near 1984 levels. Export volume, down an estimated 3 percent in fiscal 1984 compared with a year earlier, and 14 percent below the fiscal 1980 peak, is expected to expand in fiscal 1985. However, harvested acres needed to meet export demand could be down if crop yields rebound further.

Although total U.S. cropland used for crops, at 387 million acres, was the same in 1982 as in 1949, acreage shifted among regions. Acreage increased by 8.6 million in the Corn Belt, 2.8 million in the Delta States, and 3.2 million in the Mountain region. Improved drainage, plus land clearing and other land-use conversions, permitted the increases. Acreage declined by 19 million in all regions east and south of the Corn Belt except the Delta States. The shifts further concentrated acreage used for crops in the more productive regions.

Cropland has come under more intense use, particularly after 1972, when diversion programs were cut back or discontinued, and when export markets were growing. In 1969, about 70 percent of all cropland was used for crops, compared with nearly 82 percent in 1982. Acres double cropped more than tripled during 1969-82, increasing from 4.1 million to 14.6 million.

In addition to acreage in the crop rotation, there is a sizable amount of potential cropland, according to a 1982 inventory conducted by USDA's Soil Conservation Service. Sufficient cropland is currently or potentially available to meet domestic requirements and historical export volumes in the foreseeable future. But, adjustments to and within the cropland base—cropland used for crops, cropland pasture, idle cropland, and conversions to and from cropland—will continue as economic conditions and farm programs vary.

1984-85 OUTLOOK

Cropland used for crops—cropland harvested, cropland on which crops failed, and cultivated summer fallow—is expected to total 370 million acres in 1984. This is up 11 percent from 333 million in 1983 when about 76 million acres of cropland were diverted from production because of the payment-in-kind (PIK) and other acreage reduction programs. Diverted acreage in 1984 with a smaller-scale PIK program plus other programs is estimated to be around 30 million. The 370 million acres of cropland used for crops in 1984 is 20 million below the peak of 390 million acres in 1981, when no cropland was diverted due to farm programs.

An estimated 334 million acres of cropland will be harvested in 1984. This, together with an estimated 6 million acres of cropland on which all crops fail, and about 30 million acres of cultivated summer fallow account for the 370 million acres of cropland used for crops this year. About 11 million acres were double cropped, mainly in winter wheat followed by soybeans. This is below peak 1981-82 levels of 14 million acres because of reductions in wheat acreage.

The level of cropland used for crops in 1985 will be directly affected by provisions in the 1985 farm programs, and by expected crop prices and production costs when planting decisions are made. Provisions for acreage reduction and paid land diversion in the wheat program are unchanged from 1984. However, the payment-in-kind provision for diverting 10-20 percent of the wheat base acreage is not included in the 1985 program. The target price and loan rate are the same as in 1984. The 1985 acreage reductions, target prices, and loan levels for feed grains are identical to those for 1984. The target price and loan rate for rice are unchanged, but the 1985 program provides for a 20-percent acreage reduction and a 15-percent paid land diversion of base acreage in place of the 25-percent acreage reduction in 1984. A 20-percent acreage reduction and a 10-percent paid land diversion for upland cotton replace the 25-percent acreage reduction used in 1984. Target prices are the same.

Prices for the 1985 crop year will be determined by domestic and world supply and demand, and by price-support loan rates specified in the 1985 commodity programs. Domestic production will be affected by the acreage diversion programs, weather, and other factors. Domestic demand in 1985 is expected to be close to 1984 levels.

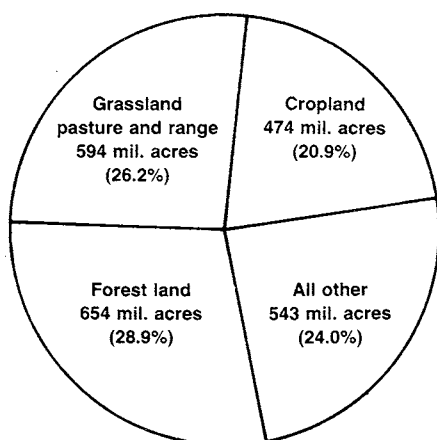
Export volume of agricultural products in fiscal 1984 (October 1983-September 1984) is expected to total only around 141 million metric tons, down 3 percent from last year and 14 percent below the 1979/80 peak. A worldwide recession, debt and credit constraints, expanding supplies in many competing exporting countries (and in some major importing nations), a strong U.S. dollar, and several other factors have contributed to the decline in U.S. exports in the 1980's. U.S. export volume is expected to expand in fiscal 1985. Most of the increase will be in coarse grains—up more than 5 million metric tons—although small gains are expected in soybeans and some other products. However, a further rebound in crop yields will likely lead to a reduction in harvested acres needed to meet export demand.

THE CROPLAND BASE

Cropland acreage totaled 474 million in 1982, nearly 21 percent of the land area in the United States. Cropland used for crops—cropland harvested, crop failure, and cultivated summer fallow—accounted for 387 million acres, nearly 82 percent of all cropland (table 1). The rest of the cropland base was idled or in cropland pasture.

Although total cropland acreage has not changed greatly in recent decades, the cropland base has undergone substantial shifts due to varying economic conditions and farm programs. Acres idled and in cropland pasture increased during the 1960's when major cropland diversion programs were underway. Easing of the diversion programs in 1973 and their elimination in 1974-77, plus favorable returns to crop production, caused growers to shift idle cropland and cropland pasture into crop production.

Major Uses of U.S. Land



1982 Data

Cropland Use

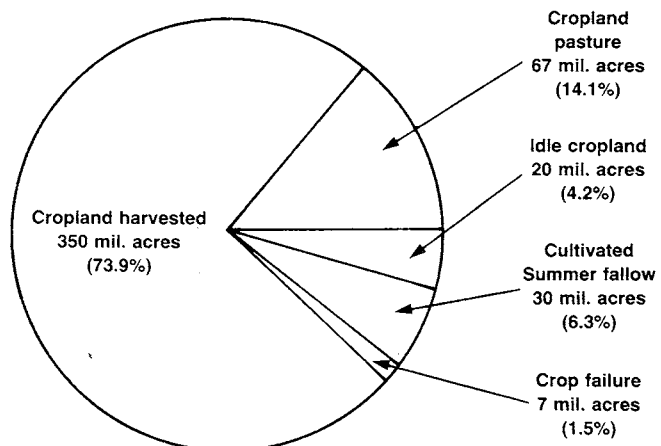


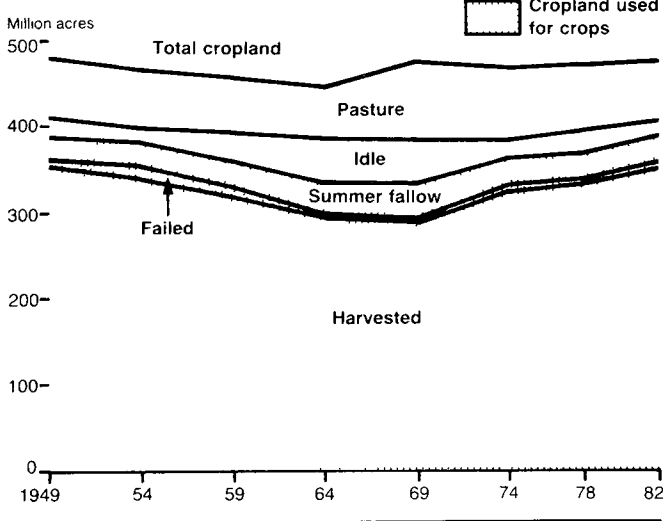
Table 1.—Major uses of cropland, United States

Cropland	1949	1959	1969	1978	1982	1983	1984 ¹
<i>Million acres</i>							
Cropland used for crops	387	359	333	369	387	333	370
Cropland harvested	352	317	286	330	350	293	334
Crop failure	9	11	6	7	7	6	6
Cultivated summer fallow	26	31	41	32	30	34	30
Idle cropland	22	33	51	26	20	(2)	(2)
Cropland pasture	69	66	88	76	67	(2)	(2)
Total cropland ³	478	458	472	471	474		

¹Preliminary. ²Estimated for years coinciding with a Census of Agriculture. ³Includes the 48 conterminous States.

Source: (1,2,3,7,11,12).

Major Uses of U.S. Cropland



Cropland Used for Crops

The 387 million acres of cropland used for crops in 1982 equaled the 1949 level (table 1). Cropland diversion programs were begun in 1956 and expanded considerably in the 1960's and early 1970's. As a consequence, cropland used for crops declined to 333 million acres in 1969, but then increased to 387 million in 1982 as strong export markets and favorable prices induced farmers to expand production. Acreage fell to 333 million in 1983 with implementation of the PIK and other diversion programs, but is expected to increase to about 370 million acres in 1984, 4 percent below the 1982 level.

Cropland harvested dropped from 352 million acres in 1949 to 286 million in 1969 but then rose to 350 million in 1982. Cropland harvested normally accounts for about 90 percent of cropland used for crops and, consequently, generally parallels changes in cropland acreage. With the diversion programs in 1983, cropland harvested was reduced to 293 million acres. Diversion programs, plus a small-scale PIK program for wheat, are expected to keep cropland harvested in 1984 at about 334 million acres, 16 million below the 1982 level.

Cultivated summer fallow normally accounts for about 30 million acres, but increased 7-10 million acres during the 1960's when cropland diversion programs were underway. An average of 7 million acres of cropland have been subject to failure each year over the past 20 years. Crop failure averages about 2 percent of the cropland harvested.

Regional Use in 1983

The Northern Plains, with 84 million acres, accounted for 25 percent of the 333 million acres of cropland used for crops in the United States in 1983 (table 2). The Corn Belt had just over 71 million acres, 21 percent of the total. The Mountain and the Lake States regions both had about 10 percent. The remaining acreage was somewhat evenly distributed among the other regions.

In terms of cropland harvested, nearly 71 million acres, or one-fourth of the total 293 million, were located in the Corn Belt. The Northern Plains, with 65.5 million acres—22 percent of all cropland harvested—was the second most important region. The Corn Belt, Lake States, and Northern Plains regions had nearly 60 percent of all cropland harvested.

Last year, crop failure totaled 6.2 million acres, 2 percent of all cropland used for crops, and a rate generally comparable to preceding years. Failure was highest in the Plains regions.

Cultivated summer fallow is common in the Plains, Mountain, and Pacific regions where wheat production is concentrated. Ten percent of the cropland used for crops in the United States—33.6 million acres—was summer fallowed in 1983.

Corn Belt More Important During 1949-82

Although the same amount of cropland (nearly 387 million acres) was used for crops in 1949 and 1982, there were 19 million fewer acres used in regions east and south of the Corn Belt in 1982. Among those regions, only the Delta States showed an increase, while acreage declined in the Northeast, Appalachian, Southeast, and Southern Plains (table 3). These shifts further concentrated cropland acreage in areas better suited to agricultural production.

Table 2.—Cropland used for crops by region, 1983

Region	Cropland harvested	Crop failure	Cultivated summer fallow	Cropland used for crops	Share of U.S. total
<i>Million acres</i>					<i>Percent</i>
Northeast	12.5	0.1	—	12.6	3.8
Lake States	32.8	0.6	—	33.4	10.0
Corn Belt	70.7	0.5	—	71.2	21.4
Northern Plains	65.5	1.2	17.3	84.0	25.3
Appalachian	16.2	0.3	—	16.5	5.0
Southeast	13.1	0.2	—	13.2	4.0
Delta States	16.1	0.3	—	16.5	5.0
Southern Plains	24.8	2.1	2.2	29.1	8.7
Mountain	25.1	0.8	10.5	36.4	10.9
Pacific	16.0	0.1	3.6	19.7	5.9
United States ¹	292.8	6.2	33.6	332.6	100.0

¹Includes the 48 conterminous States. Cropland used for crops in Alaska and Hawaii totals less than 200,000 acres.

Source: (6).

Table 3.—Cropland used for crops and change in acreage by region

Region	1949	1972	1982	1983	Change		
					1949-72	1972-82	1982-83
Million acres							
Northeast	17.2	12.3	13.4	12.6	-4.9	1.1	-0.8
Lake States	38.2	32.3	40.0	33.4	-5.9	7.7	-6.6
Corn Belt	78.0	72.8	86.6	71.2	-5.2	13.8	-15.4
Northern Plains	93.9	87.2	95.6	84.0	-6.7	8.4	-11.6
Appalachian	22.3	15.6	19.2	16.5	-6.7	3.6	-2.7
Southeast	20.2	12.1	14.9	13.2	-8.1	2.8	-1.7
Delta States	16.6	16.4	19.4	16.5	-0.2	3.0	-2.9
Southern Plains	44.7	29.8	38.0	29.1	-14.9	8.2	-8.9
Mountain	34.7	35.0	37.9	36.4	0.3	2.9	-1.5
Pacific	20.8	20.0	21.4	19.7	-0.8	1.4	-1.7
United States ¹	386.6	333.5	386.4	332.6	-53.1	52.9	-53.8

¹Includes the 48 conterminous States. Cropland used for crops in Alaska and Hawaii totaled less than 200,000 acres in 1982.

Source: (6).

Improved drainage and shifts of cropland pasture to crop production contributed to an 8.6-million-acre increase in the Corn Belt. The Delta States gained 2.8 million acres following large-scale drainage and land clearing. Semiarid rangeland was converted to cropland in the Mountain region, where an expansion in irrigated acres was also important in some areas.

Cropland used for crops in the United States declined by 53 million acres during 1949-72. Nearly 15 million acres of the decline—28 percent—occurred in the Southern Plains. The Southeast lost 8 million acres. Acreage was hardly changed, however, in the Delta States, Mountain, and Pacific regions. No cropland diversion programs were in effect in 1949. About 62 million acres were diverted in 1972.

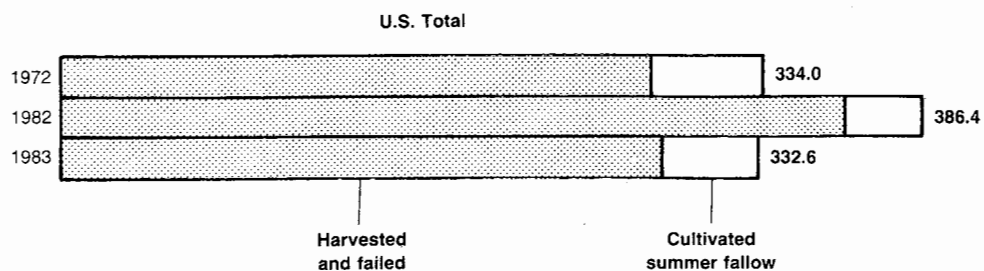
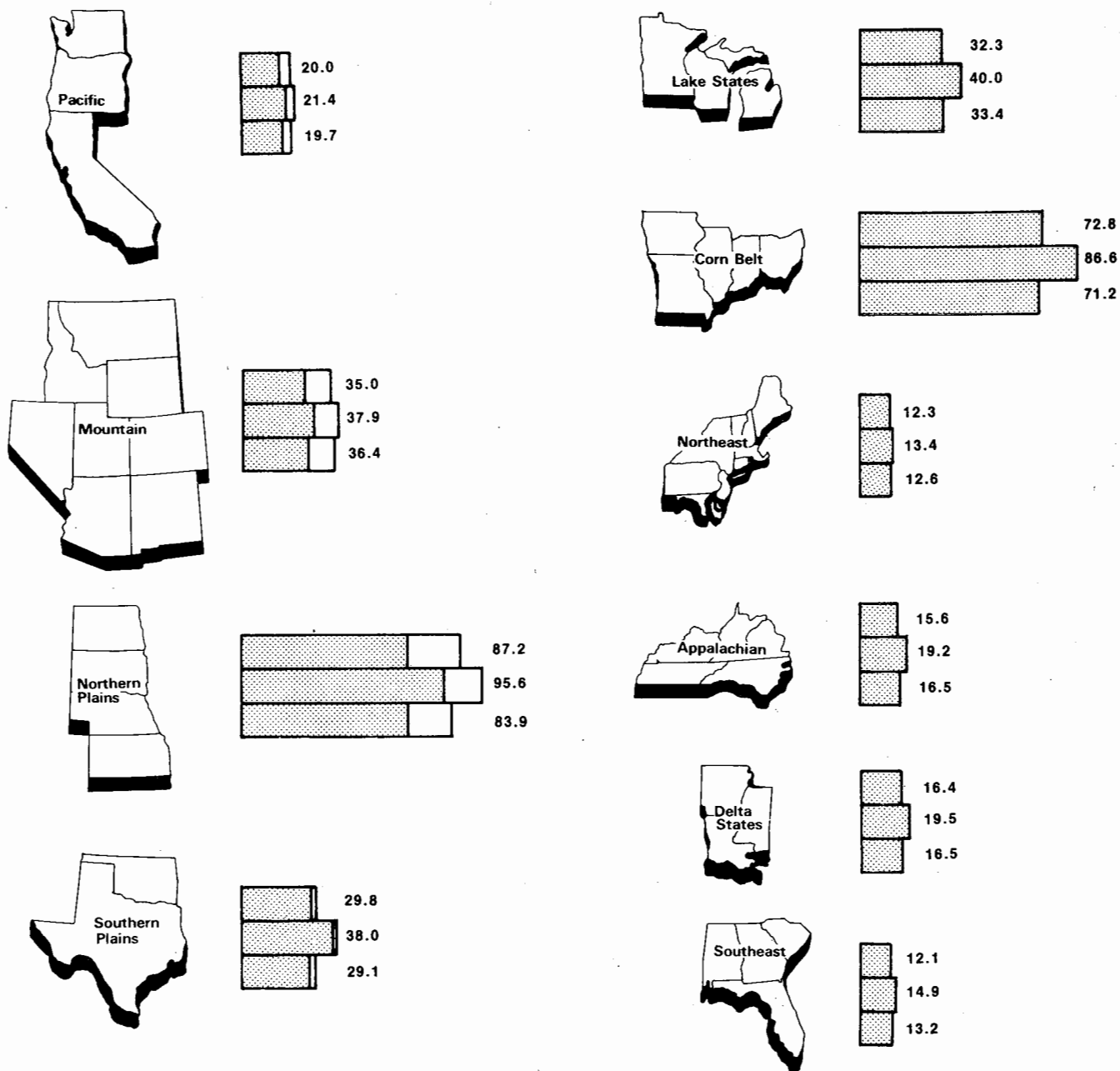
Cropland used for crops increased nearly 53 million acres during 1972-82, a period that spanned continuance of the

cropland diversion programs in the early 1970's, the easing of diversion programs in 1973 and their discontinuance during 1974-77, strong growth in export markets in the 1970's, resumption of diversion programs on a relatively small scale in 1978-79, and the year of near-record acreage prior to the 1983 PIK program. Growth occurred in all regions. Most growth—13.8 million acres, or 26 percent of the total—occurred in the Corn Belt. The Lake States and Northern Plains also had sizable increases with a combined total of 16.1 million acres. The Southern Plains had the largest proportional increase with 27.5 percent. The Lake States, Appalachian, and Southeast regions all had 23-percent increases, while the Northeast, Mountain, and Pacific regions each had gains of 7-9 percent. About 11 million acres of cropland were diverted in 1982.

During 1982-83, cropland used for crops declined 54.0 million acres, nearly equal the growth in 1972-82.

Cropland Used for Crops

Million acres



Decreases were most notable in the Corn Belt, Northern Plains, and Southern Plains. These regions are important production areas for crops affected by cropland diversion programs in 1983. About 76 million acres were diverted in the United States last year.

Adjustments in Acres of Major Crops

Corn, wheat, and soybean acreage rose significantly during 1972-82, particularly in the Plains regions, Lake States, and the Corn Belt (tables 4 and 5). Sizable increases were also realized in the Appalachian, Southeast, and Delta States regions, where double cropping small-grains and soybeans has become increasingly popular.

Wheat, corn, sorghum, cotton, and rice were most affected by the PIK and other diversion programs in 1983. Harvested corn acreage declined 21.7 million acres from 1982 to 1983. Decreases occurred in all regions but were largest in important corn-producing areas in the Lake States, Corn Belt, and Northern Plains. Wheat acreage fell 16.5 million acres with two-thirds of the reduction occurring in the Plains regions. Although soybeans were not included in the acreage diversion programs, harvested acreage in 1983 dropped 7.6 million below the 1982 level. The reduction probably stemmed from a weakening of prices in second-half 1982 and only a modest recovery by planting time. Also, idling of wheat and other small grain acreage that normally would have been double cropped with soybeans likely contributed to the reduction.

Table 4.—Harvested acreage of major crops by region

Region	Corn			Sorghum			Wheat			Soybeans			Cotton		
	1972	1982	1983	1972	1982	1983	1972	1982	1983	1972	1982	1983	1972	1982	1983
<i>Million acres</i>															
Northeast	3.4	4.5	4.0	—	—	—	0.6	0.6	0.6	0.5	1.0	0.9	—	—	—
Lake States	10.7	14.8	10.4	—	—	—	2.1	3.9	3.0	4.0	6.4	6.0	—	—	—
Corn Belt	31.5	38.2	26.8	0.6	1.0	0.2	4.0	6.0	5.5	24.3	31.5	29.0	0.4	0.2	0.1
No. Plains	10.9	12.9	9.5	6.6	6.2	4.7	21.3	29.9	23.0	2.1	5.2	5.0	—	—	—
Appalachian	4.1	5.1	4.0	0.2	0.3	0.2	0.9	2.5	1.9	3.6	6.7	5.6	0.7	0.3	0.3
Southeast	3.0	2.0	1.6	0.1	0.3	0.3	0.4	2.6	1.7	2.8	6.6	5.1	1.4	0.6	0.4
Delta States	0.4	0.2	0.2	0.3	0.6	0.8	0.5	3.4	2.4	8.2	10.8	9.4	3.7	2.0	1.4
So. Plains	0.7	1.3	1.2	7.7	6.5	3.7	5.9	12.9	8.9	0.4	1.2	0.6	5.7	4.8	3.9
Mountain	1.1	1.5	1.3	1.0	0.7	1.2	7.6	11.1	9.9	—	—	—	0.5	0.6	0.4
Pacific	0.5	0.8	0.7	0.3	0.1	0.1	4.0	5.1	4.5	—	—	—	0.9	1.4	1.0
United States ¹	66.1	81.3	59.6	17.0	15.7	11.2	47.3	77.9	61.4	45.8	69.4	61.8	13.2	9.7	7.4

¹Includes the 48 conterminous States. Because of rounding, regional acres may not sum to U.S. totals.

Source: (9, 10).

Table 5.—Change in harvested acreage of major crops by region, 1972-82 and 1982-83

Region	1972-82 Change					1982-83 Change				
	Corn	Sorghum	Wheat	Soybeans	Cotton	Corn	Sorghum	Wheat	Soybeans	Cotton
<i>Million acres</i>										
Northeast	1.1	—	—	0.5	—	-0.5	—	—	-0.1	—
Lake States	4.1	—	1.8	2.4	—	-4.4	—	-0.9	-0.4	—
Corn Belt	6.7	0.4	2.0	7.2	-0.2	-11.4	-0.8	-0.5	-2.5	-0.1
No. Plains	2.0	-0.4	8.6	3.1	—	-3.4	-1.5	-6.9	-0.2	—
Appalachian	1.0	0.1	1.6	3.1	-0.4	-1.1	-0.1	-0.6	-1.1	—
Southeast	-1.0	0.2	2.2	3.8	-0.8	-0.4	—	-0.9	-1.5	-0.2
Delta States	-0.2	0.3	2.9	2.6	-1.7	—	0.2	-1.0	-1.4	-0.6
So. Plains	0.6	-1.2	7.0	0.8	-0.9	-0.1	-2.8	-4.0	-0.6	-0.9
Mountain	0.4	-0.3	3.5	—	0.1	-0.2	0.5	-1.2	—	-0.2
Pacific	0.3	-0.2	1.1	—	0.5	-0.1	—	-0.6	—	-0.4
United States ¹	15.2	-1.3	30.6	23.6	-3.5	-21.7	-4.5	-16.5	-7.6	-2.3

¹Includes the 48 conterminous States. Because of rounding, regional acres may not sum to U.S. totals.

Source: (9, 10).

Cropland Pasture

Cropland pasture, which may be used directly for crop production, contributed significantly to the national increase in cropland used for crops after 1972. About 67.7 million acres representing 14.3 percent of the U.S. cropland base were in cropland pasture in 1982, down from a peak of 88 million acres in 1969 (table 6). The acreage used for pasture steadily declined during 1969-82 as acres for crop production increased.

Although U.S. totals are comparable for 1949 and 1982, acreage in cropland pasture shifted significantly among regions. The Plains regions had 13.7 million acres—20 percent of the national total—in 1949. This increased to 23.9 million in 1982, about 35 percent of all cropland pasture. Modest increases were also recorded in the Southeast and Mountain regions. Reductions were largest in the Lake States and Corn Belt.

Nationally, cropland pasture accounted for 14 percent of all cropland in 1982, but that rate was more than doubled in the Appalachian region and was noticeably higher throughout the Southeast, Delta, and Southern Plains. In these regions, the ability to shift cropland pasture to crop production is limited by field size, shape, and distribution.

The proportion of the cropland base in cropland pasture declined from 18.7 to 14.3 percent during 1969-82. Declines occurred in all regions, but were largest in the Delta States and Appalachian areas.

The regional distribution of cropland pasture in 1982 indicates the potential for shifting this acreage to crop production. Acreages are relatively large in the Corn Belt and Northern Plains, where total cropland acreage is also large. The Appalachian States and Southern Plains, where cropland pasture is historically associated with cropland abandonment, also have sizable acreages.

Much of the cropland pasture has a high potential for conversion to crop production. That land remains in pasture to support livestock enterprises. As the relative profitability between crops and livestock production changes, cropland is expected to shift into and out of cropland pasture.

Idle Cropland

Some cropland is idled each year due to adverse weather, crop failure, and anticipated low economic returns. Land is also idled with cropland diversion programs. The total generally varies inversely with the acreage of cropland used for crops.

About 4 to 5 percent of the U.S. cropland base was idled during the 1970's and early 1980's (table 7). The 20 million acres idled in 1982 were less than half the average 50 million acres idled annually during the 1960's when major cropland diversion programs were in progress. Idle cropland declined 31 million acres during 1969-82. About 58 million acres were diverted in 1969, compared with only 11 million in 1982. Combined reductions in the Lake States, Corn Belt, and Northern Plains totaled 20.6 million acres, nearly two-thirds of the U.S. reduction.

Table 6.—Acres in cropland pasture by region

Region	1949	1959	1969	1978	1982
<i>Million acres</i>					
Northeast	4.2	3.2	3.7	3.1	2.6
Lake States	5.7	4.7	5.3	3.9	3.1
Corn Belt	14.9	12.8	16.9	14.0	11.2
Northern Plains	4.7	4.7	11.3	9.4	9.5
Appalachian	11.2	9.5	12.4	10.6	9.6
Southeast	4.3	4.3	5.6	5.3	4.7
Delta States	5.9	5.9	6.7	5.6	4.7
Southern Plains	9.0	10.8	16.8	16.3	14.4
Mountain	4.2	4.8	5.7	4.8	4.8
Pacific	5.2	4.7	3.8	3.1	3.1
United States ¹	69.3	65.4	88.2	76.1	67.7
<i>Percent</i>					
Percent of all cropland:					
Northeast	17.2	15.3	20.6	17.8	15.5
Lake States	12.3	10.2	11.9	8.6	6.9
Corn Belt	15.6	13.5	16.6	13.8	11.1
Northern Plains	4.6	4.6	10.5	9.2	8.7
Appalachian	30.0	31.7	39.3	34.1	31.2
Southeast	15.4	20.0	27.6	24.9	22.3
Delta States	24.2	28.5	27.2	21.5	18.7
Southern Plains	16.6	20.0	30.0	29.2	26.1
Mountain	10.6	11.3	13.2	11.0	10.8
Pacific	19.3	18.0	15.5	12.0	12.1
United States ¹	14.5	14.3	18.7	16.2	14.3

¹Includes the 48 conterminous States.

Source: (1,2,3,11,12).

Table 7.—Acres in idle cropland by region

Region	1959	1969	1978	1982
<i>Million acres</i>				
Northeast	2.6	2.0	1.2	0.9
Lake States	4.2	7.5	3.2	2.0
Corn Belt	3.5	14.4	4.4	3.1
Northern Plains	6.2	7.7	5.1	3.9
Appalachian	3.1	4.4	2.3	1.9
Southeast	2.2	3.3	1.4	1.4
Delta States	1.8	1.9	1.1	1.2
Southern Plains	5.5	5.3	3.7	2.8
Mountain	3.7	2.8	2.2	1.8
Pacific	1.0	1.5	1.3	0.8
United States ¹	33.8	50.8	25.9	19.8
<i>Percent</i>				
Percent of all cropland:				
Northeast	12.2	11.1	7.0	5.2
Lake States	9.2	17.0	7.1	4.3
Corn Belt	3.6	14.1	4.3	3.1
Northern Plains	6.1	7.1	4.9	3.6
Appalachian	10.2	14.0	7.4	6.2
Southeast	10.5	15.9	6.8	6.8
Delta States	8.7	7.9	4.4	4.6
Southern Plains	10.2	9.5	6.7	5.0
Mountain	8.6	6.4	5.0	4.1
Pacific	3.7	6.2	4.9	3.4
United States ¹	7.3	10.8	5.5	4.2

¹Includes the 48 conterminous States.

Source: (1,2,3,12).

Diverted acreage increased substantially to 76 million in 1983 with the PIK and other diversion programs. An estimated 30 million acres were diverted in 1984. Regional acreages have not been developed for 1983 and 1984.

The Northern Plains and the Corn Belt had the largest acreages of idle cropland in 1982—3.9 and 3.1 million acres, respectively. But, in terms of total cropland, these regions had among the lowest percentages of idle cropland with 3.6 and 3.1 percent, respectively. Percentage of idle cropland historically has been highest in the Appalachian and Southeast regions.

In the absence of major cropland diversion programs and major changes in the cropland base, about 15-20 million acres of cropland normally will be idle annually in the United States.

INTENSITY OF CROPLAND USE

In addition to increasing the cropland base, existing cropland can be and is being used more intensively. This occurs when cropland is shifted from idle uses and cropland pasture into crop production. Also, using more fertilizer, agricultural chemicals, and irrigation water per acre increases the intensity of cropland use. Double and multiple cropping represents yet more intensive use of cropland.

Regional Shifts in Intensity

Cropland used for crops in the United States in 1982 represented 81.5 percent of the cropland base, up only slightly from 81.0 percent in 1949 (table 8). No cropland diversion programs were in effect in 1949, but about 11 million acres were diverted in 1982.

The percentage of cropland used for crops increased in 6 of 10 regions during 1949-82. The most notable increase was in the Delta States, where cropland used for crops rose from 68 to 77 percent of the region's total cropland. The Corn Belt and Appalachian regions showed only small gains.

Among the four regions with reductions during 1949-82, the Plains regions had the most sizable declines, with shifts from crop production to cropland pasture. Decreases in the Southeast and Mountain regions were relatively minor.

The percentages of cropland used for crops varied among regions during 1949-82. These variations are linked to the magnitude of the cropland diversion programs and the crops included in these programs. No cropland was diverted in the United States in 1949, but 22 million acres were diverted in 1959, 58 million in 1969, 18 million in 1978, and 11 million in 1982.

Indices of Crop Production Up

Another indication of intensity of use is an index of crop production per acre. With 1977=100 as a base, the index trended upward to 116 in 1982 for the United States (table 9). This compares with 81 and 99 for 1962 and 1972, respectively. Adverse weather throughout much of the country in 1983 caused the index to drop to 99.

Several factors interact to affect index values. Improvements in technology, increased use of inputs, and more double cropping raise per-acre productivity. Changes in weather, growing conditions, and cropping patterns directly affect yearly estimations of crop production per acre. These latter factors seem to account for the somewhat erratic patterns of changes in indices in the Southern Plains and Delta States regions. Indices are, however, trending upward for several regions.

Table 8.—Cropland used for crops as percent of total cropland by region

Region	1949	1959	1969	1978	1982
<i>Percent</i>					
Northeast	69.9	72.4	68.4	75.2	79.3
Lake States	82.3	80.6	71.1	84.3	88.8
Corn Belt	81.2	82.9	69.4	81.9	85.9
Northern Plains	93.2	89.3	82.4	85.9	87.7
Appalachian	59.6	58.1	46.7	58.5	62.6
Southeast	72.4	69.1	56.5	68.3	70.9
Delta States	68.3	62.8	64.9	74.1	76.7
Southern Plains	82.8	69.8	60.5	64.1	68.8
Mountain	87.4	80.1	80.4	83.9	85.1
Pacific	77.0	78.3	78.4	83.0	84.5
United States ¹	81.0	78.4	70.5	78.3	81.5

¹Includes the 48 conterminous States

Source: (1,2,3,11,12).

Table 9.—Indices of crop production per acre of cropland used for crops by region, 1970-83

Year	North-east	Lake States	Corn Belt	Northern Plains	Appalachian	South-east	Delta States	Southern Plains	Mountain	Pacific	United States ¹
1977 = 100											
1970	108	85	82	75	111	111	106	87	92	84	88
1971	107	89	100	94	106	121	108	78	95	87	96
1972	92	91	102	94	112	120	113	97	93	88	99
1973	102	90	95	97	110	122	109	107	96	94	99
1974	106	78	77	77	108	125	100	77	98	97	88
1975	103	83	97	87	111	121	99	84	97	97	96
1976	102	70	94	81	113	121	93	89	103	98	94
1977	100	100	100	100	100	100	100	100	100	100	100
1978	109	102	108	110	109	114	100	88	109	95	105
1979	109	105	116	119	102	120	112	109	107	107	113
1980	104	100	102	92	95	102	81	79	111	113	99
1981	112	107	114	113	119	121	106	105	118	112	113
1982	116	114	119	120	121	127	117	88	118	114	116
1983 ²	105	101	88	104	88	116	96	95	112	114	99

¹Includes the 48 conterminous States. ²Preliminary.

Source: (6).

Recent Expansions in Double Cropping

Acres double cropped in the United States more than tripled during 1969-82, rising from 4.1 million to 14.6 million (table 10). Double cropping increased in all regions, but gains were most evident in the Appalachian, Southeast, and Delta States, particularly during 1978-82. These three regions accounted for 24 percent of all acres double cropped in 1978 and nearly 60 percent in 1982. The shift to a larger share in southern regions during 1978-82 occurred as the Lake States, Corn Belt, and Northern Plains each recorded significant declines in their shares of all acreage double cropped.

The increase in double cropping is due to several factors. Changing price relationships made wheat and soybeans more profitable, individually and as a double crop, in the 1970's. Development of earlier maturing, high yielding winter wheat and winter barley permitted a longer growing season for a second crop such as soybeans, grain sorghum, or silages. Technology and equipment were developed for adopting conservation tillage, particularly no-till, which permits more timely planting of a second crop without prior tillage. Also, herbicides were developed for good weed control when conservation tillage is used. Supplemental irrigation ensures quick seed germination and availability of soil moisture at critical stages of plant growth in a production period that is shorter than for single crop production.

Fall-seeded small grains followed by soybeans or sorghum is the most popular form of double cropping in southern and coastal areas up to southern parts of the Corn Belt. Farther north, the grain or row crop may be harvested as silage. Multiple cropping of vegetables occurs in some areas. Further improvements in technology and management will make double cropping possible for areas currently near the limits of feasibility. Economic factors, however, will determine rates of adoption.

POTENTIAL FOR CONVERSIONS TO CROPLAND

In addition to the land currently in the crop rotation, the United States has a large but indefinite acreage of grass-

Table 10.—Acres double cropped by region

Region	1969	1974	1978	1982
<i>Million acres</i>				
Northeast	0.2	0.4	0.6	0.7
Lake States	0.4	0.7	0.8	0.7
Corn Belt	1.0	1.5	1.7	2.3
Northern Plains	0.5	0.7	1.4	1.2
Appalachian	0.4	0.7	0.8	2.7
Southeast	0.4	0.4	0.5	2.9
Delta States	0.3	0.4	0.5	2.8
Southern Plains	0.3	0.3	0.4	0.6
Mountain	0.2	0.2	0.4	0.3
Pacific	0.4	0.3	0.4	0.4
United States ¹	4.1	5.6	7.5	14.6
<i>Percent</i>				
Share of U.S. total:				
Northeast	4.8	7.1	8.0	4.8
Lake States	9.8	12.5	10.7	4.8
Corn Belt	24.4	26.8	22.6	15.8
Northern Plains	12.2	12.5	18.7	8.2
Appalachian	9.8	12.5	10.7	18.5
Southeast	9.8	7.1	6.7	19.9
Delta States	7.3	7.1	6.7	19.2
Southern Plains	7.3	5.4	5.3	4.1
Mountain	4.8	3.6	5.3	2.0
Pacific	9.8	5.4	5.3	2.7
United States ¹	100.0	100.0	100.0	100.0

¹Includes 48 conterminous States.

Source: (7).

land and forest land that could be converted to cropland. The 1982 National Resources Inventory (NRI) conducted by the Soil Conservation Service (SCS) provided two measures of this potential—the physical and the economic potential.

The physical potential is based on land capability-use data (table 11). Land capability classes I through VIII indicate the degree of physical limitation to cultivation. (Although not shown, classes II-IV and VI-VIII have four subclasses indicating the dominant physical hazard to cultivation.) Land in classes I-III is suitable for continuous cultivation. Land in class IV can be cultivated occasionally. Land in classes V-VIII is, under present production practices, generally unsuited for crops requiring cultivation.¹

Overall, 801 million acres were in classes I-IV in 1982 and, therefore, considered physically suitable for continuous or occasional cultivation. One-half was already classed as cropland. The other 399 million acres were distributed among grassland, forest land, and a small acreage of unclassified land.

Part of the 588 million acres in classes V-VIII would presumably be cropped given strong economic incentives.

In 1982, 19 million acres of such land was classed as cropland. Part of this acreage is used to grow crops with unique land requirements, such as cranberries. Another part is portions of fields with predominately class I-IV soils.

Estimates of the economic potential for converting non-cropland to crop use in 1982 were made by a committee of county representatives from various USDA agencies. Determinations were based on price-cost relationships existing in 1981. A rating of high potential required, in addition, evidence that similar land had been converted to cropland during the last 3 years.

Of the nearly 400 million acres of noncropland in classes I-IV, 33 million acres—8 percent—had high potential, and 102 million acres—26 percent—had medium potential for conversion to cropland. About one-third of the potential cropland identified in the NRI is already classified as cropland in ERS data series (3). If the acreage with high and medium potential were converted, cropland acreage would increase by nearly one-third from 421 to 556 million acres.

The remaining 264 million acres—two-thirds of all non-federal rural land in classes I-IV not classed as cropland—had low or no potential for use as cropland. Federally owned land totaling about 760 million acres was excluded from the NRI. Only a small part of this acreage has potential for crop use (5).

¹For a description of the SCS land capability classifications, see (4).

Table 11.—Cropland and potential for converting noncropland to crop use by land capability class, United States, 1982

Capability Class	Cropland	Noncropland					Total
		Potential for crop use					
		High	Medium	Low	Zero	Total	
		Million acres					
I	30	2	1	2	1	6	36
II	191	17	32	41	10	100	291
III	134	11	44	80	19	154	288
I-III	355	30	77	123	30	260	615
IV	47	3	25	83	28	139	186
I-IV	402	33	102	206	58	399	801
V-VIII	19	2	15	134	437	588	607
Total	3421	35	117	340	495	987	21,408

¹Includes 5 million acres not classified by capability. ²Nonfederal rural land representing all land in the 48 conterminous States minus urban and built-up areas and federally owned land in these States. ³The substantial difference between the 421 million acres of total cropland estimated in the 1982 NRI and the 474 million acres in Table 1 is largely explained by differences in procedures for classifying better quality pastureland as cropland or as pastureland.

Source: (8).

Table 12.—Indices of cropland used for crops by region, 1960-83

Year	North-east	Lake States	Corn Belt	Northern Plains	Appalachian	South-east	Delta States	Southern Plains	Mountain	Pacific	United States ¹
1977 = 100											
1960	112	91	92	100	92	91	66	97	93	97	94
1961	109	90	84	95	87	87	66	93	92	96	90
1962	107	85	83	93	83	82	66	89	93	93	88
1963	107	88	85	95	82	83	68	91	93	95	89
1964	106	87	84	94	81	81	70	89	93	95	89
1965	103	87	85	95	82	79	71	89	94	94	89
1966	103	85	85	95	81	75	71	83	93	93	88
1967	101	87	89	96	85	82	77	82	93	94	90
1968	96	86	85	94	84	81	83	85	93	94	89
1969	92	80	83	96	80	79	83	88	95	91	88
1970	95	81	84	95	81	80	85	82	95	93	88
1971	96	87	88	96	88	85	85	80	94	93	90
1972	93	82	85	95	85	83	85	78	96	96	88
1973	95	90	93	98	89	87	86	90	96	95	93
1974	98	93	96	98	92	91	87	91	98	100	96
1975	98	95	97	99	95	94	89	96	101	102	97
1976	99	97	98	98	96	95	96	94	100	103	98
1977	100	100	100	100	100	100	100	100	100	100	100
1978	99	97	97	96	101	99	100	93	100	101	97
1979	101	99	101	99	102	103	103	98	101	102	100
1980	102	102	102	100	101	104	103	99	103	104	102
1981	102	102	102	104	104	106	106	100	105	106	103
1982	101	101	101	104	104	102	101	99	104	103	102
1983 ²	95	85	83	91	89	91	85	76	100	94	88

¹Includes the 48 conterminous States. ²Preliminary.

Source: (6).

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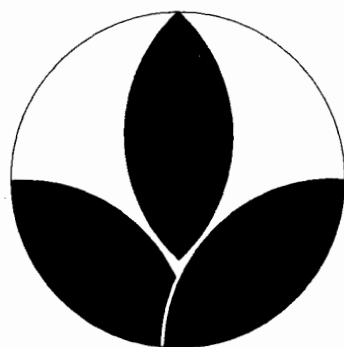
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Prospects for the 1985 farm bill will come under close scrutiny at **Outlook '85**, USDA's 61st annual agricultural outlook conference, which will be held in Washington, D.C., December 3-5, 1984. As is its tradition, the conference will lead off with the outlook for the economy, agriculture and trade, and international policy—major components of today's agricultural equation.

OUTLOOK '85



Shorter and tighter than in recent years, the conference will provide policymakers with a complete overview of the agricultural situation in 3 days. Secretary of Agriculture John Block is scheduled to open the proceedings with an address at 10 a.m. Monday, December 3. Two special panels on the 1985 farm bill will follow, one focusing on the environment for the new legislation and the second including viewpoints from members of Congress, the Administration, and the farm and private sectors. Succeeding sessions will cover the major farm commodities, while sessions on family economics and nutrition are scheduled over the 3 days.

This year for the first time, listeners outside the Washington area will be able to call in questions to certain follow-up sessions for major commodities. Callers will use a regular long-distance business line at regular long-distance rates.

As last year, a 900-line service will allow listeners to hear all sessions. The service costs 50 cents for the first minute and 35 cents for each additional minute. Thus, you can hear an hour-long session for less than \$22, plus tax.

For a copy of the preliminary **Outlook '85** program, which contains time and location for each session, please write: Outlook '85, USDA/WAOB, Room 5143-S, Washington, D.C. 20250.

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