



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.

1980 AGRICULTURAL OUTLOOK

Papers Presented at the Agricultural Outlook Conference
Sponsored by the U.S. Department of Agriculture—
Held in Washington, D.C., November 5-8, 1979

PREPARED FOR THE
COMMITTEE ON AGRICULTURE, NUTRITION,
AND FORESTRY
UNITED STATES SENATE

DECEMBER 23, 1979



U.S. DEPT. OF AGRICULTURAL
NATIONAL AGRICULTURAL LIBRARY

APR 28 1980

CATALOGING = PREP.

Printed for the use of the
Committee on Agriculture, Nutrition, and Forestry

U.S. GOVERNMENT PRINTING OFFICE

WASHINGTON : 1979

Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

U.S. OUTLOOK FOR SWEETENERS AND TROPICAL PRODUCTS

(By Owen K. Shugars, Fred Gray and Robert Barry, Agricultural Economists, Economics, Statistics, and Cooperatives Service, U.S. Department of Agriculture)

INTRODUCTION

This discussion of the U.S. outlook for sweeteners and tropical products will include coffee, tea, and cocoa in addition to sweeteners. Since the United States is both producer and consumer of sweeteners, emphasis will be on sugar and corn sweeteners. We depend on foreign production of coffee, tea, and cocoa, but they are very important consumption items. For example, the value of U.S. coffee imports in 1978 was more than \$4 billion, making it in dollar terms our most important agricultural import. Cocoa, chocolate, and tea imports all together totaled around \$1.5 billion in 1978. We will have more to say about these tropical products but will turn first to sweeteners.

OVERVIEW OF SWEETENERS OUTLOOK

Last year, at this time, the sweeteners outlook was fraught with uncertainty. In reviewing last year's outlook talk, one is struck by the statement: "Until U.S. sugar policy is more clearly defined, congressional review of sugar policy and administrative support decisions authorized under existing law are expected to remain major factors affecting sugar prices and the sweetener situation and outlook."

In general this statement applies also to the 1980 outlook for sweeteners. But some important changes have occurred:

1. The sugar price support-loan program provided in the Food and Agricultural Act of 1977 expired with the 1978 crops of sugarbeets and sugarcane.

2. The Secretary of Agriculture instituted an interim price support-loan program for 1979-crop sugar under general authority provided in the Agricultural Act of 1949 as amended. This interim program was to provide minimum price support coverage for 1979-crop sugarbeets and sugarcane until new legislation was implemented or a subsequent program adopted.

3. In late August, September, and October, world raw sugar prices rose sharply to levels that triggered successive reductions in U.S. import fees until on October 24 the fee on raw sugar was zero.

4. On October 23, 1979 the U.S. House of Representatives voted against the International Sugar Stabilization Act of 1979 (H.R. 2172).

Whether this combination of events has added to or lessened uncertainty could be debated. However, the question of U.S. ratification of the International Sugar Agreement remains unresolved, clearly adding to uncertainty. These events do suggest that in 1980 the U.S. sweetener market will be much more directly influenced by the world sugar economy than it was for most of 1979. Let us look at the sweetener situation in a bit more detail for a perspective on the outlook.

THE SWEETENER SITUATION

Sugar

Raw sugar prices, by virtue of their recent behavior, deserve first attention. For the first 9 months of 1979, the derived U.S. raw sugar prices (landed New York, duty and fees paid) averaged 15.1 cents a pound, 10 percent above the same period last year and in line with the 15-cent domestic price objective.¹ Because of import fee adjustments the domestic raw price was relatively stable. Monthly average prices differed from the January-September average by no more than 0.82 cent a pound. In late August, however, daily prices pushed above 16 cents a pound and triggered a 1-cent intraquarter import fee reduction effective September 1, the first time a fee adjustment had been necessary within a calendar quarter.

Domestic prices continued strong into September, averaging 15.72 cents (New York spot No. 12 contract) for the month. The fourth quarter fee adjustment, reflecting prices during the 20-day base period in the third quarter, reduced the import fee for raw sugar down to 1.76 cents per pound effective October 1. Raw prices continued strong and resulted in another intraquarter fee reduction of 1 cent per pound, effective October 18, followed by a 0.76-cent reduction effective October 24. With the October 24 fee adjustment the U.S. import fee for raw sugar was zero. For refined sugar imports, the fee stood at 0.52 cent per pound. The New York raw sugar spot price (No. 12 contract), for the first 20 market days in October averaged 15.92 cents per pound, up from 15.72 cents in September. The world price (measured by the No. 11 contract), rose from the September average of 9.80 cents to 11.85 cents per pound for the first 20 market days in October. Thus, the import fee adjustments buffered the U.S. price from the substantial rises in world raw sugar prices, but now with the fee at zero the buffer against further world price increases is gone.

Domestic wholesale prices of refined sugar have strengthened this year. Because of discounting practices this is not evident from reported list prices. The reported Chicago-West list price for refined sugar in 100-pound bags or liquid has held at \$19.15 per hundred-weight since January 1979, but the actual price was reportedly discounted to as low as \$17.50 last summer in some instances. Bulk sales are now occurring at actual prices of \$17.75 and above, while bagged and liquid sugar have been selling at above \$18.40. As domestic raw

¹The price used is a "derived" New York spot price, calculated by converting the London spot for sugar to a Caribbean basis in U.S. dollars and adding freight, insurance and U.S. duties and fees. It is a rough measure of U.S. raw sugar price movements and is not necessarily equivalent to market prices transacted by buyers and sellers. On Aug. 20, 1979, the New York Coffee and Sugar Exchange resumed reporting spot market prices for raw sugar. The Exchange's spot price for the No. 11 contract is a measure of the world raw sugar price, f.o.b. Caribbean and its No. 12 contract price a measure of the U.S. raw sugar price (New York spot).

sugar prices have increased in recent months, discounts under list for wholesale refined sugar have probably become smaller. Actual wholesale price trends in other territories are generally similar to Chicago-West, though discounts under list prices are reported to be significantly less than in the Midwest. With the exception of the Northeast, list prices have remained mostly unchanged. List prices in the Northeast increased from \$22.27 per hundredweight in January 1979 to \$23.79 in August then declined slightly in September to \$23.46.

The U.S. average retail price for refined sugar was 23.8 cents per pound in December 1978. The average price for May 1979 rose to 24.9 cents and has since held near that level. Retail sugar prices during first 8 months of 1979 rose 2.3 percent, but sweetener-containing products at retail exhibited a 5.6 percent increase during the same period.²

U.S. production of cane and beet sugar in crop year 1979-80 is expected to be down nearly 6 percent from the 1978-79 outturn. Estimates are for little change in cane sugar but 11 percent less beet sugar than in 1978-79. At 5.7 million short tons (raw value), estimated total production is about 1.5 million tons less than the record in 1975-76. On a calendar year basis, 1979 production will be little changed from 1978. This is because weather problems caused processing of a relatively large quantity of 1978-79-crop sugar beets to be postponed until after January 1, 1979.

Sugar beet acreage for the 1979-80 crop was cut back 12 percent, dropping to around 1.12 million acres. The cutback reflects closings of six sugar beet plants and a planned reduction in beet acreage in the Red River Valley where back-to-back bumper crops the last 2 years strained processing capacity. Washington, formerly a major beet State, did not grow any beets this year because of the closing of its only two processing plants. Current prospects are for U.S. beet yields to average about 19.9 tons per acre, down about 2 percent from 1978-79. Yields in the Red River Valley, the largest producing area, may drop 2 tons per acre. This and the elimination of the high-yielding Washington acreage are the chief reasons for lower U.S. yields in 1979-80. Total beet sugar production from the 1979-80 crop is expected to be about 2.9 million tons, raw value, down sharply from 3.25 million tons in 1978-79.

Sugarcane acreage (including seed) for harvest will likely total around 731,000 acres in 1979-80, down 1 percent from the previous season. Acreage expanded slightly in Florida and Hawaii, declined only slightly in Texas but dropped significantly in Louisiana. Louisiana's 1979-80 area for harvest of 270,000 acres is down from 289,000 in 1978-79. This fall, 25 cane processing facilities were scheduled to operate in Louisiana compared with 28 last year. The projected U.S. average cane yield for the 1979-80 crop is 37.0 tons per acre, up 1.9 tons from last year. Total cane sugar production is expected to be about 2.6 million short tons (raw value).

Calendar 1979 sugar deliveries, based on the trend for the most recent 12 consecutive months, seem likely to total around 10.7 million short tons compared with 10.89 million tons in 1978. Through mid-

² Measured by the simple average of the BLS indexes for 16 sweetener-containing product categories.

September, deliveries were down around 2 percent from the same period last year. First quarter deliveries were up, but there were significant slippages from a year ago in the second and third quarters. Sugar deliveries are competing with sharply increased deliveries of high fructose corn sirup.

With the expected decline in sugar deliveries and a larger population, per capita consumption of refined sugar in calendar 1979 seems likely to total under 91 pounds, down about 2 pounds from last year's level. This compares with 90 pounds in 1975, a year when consumption was influenced by record high sugar prices.

Sugar imports this calendar year seem likely to total between 5 and 5.5 million short tons. For the first 8 months of 1979, imports were 3.24 million tons (raw value), up about 18 percent from the same period a year ago. Moreover, recent import fee reductions may stimulate imports in the remaining months of this quarter.

On August 1, domestic sugar stocks had been drawn down to 2.91 million short tons (raw value) from nearly 3.8 million tons on January 1. Total stocks were about 6 percent higher than in August, 1978, but refiner stocks were down nearly 25 percent. Refiner stocks are down below the level refiners have historically attempted to maintain to supply industrial users, wholesalers, and retailers. Imports of around 5 million tons in 1979 would give end-of-year total stocks of about the same level as beginning stocks. U.S. sugar exports, relative to total supply, are insignificant and may total near last year's 16,000 tons.

Corn sweeteners

Corn sweetener prices increased significantly in 1979. The September price of \$15.21 per hundredweight for 42-percent high fructose corn sirup (HFCS) (Decatur, Ill.) was up more than 50 percent from April. Glucose corn sirup prices increased nearly a fifth in New York, and about one-fourth in Chicago. Dextrose prices were about 2.5 percent higher in September than in April.

If corn sweetener prices remain near recent levels for the remainder of the year, dextrose prices for 1979 will average about 5 percent higher than in 1978 while fructose sirup prices will be up about 10 percent. Similarly, glucose sirup prices, would average around 15 percent higher in the Northeast and 30 percent higher in the Chicago-West marketing territory than in 1978. Corn sweetener prices could soften slightly later this year or early next year as HFCS and glucose corn sirup demand declines seasonally.

Corn prices have strengthened significantly this year. Prices of No. 2 yellow corn averaged \$2.78 per bushel in August, about 30 percent above September 1978. However, corn sweetener producers have at least partially offset higher corn costs with higher prices for corn wet milling byproducts. Corn oil prices were up nearly 3 percent from January. Corn gluten feed prices (21 percent protein) were up nearly a 10th while corn gluten meal (60 percent protein) prices were about a fourth higher than in January.

The U.S. wet milling grind in calendar 1979 is expected to range between 430 to 440 million bushels, up sharply from 400 million last year. Over two-thirds of the recovered starch will be processed into corn sweeteners, with the remainder sold as corn starch and dextrin.

Total domestic shipments of corn sweeteners for food use this calendar year are expected to total over 4 million short tons (dry basis—DB), up sharply from 3.56 million in 1978. Most of the increase in corn sweetener sales is coming from a spectacular increase in high fructose corn sirup (HFCS) though sales of corn starch and glucose corn sirup also increased.

HFCS sales for the first 8 months of 1979 were reportedly up 40 percent over the same period in 1978. At this high pace, sales in 1979 would reach 1.6 to 1.7 million tons (DB), up sharply from 1.25 million last year. Use in beverages, accounting for about 40 percent of total fructose sales, was reportedly up 50 percent for the first 8 months this year compared with the same period in 1978.

Glucose corn sirup shipments are expected to rise to 2.05 million tons (DB) from 1.97 million in 1978, but dextrose shipments for food use will likely ease to around 425,000 tons from 435,000 in 1978.

Per capita consumption of corn sweeteners is expected to total nearly 38 pounds (DB) this year, up from about 34 pounds in 1978, with most of the increase in fructose sirup. Fructose sirup consumption may total 15 pounds (DB) compared with 11.5 pounds in 1978. Glucose sirup consumption is estimated at 18.5 (DB), up slightly from 1978. Per capita dextrose consumption is expected to fall to 4.2 pounds this year, continuing the decline that began in 1976.

Other caloric and non-caloric sweeteners

Honey production in 1979 may be down slightly from the 230 million pounds produced last year. The estimate for commercial producers in 20 States with 300 or more colonies is down 2 percent from last year's output. There was a 2-percent increase in commercial producer colony numbers but the expected yield of 74.1 pounds per colony is off 4 percent. Demand appears to be good with producers receiving 6 cents per pound more than last year. Imports are running behind last year's pace and may total 55 million pounds in 1979 down slightly from 56 million pounds in 1978. U.S. exports may about equal 1978's 10 million pounds. Total 1979 domestic disappearance of honey will likely decline about 5 percent.

U.S. maple sirup production at 1.22 million gallons in 1979 is up 6 percent. Imports for the first 7 months of 1979 totaled 7 million pounds, an increase of 3 percent from the first half of last year.

The noncaloric sweetener situation continues in an unsettled state since cyclamate was banned for domestic food and beverage use nearly a decade ago. Cyclamate continues to be banned but according to the Food and Drug Administration (FDA), hearings will be reopened "to consider some specific questions about the safety of the artificial sweetener that were not adequately addressed." Saccharin continues to be available for use in foods and beverages. On July 24, the House of Representatives voted to extend until June 30, 1981, the moratorium that prevented the FDA from banning saccharin. The Senate has not yet considered saccharin and the FDA has indicated it will not ban saccharin while the Congress is actively evaluating it.

The FDA will convene a public board of inquiry on aspartame later in 1979; no specific date has been set. FDA denied the major manufacturer's recommendation that aspartame be allowed on the market while the board proceedings are taking place.

THE SWEETENER OUTLOOK

Domestic raw sugar prices in 1980 will continue to be chiefly influenced by world sugar prices and U.S. sugar policy. Recent strength in the world price seems likely to continue into next year, especially if the United States ratifies the International Sugar Agreement. World prices already have been buoyed by prospects of 1979-80 world production below consumption and reportedly, speculation in sugar as a hedge against inflation.

With the import fee on raw sugar at zero, and a domestic market price objective of 15 cents, further increases in the world price can be expected to be directly reflected in the U.S. price. Unless the world price falls sharply in the fourth quarter, averaging below 10.29 cents per pound for 10 consecutive market days, the raw sugar fee will remain zero for the rest of 1979. In addition, unless the world raw sugar price averages below 11.29 cents during the 20 market days preceding December 20, 1979, we will begin the first quarter of 1980 with no import fee on raw sugar. This assumes no change in the market price objective and no change in the import duty.

The sugar bill, voted down by the House of Representatives in October, would have set the market price objective at 15.8 cents per pound (raw value) for the 1979 sugar supply year beginning October 1, 1979. The Secretary of Agriculture has general authority even without this legislation to change the market price objective. The Secretary however, remains constrained by the 50-percent ad valorem limit on the import fee used to protect the price objective from decreases in world prices.

The interim sugar program, announced by the Secretary of Agriculture while sugar legislation was pending, continues to govern the 1979 crop. This program specifies loan rates of 13 cents per pound for raw cane sugar and 15.15 cents per pound for refined beet sugar. Loan rates for 1978-crop sugar were 14.73 cents for raw sugar cane and 16.99 cents for refined beet sugar.

Wholesale and retail prices for sugar in 1980 are expected to follow changes in the domestic raw price. Demand for sweeteners will not likely suffer from the expected economic downturn. Sweeteners and sweetener-containing products are believed to be relatively inelastic within the range of consumer incomes expected. Sugar, however will continue to face competition from corn sweeteners and per capita sugar consumption may fall 1 to 2 pounds in 1980.

Domestic production of sugar in the 1980-81 crop year may not differ much from this year's. Sugarcane acreage for 1980 harvest is largely planted and is expected to produce a crop about the same size as in 1979-80. The first official indication of sugar beet acreage will come in the January Prospective Plantings report. Sugar beet growers have more flexibility than cane growers in switching to other crops. However, given recent price strength and barring additional plant closings, 1980-81 production may be about the same as in 1979-80. Sugar growers will face higher production costs in 1980 but so will growers of other crops.

Sugar processed in calendar 1980 will come partly from the 1979-80 crop and partly from the 1980-81 crop. Because 1979-80 best produc-

tion is down, less contribution is expected from that crop to calendar 1980 production than was made to calendar 1979 production from the 1978-79 crop. Calendar year 1980 production thus may decline around 3 percent. With these expectations for production and consumption in calendar year 1980 and for beginning stocks of around 4.1 million tons, imports in 1980 could run about 4.7 million tons. This would give 1980 ending stocks of around 3.7 million tons, about the same as ending stocks in 1978.

Corn sweetener prices seem likely to increase further in 1980. High fructose corn sirup (HFCS) prices will continue to be largely determined by the price of sugar, a close substitute in many industrial uses. However, corn sweetener prices will also be influenced by higher prices for corn, energy, and other inputs in 1980. Increased costs stemming from higher input prices could cause sugar-HFCS price differentials to narrow.

The corn wet milling grind is expected to total around 465 million bushels in 1980. Present trends suggest HFCS sales could approach 2 million short tons (dry basis, db). This would be an increase of about 20 percent following an increase of around one-third this year. Glucose sales for food use may be up slightly to around 2.1 million tons (db). Dextrose shipments for food use are expected to total about the same as in 1979.

OUTLOOK FOR COFFEE, TEA, AND COCOA

Coffee

The U.S. average retail price for roasted coffee in September 1979 was \$3.28 a pound up 25 percent from the May 1979 price. The May average, \$2.62 a pound, was the low point of 23-month-long period of declining retail coffee prices. Recent higher retail prices reflect increases in wholesale roasted and green coffee prices. Wholesale prices were up from \$2.31 a pound in April to \$3.05 in September. Green prices started rising in March, before the Brazilian freeze, reportedly because of growing demand, particularly in Europe and Japan. Following news of the May 30-June 1 freeze in Brazil, affecting the prospects of the 1980-81 crop, green prices rose faster reaching \$2.04 a pound in September compared with the February low of \$1.31.

Green and wholesale roasted coffee prices may not change much from current levels until there are further indications about the size of the 1980-81 crop and prospects for the 1981-82 crop. Harvest of the 1980-81 crop in Brazil is expected to begin in May. Danger of frost damage in Brazil continues through August. U.S. retail coffee prices probably have not yet reflected all of the increase experienced in green and wholesale prices. Thus, retail coffee prices are likely to increase further and reach a U.S. average of \$3.25 to \$3.60 per pound over the next several months.

Per capita consumption of coffee in the fourth quarter of 1979 is expected to decline slightly from the level of the same period last year. However, gains made in the first three quarters will be more than offsetting. Consumption for calendar 1979 is estimated at 11.5 pounds (green bean equivalent, GBE) per capita, up about 1 pound from 1978. In 1980, per capita use will do well to equal the 1979 level. With the sharp rise in prices in 1977, per capita consumption dropped 3.4

pounds (GBE). The U.S. average retail price that year reached a record \$3.94 per pound. Prices this time are not predicted to jump as sharply but some consumers can be expected to reduce consumption. Moreover, U.S. per capita coffee consumption was trending down before the sharp falloff in 1977 and this longrun downtrend could resume in 1980.

U.S. imports of coffee (green and processed) for the first 8 months of 1979 totaled 1.78 billion pounds, up 12 percent from January–August 1978. A continuation of recent trends through September with a slight falloff in the last quarter suggest that 1979 imports will total around 2.6 billion pounds (GBE) up from 2.45 billion in 1978. With coffee consumption likely to decline in 1980, roastings and imports can also be expected to decline.

Tea

U.S. tea imports totaled nearly 111 million pounds during January–August 1979, compared with 109 million during the same period in 1978. The level of tea imports ran behind the 1978 pace earlier this year, as the then-declining coffee prices and somewhat higher tea prices apparently discouraged tea use. However, with rising coffee prices, both tea imports and use may pick up in the last quarter of 1979. Calendar 1979 tea imports now seem likely to exceed the 1978 level of 152 million pounds and total 160 million to 170 million pounds.

Retail tea prices increased slightly in 1979. A pack of 48 tea bags cost \$1.43 in New York City in September, up from \$1.38 in January and \$1.36 in September 1978. The increase in retail tea prices reflects increased handling, packaging and distribution costs. Wholesale tea prices have not increased in recent months.

Tea imports in calendar 1980 seem likely to at least match this year's prospective level of 160 to 170 million pounds. There could be some pickup in tea use, as some coffee drinkers react to higher coffee prices, and switch to tea.

Wholesale tea prices are not expected to change much from current levels into early 1980. They have been relatively stable this year despite an expected drawdown in global stocks. Retail tea prices may increase next year but probably less than the general rate of inflation.

Cocoa and chocolate

U.S. cocoa bean imports totaled 294 million pounds through August of 1979, down 11 percent from the same period last year. Imports of semiprocessed products totaled 256 million pounds (cocoa bean equivalent—CBE), 11.5 percent less than last year. In the semiprocessed products category, cocoa butter imports were up nearly a fourth, unsweetened cocoa powder imports were down nearly 30 percent, and imports of unsweetened chocolate were largely unchanged. Imports of consumer cocoa and chocolate products continue relatively insignificant, at around 3 million pounds (CBE) for the first 8 months of both 1978 and 1979.

Cocoa bean imports in 1979 now seem likely to total between 400 and 440 million pounds, compared with 470 million last year.

The U.S. cocoa bean grind in 1979 is now expected to increase slightly over last year's nearly 360 million pounds. Significant expansion in the second and third quarter brought the grind to about 13

million pounds ahead of last year's pace for the first 9 months. Even with a slight falloff in the fourth quarter, the calendar 1979 grind could total near 370 million pounds.

Based on 8 months of data, total 1979 domestic use of cocoa and chocolate products appears to be slipping from last year's 744 million pounds (CBE). Per capita consumption of cocoa and chocolate is likely to decline from 3.4 pounds in 1978 to around 3.2 pounds.

New York cocoa bean prices (the average of the nearest three active futures trading months on the New York Cocoa Exchange) average \$1.39 a pound in the third quarter, down from \$1.47 in the second quarter and \$1.56 in the first quarter. The decline from the 1978 average of \$1.53 per pound has been caused largely by: (1) indications from around the world as early as last April, that the 1979-80 world cocoa crop had the potential to be large and (2) that while cocoa prices have softened, prices continue to be sufficiently high to discourage consumer demand and expansion of the U.S. cocoa grind. As prospects firmed for a record crop in 1979-80, cocoa bean prices declined from \$1.48 a pound on October 1 to \$1.25 on the 25th.

With more plentiful cocoa supplies and lower prices in prospect, cocoa imports and grindings are likely to increase some in calendar 1980.

Retail prices of cocoa and chocolate products may increase some next year. Lower cocoa bean prices will have little if any net impact on retail prices. Manufacturers are still using relatively high-priced cocoa inventories and other costs can be expected to rise with the general rate of inflation. Per capita consumption may be about the same as in 1979, with total consumption up about in line with expected population growth.