SUGAR PROGRAM

Impact on Sweetener Users and Producers

Statement of John W. Harman, Director, Food and Agriculture Issues, Resources, Community, and Economic Development Division
Mr. Chairman and Members of the Subcommittee:

We are pleased to be here today to discuss the impact of the U.S. sugar program on sweetener users and producers, and domestic and international conditions' possible effect on the program's operation. Our testimony is based primarily on our 1993 report with several updates to reflect recent domestic and international events.\(^1\)

In summary, in our 1993 report we stated that:

-- The sugar program, through its price support loans and tariff-rate import quotas, protects sugar producers from lower world prices but increases domestic sugar prices, costing sweetener users an estimated $1.4 billion annually. (This is an average based on 1989, 1990, and 1991 cost estimates.)

-- Approximately 1,700 sugarcane farms in 4 states and 13,700 sugarbeet farms in 14 states benefit from the program, which has typically kept domestic sugar prices at twice the world price. These benefits are concentrated among a relatively small percentage of farms, and there is no limit to the size of individuals' benefits. We estimated that 42 percent of the sugar growers' benefits went to 1 percent of all sugar farms in 1991.

-- Other beneficiaries of the program include manufacturers of high fructose corn syrup (HFCS) and foreign countries that export sugar to the United States. HFCS manufacturers benefit because they can charge higher prices to compete with the supported price of sugar. Foreign countries that hold U.S. sugar quotas benefit, since they can receive double the price they would on the world market.

-- Increases in production have outpaced consumption, making it difficult for the U.S. Department of Agriculture (USDA) to operate the program as it has in the past. As a result, USDA used marketing allotments in fiscal years 1993 and 1995 to restrict the sale of sugar on the domestic market.

Because of the additional costs of the sugar program to sweetener users and the probability that it would not operate in the future as it had in the past, we recommended that the Congress

\(^1\)Sugar Program: Changing Domestic and International Conditions Require Program Changes (GAO/RCED-93-84, Apr. 16, 1993).
consider legislation to move the industry toward a more open market.

Background

The U.S. sweetener market was transformed about 20 years ago by the introduction of a process to mass-produce HFCS. At that time, sugarcane and sugar beets were the dominant sweetener sources in the United States. Despite increases in sugar production, sugar's importance as a sweetener has diminished. HFCS and other corn sweeteners now account for more than one-half of the caloric sweeteners consumed in this country.

For over 200 years, the United States has intervened in the sugar market, first by levying tariffs on imported sugar to raise revenue. However, the Agriculture and Food Act of 1981, as amended, provides the basis for the current sugar program. The program has two basic components: (1) a domestic commodity loan program that sets a support price (loan rate) for sugar and (2) an import quota system. Because the United States has had to import sugar to meet its domestic needs, USDA has been able to use a tariff-rate import quota to restrict the supply of foreign sugar. This allows USDA to keep prices high enough to support growers and help prevent processors from defaulting on their loans. USDA must act to prevent forfeitures in order to ensure that the program operates at no net cost to the government.

While the United States continues to need imported sugar to meet domestic demand, the level of imports entering the United States has fallen dramatically over the past 20 years in response to increases in domestic sweetener production and decreases in sugar consumption. In 1991, the United States imported less than 2 million tons of raw sugar, compared with almost 6 million tons in 1972. Because of declining imports, the Congress passed legislation in 1990 that required USDA to impose marketing allotments when estimated imports fall below 1.25 million short tons. When triggered, these allotments restrict the amount of sugar that domestic cane millers and beet processors can market. In this way, marketing allotments provide another tool for USDA to support prices and avoid forfeitures by millers and processors.

Sugar Program Has Cost Sweetener Users Billions of Dollars

Sweetener users bear the cost of supporting sweetener producers. Some studies have estimated high program costs by comparing the supported domestic price of sugar with the prevailing world price, resulting in a cost to domestic users of over $3 billion annually. However, recognizing that the world price would go up significantly in the long run if the United States and other countries purchased more sugar on the world market, we chose a more conservative approach. Using a long-run world price for refined sugar and including program-related HFCS costs, we estimated that
the program costs sweetener users approximately $1.4 billion annually. (See app. I for further information on the estimated costs and benefits of the program.)

**Sugar Program Benefits Are Concentrated Among a Few Sugar Farms**

Growers and processors share about $561 million in annual benefits from the sugar program, with growers generally receiving about 60 percent and processors 40 percent. Benefits that go to sugar growers are concentrated among a relatively small percentage of farms. We estimated that in 1991, 42 percent of these benefits went to about 150--1 percent--of all sugar farms. Cane growers and beet growers each receive about one-half of the total benefits, even though there are about eight beet farms for every cane farm. The cane sugar industry is especially concentrated, with 17 farms receiving over one-half of all cane grower benefits. The beet sugar industry is less concentrated, with about 2,000 farms receiving one-half of the beet grower benefits. Benefits are further concentrated because, in both the cane and beet industries, some growers are also processors.

Unlike USDA's commodity programs that provide direct payments to producers, the sugar program does not have payment limitations. For example, we estimate that one farm received over $30 million in benefits from the sugar program in 1991. The 33 largest farms--all in Florida or Hawaii--received over $1 million each in estimated benefits from the program that year. These 33 farms, which represent 0.2 percent of all sugar farms, received approximately one-third of the entire estimated farm-level benefits from the program. (See app. II for further information on the distribution of program benefits).

**Sugar Program Provides Benefits to Manufacturers of HFCS**

Since the sugar program keeps domestic sugar prices artificially high, manufacturers of sugar's main competitor--HFCS--can keep their prices high as well. We estimated that manufacturers of HFCS received an additional $548 million annually as a result of the sugar program. The benefits to HFCS manufacturers are also highly concentrated: Four HFCS firms accounted for 87 percent of domestic production in 1990. This concentration of benefits occurs largely because of the substantial investment required to produce HFCS, which makes it difficult for new firms to enter the market.

**Sugar Program's Future Is Uncertain**

Recent trends in domestic sweetener production have made it difficult for USDA to operate the program as it has in the past. Increasing domestic production, encouraged by technological improvements and the price incentives built into the sugar program, led the Congress to pass farm legislation in 1990 that provided for
a minimum level of foreign sugar imports. Because estimated imports in fiscal years 1993 and 1995 fell below the trigger level of 1.25 million short tons, USDA imposed limits on the amount of domestic sugar that producers could sell and assigned marketing allocations to beet and cane sugar. These allocations are based on three factors: past marketings, processing and refining capacity, and the ability to market sugar.

When we conducted our work in 1993 it was unclear how then-pending international trade agreements would affect the operation of the U.S. sugar program. According to recent information from USDA, the Uruguay Round agreements of the General Agreement on Tariffs and Trade (GATT) and the North American Free Trade Agreement (NAFTA) have had and will have little impact on U.S. sugar prices and the U.S. sugar market. Accordingly, it is unlikely that there will be any near-term effects on the ability of the U.S. to shield its domestic sugar producers from increasing imports.

The Congress Should Consider Changing the Sugar Program

Because of the additional costs of the sugar program to sweetener users and the probability that it would not operate in the future as it had in the past, we recommended that the Congress consider legislation to move the industry toward a more open market. As part of this transition, we recommended that the Congress gradually lower the loan rate for sugar and direct USDA to adjust import quotas accordingly. Reducing the loan rate gradually would allow producers time to make orderly adjustments.

Mr. Chairman, this concludes my prepared statement. I would be pleased to answer any questions that you or Members of the Subcommittee may have.
Estimates of Program Costs and Benefits

By keeping the domestic price of sugar artificially high, the U.S. sugar program provides sugar producers (growers and processors) with an average of $561 million in benefits annually. This is less than one-half of the $1.4 billion in costs to users. Some of the remaining costs to users benefit manufacturers of high fructose corn syrup (HFCS) or foreign countries that export their quota sugar to the United States. The rest of the costs to users are considered a net loss to society that results from program incentives that lead to an inefficient allocation of productive resources (deadweight loss).

The table below shows the benefits to producers and exporters and the deadweight loss of the sugar program.

Table I.1: Estimates of Program Costs and Benefits
Dollars in millions

<table>
<thead>
<tr>
<th>Year</th>
<th>Sugar producers' gains</th>
<th>HFCS manufacturer's gains</th>
<th>Exporter gains</th>
<th>Deadweight loss</th>
<th>Total cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1989</td>
<td>$597</td>
<td>$551</td>
<td>$116</td>
<td>$114</td>
<td>$1,380</td>
</tr>
<tr>
<td>1990</td>
<td>650</td>
<td>677</td>
<td>241</td>
<td>150</td>
<td>1,720</td>
</tr>
<tr>
<td>1991</td>
<td>435</td>
<td>417</td>
<td>141</td>
<td>65</td>
<td>1,060</td>
</tr>
<tr>
<td>Avg</td>
<td>561</td>
<td>548</td>
<td>166</td>
<td>110</td>
<td>1,390</td>
</tr>
</tbody>
</table>

Note: Figures in the "total cost" column are rounded.
## Distribution of Program Benefits According to Size of Benefit

<table>
<thead>
<tr>
<th>Cane benefits</th>
<th>Number of farms</th>
<th>Percent of all farms</th>
<th>Percent of total benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than $50,000</td>
<td>1,336</td>
<td>8.7%</td>
<td>4.5%</td>
</tr>
<tr>
<td>$50,000-$100,000</td>
<td>212</td>
<td>1.4%</td>
<td>3.2%</td>
</tr>
<tr>
<td>$100,001-$500,000</td>
<td>106</td>
<td>0.7%</td>
<td>4.2%</td>
</tr>
<tr>
<td>$500,001-$1 million</td>
<td>18</td>
<td>0.1%</td>
<td>2.7%</td>
</tr>
<tr>
<td>Over $1 million</td>
<td>33</td>
<td>0.2%</td>
<td>34.0%</td>
</tr>
<tr>
<td>Cane total</td>
<td>1,705</td>
<td>11.0%</td>
<td>48.6%</td>
</tr>
</tbody>
</table>

| Beet Benefits       |                  |                      |                          |
| Less than $50,000   | 12,877           | 83.4%                | 35.5%                    |
| $50,000-$100,000    | 690              | 4.5%                 | 10.2%                    |
| $100,001-$500,000   | 163              | 1.1%                 | 5.5%                     |
| $500,001-$1 million | 1                | 0.01%                | 0.2%                     |
| Over $1 million     | 0                | 0%                   | 0%                       |
| Beet total          | 13,731           | 89.0%                | 51.4%                    |
| Grand Total         | 15,436           | 100.0%               | 100.0%                   |

Note: Totals may not add due to rounding.
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