



GAO

Report to the Chairman, Subcommittee
on Agricultural Production and
Stabilization of Prices, Committee on
Agriculture, Nutrition and Forestry,
U.S. Senate

COTTON PROGRAM

THE WITHDRAWAL LOAN HAS NOT WORKED

RELEASED

RESTRICTED—Not to be released outside the
General Accounting Office unless specifically
approved by the Office of Congressional
Relations.

549029



United States
General Accounting Office
Washington, D.C. 20548

**Resources, Community, and
Economic Development Division**

B-240157

July 31, 1990

The Honorable David Pryor
Chairman, Subcommittee on Agricultural
Production and Stabilization of Prices
Committee on Agriculture, Nutrition and
Forestry
United States Senate

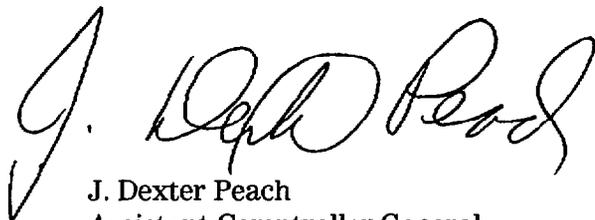
Dear Mr. Chairman:

In response to your request of March 20, 1989, this is our report on the U.S. Department of Agriculture's marketing loan program for cotton. As you requested, our analysis was conducted with a view toward identifying potential options for improving the program's effectiveness. This report provides matters for congressional consideration to help ensure that the cotton marketing loan program's objective is achieved.

As arranged with your office, unless you publicly announce its contents earlier, we plan no further distribution of this report until 5 days after the date of this letter. At that time, we will send copies to the appropriate House and Senate committees and subcommittees; interested members of Congress; the Secretary of Agriculture; the Director, Office of Management and Budget; and other interested parties.

This work was performed under the general direction of John W. Harman, Director, Food and Agriculture Issues, who can be reached at (202) 275-5138. Other major contributors to this report are listed in appendix I.

Sincerely yours,



J. Dexter Peach
Assistant Comptroller General

Executive Summary

Purpose

The Food Security Act of 1985 introduced a new concept—the marketing loan—as part of the U.S. Department of Agriculture’s (USDA) price and income support program for cotton. The marketing loan was devised to help keep U.S. cotton prices competitive in world markets, thus encouraging producers to sell their cotton instead of keeping it under loan and off the market. It is critical that U.S. cotton remain competitive in world markets because, historically, about one-half of U.S. cotton has been available for export.

Because the effectiveness of the marketing loan program was in question, the Chairman, Subcommittee on Agricultural Production and Stabilization of Prices, Senate Committee on Agriculture, Nutrition and Forestry, asked GAO to analyze the marketing loan to determine if (1) the program is meeting its objective, (2) the Secretary of Agriculture has fully used his authority to make U.S. cotton competitive, (3) the Secretary has fully used his authority to maintain year-ending stocks at approximately 4 million bales, and (4) options are available to improve the program’s effectiveness.

Background

The overall objectives of USDA’s cotton program include (1) protecting U.S. farm income, (2) maintaining competitive U.S. cotton prices in world markets, and (3) managing cotton supply levels for domestic mill use and export. The federal costs associated with USDA’s cotton program from fiscal years 1986 through 1989 averaged about \$1.5 billion a year.

To help protect U.S. farm income, the 1985 act directs the Secretary of Agriculture to provide nonrecourse loans to cotton producers that allow them to forfeit their cotton to USDA as full loan repayment. A nonrecourse loan, in effect, assures producers a guaranteed minimum price for the cotton they pledge as loan collateral. Nonrecourse loan rates are calculated by USDA following a statutory formula that is based on historical market prices. The loans mature in 10 months, but they can be extended an additional 8 months, at the producer’s request, unless U.S. cotton prices are high relative to historical prices.

The marketing loan changed the nonrecourse loan repayment process by permitting producers to repay their loans at the lower of the loan rate or the USDA-calculated world price for cotton. The marketing loan was devised in an attempt to keep U.S. cotton prices competitive in world markets. It was expected to provide producers an incentive during periods of low market prices to redeem their loans and to sell their cotton.

As a tool for managing cotton supplies, the 1985 act authorizes the Secretary to utilize, to the maximum extent practicable, an acreage reduction program (ARP) to help achieve an annual cotton carryover stock level of 4 million bales. Carryover stocks refer to the amount of U.S. cotton on hand at the end of each crop year. For U.S. cotton, crop years begin August 1 and end July 31.

Results in Brief

GAO's analysis shows that the marketing loan has not met its objective of keeping U.S. cotton prices competitive in world markets. Specifically, during crop years 1987 and 1988, when the world price was below the loan rate, the marketing loan did not provide producers the needed incentive to redeem their loans and to sell their cotton at the lower world price. Producers lacked this incentive because the cost of redeeming loans was equal to or higher than the world price. Thus, U.S. cotton prices were not competitive in world markets, the world market share of U.S. cotton fell as exports decreased, and U.S. carryover stocks grew significantly above the 4-million bale level targeted in the 1985 act as producers tended to keep their cotton under loan.

Since passage of the act, the Secretary of Agriculture has considered options available to him and has used his authority to implement those program provisions and changes that were reasonable and prudent to make U.S. cotton competitive and to maintain year-ending stocks at approximately 4 million bales. Although these actions were steps in the right direction, GAO believes that several factors continue to inhibit the cotton program from working as intended. These factors are (1) a nonrecourse loan rate that is too high, (2) an 8-month loan extension for producers that is routinely available, and (3) a mandatory ARP announcement date that is too early. Addressing these factors will require congressional action.

Principal Findings

The Marketing Loan Has Not Kept U.S. Cotton Competitive

GAO's analysis shows that U.S. cotton prices were not competitive in world markets for a 14-month period during crop years 1987 and 1988. From February 1988 through March 1989—the period of greatest price divergence—the price of U.S. cotton was above the world price by as much as 10 cents a pound. Although the marketing loan repayment features were in effect during 9 months of that price divergence period,

U.S. prices remained above world prices. If the marketing loan program had been effective, prices for U.S. cotton would have adjusted to be competitive with world prices.

The divergence between the U.S. and world price was primarily the result of producers not having adequate incentive to redeem their loans and to sell their cotton at the world price. Producer incentive was lacking because the cost of redeeming loans (including any associated interest and warehouse charges) was equal to or higher than the price producers would have received by selling their cotton at the world price.

One way to encourage producers to redeem their loans and to sell their cotton would be to lower the nonrecourse loan rate to a level below current market prices. In this way, producers would be less inclined to hold their cotton under loan, or ultimately, to forfeit it to the government. According to USDA, lowering the nonrecourse loan rate would, in the long run, result in reduced program costs to the government.

An additional factor that makes it difficult for the marketing loan to be effective is that producers are routinely provided an 8-month extension to their basic 10-month nonrecourse loan, which allows them to hold cotton off the market for up to 18 months while they speculate on higher prices. Providing the Secretary of Agriculture with authority to extend the loan only when needed to minimize cotton forfeitures would enable the marketing loan to work more effectively.

The Secretary Has Attempted to Improve the Marketing Loan Program

The Secretary of Agriculture has made several adjustments to improve the effectiveness of the marketing loan program. For example, in August 1988 he announced that under certain conditions the government would pay storage and interest costs for cotton under loan. These changes were not fully successful in making U.S. cotton prices competitive in world markets. Consequently, in October 1989 the Secretary made additional changes in the program. For example, he required producers to pay storage and interest costs during the 8-month loan extension period. The effectiveness of these latest changes has not yet been fully tested. Notwithstanding these changes, GAO believes that two factors—the high nonrecourse loan rate and the routine availability of the 8-month loan extension—continue to inhibit the marketing loan program's effectiveness. These factors will require congressional action.

The Secretary Has Attempted to Maintain the Target Carryover Stock Level

The Secretary of Agriculture has used his primary tool—the ARP—in an attempt to maintain cotton carryover stocks at the 4-million bale level targeted by the 1985 act. However, carryover stocks, ranging from 4.9 million bales in crop year 1986 to 7.03 million bales in crop year 1988, have consistently exceeded this target.

The Secretary's ability to achieve a target carryover stock level is impeded by a legal requirement that he announce the ARP rate no later than November 1 each year. USDA and industry officials believe that if the ARP announcement date were delayed at least 2 months (from November to January), the Secretary would have more complete data on cotton production and could make more informed judgments about what the appropriate ARP rate should be.

Matters for Consideration by the Congress

In providing options to help achieve the objectives of keeping U.S. cotton prices competitive in world markets and maintaining target carryover stock levels, GAO believes that the Congress should consider including provisions in the 1990 farm legislation to provide for (1) a lower nonrecourse loan rate that represents a fraction of the current U.S. or world price, whichever is lower, to increase producers' incentive to redeem their loans and to market their cotton; (2) an 8-month extension to the basic 10-month nonrecourse loan that would be available at the discretion of the Secretary of Agriculture only when needed to minimize cotton forfeitures to the government; and (3) a delay of the ARP announcement date to provide the Secretary more time to obtain needed data on cotton production.

Agency Comments

Although GAO did not obtain formal agency comments on a draft of this report, GAO discussed the information contained in the report with USDA officials, and their comments have been included where appropriate.

Contents

Executive Summary		2
Chapter 1	The Objectives of USDA's Cotton Program	8
Introduction	Why the Marketing Loan Was Established, and How It Works	10
	The Marketing Loan's Effect on USDA's Cotton Program Objectives, Scope, and Methodology	11
		12
Chapter 2		16
The Marketing Loan Has Not Kept U.S. Cotton Competitive in World Markets	U.S. Cotton Was Not Competitive When U.S. and World Prices Diverged	17
	Producers Lacked Incentive to Market Cotton at the AWP	20
	Additional Factors Make It Difficult for the Marketing Loan to Be Effective	22
	Administrative Changes to the Cotton Loan Program Have Not Been Fully Effective	25
	Conclusions	26
	Matters for Consideration by the Congress	28
Chapter 3		29
The Secretary's Discretionary Actions Have Not Achieved the Annual Target Carryover Stock Level	Basis for the 4-Million Bale Carryover Stock Level	29
	The Secretary Has Used the ARP in an Attempt to Achieve the Target Carryover Stock Level	29
	Delaying the ARP Announcement Date Could Better Achieve the Target Carryover Stock Level	30
	Conclusions	31
	Matter for Consideration by the Congress	32
Appendix	Appendix I: Major Contributors to This Report	34
Figures	Figure 2.1: Relationships Between U.S. Cotton Price Overseas and the World Price	18
	Figure 2.2: Relationships Between U.S. Spot Price, the AWP, and the Nonrecourse Loan Rate in the Domestic Market	19
	Figure 2.3: Relationships Between U.S. Spot Price, the AWP, the Nonrecourse Loan Rate, and the Cost of Redeeming Cotton	21

09

Abbreviations

ARP	acreage reduction program
ASCS	Agricultural Stabilization and Conservation Service
AWP	adjusted world price
CCC	Commodity Credit Corporation
GAO	General Accounting Office
USDA	U.S. Department of Agriculture

Introduction

Cotton is the single most important textile fiber in the world, according to the U.S. Department of Agriculture (USDA). It is produced in about 75 countries and accounts for about 67 percent of all fibers used. China, the Soviet Union, and the United States account for nearly 60 percent of world cotton production, which, during the period 1984 through 1988, averaged 80.6 million bales (38.7 billion pounds) per year. The United States is the largest cotton exporter. It produces about 16 percent of the world's cotton and uses about 8 percent. This means that one-half of the U.S. cotton production is available for export.

Since 1929, USDA has administered a cotton program affecting various aspects of U.S. cotton production, prices, and farm income.¹ The government costs associated with USDA's cotton program from fiscal years 1986 through 1989 averaged about \$1.5 billion a year.

USDA's Agricultural Stabilization and Conservation Service (ASCS) is responsible for the day-to-day operations of the cotton program with funds provided through the Commodity Credit Corporation (CCC). CCC is a government-owned corporation created within USDA to stabilize, support, and protect farm prices and producer income for a variety of agricultural commodities.

The Objectives of USDA's Cotton Program

The major objectives of USDA's cotton program include (1) managing cotton supply levels for domestic mill use and export, (2) protecting U.S. farm income, and (3) maintaining competitive U.S. cotton prices in world markets. Under current U.S. farm policy, USDA relies on four primary tools—acreage reductions, import quotas, target prices/deficiency payments, and nonrecourse loans—to help accomplish these objectives.

Managing Cotton Supplies

As a tool for managing cotton supplies for domestic mill use and exports, the Food Security Act of 1985 provides the Secretary of Agriculture with discretionary authority to establish an acreage reduction program (ARP). Under this program, producers are required to comply with the Secretary's directive to remove acreage from production as a condition for participating in USDA's cotton program. The act specifically provides for the Secretary, to the maximum extent practicable, to utilize

¹This report addresses USDA's program for upland cotton which represents about 98 percent of all cotton grown in the United States.

an ARP that will result in a U.S. cotton carryover stock level each year of 4 million bales.²

Protecting U.S. Farm Income

To help protect U.S. farm income, an annual cotton import quota of about 125,000 bales (60 million pounds) has been imposed pursuant to the Agricultural Adjustment Act of 1933, as amended. This quota was imposed to prevent U.S. textile mills from purchasing unlimited supplies of cotton from foreign sources. In addition to this annual quota, the Food Security Act of 1985 provides for a special import quota that is equal to 21 days of U.S. mill use. This special quota is to be implemented during 90-day periods when the current U.S. spot price³ for cotton exceeds historical price averages by specific amounts.

To further help protect U.S. farm income, the 1985 act continues the use of a deficiency payment program that provides direct government payments to cotton producers when market prices are low. Under this program, a minimum target price is legislatively set each crop year, and deficiency payments are made to support producers' incomes whenever the calendar year national average price received by producers for their cotton falls below the target price.

In conjunction with the target price/deficiency payment program, the 1985 act also continues the use of nonrecourse loans to cotton producers. CCC makes these loans at an established loan rate,⁴ and producers, in turn, pledge their stored cotton as collateral. Essentially, these loans establish a floor price for cotton, which guarantees producers a minimum price. The loans are nonrecourse because producers may forfeit their stored cotton to CCC as payment of their loan in full, regardless of the current market value of the cotton.

Nonrecourse loans for cotton mature 10 months from the first day of the month in which they were made. At the end of the 10-month loan period, producers can elect to (1) repay the loan, (2) forfeit their

²U.S. carryover stocks are defined as the amount of cotton on hand at farms, warehouses, and mills, or in transit at the end of each crop year. A cotton crop year begins August 1 and ends July 31 of the following calendar year.

³U.S. spot price represents the average of quoted prices for cotton in seven U.S. geographical areas, as designated by the Secretary of Agriculture.

⁴The nonrecourse loan rate is calculated by USDA following a statutory formula that is based on historical market prices. This rate is expressed in cents per pound of cotton and, under the 1985 act, cannot be less than 50 cents for any given crop year.

pledged cotton as full loan repayment, or (3) request that the loan maturity date be extended for 8 months. The criterion in the act for allowing producers to extend their loan for 8 months has proven to be so lenient that availability of this option is practically assured. Thus, producers routinely have an 18-month period available in which they can hold their cotton under loan and keep it off the market.⁵

Maintaining Competitive U.S. Cotton Prices

To help maintain competitive U.S. cotton prices in world markets, the 1985 act introduced a new repayment tool—the marketing loan—as part of USDA's nonrecourse loan program. It is critical that U.S. prices remain competitive in relation to world prices because about one-half of all domestic cotton production is available for export. Under the marketing loan concept, whenever the adjusted world price (AWP)⁶ for cotton falls below the nonrecourse loan rate established by USDA, producers may repay their loans at the AWP.

Why the Marketing Loan Was Established, and How It Works

At the time of legislative debate leading to the 1985 act, the U.S. cotton market was characterized by falling domestic mill use, sharply lower exports, rising domestic stocks, growing textile imports, and low farm prices. The sluggish market for U.S. cotton was aggravated by a worldwide record supply of cotton in crop year 1984 of nearly 88 million bales, which exceeded worldwide use by about 18 million bales. This situation caused a worldwide buildup of inventories that year to a record 42 million bales and a sharp drop in world market prices. As a result of those conditions, the marketing loan was devised in an attempt to retain the government's cotton loan program for producers while keeping U.S. cotton prices competitive in world markets. The marketing loan was expected to provide producers an incentive to market the cotton they used as loan collateral rather than to forfeit it and add to the federal government's costs and accumulation of cotton stocks.

As mandated by the 1985 act, if the AWP for cotton is below the USDA-established nonrecourse loan rate, the Secretary must implement the marketing loan repayment provisions to make U.S. cotton prices competitive in world markets. In doing this, the Secretary is to implement either

⁵Technically, while U.S. cotton under loan is frequently held by merchants, we use the term "producers" throughout this report to refer to both merchants and producers.

⁶The adjusted world price (AWP) represents the prevailing world price—the average of the five lowest quoted prices for cotton from various countries in the Northern European market—as calculated weekly and adjusted to U.S. quality and location by the Secretary of Agriculture.

of two loan repayment plans—Plan A or B—that he must announce by November 1 of each year for the upcoming cotton crop. Once announced, the repayment plan cannot be changed during the entire period that the crop is under loan, which, as discussed earlier, can be for as long as 18 months.

Under Plan A, the marketing loan repayment rate is fixed by the Secretary at a level that cannot be less than 80 percent of the established loan rate. Under Plan B, the marketing loan repayment rate equals the AWP or the loan rate, whichever is lower. The Secretary selected Plan A for the 1986 crop and set the marketing loan repayment rate at 80 percent of the USDA-established nonrecourse loan rate.⁷ He subsequently selected Plan B for the 1987 through 1990 crops.

The Marketing Loan's Effect on USDA's Cotton Program

For crop year 1986, the intended effect of the marketing loan program was achieved. U.S. spot prices, which had previously been above the nonrecourse loan rate, dropped dramatically below that loan rate in line with the newly established AWP. Consequently, U.S. cotton—which had previously been noncompetitive in world markets—became competitive. As a result, cotton exports rebounded to 6.6 million bales and U.S. carry-over stocks were reduced sharply from 9.3 million bales at the beginning of the crop year (August 1, 1986) to 4.9 million bales by the crop year's end (July 31, 1987).

These developments were initially taken as evidence by USDA and the cotton industry that the marketing loan program was accomplishing its objective. It is important to point out, however, that during part of the period that the 1986 crop under loan could be redeemed, favorable market conditions caused the U.S. spot price and the AWP to reach a high of about 74 cents per pound. Nevertheless, because Plan A of the marketing loan program was in effect, producers were allowed to redeem their loans at 44 cents per pound (i.e., 80 percent of the established loan rate of 55 cents). Thus, producers could have received a price of up to 30 cents per pound above the loan repayment rate—11 cents from the government and 19 cents from the marketplace.

According to the Assistant Secretary for Economics and the Director, Economics Analysis Staff, USDA, the favorable market conditions in crop

⁷The nonrecourse loan rate for the 1986 cotton crop was 55 cents per pound. Thus, the marketing loan repayment rate, which under Plan A was 80 percent of the loan rate, was set at 44 cents per pound.

year 1986 were the primary reason that U.S. producers redeemed their loans and sold their cotton. The director told us that the Plan A repayment feature of the marketing loan program had little to do with the movement of U.S. cotton at that time, although the use of Plan A as opposed to Plan B had resulted in producers receiving an additional subsidy payment (i.e., 11 cents per pound) from the government that was not warranted.

Because USDA was locked into a lower nonrecourse loan repayment rate under Plan A even after market conditions and cotton prices improved during crop year 1986, USDA has opted not to use Plan A since that time. The potential for high government costs and the lack of flexibility to adjust the repayment rate when warranted by market conditions made Plan A an undesirable marketing loan program feature, according to the USDA Economics Analysis Staff Director.

In February 1988, after many months of U.S. cotton prices rising and falling in line with the AWP, the two prices diverged, and U.S. cotton was no longer competitive in world markets. Even after the AWP dropped below the loan rate in July 1988 and loans could be redeemed at the lower AWP under Plan B of the marketing loan program, U.S. cotton remained noncompetitive as evidenced by U.S. spot prices staying above the AWP by as much as 10 cents per pound. During that price divergence period, producers had no incentive to sell their cotton at the AWP. As a result, cotton exports dropped, and USDA projected in February 1989 that the U.S. carryover stock level for crop year 1988 would be above 9 million bales, more than double the 4-million bale level targeted by the act.⁸ This projection caused USDA, the cotton industry, and the Congress to express concern about the effectiveness of the marketing loan.

Objectives, Scope, and Methodology

On March 20, 1989, the Chairman, Subcommittee on Agricultural Production and Stabilization of Prices, Senate Committee on Agriculture, Nutrition and Forestry, requested that we analyze the cotton marketing loan program and identify options for improving its effectiveness. Specifically, on the basis of the Chairman's letter and subsequent discussions with his office, we addressed the following questions:

- As currently implemented, is the marketing loan for cotton meeting its objective? If not, why?

⁸Subsequent to this projection, the actual crop year 1988 carryover stock level was 7.03 million bales.

-
- Has the Secretary of Agriculture fully used his authority to make U.S. cotton competitive?
 - Has the Secretary fully used his authority to maintain stocks at approximately 4 million bales?
 - Are there any options available to improve the program's effectiveness?

In addressing these questions, we examined Title V of the Food Security Act of 1985, which covers all aspects of USDA's cotton program, as well as earlier legislation governing the program. We researched pertinent literature and documentation on the cotton program, including legislative history files, congressional hearings, USDA cotton reports on domestic and foreign market conditions, and economic studies performed by USDA and the cotton industry. In addition, we obtained information and documentation from USDA officials and industry organizations to aid in evaluating the marketing loan program's effectiveness. We did not verify the accuracy of the information obtained from these sources.

We interviewed pertinent USDA officials and cotton industry representatives, including the National Cotton Council, which represents all segments of the U.S. cotton industry. Our primary USDA contacts in Washington, D.C., were with officials of the ASCS Fibers Group who are responsible for managing the policy and regulatory aspects of the cotton program. Other ASCS contacts included county office representatives in Marion, Arkansas; Lubbock, Texas; and Bakersfield, California—all are located in major cotton-producing states. We also contacted USDA officials from the Economic Analysis Staff and the Economic Research Service, Washington, D.C.; the National Agricultural Statistics Service, Washington, D.C., and Austin, Texas; and officials in the Kansas City Commodity and Management Offices, Kansas City, Missouri, who are responsible for maintaining summary data on cotton placed under USDA's loan program.

We obtained an overall industry view of the cotton loan program from the National Cotton Council and also met with representatives of individual segments of the cotton industry to obtain their views on the marketing loan and to discuss options available for improving the program. The individual industry segments included the American Cotton Shippers Association in Washington, D.C., whose members handle 80 percent of the cotton sold to domestic textile mills (excluding cotton bought directly by the mills) and 90 percent of all U.S. cotton exports; cotton merchants in Memphis, Tennessee, and Bakersfield, California, two prominent U.S. geographic cotton marketing locations; the American

Textile Manufacturers Institute, Inc., Washington, D.C., whose members account for about 85 percent of all textile production in the United States; the Southern Cotton Ginners Association, Memphis, Tennessee, which represents ginners in the U.S. Delta cotton-producing region; Calcot, Ltd., Bakersfield, California, which is the nation's largest cotton marketing cooperative; the Texas Association of Cotton Producer Organizations and the Plains Cotton Cooperative Association, both of Lubbock, Texas, which together account for over 50 percent of the cotton produced in Texas; Staple Cotton Cooperative Association, Greenwood, Mississippi, a Mid-South regional cooperative that reportedly markets about one-eighth of all U.S. cotton; and five producers from two geographically disbursed cotton-producing regions—Critten County, Arkansas, and Kern County, California.

In our efforts to address the questions pertaining to the Secretary's use of his full authority to make the cotton program work, we did not analyze all of the multitude of options available to him. Rather, we identified those actions taken by the Secretary and determined whether they were reasonable and prudent.

We performed our own economic analysis to determine if the marketing loan for cotton was meeting its objective of making U.S. cotton competitive. We did this by analyzing price relationships from the start of the marketing loan program in August 1986 (crop year 1986) through March 1990 (the latest data available at the time of the analysis). As a result of this price analysis, we identified a 14-month period within crop years 1987 and 1988 (from February 1988 through March 1989) as a period of sustained and generally large differences between U.S. prices overseas and world prices during which time U.S. cotton was not competitive in the world market. Therefore, our detailed analysis as presented in this report focuses on crop years 1987 and 1988, with specific emphasis on the 14-month period of greatest price divergence.

In performing our analysis, we reviewed the formulas used by the ASCS Fibers Group to determine the AWP and its components and used ASCS's data on the AWP and domestic and world market cotton prices to measure U.S. prices in relation to other countries' prices. We also reviewed USDA and ASCS documents that provided the rationale for the components used in the AWP formula and interviewed cotton experts in USDA, the ASCS Fibers Group, and the Economic Research Service, Commodity Economics Division, to obtain information and data on the marketing of cotton, cotton stocks, storage charges, and other cotton marketing costs.

Chapter 2 is our analysis of whether the marketing loan is meeting its objective. To a large degree, our analysis is based on the interrelationships of four prices that come into play in marketing U.S. cotton. These four prices have very precise, technical meanings. Consequently, to fully understand the analysis presented in chapter 2, it is critical to understand the price terminology used throughout the chapter. To facilitate this understanding, the definition of each price follows:

1. World price, as used by USDA and the cotton industry, is the average of the five lowest quoted prices for cotton delivered to Northern Europe from various exporting countries.
2. U.S. price overseas is the average quoted price for U.S.-grown cotton delivered to overseas markets, specifically Northern Europe.
3. Adjusted world price (AWP) is the prevailing world price for cotton—the average of the five lowest quoted prices from various countries in the Northern European market—as calculated weekly and adjusted to U.S. quality and location by the Secretary of Agriculture. The AWP is unique to the U.S. cotton marketing loan program.
4. U.S. spot price is the average quoted price for cotton in seven U.S. geographical areas, as designated by the Secretary of Agriculture.

We discussed the information contained in this report with USDA officials and have included their comments where appropriate. As agreed with the Chairman's office, we did not obtain formal agency comments on a draft of the report.

We conducted our work between April 1989 and March 1990 in accordance with generally accepted government auditing standards.

The Marketing Loan Has Not Kept U.S. Cotton Competitive in World Markets

Our analysis shows that, since enactment of the Food Security Act of 1985, the marketing loan has not achieved its objective of keeping U.S. cotton prices competitive in world markets. During crop years 1987 and 1988, U.S. cotton prices overseas were significantly above world prices for 14 consecutive months. At the same time, U.S. spot prices were above the AWP. As a result, U.S. cotton exports declined and carryover stocks grew beyond the 4-million bale target level.¹

During the 14-month period when the price divergence occurred, U.S. producers lacked incentive to redeem their loans and to market their cotton at prices near the world price, or at the AWP when the marketing loan was in effect. Producers lacked incentive to redeem their loans because they would have made the same money by keeping their cotton under loan and ultimately forfeiting it to the government. Moreover, the fact that U.S. spot prices stayed significantly above the costs of redeeming cotton during the entire period suggests that U.S. producers were speculating on higher prices in the future. Such speculation would likely have induced them to keep their cotton under loan and off the market in an attempt to make more money.

Two additional factors make it difficult for the marketing loan program to be effective. One, import quotas on cotton insulate U.S. producers from world competition which may have made these producers more reluctant to sell their cotton at lower prices. Two, the 8-month extension to the basic 10-month nonrecourse loan allows producers to hold their cotton off the market for periods of up to 18 months in anticipation of higher prices. Permitting producers to hold cotton off the market for up to 18 months is in direct conflict with the marketing loan program's intent to release cotton into the marketplace.

Since 1986, the Secretary of Agriculture has used his discretionary authority to make reasonable and prudent changes to the cotton loan program in an effort to keep U.S. cotton prices competitive in world markets. The changes he made through crop year 1988 did not fully achieve this objective, and additional changes made in October 1989 have not yet been fully tested. Nevertheless, we believe that legislative changes are also needed to keep U.S. cotton competitive in world markets.

¹As mentioned in chapter 1, our detailed analysis focuses on the period of greatest price divergence, from February 1988 through March 1989 (crop years 1987 and 1988).

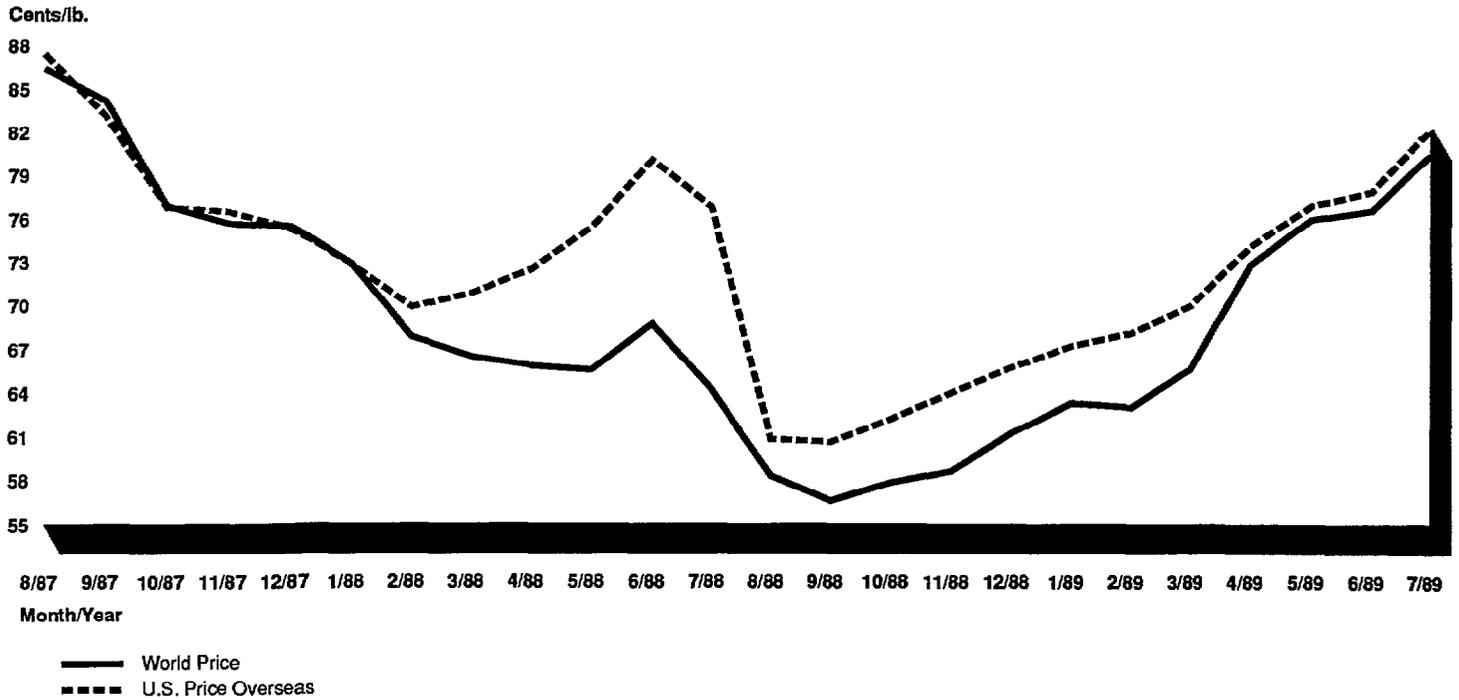
U.S. Cotton Was Not Competitive When U.S. and World Prices Diverged

To ensure that U.S. cotton is competitive in world markets, U.S. prices overseas must move in line with world prices. Ideally, the two prices should be close and increase or decrease simultaneously with little or no divergence. However, during 14 consecutive months in crop years 1987 and 1988 (from February 1988 through March 1989), the price of U.S. cotton overseas diverged significantly above the world price. This divergence also appeared on the domestic cotton market, with U.S. spot prices rising above the AWP. As a result, the U.S. share of the world cotton market fell from 28.45 percent in crop year 1987 to 24.22 percent in crop year 1988. U.S. cotton carryover stocks at the end of those two crop years increased to 5.7 million bales and 7.03 million bales, respectively, which was significantly above the 4.9-million bale carryover level of crop year 1986 and the 4-million bale level targeted by the 1985 act.

Figure 2.1 contrasts the U.S. price overseas with the world price for cotton of comparable quality from the beginning of crop year 1987 (August 1987) through the end of crop year 1988 (July 1989). As figure 2.1 illustrates, the two prices diverged significantly from February 1988 through March 1989.

Chapter 2
 The Marketing Loan Has Not Kept U.S.
 Cotton Competitive in World Markets

Figure 2.1: Relationships Between the U.S. Cotton Price Overseas and the World Price

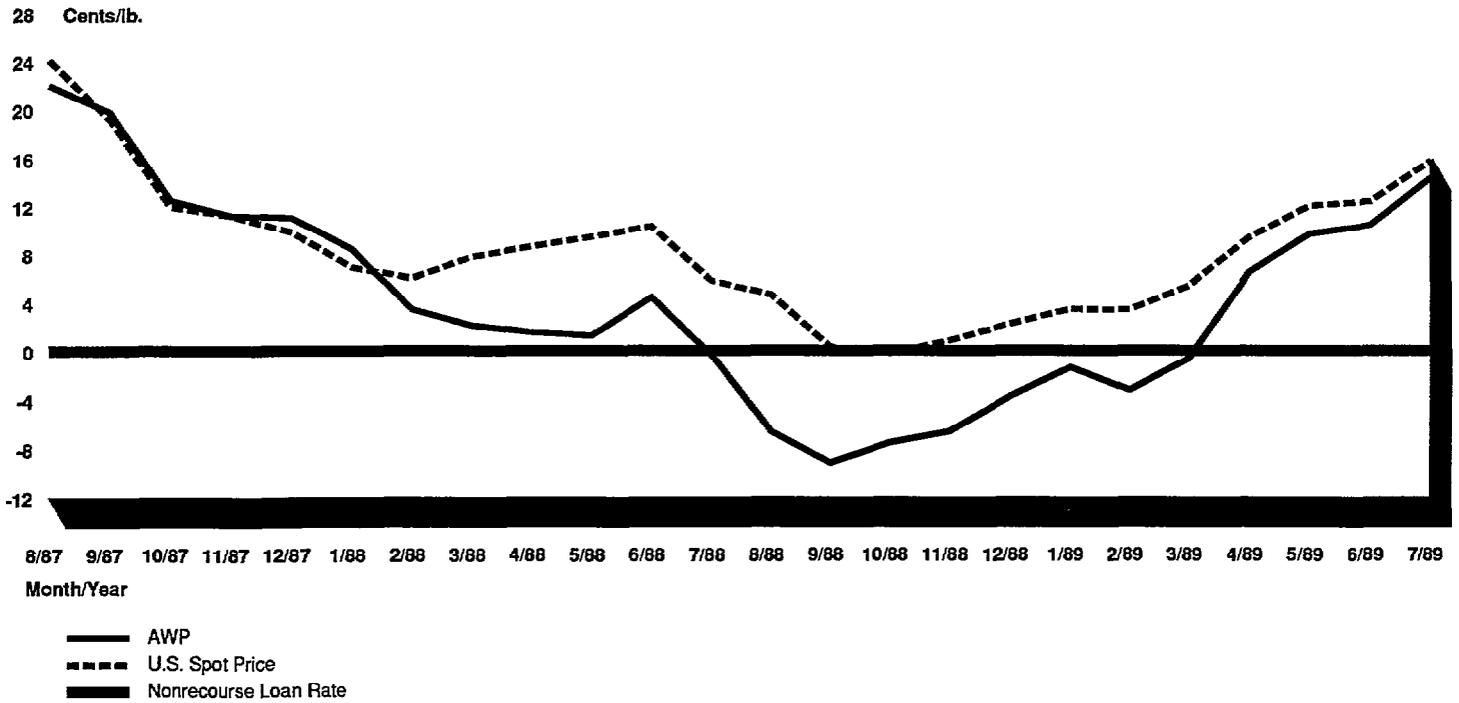


Source: Compiled by GAO based on USDA/ASCS data.

Similarly, figure 2.2 illustrates price relationships on the domestic cotton market. It shows that the price divergence that occurred in the world market also appeared in the domestic market. Initially, from the beginning of crop year 1987 (August 1987) through January 1988, U.S. spot prices were generally in line with the AWP, with both prices above the nonrecourse loan rate. Conversely, during the next 14-month period—from February 1988 through March 1989—U.S. spot prices rose above the AWP by as much as 10 cents per pound.

Chapter 2
 The Marketing Loan Has Not Kept U.S.
 Cotton Competitive in World Markets

Figure 2.2: Relationships Between U.S. Spot Price, the AWP, and the Nonrecourse Loan Rate in the Domestic Market



Note: The data represent the difference between each price and the nonrecourse loan rate. Therefore, zero represents the effective nonrecourse loan rate for each crop year
 Source: Compiled by GAO based on USDA/ASCS data

During the first 5 months of the 14-month price divergence period—from February through June 1988—the AWP was above the nonrecourse loan rate, so the marketing loan repayment features were not in effect. Consequently, during that 5-month period, crop year 1987 cotton under loan would have been redeemed at the loan rate. In addition, the redeemer of that cotton would have had to reimburse CCC for the carrying charges associated with the loan (i.e., interest and warehouse charges).

During the next 9 months of the 14-month price divergence period—from July 1988 through March 1989—the AWP was below the loan rate and the marketing loan repayment features were in effect. Therefore,

cotton under loan would have been redeemed at the AWP.² If the marketing loan program had been effective during this 9-month period, it would have caused U.S. spot prices to drop below the loan rate in line with the AWP, and the price divergence would have been eliminated. This price drop did not occur, however, because the repayment features of the marketing loan program did not provide producers the incentive needed to redeem their loans and market their cotton at the AWP.

Producers Lacked Incentive to Market Cotton at the AWP

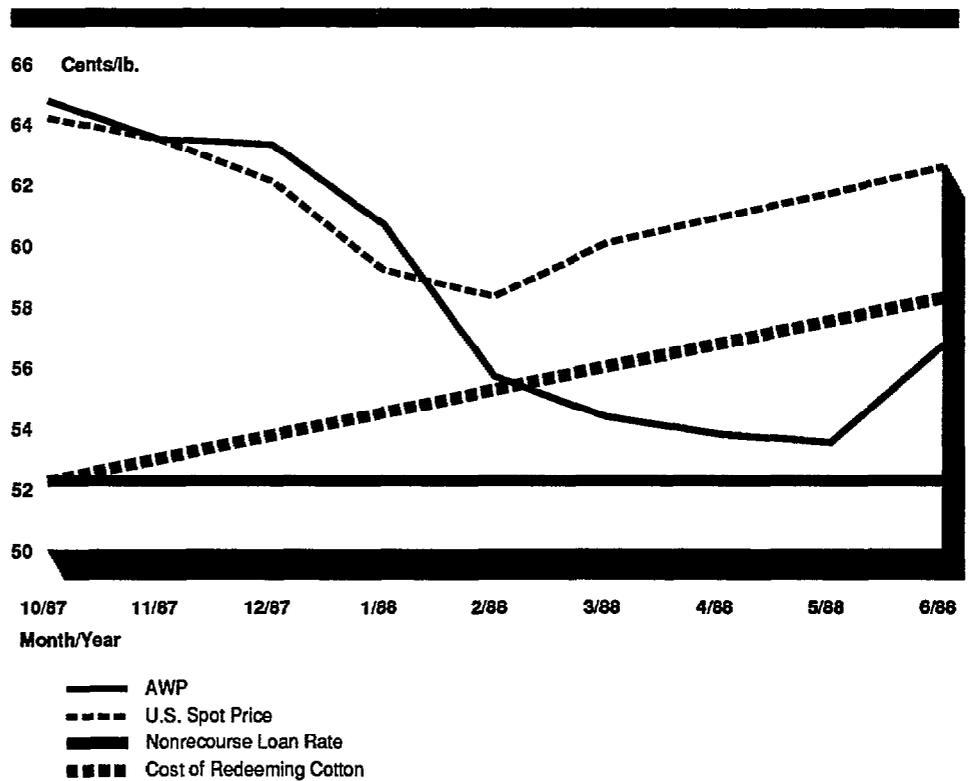
Our analysis shows that, during the 14-month period that U.S. spot prices and the AWP diverged, the cost of redeeming cotton under loan, including associated carrying charges when applicable, was higher than, or equal to, the price producers would have received for their cotton in the world market at the AWP. Under such a condition, producers who redeemed their loans and marketed their cotton at the AWP (under Plan B) would have been no better off financially than if they were to have kept their cotton under loan or forfeited it to the government. Therefore, producers lacked incentive to market cotton held under loan unless they could receive a price higher than the AWP.

As illustrated in figure 2.3, for the first 5 months of the 14-month period when U.S. spot prices were above the AWP—from February 1988 through June 1988—the AWP was above the loan rate. Consequently, the marketing loan was not in effect. Producers' costs for redeeming crop year 1987 cotton under loan during that period equaled the crop year 1987 loan rate of 52.25 cents per pound plus accrued carrying charges of 0.75 cents per pound per month (which is the industry's estimate of the average monthly interest and warehouse charges). Collectively, those costs were greater than the AWP. Each month after February 1988, U.S. spot prices increased to reflect the costs of redeeming cotton under loan. The U.S. spot prices apparently included a price premium demanded by producers, which caused those prices to remain above the AWP. While the AWP remained below the cost of redeeming cotton, U.S. spot prices increased each successive month in line with the 0.75 cents-per-pound monthly increase in carrying charges.

Subsequent to the initial 5-month period—July 1988 through March 1989—U.S. spot prices stayed above the loan rate for 8 of 9 months. (This price divergence was illustrated previously in figure 2.2.) However, the AWP dropped below the loan rate for the entire 9-month period,

²Beginning August 22, 1988, USDA required that CCC pay the associated carrying charges for cotton redeemed when the AWP was below the loan rate or above the loan rate by no more than the amount of accumulated carrying charges. This change was made to encourage loan redemption at the AWP.

Figure 2.3: Relationships Between U.S. Spot Price, the AWP, the Nonrecourse Loan Rate, and the Cost of Redeeming Cotton



Note: Cost of redeeming cotton equals the nonrecourse loan rate plus carrying charges, assuming that cotton was placed under loan in October 1987, at which time carrying charges started to accrue.
 Source: Compiled by GAO based on USDA/ASCS data.

so the marketing loan repayment features under Plan B were in effect. Consequently, producers could redeem their loans at the AWP without having to pay carrying charges. Under this condition, producers reacted in one of two ways. Some redeemed their loans and sold their cotton at the higher U.S. spot price, while others did not.

The reasons some producers chose not to redeem their loans and to sell their cotton included (1) insufficient demand for the higher-priced cotton and/or (2) producers' expectations for higher prices in the future. Moreover, producers would have lacked incentive to sell their cotton in world markets at the AWP because to do so, the net proceeds from such action would have been the same as if the cotton under loan were ultimately forfeited to the government. For example, if the loan rate was 50 cents, producers would receive that amount if they forfeited their cotton. If, on the other hand, the AWP was 40 cents and producers redeemed their loans and sold their cotton at that amount, they would

receive 40 cents from the marketplace plus 10 cents from the government (which is the difference between the loan rate and the AWP). The total of these two amounts equals 50 cents, which is the same proceeds that producers would receive if they forfeited their cotton.

One way to encourage producers in the future to redeem their loans and to sell their cotton at the AWP would be to lower the basic nonrecourse loan rate to a level below the market price. For example, the nonrecourse loan rate could be set to represent a fraction (e.g., 75 percent) of the current U.S. spot price or world price, whichever is lower at the time cotton is placed under loan. Accordingly, the nonrecourse loan rate would vary with market conditions. For this reason, a maximum nonrecourse loan rate should be established to prevent extremely high rates when current market prices are high. Lowering the nonrecourse loan rate would (1) lower producers' price expectations and encourage them to market rather than to forfeit their cotton and (2) result in producers retaining a greater amount of ownership in the cotton they place under loan, which should reduce their tendency to hold that cotton under loan for extended periods. Furthermore, this approach would put more of the price risk of marketing cotton on producers rather than on the government. This risk may be offset somewhat, however, by increased income support subsidies that are available under other aspects of the cotton program, such as deficiency payments.

We did not assess the potential cost impact of lowering the nonrecourse loan rate. However, according to the Assistant Secretary for Economics, and the Director, Economics Analysis Staff, USDA, this approach would, in the long run, result in reduced program costs to the government.

Additional Factors Make It Difficult for the Marketing Loan to Be Effective

Two other factors make it difficult for the marketing loan program to be effective. One, domestic textile mills, for the most part, are prohibited from importing cotton, so U.S. prices are insulated from world competition. Thus, producers in effect have a captive domestic market that may result in their reluctance to sell cotton at lower prices. Two, producers routinely have available an 8-month extension to their basic 10-month nonrecourse loan. This extension makes it easier for producers to be selective in the price they will accept for their cotton because it allows them to hold their cotton off the market for up to 18 months. These factors and their potential impact are discussed in the following paragraphs.

Import Restrictions Hamper the Effectiveness of the Marketing Loan

As a result of legal restrictions on importing cotton, only relatively small amounts of foreign cotton can be imported. Consequently, domestic textile mills are effectively required to purchase their cotton from U.S. producers. For this reason, U.S. spot prices are insulated from declines in the AWP, as was the case from February 1988 through March 1989. With an effective marketing loan program, however, the impact of the import restrictions can be overcome.

Pursuant to section 22 of the Agricultural Adjustment Act of 1933, as amended, an annual cotton import quota of about 125,000 bales (60,000,000 pounds) has been imposed. The Food Security Act of 1985 also provides that, under certain conditions, additional cotton equal to 21 days of domestic textile mill consumption can be imported. This special quota is to be implemented only when the current U.S. spot price exceeds historical averages by 130 percent. Furthermore, when implemented, it is to remain in effect for a 90-day period only. The special quota has been implemented once since 1985, at which time domestic textile mills could have imported approximately an additional 633,000 bales (303,894,717 pounds) of cotton.

Cotton imports in recent years have averaged about 3,000 bales, significantly below the annual import quota of 125,000 bales. According to an official of the American Textile Manufacturers Institute, Inc., which represents about 85 percent of all U.S. textile production, domestic textile mills choose not to import cotton because this annual import quota equates to less than one week's consumption by their mills. This official stated that it is not practical for domestic mills to import such a small quantity of cotton.

This official further stated that the provisions of the special import quota provided for in the 1985 act are so restrictive that, during the one time it was triggered, it was not practical to have the imported cotton purchased and delivered within the specified 90-day period. According to this official, at least 90 days is needed for the purchase and an additional 180 days is needed to take delivery of imported cotton. So, even when domestic mills could import under these provisions, it was not practical to do so under the 90-day time constraint.

To demonstrate the effect that import quotas have had on the domestic mills, the American Textile Manufacturers Institute, Inc., estimates that when U.S. spot prices were higher than world prices in 1988 and 1989, U.S. textile mills paid at least \$100 million more for their cotton than foreign mills paid. This added cost would likely have been passed on to

some extent to consumers and would have reduced the competitiveness of U.S. cotton textile products. The Institute believes that U.S. textile mills should be allowed to import cotton during periods when U.S. spot prices are higher than world prices.

While we did not assess the appropriateness of the cotton import quotas, we recognize that cotton import quotas can play an important role in causing U.S. spot prices to diverge above world prices. We believe, however, that, if the marketing loan program is made to work effectively so that U.S. spot and overseas prices are competitive in world markets, then U.S. textile mills would have access to cotton on the domestic market at prices competitive with world prices.

Routine Availability of the 8-Month Loan Extension Hampers the Effectiveness of the Marketing Loan

The routine availability of the 8-month nonrecourse loan extension allows U.S. producers to keep cotton under loan and off the market beyond the basic 10-month loan period, even when cotton prices are above the loan rate. With the 8-month loan extension, producers are provided additional time to hold their cotton under loan and speculate on receiving higher prices. We believe that if the 8-month loan extension were available at the discretion of the Secretary of Agriculture based on current market conditions, producers would market their cotton in a more timely manner and forfeitures could be reduced.

USDA officials have expressed concern that a 10-month loan period with an 8-month extension undermines the marketing loan's objective. On February 22, 1989, for example, the USDA Assistant Secretary For Economics, in testimony before the House Committee on Agriculture, Subcommittee On Cotton, Rice and Sugar, made the following statement:

"On the one hand, we have a marketing loan which is supposed to release cotton to the market and make U.S. cotton competitive. On the other hand, we have an 18-month loan and a practice of paying price premiums ... which encourages the storage of cotton. We cannot have it both ways. If we want to market cotton, it does not make sense to isolate it from the market in storage."

Similar concerns regarding the availability of the 8-month loan extension have been expressed by industry officials, including the American Cotton Shippers Association, whose members handle nearly all of the domestic and exported cotton sold, and the American Textile Manufacturers Institute, Inc.

Under the 1985 act, the 8-month extension is approved, upon request by the producer, unless the average U.S. spot price in the preceding month exceeds 130 percent of the average U.S. spot price for the preceding 36-month period. This criterion has proven to be so lenient that producers are virtually assured the availability of the 8-month loan extension even when cotton prices are above the loan rate. We believe that the criterion should be changed to eliminate the routine availability of the loan extension during such periods. In our opinion, a better approach would be to provide the Secretary with discretionary authority to use the 8-month loan extension only when needed to minimize cotton forfeitures to the government at the end of the basic 10-month loan period. This approach would encourage producers to market their cotton and would be more consistent with the objective of the cotton marketing loan program.

Administrative Changes to the Cotton Loan Program Have Not Been Fully Effective

In August 1988 the Secretary made several administrative changes to the cotton loan program to address the concerns discussed in this chapter. These changes, which were reasonable and prudent, primarily affected the calculation of the AWP and the payment of storage and interest costs.

One change adjusted the transportation factor in the AWP formula to more accurately reflect the cost of transporting cotton from the United States to Northern Europe. This adjustment was expected to make the AWP more closely reflect the world price, thus increasing the competitiveness of U.S. cotton in world markets. Another change revised the loan repayment features by providing that when loans are redeemed at a time when the AWP exceeds the loan rate, USDA will pay that portion of the carrying charges necessary to permit the loan to be redeemed at no more than the AWP.

Although these administrative changes were steps in the right direction, they did not have the desired effect of eliminating the divergence between U.S. spot prices and the AWP. Consequently, U.S. cotton remained noncompetitive after these changes were implemented.

In October 1989 the Secretary announced further changes in the marketing loan program to help keep U.S. cotton competitive and to encourage the timely movement of cotton into the market. These changes were twofold. One change allows the Secretary to make discretionary adjustments to the AWP at times when U.S. cotton becomes noncompetitive, as it was in 1988 and 1989. USDA believes that such adjustments will permit U.S. cotton prices to react more quickly to

changes in the world price. USDA expects this change to result in larger exports and lower prices to domestic textile mills.

The other change requires producers, beginning with crop year 1989, to pay interest and storage costs on loans redeemed during the 8-month loan extension, regardless of whether the AWP is above or below the loan rate. In addition, if producers decide to forfeit their cotton rather than to redeem their loans during the 8-month loan extension, they must pay storage costs for the entire extension period and a handling fee of \$1 per bale. USDA expects this change to promote timely loan repayments and to discourage both loan extensions and forfeitures.

Whether these October 1989 changes will meet USDA's expectations and help keep U.S. cotton competitive is still uncertain, as they have not yet been fully tested. As of March 1990, when our review work ended, the Secretary had not needed to make any additional adjustments to the AWP because favorable market conditions, resulting from decreased supplies of foreign cotton, had kept U.S. cotton competitive in world markets. Furthermore, the change regarding the payment of interest and storage costs during the 8-month extension will not be applicable until crop year 1989's initial 10-month loan period expires, which will not occur until about July 1990.

In addition to the above-mentioned changes, the Secretary could have implemented Plan A rather than Plan B repayment features during crop years 1987 and 1988 in his attempt to improve the effectiveness of the marketing loan program. However, as we discussed in chapter 1, the Secretary opted not to use Plan A in those crop years because, even under conditions of very high market prices, the government would have been required to pay high subsidies to producers. Because of the implications of these additional subsidies on the federal budget, we believe the Secretary's decision not to use Plan A is appropriate.

Conclusions

The marketing loan program has not achieved its objective of keeping U.S. cotton prices competitive in world markets. Our analysis shows that, from February 1988 through March 1989, the price of U.S. cotton overseas diverged above the world price. Similarly, U.S. spot prices diverged above the AWP, and although the marketing loan was in effect during most of that period, it did not correct this price divergence. As a result, U.S. cotton was not competitive in world markets, and cotton exports decreased while U.S. carryover stocks grew.

During the time when U.S. cotton was not competitive, the marketing loan did not provide producers the incentive needed to redeem their loans and to market their cotton at the AWP. We believe that a way to provide producers this needed incentive would be to lower the nonrecourse loan rate to a level below the U.S. spot price and the world price. This approach would increase the producers' ownership in their pledged cotton and reduce their tendency to hold cotton under loan for extended periods. This approach would also help to make the cotton program more market-oriented by better assuring that producers react to prices established in the marketplace rather than to USDA's price support program. For these reasons, we believe that the Congress could better achieve its objective of keeping U.S. cotton prices competitive in world markets by lowering the nonrecourse loan rate. According to USDA officials, lowering the nonrecourse loan rate would, in the long run, result in reduced program costs to the government.

The routine availability of an 8-month loan extension to the basic 10-month nonrecourse loan makes it easier for producers to be selective in the price they will accept for their cotton because it allows them to keep their cotton under loan longer while they speculate on higher prices. We believe that the 8-month loan extension should be available to producers only when the Secretary of Agriculture determines that it is needed to minimize cotton forfeitures to the government at the end of the basic 10-month loan period. This approach would encourage producers to market their cotton and would be more consistent with the objective of the cotton marketing loan program.

The Secretary made several administrative changes in August 1988 to help keep U.S. cotton competitive. These changes were not fully successful, however. In October 1989 the Secretary made additional changes to help keep U.S. cotton competitive and to encourage the timely movement of cotton into the market. Although these changes may help to improve the marketing loan program's effectiveness, we believe that the lack of incentive for producers to redeem their nonrecourse loans and to sell their cotton at the AWP, as well as the virtually automatic 8-month loan extension, will continue to inhibit the marketing loan from working as intended. Addressing these factors will require congressional action.

Matters for Consideration by the Congress

To help achieve the objective of keeping U.S. cotton prices competitive in world markets, the Congress should consider including provisions in the 1990 farm legislation to increase the effectiveness of the cotton program. Specifically, the Congress should consider doing two things.

First, the Congress should consider lowering the nonrecourse loan rate to a level that represents a fraction of the current U.S. spot price or world price, whichever is lower at the time cotton is placed under loan. Because the nonrecourse loan rate would vary with market conditions, a maximum rate should be established. Lowering the nonrecourse loan rate would (1) lower producers' price expectations and encourage producers to market their cotton rather than forfeit it to the government and (2) reduce producers' tendency to hold cotton under loan for extended periods.

Second, the Congress should consider providing the Secretary of Agriculture the authority to make available the 8-month loan extension to the basic 10-month nonrecourse loan only when it is needed to minimize cotton forfeitures to the government. This provision would eliminate the existing situation where producers are virtually assured availability of the 8-month loan extension, which allows them to keep cotton under loan whether or not justified by current market conditions.

The Secretary's Discretionary Actions Have Not Achieved the Annual Target Carryover Stock Level

The Secretary of Agriculture considered options available to him and, utilizing his discretionary authority, took reasonable and prudent actions to maintain carryover stocks at the 4-million bale level targeted by the Food Security Act of 1985. In doing so, the Secretary used his primary tool—the ARP. However, carryover stock levels have exceeded the target each year since 1985. To help achieve the target carryover stock level, the Secretary needs additional time beyond the mandated November 1 announcement date to obtain more complete cotton crop production data before determining the ARP rate each year. Providing the additional time will require congressional action.

Basis for the 4-Million Bale Carryover Stock Level

The Food Security Act of 1985 requires that the Secretary utilize the ARP, to the maximum extent practicable, to achieve a carryover stock level of 4 million bales of cotton each year. Carryover stocks refer to the amount of cotton on hand in the United States at the end of a crop year (i.e., July 31).

According to legislative history, at the time the 1985 act was being debated, the 4-million bale carryover stock level represented one-third of the approximate 12 million bales of U.S. cotton that was being consumed domestically and exported each year. A 4-month supply of cotton is considered necessary by USDA and the industry to provide adequate stocks between crop year harvests.

The act directs the Secretary to achieve the target carryover stock level through an ARP by applying a uniform percentage reduction—not to exceed 25 percent—to the cotton crop acreage base for each farm. As a condition for participating in USDA's cotton program, producers must reduce their cotton acreage by the specified rate. The Secretary is required to announce the ARP rate no later than November 1 of the calendar year preceding the year in which the crop is harvested.

The Secretary Has Used the ARP in an Attempt to Achieve the Target Carryover Stock Level

After considering the objectives of the cotton program and the provisions available for achieving those objectives, the Secretary utilized his authority each year since 1985 by implementing an ARP rate that he believed would achieve the target carryover stock level. For crop years 1986 and 1987, the Secretary announced the maximum 25-percent ARP rate in an attempt to attain the target carryover stock level of 4 million bales. Carryover stocks at the end of those years were 4.94 million bales and 5.72 million bales, respectively, down considerably from the 9.3 million bales in crop year 1985, but still above the target level.

Contrary to what he did in crop years 1986 and 1987, the Secretary implemented an ARP rate of 12.5 percent for crop year 1988. ASCS statistics available at that time indicated that the estimated cotton production and consumption for 1987 and 1988, together with the 12.5-percent ARP rate, would result in a crop year 1988 carryover stock level of 3.9 million bales. However, unexpected back-to-back large cotton yields in crop years 1987 and 1988, combined with the less-than-maximum ARP rate in 1988 and the reduction in exports during the noncompetitive price period discussed in chapter 2, resulted in a crop year 1988 carryover stock level of 7.03 million bales. If the Secretary had not been required to announce the ARP rate so early, he would have had more complete data available for determining a more appropriate ARP rate for crop year 1988. We recognize, however, that while delaying the ARP announcement date would allow USDA to get a better handle on beginning stock levels, the unpredictability of yields and demand in the next year would still make it difficult to achieve the target carryover stock level.

Delaying the ARP Announcement Date Could Better Achieve the Target Carryover Stock Level

As mentioned earlier, the Secretary is required to announce an ARP rate no later than November 1 of the calendar year preceding the year in which the crop is harvested. For example, the ARP rate for crop year 1988, which began August 1, 1988, and ended July 31, 1989, was announced by the Secretary on October 29, 1987. USDA and industry officials believe that the required ARP announcement date is too early, however, for two reasons.

First, because the ARP rate affects the cotton carryover stock level at the end rather than at the beginning of each crop year, the Secretary's ARP rate decision is based on estimated ending stock levels that are expected to occur 21 months after the ARP rate is announced. (In other words, a November 1, 1987, ARP announcement for the 1988 crop year would have been in effect through July 31, 1989, at which time the ending stock level would have been determined. The time span between November 1, 1987, and July 31, 1989, was 21 months.) Second, because the Secretary does not have complete information on the current crop year's harvest at the time he must decide on the ARP rate for the following year, his decisions are based on forecasts which could change significantly from month to month, especially during the harvesting period that occurs between November 1 and January 1 each year.

Crop year 1988 illustrates why the required ARP announcement date of November 1 is too early. The November 1 deadline for announcing the 1988 ARP rate forced the Secretary to announce the rate before having

Chapter 3
The Secretary's Discretionary Actions Have
Not Achieved the Annual Target Carryover
Stock Level

complete information on the 1987 cotton crop yield. Nonetheless, on the basis of the information available at that time, the Secretary announced an ARP rate of 12.5 percent for crop year 1988. After the 12.5-percent rate had been announced, favorable weather resulted in a record 1987 cotton crop yield and increased the forecasted U.S. production by 1.4 million bales beyond what it was predicted to be at the time the Secretary made the ARP announcement on October 29, 1987. Consequently, the higher-than-expected 1987 yield increased the carryover stock level which, in turn, resulted in a larger supply of cotton available during crop year 1988.

In hindsight, had the Secretary had information indicating the higher cotton yield estimates in 1987, he might have increased the ARP rate for 1988. If he had increased the ARP rate to 15 or 20 percent, or had he used the maximum allowable 25-percent rate, the 7.03-million bale carryover stock level in 1988 would have been reduced to a level closer to the 4-million bale target level.

According to the ASCS official in charge of the day-to-day management of the cotton program, the Secretary would have announced an ARP rate higher than 12.5 percent for crop year 1988 if he had been allowed to delay the announcement of the final ARP decision until after the legislated deadline of November 1. Had the announcement date been delayed until the Secretary had obtained U.S. cotton data through December 1987, for example, he would have known that the 1987 crop yield was significantly higher than forecasted at the time he made his decision on the 1988 ARP rate. The ASCS official stated that a 2- to 3-month delay would give the Secretary the additional time needed to acquire data on nearly all of the current U.S. cotton crop harvest, as well as additional information on planting intentions overseas.

Regarding any adverse effects that a delayed ARP rate announcement date might cause, the ASCS official stated that only a small number of producers in four counties in south Texas would likely be affected. These producers typically plant cotton earlier than producers in other parts of the country and they need to know by November 1 what the ARP rate is going to be for the upcoming year. This official indicated that USDA could work with producers who plant early in the season to minimize any adverse effects from the later announcement date.

Conclusions

The Secretary of Agriculture's discretionary actions have not achieved the annual 4-million bale cotton carryover stock level targeted by the

Chapter 3
The Secretary's Discretionary Actions Have
Not Achieved the Annual Target Carryover
Stock Level

Food Security Act of 1985. We believe the Secretary could more likely achieve the annual target level if he were to base his ARP rate decisions on the crop year's harvest data through December each year. To do so, the Congress would have to change the mandated November 1 ARP announcement date to no earlier than sometime in January.

Matter for
Consideration by the
Congress

If the Congress chooses to maintain a target carryover stock level for cotton, it should consider including provisions in the 1990 farm legislation to revise the ARP announcement date to at least January to provide the Secretary of Agriculture the time needed to obtain data on the crop year's harvest through December of each year.

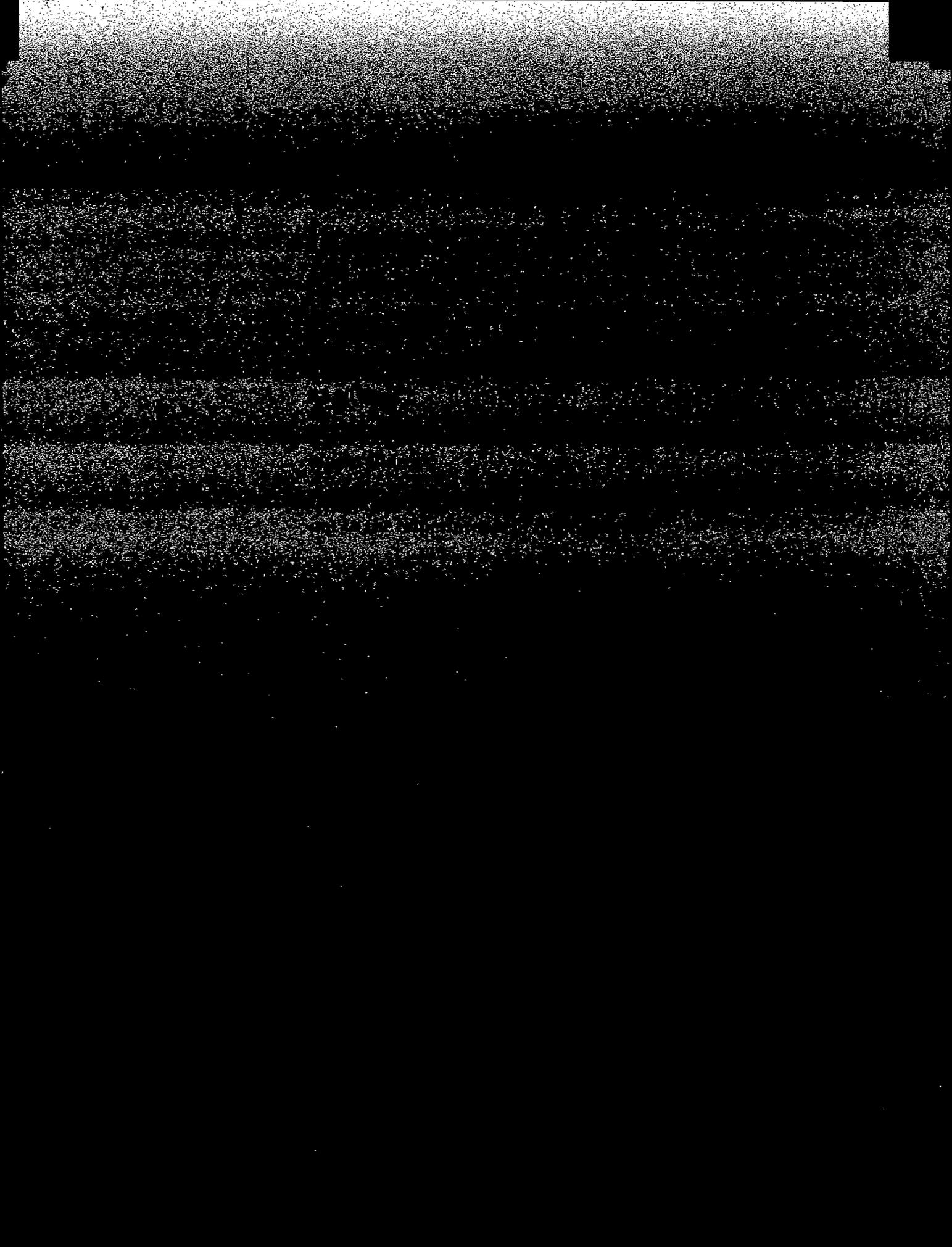
Major Contributors to This Report

**Resources,
Community, and
Economic
Development Division,
Washington, D.C.**

Flora H. Milans, Associate Director
Clifton W. Fowler, Assistant Director
Dennis J. Parker, Assignment Manager
Charles W. Bausell, Jr., Senior Economist
Carol E. Bray, Economist

Dallas Regional Office

Sherrill H. Johnson, Regional Manager's Representative
Seth D. Taylor, Evaluator-in-Charge
Kirk D. Menard, Evaluator



United States
General Accounting Office
Washington, D.C. 20548

First-Class Mail
Postage & Fees Paid
GAO