UNITED STATES DEPARTMENT OF AGRICULTURE Bureau of Agricultural Economics Washington

CS-11 September 28, 1937

THE COTTON SITUATION

Summary

Spot cotton prices at the 10 markets in the United States are now at their lowest level in more than 4 years. Prices declined from an average of 12.12 cents in July to an average of 10.23 cents in August as compared with 12.07 cents in August 1936. Prices have been below 9 cents since early in the present month and on September 24 averaged 8.18 cents.

The dominant price-depressing influence continues to be the favorable conditions affecting the United States crop. Other factors include the slackening rate of mill activity in the United States, the downward tendency in prices of leading internationally-traded commodities, and the military operations in the Orient.

As announced on August 30, cotton growers will be permitted to borrow through the Commodity Credit Corporation 9 cents on Middling 7/8 inch or better and smaller amounts on the shorter staples and lower grades. Growers who co-operate in the 1938 Agricultural Conservation Program will be eligible to receive adjustment payments for that portion of their 1937 marketings not in excess of 65 percent of their base production, equal to the difference between the 10-market price and 12 cents, but not to exceed 3 cents.

World consumption of all kinds of cotton was at a record high level during the season just passed. Utilization of American cotton in the United States was the largest in history, but consumption of American cotton by foreign countries was extremely small. Small consumption of American by foreign mills was due partly to import restrictions, the substitution of synthetic

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fibers, and relatively high prices for American cotton. Perhaps the most important factors responsible for the decreased importance of American cotton, however, were larger supplies of foreign cottons of a grade and staple directly competitive with American, and alternations in spinning machinery and technique which have permitted the larger quantities of short staple cottons to be more readily substituted for American medium staple.

The outlook for the next few months seems to be for a maintenance of a high level of mill activity and total cotton consumption in Europe. In the Orient, however, consumption undoubtedly will show a decline, largely due to the shutting down of a large part of the Chinese cotton manufacturing industry. Foreign consumption of American cotton will tend to be increased to some extent by larger supplies of and the prevailing lower prices for American. In the United States, however, consumption of American cotton is expected to decline because of a continuation of the moderate reduction in mill activity which has been going on for the past 3 or 4 months. The reduction continued through August and into September. Utilization by domestic mills in August, however, was the highest for any August on record with the exception of August 1927.

Total world supply of all cetton for the 1937-38 season is preliminarily estimated by the New York Cotton Exchange Service at more than 48,000,000 bales, the largest supply in history. This extremely large world supply is due to an indicated supply of American about 2,800,000 bales more than in 1936-37 and a new necord high supply of foreign cotton. Carry-over of American cotton on August 1 was smaller than a year earlier but indicated production of 16,098,000 bales is nearly 3,700,000 larger than the 1936 crop. The larger prospective supply of foreign cottons in 1937-38 as compared with

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1936-37 is based on a greater carry-over at the beginning of the present season than a year earlier and a prospective increase in forcign production.

DOMESTIC PRICES

Spot Prices Lowest in 4 Years

Spot cotton prices at the 10 markets averaged 10.23 cents in August compared with 12.12 in July and 12.07 cents in August 1936. Averages for the weeks ended September 4, 11, and 18 were 9.20, 9.05, and 8.75 cents, respectively. The downward movement of prices which started in late July carried the 10-market average to 8.70 cents on September 17 and 18. These were the lowest daily averages since August 1933. The dominant price-depressing influence has continued to be the generally favorable growing conditions affecting the United States crop. Other factors have been the slackening rate of domestic mill activity, the downward tendency in prices of the leading internationally traded commodities, and military operations in the Orient.

	Average	prices	at	the	10	markets
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Year beginning Aug. 1	:	Aug.	:	Sept.	: Season average	::	Year beginning Aug. 1	: :	Aug.	: Sept.	Season average
	:	Cents		Cents	Cents	::	•	:	Cents	Cents	Cents
	:					::	•	:			
1928-29	:	18.72		17.72	18.67	::	1933-34	:	9.24	9.19	10.81
1929-30	:	18.04		18.01	15.79	::	1934-35	:	13.12	12.85	12.36
1930-31	:	11.14		10,15	9.61	::	1935-36	:	11.37	10.48	11.55
1931-32	:	6.57		5.83	5.89	::	1936-37	:	12.07	12.05	12.70
1932-33	:	7.08		7.40	7.15	::	1937-38	:	10.23	1/8.94	
	:					::	•	:		 i	

^{1/} Average of September 1-24.

Growers can Borrow 9 cents - to Receive Adjustment Payment

The Commodity Credit Corporation announced on August 30 that it will lend producers of the 1937 crop 9 cents per pound on Middling and better grade not shorter than 7/8 inch in staple, 8 cents on Middling and better 13/16 inch, and $7\frac{3}{4}$ cents on cotton below Middling not shorter than 7/8 inch. No cotton will be eligible for a loan which is of a grade not deliverable on futures contracts, and no loan will be made on 13/16 cotton below Middling grade.

Growers are to receive adjustment payments equal to the differences between the 10-market price on the day when the producer sells his cotton and 12 cents. The maximum payment is to be 3 cents per pound, however, and only those growers will receive a payment who cooperate in the 1938 adjustment program. Payments will be made on only 65 percent of growers' base production (base equal to about 16,150,000 bales) unless funds permit payment on a larger percentage. With \$130,000,000 available for this program, the share of total production on which payment will be received will depend upon the extent to which growers cooperate in the 1938 program and the size of the payment per pound.

DEMAND AND CONSUMPTION

World consumption of American cotton below pre-depression level despite record high utilization of all cotton

According to estimates of the New York Cotton Exchange Service, consumption of all cotton in the world in 1936-37 totaled 30,900,000 bales or 11 percent more than in 1935-36, and was the largest consumption on record. The extremely high level of total world consumption resulted mainly from the record-breaking utilization of foreign cotton. Consumption of foreign growths amounted to 17,800,000 bales, an increase of 17 percent over the preceding year and 64 percent more than the 1928-32 average.

World cotton consumption, American, foreign and total

	:	Amer	rican	;	: Fo	rei	gn	*.
Season	:	Actual	: Percentage : of total		Actual	:	Percentage of total	: Total
	:1	L,000 bales	Percent		1,000 bales		Percent	1,000 bales
Average 1928-32	:	13,243	54.9		10,879		45.1	24,122
1933-34	:	13,780	53.8		11,816	,	46.2	25,596
1934-35	:	11,206	44.2		14,119		55.8	25,325
1935-36	:	12,539	45.2		15,190		54.8	27,729
1936-37	:	13,055	42.4		17,840		57.6	30,900
	:							

Consumption of American cotton in the world by major divisions of the cotton textile industry

Season		United States	:		United Kingdom	Continent: of Europe:	Orient	:	Else- where	:	Total
A	:	1,000 bales		1,000 bales	1,000 bales	l,000 bales	1,000 bales		1,000 bales	-	1,000 bales
Average 1928-32	:	5,683		7,560	1,392	4,002	1,943		223		13,243
1933-34 1934-35 1935-36	:	5,553 5,241 6,221		8,227 5,965 6,318	1,403 941 1,295	4,230 2,739 2,963	2,321 2,032 1,793		273 253 267		13,780 11,206 12,539
1936-37	:	7,766		5,289	1,150	2,446	1,384		309		13,055

Compiled from records of the New York Cotton Exchange Service.

Recent reports indicate that mill activity and cotton consumption throughout the world as a whole was comparatively high in August and September. In several important countries, however, including the United States, the United Kingdom, and Japan, the outlook for the future is clouded by a considerable excess of mill output over new orders with a consequent tendency to decrease the /volume

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of unfilled orders and bring about an accumulation of stocks. Other things remaining the same, buying from mills should pick up, to some extent at least, when raw cotton prices cease to decline. Total world consumption undoubtedly is being adversely affected at the present time by military operations in the Orient. A large part of the Chinese industry has been destroyed or shut down as a result of hostilities.

Domestic mill activity still relatively high, but lower than in recent months and tending downward

Mills in the United States consumed 7,945,000 bales of all kinds of cotton in 1936-37, nearly 1,600,000 bales or 25 percent more than the 6,351,000 used in 1935-36. This was the largest consumption on record, the next largest consumption being 7,190,000 bales in 1926-27.

Utilization during August, the first month of the new marketing season, amounted to 60½,000 bales, or 5 percent more than the corresponding month a year earlier, and was the highest for any August on record with the exception of August 1927. During the past few months, however, mill activity has been tending to decline, and the decline continued through August and into September. According to the New York Cotton Exchange Service, mill output by the middle of September was at a lower level than at the same time last season.

Mill sales of goods have been below production since mid-March or for more than 6 months. Trade reports state that distributors are having difficulty in moving higher priced goods. Steady or strong prices for raw cotton doubtless will exert a tendency to increase mill sales. Margins for 17 constructions of medium and coarsé grey cloths averaged 15.14 cents for the 4 weeks of August. Margins declined further in the first part of September and are now nearly 4 cents lower than the peak of 18.58 cents in April. Assuming that general business conditions remain substantially unchanged, the outlook would seem to be for a further moderate recession in mill activity and cotton consumption during the next few months.

Margins between average price of raw cotton per pound and wholesale price of unfinished cotton cloth (17 constructions)1925-26 to date

Year	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Teb.	Mar.	Apr.	May	June	July
1925- 2 6: 1926-27: 1927-28: 1928-29: 1929-30: 1930-31: 1931-32: 1932-33: 1933-34: 1935-36: 1936-37: 1937-38:	15.21 14.61 15.27 14.00 13.95 12.01 11.39 8.39 17.97 12.61 11.61 13.72	16.36 16.34 16.53 14.30 14.38 12.97 11.04 10.18 15.82 13.58 12.87 14.03	18.41 17.45 16.12 14.55 15.05 13.51 10.23 9.77 15.47 12.82 13.31	17.61 16.34 15.11 14.34 15.45 13.42 9.59 8.65 14.02 11.70 12.80	17.37 15.77 14.67 14.12 13.51 13.05 9.07 8.22 13.50 11.94 13.02	16.44 15.31 14.87 13.86 12.74 12.18 9.01 7.75 13.91 12.13	16.90 15.32 14.64 13.38 13.25 11.24 9.61 7.50 14.11 11.72 13.26	16.25 15.45 13.43 13.00 12.21 11.78 9.62 8.03 13.72 11.64 12.78	15.65 15.00 12.62 13.41 11.54 11.80 9.61 8.27 13.27 11.19	14.91 14.41 12.79 13.02 11.70 11.65 8.40 10.95 12.16 11.07 11.62	13.82 14.81 11.90 12.57 12.39 11.23 7.93 14.99 11.58 11.11	13.45 14.14 12.66 12.53 12.10 11.16 7.65 18.10 11.86 10.43 12.72

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Mill activity and cotton consumption in foreign countries very high in past season 1/

Total European mill consumption of raw cotton during 1936-37 maintained and even slightly exceeded the good levels reached in the season of 1935-36. The increase in 1936-37 occurred in considerable measure as a result of the continued expansion in the United Kingdom. Increases in mill consumption of raw cotton also took place in Czechoslovakia, Belgium, Switzerland, The Netherlands, the Scandinavian countries, and Italy. The growth in Italian cotton consumption resulted from a strong upturn in the second half of the season, incident to a remarkable revival in exports of both piece goods and yarns. On the other hand, there was a considerable decline in Germany where the increasing substitution of artificial and reclaimed fibers enabled the textile industry to dispense with even more raw cotton than hitherto has been the case. There were slight declines in cotton consumption in Poland and Austria and a drastic decrease in Spain.

Most of the increase in the total utilization of cotton by foreign mills occurred as a result of increased consumption in the Orient. Utilization was very high in Japan, China, and India, but the increase as compared with a year earlier was especially marked in China.

The share of American cotton in foreign mill consumption very low in 1936-37

Cotton mills in foreign countries used approximately 23 million bales of all kinds of cotton in the season just passed, or about 7 percent more than in 1935-36 and 26 percent more than on the average from 1928-29 to 1932-33. Utilization of American cotton, however, was only 5,300,000 bales in 1936-37, or 16 percent less than in the preceding year and 30 percent less than the 1928-32 average.

This small consumption of American cotton can be partly accounted for by import restrictions and the use of substitute fibers, most important in the case of Italy and Germany, and by high prices for American cotton relative to foreign cottons. The decreased importance of American cotton, however, is chiefly accounted for by the fact that in every year for the past few years there has been an increase in the supply of foreign cottons (such as Brazilian) of a grade and staple directly competitive with American and by the further fact that in the same period spinners have been altering machinery and techniques that foreign cottons - like Indian and Egyptian which differ significantly from American in grade and staple length - can be more readily substituted for American.

l/ Information, applying particularly to the European countries, received by special report from Agricultural Attache Lloyd V, Steere at Berlin. Information on the Orient furnished by cable from Agricultural Commissioner Dawson at Shanghai.

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The British market has always been free to all cottons. In 1936-37 consumption of all cotton was larger in the United Kingdom than for several years past. But the utilization of American cotton was 11 percent less than in 1935-36 and the lowest for any year on record with the exception of 1934-35 and 1930-31 when total contumption of all cottons was considerably less than in the season just passed.

Taking the Orient as a whole, no new trade restrictions were instituted affecting the consumption of American cotton during the past year. Consumption of all cottons by Oriental mills was a record high in 1936-37, but consumption of American was 23 percent less than in 1935-36, 32 percent less than in 1934-35, and 29 percent below the 1928-32 average.

As was pointed out in The Cotton Situation for August, the price of foreign cottons (those most closely competitive with American) relative to the prices of American were about the same during 1936-37 as their average relationship during the 1920's. However, foreign cottons have been consumed in much larger quantities than in earlier years, and have replaced large quantities of American in spite of the fact that their prices expressed as a ratio to the price of American have been about the same as in years when their utilization was considerably smaller.

The following table shows the important place held by American cotton in foreign mill consumption up to and including 1933-34. The share of American cotton in total foreign consumption was somewhat smaller in 1933-34 and on the average from 1928-32 than in the 1920's. The share of American cotton in total world supply of all cotton also would appear to be smaller if the supply of American cotton in trade channels were shown instead of the total supply of American. This is true because since 1930 significant quantities of American cotton were held in Government-financed stocks in the United States. In 1934-35 the supply of American was sharply contracted. At the same time, the supply of foreign increased, and the prices of Indian and Egyptian cottons were much lower relative to American than in earlier years. Foreign consumption of American cotton declined, and the utilization of foreign cotton expanded. In 1935-36 American as a percentage of total foreign consumption was slightly smaller than in 1934-35, and a further sharp decrease in the share of American in 1936-37 brought its proportion of total foreign consumption to about half of what it was on the average from 1920 to 1929. However, the price of Indian relative to American was about the same as in the 1920's and the price of Egyptian was getting back toward its pre-depression relationship to American. During the entire period under review the price of Brazilian San Paulo Fair retained about the same relationship to American since it is comparable in grade and staple with American Middling.

"This indicates that to the extent that there is an increased production of foreign cotton similar in grade and staple to American, and to the extent that spinners alter machinery and technique so that foreign cotton can be more readily substituted for American, consistently larger quantities of foreign cottons can be used to replace American without the prices of foreign cottons being low compared with the price of American in world markets." 2/2/ The Cotton Situation, August 25, 1937, page 3.

Cotton: Foreign mill consumption, world supplies; and price ratios, specified periods

	: Const	umotion	in	: Su	pply of		:For-	:Per-	Price	as a pe	rcentage
		-						:cent-		the pri	0,
	:	:	:	•	}		:cons.			America	n
	:	:	:	2	:	:	: of	: supply:	Three	:Egyp-	:Brazil-
	: Amer-		: Total	:Amer-	:For-			:Amori-			: ian
Year	ican:	eign	:	ican	eign	:	as p.	can is:	of:	:Uppers	
	:	:	•	:	:	-	:ct.of		:Indian	-	:Paulo
	:		;	:	:			:total	: <u>2</u> /	: <u>2</u> /	:Fair
	: :		:	:	:		for.	boom,	:	:	: <u>2</u> /
	:						:cons.		<u>. </u>	:	:
		1,000	1,000	1,000	1,000	1,000	Per-	Per-	Per-	Per-	Per-
		<u>bales</u>	bales	bales	bales	bales	cent	cent	cent	cent	cent
Average		_									
1920-29	9:7,268	9,127	16,395	18,715	13,732	32,447	44.3		79.3	127.2	95.4
1928-32	2:7,561	10,669	18,230	22,226	15,792	38,018	41.5	58.5	79.0	118.9	97.7
	:										
1933-34	4:8,227	11,669	19,896	24,521	18,172	42,693	41.4	57.4	74.0	110.8	98.8
1934-35	5:5,965	13,999	19,964	20,277	19,653	39,930	29.9	50.8	72.3	108.8	
1935-36	5:6,318	15,060	21,378	19,536	21,301	40,837	29.6	47.8	79.5		
		17,666	22,955		24,521			44.1	79.8		
1937-38	3:			22,145	26,200	48,345		45.8	85.7	142.2	96.6
	:										

Consumption and supply compiled from records of the New York Cotton Exchange Service. Relative prices based on data compiled from reports of the Liverpool Cotton Association.

2/ Relative prices for 1937-38 for month of August.

Outlook for all cotton consumption favorable in Europe, uncertain in Orient

Prospects for the European cotton textile industry during the next few months point to a maintenance of most of the gains which the industry has made during the past two seasons. It appears that mill consumption of raw cotton probably will be about the same as in the corresponding months of last season in spite of the likelihood of a further substitution of artificial fibers for cotton in Germany and Italy, the possibility of the loss by European countries of their export trade in cotton textiles with China, and the possibility of a slump in mill occupation in several countries.

Over and against these unfavorable factors are two decidedly favorable influences. These are the large supply of all kinds of raw cotton and the prospect for a fairly active consumer demand for textile goods in the world as a whole. It is true that, while demand for cotton goods probably will

^{1/} Only raw cotton produced for factory consumption. Does not include large amounts grown in India, China, and other countries for consumption on hand spindles or in other ways in the homes without entering commercial channels. Supply for 1937-38 preliminary.

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continue comparatively high by domestic markets in important cotton manufacturing countries such as the United Kingdom, France, and Italy, the outlook for their export trade has not, up until recently at least, been considered so favorable. There is a possibility, however, that military operations in the Far East may benefit the export trade of these European exporting countries through a curtailment of Japan's export business. also is possible, however, that Japan will increase her efforts to expand exports in order to secure foreign exchange. As far as the situation in the Far East is concerned, it would seem that all countries exporting textiles to China would suffer a loss of most of their exports to that country. Regardless of these possible unfavorable factors affecting the outlook for cotton textile exports from European countries, definite gains have been made during the past season by the United Kingdom, Germany, Belgiun, the Netherlands, Switzerland, Czechoslovakia, and Italy, and it is not unlikely that these countries will be able to maintain their total export trade in cotton textiles in the future. An important factor which will tend to make this possible is the high prices for foods and raw materials which will tend to increase the demand of importing countries.

The outlook in the Orient is much less favorable than in Europe. Over half of the Chinese cotton textile industry is located in areas in which large scale military operations are now taking place. Not only are nearly all of the mills in these regions shut down, but it is reported that all of the Japanese-owned mills in China have ceased operation. How long the Chinese industry will be so profoundly disrupted will depend upon the extent and duration of the conflict. It is certain, however, that the Chinese industry will be severely crippled during the next few months.

In Japan, the necessity for obtaining foreign exchange to purchase munitions and other supplies relative to military operations has resulted in a severe curtailment in the number of permits granted for the importation of raw cotton. On the other hand, exports of cotton textiles make up such a large proportion of total Japanese exports that it seems doubtful whether Japan will restrict imports of raw cotton to the point where it would be necessary to curtail the manufacture of cotton goods for export. It is quite possible that the effort to expand exports of cotton goods will be redoubled in order to provide foreign exchange for the purchase of necessary imports. For the months of September, October, and November, however, foreign exchange for the purchase of cotton has been materially restricted. Everything considered, it seems probable that mill activity and cotton consumption in Japan in coming months will recede somewhat from present high levels.

Somewhat larger foreign consumption of American possible

It seems likely that larger supplies of American cotton and lower prices for it relative to the prices of foreign will tend to make for an increase in the ratio of American to foreign cotton used by foreign mills during the next few months as compared with the corresponding months last season. However, supplies of foreign cotton likewise probably will be larger than last

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year, and the relatively large supply of American and lower prices for it relative to prices for foreign cottons cannot be expected to result in as large a foreign consumption of American as would have been the case a few years ago. Furthermore, it is likely that China and possibly Russia will export considerable quantities of cotton during the present season. With a large portion of the domestic market destroyed, considerable amounts of Chinese cotton probably will move to foreign markets either through sale to neutral countries or as a result of confiscation by Japan. Russia also may ship significant quantities of cotton abroad this year since it is reported that the cotton textile industry does not have sufficient equipment to process all of the extremely large prospective Russian crop now being harvested.

SUPPLY

Largest world supply of all cotton in history expected in 1937-38

The world supply of commercial cotton in 1937-38 is expected to amount to about 48,300,000 bales according to the estimates of the New York Cotton Exchange Service. This is 10 percent more than supply in 1936-37, 27 percent more than the 1928-32 average and 49 percent more than the 1920-29 average. The estimate of supply for 1937-38 is, of course, very tentative and may be materially revised in the light of any developments affecting American and foreign supply or both.

Supply of both American and foreign materially larger

The supply of American cotton for this season in running bales is estimated by the New York Cotton Exchange at 22,145,000, an increase of 14 percent compared with 1936-37, about the same as the 1928-32 average, and 18 percent more than average supply from 1920-29. The prospective commercial supply of foreign cotton is 26,200,000 bales, a new high record, an increase of 66 percent over the 1928-32 average, and nearly twice as large as the 1920-29 average.

Carry-over

World carry-over of all cotton about same as year earlier

Total world carry-over of all cottons on August 1 last amounted to about 13 million bales, or slightly less than the world carry-over on the same date in 1936. This is the smallest total carry-over since August 1, 1930.

World carry-over of American smaller; stocks of foreign larger

Stocks of American cotton in the world at the beginning of the present season were 6,245,000 bales. This was the smallest world carry-over of American since 1930. Carry-over of American cotton in the United States amounted to slightly less than 4,400,000 bales and carry-over in foreign countries to about 1,840,000 bales. Of the carry-over in the United States at the beginning of this season, about 1,650,000 were in Government-financed

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stocks and hence withdrawn from trade channels. Of last season's stocks in the United States, 5,336,000 bales, approximately 3,200,000 bales were in Government-financed stocks. Carry-over of foreign cotton in the world on August 1 was between 6,700,000 and 6,800,000 bales, an increase of between 500,000 and 700,000 bales, or about 10 percent over the carry-over in 1936.

.Carry-over	of	cotton.	American.	foreign	and	total

Beginning	:		rican	-: Foreign	: Total ·
of season	:	In United : States :	World		all kinds
	: 1	,000 bales	1,000 bales	1,000 bales	1,000 bales
1920 - 29 1928-32	;	2,900 4,944	5,417 7,630	4,206 4,830	9,723 12,510
1933-34 1934-35 1935-36	;	8,031 7,648 7,138	11,809 10,701	4,773 6,356 5,534	13,522 17,057 14,575
1935-36 1935-37 1937-38	:	5,336 4,397	9,041 6,962 6,245	6,111 6,721	13,073 12,966

Compiled from records of the New York Cotton Exchange Service.

Production

United States production of 16,093,000 bales indicated; 1978 Conservation Program announced

The indicated production of cotton in the United States on September 1 was 15,058,000 bales of 478 pounds net -- an increase of 505,000 bales over August 1 indications. A final outturn of this amount would mean the largest United States cotton production since 1931-32. The indicated yield per acre of 228.5 pounds is the highest on record. Every important cotton producing State showed an increase in indicated yield over actual yield last year with the exception of South Carolina and Mississippi where yields were exceptionally large last season. The yield in every State is materially above the average for the 10 years 1923-32.

Trade reports released during September indicate that the crop is continuing to make good progress, with moderate damage by weevil and rain in the East being offset by better than average conditions in the central and western parts of the Belt.

The outline of the 1938 Agricultural Conservation Program which establishes national, state, and county goals for soil-depleting crops and for soil-building crops and practices was announced by Secretary of Agriculture Wallace on August 30. Goals for soil-depleting crops were fixed as a conservation measure and to assure an ample and balanced supply of food, feed and fiber crops. As one of the most important soil-depleting crops, cotton occupies

an important place in the program. The 1938 acreage goal has been set at from 29,000,000 to 31,000,000 acres. In all regions, payments will be divided between landlord and tenent in the proportion that they share in the principal crop or all crops and practices on the farm, according to the above arrangement. The total soil-depleting crop goal, including the general soil-depleting crop goal and the special soil-depleting crop goals for cotton, tobacco, corn, potatoes, peanuts, and rice, will be divided between state, county, and individual farms. Within each state, county goals will be established by the Agricultural Adjustment Administration and the State Agricultural Conservation Committee. County goals for cotton, tobacco, and rice will be established for each county where such crops are grown.

Under the previous program, separate rates were established for diversion from soil-depleting to soil-conserving crops and for the carrying out of each soil-building practice. In 1938, however, the maximum payment for each producer will be calculated at the beginning of the crop year and the attainment of the soil-depleting crop goal and the soil-building crop goal will be set as conditions of each payment. Each producer will know what he must do for complete cooperation. This change is expected to result in a greater degree of compliance and a more effective program. The payment made to cotton growers under the plan will be made as follows: (1) \$1.50 per acre, adjusted for the productivity of the farm, for each acre in the eneral scil-depleting crop goal, (2) 77 cents per acre on either the soil conservation acreage or one-fourth of the total soil-depleting crop goal established for the farm, whichever is greater, (3) 2 cents per pound of the farms' normal yield per acre of cotton for each acre in the cotton roal.

Record-breaking crops in Russia and China may mean large exports

Russia.— It is still too early to formulate a definite opinion as to the outturn of the 1937 Russian crop, but present prospects are reported to be favorable. The original plan issued early this year provided for a crop of 3,482,000 bales of ginned cotton, but later reports mention a figure of about 3,732,000 bales. These plans compare with a production of 3,250,000 estimated by the Bureau for 1936-37. The setting of a higher goal than originally planned probably is due to the fact that last year's plan is reported to have been exceeded by a good margin.

The upward trend in cotton production in Russia is due almost entirely to rapidly increasing yields per acre, since no significant change in acreage has taken place since 1932. The 1937 acreage under cotton is tentatively estimated at 5,164,000 acres, the figure set by the Plan, and which was reported as fully executed by the middle of May. The final acreage may fall somewhat short of the above, but acreage is not expected to be much below last year's area of 5,024,000 acres. The upward trend in yields per acre is reported to be the result of several factors. A steadily increasing share of the total cotton planted is being sown on fallow ploved land early in the season. The quality of seed is reported to have improved considerably. The cultivation and

irrigation of cotton fields is also better, with the average number of cultivations practically doubled between 1933 and 1933. An increased application of mineral fertilizers and the mechanization of field work also have helped to increase yield per acre.

The estimates of Russian cotton production being carried by the Bureau of Agricultural Economics are still considerably smaller than estimates received from Russian sources. As pointed out in previous issues of The Cotton Situation, early estimates of the crop made by Russian authorities frequently have been revised downward later in the season. With respect to the 1935-36 crop, it is believed that much of the cotton reported as harvested was damaged or destroyed before it reached market. Bureau estimates of the 1935-36 and 1936-37 crops are 2,250,000 and 3,250,000 bales, respectively, compared with 3,250,000 and 3,550,000 bales reported by Russian sources.

As pointed out in the discussion of prospects for the consumption of American cotton in foreign countries, Russia may enter the world market as an important exporter of cotton this season. Small quantities of cotton have been exported in recent years, but on the whole there has been no actual net exportation of cotton. However, with the domestic cotton textile industry unable to work up all of the 1936 production of raw cotton and with a still larger crop in prospect for 1937, it is possible that exports of raw cotton will be considerably in excess of imports. Whether this takes place will depend very largely upon government policy. Since there is a large unsatisfied demand for cotton goods in Russia, it may be that the government will decide to build up stocks of action against the time when the capacity of the textile industry can be expanded sufficiently to process a much larger quantity of raw cotton.

It is reported that the third 5-year plan (period ending 1942) will contain an ambitious program for the expansion of Russian cotton production. A possible goal for 1942 is 5,670,000 bales. This would be an increase of almost 60 percent over the Russian estimate of 1936 production. This figure has been criticised by other Russian observers as being too conservative, and the opinion has been advanced that fertilization, mechanization, and better irrigation would enable the attainment of a crop more than 8,000,000 bales. This anticipated increase would result from higher yields per acre. Of course, all of these tentative figures may differ widely from those finally adopted for the official 5-year plan, but they indicate that further large increases in production are planned.

China. Weather conditions in the Yangtze Valley during August and early September were favorable for the harvesting of cotton which was progressing satisfactorily except in small areas affected by military activities. In North China excessive rainfall and military operations are reported to have been damaging to the crop. As in the case of Russia, the inability of the domestic textile industry to consume all of the large output of raw cotton now estimated at 4,400,000 bales compared with 3,870,000 in 1936. However, the Chinese may have difficulty in getting cotton out of China due to military activity.

Cotton: Estimates of production 1/2, specified countries, 1920-21 to date

								
	United: States:	India	China 2/	Russia	Egypt	Brazil	Peru	Mexico
:	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
	bales	bales	bales	bales	bales	bales	bales	bales
:	478 lbs.	478 lbs.	478 lbs.	478 lbs.	478 lbs.	478 lbs.	478 lbs.	478 lbs.
:	<u>net</u>	<u>net</u>	<u>net</u>	<u>net</u>	net	net	<u>net</u>	<u>net</u>
1920-21	13,429	3,013	2,406	58	1,251	476	177	3/
1921-22:	7,945	3,752	2,197	43	902	459	186	147
1922-23:	9,755	4,245	2,510	55	1,391	434	1:99	202
	10,140	4,320	2,406	197	1,353	552	212	175
	13,630	5,095	2,510	453	1,507	7:40	215	196
	16,105	5,201	2,458	762	1,650	561	210	200
1926-27:		4,205	2,301	830	1,586	493	246	360
1927-28:		4,990	2,524	1,096	1,261	464	246	179
1928-29:		4,338	2,720	1,172	1,672	430 571	225	278 246
1929-30: 1930-31:		4,387 4,373	2,458 2,615	1,229	1,768 1,715	571 433	303 271	178
1931–32:		3,353	2,019	1,845	1,323	555	234	210
1932–33		3,398	2,720	1,816	1,028	450	242	102
1933-34:		4,274	2,981	1,687	1,777	1,014	278	260
1934-35:		4,065	3,243	1,738	1,566	1,359	345	223
1935–36:		4,965	2,667	2,250	1,769	1,765	393	251
1936-37 4/:		5,278	3,870	3,250	1,887	1,712	374	361
1937-38 4/:			4,400					
:	Argen- tina	Ugano		.o-Egyv∹ Sudan:	Chosen : (Korea) :	Foreign	:Estimate :total_in	
:	1,000	1,000		000	1,000	1;000	1,00	
:	bales	bale		les	bales	bales	bale	S
;	473 lbs.	478 1	bs. 478	lbs.	478 lbs.	478 lbs	. 478 1	.bs.
:	<u>ne t</u>	net		<u>iet</u>	<u>net</u>	<u>net</u>	<u>ne t</u>	-
1920-21			58	26	101	7,921		
1921-22:	-		10	50	82	8,025		
1922-23:			74	24	103	9,545		
1923-24:	59 67		27t D8	38 41	112	9,850		
1924-25:				106	123 123	11,530 12,135		
1925-26: 1926-27:	135 58	1	70 DT	130	143	10,942	,	
1927-28:			16	111	133	11,934		
1925-29			71	J _J ₁ 5	150	12,403	26,8	
1929-30:)8	139	139	12,035		
1930-31:			58	106	149	12,298	26,2	230
1931-32:	169	1	73	20,6	101	10,723		
1932-33:			1 7	121	136	11,317	24, 3	
1933-34:			39	135	140	13,843		
1934-35			12	227	136	14,204		540 500
1935-36:			72	210 268	189	16,052		
	7) (7							37 17 1
1936-37 ½/: 1937-36 4/:		2	76	200	119	18,401	30,8	500

Compiled from official sources and reports of the International Institute of Agriculture or estimated by the Bureau of Agricultural Economics.

^{1/} Includes large amounts of cotton grown in India, China, and other countries, for consumption on hand spindles or in other ways in the homes without entering commercial channel.

^{2/} Includes Manchuria. 3/ Comparable data not available. 4/ Preliminary.

Cotton: Estimates of acreage, smacified countries, 1920-21 to date

								
Year	United: States:	India	China <u>l</u> /	Russia	: Est t	Brazil	Peru	Mexico
;	1,000	1,000	1,000	1,000	1,000		1,900	1,000
	acres	ccres	acres	ecres	<u>acres</u>		<u>peres</u>	acres
1920-21:		21,339	5,503	315	1,,97	948	253	2/
1921-22 · · : 1922-23 · · :		18 ,4 51 21,804	5,834 5,504	296 174	1,339 1,369	1,257 1,511	263 275	241 343
1923-24:		23,631	5,425	527	1,730	1,550	2c]	292
1924-25:	39,501	26,501	5,041	1,244	1,856	1,912	272	346
1925-26:		28,403	5,000	1,464	1,998	1,542	293	425
1926–27: 1927–28:		24,822 24,761	5,500 6,000	1,631	1,854	1,422	316 316	613
1928-29		27,053	5,351	1,981 2,400	1,574 1,505	1,376 1,393	283 2±3	326 502
1929-30:	43,232	25,922	5,964	2,608	1,911	1,726	316	492
1930-31:		23,812	6,068	3,911	2,162	1.,694	330	390
1931-32: 1932-33:		23,722 22,483	5, 618 6,772	5,281 5,367	1,747 1,135	2,000 1,671	314 304	319 192
1933-34:		24,137	6,721	5,070	1,373	2,851	322	424
193 ¹ ←35 · · :	26,866	23,972	7,078	4,787	1,798	¥,067	368	418
1935-36:		25,999	6,250	4,827	1,733	5,189	400	599 786
1936-37 <u>3/</u> : 1937-38 <u>3</u> /:		25,219	8,447 9,545	5,023	1,781 2,053	6,425	445	786
:					-, ∪,)			
Crop : year :	Argen-	: Uganda	: Anglo-E		osen:	POTE PE	stimated	vorld
	tina.	· OBCOLICEO	: tian Su	đan: (K	orca):	: t.	ctal incl	. China
:	<u>tina</u> 1,000	1,000	<u>: tian Su</u> 1,000	<u>dan: (K</u> 1,0	<u>orca):</u> 00	1,000	<u>ctal incl</u> 1,000	. China
:		<u> </u>			00	_ <u>:t</u>		. China
: : :	1,000 acres	1,000 acres	1,000 <u>acres</u>	1,0 aer	00 es	1,000 ccres	1,000 acres	
1920-21: 1921-22:	1,000 acres 59	1,000	1,000	1,0 <u>scr</u>	00 <u>es</u> 59	1,000 ccres	1,000 <u>acres</u> 56,1	1 00
1921-22: 1922-23:	1,000 acres 59 39 56	1,000 acres 242 165 346	1,000 <u>ocres</u> 85 87 64	1,0 acr 3 3 3	00 es 59 62 70	1,000 ceres C1,992 29,222 33,459	1,000 acres 55,1 57,5 64,8	400 900 320
1921-22: 1922-23: 1923-24:	1,000 acres 59 39 56 155	1,000 acres 242 165 346 419	1,000 <u>acres</u> 85 87 64 116	1,0 acr 3 3 3 3	00 <u>es</u> 59 62 70 39	1,000 ccres C1,992 29,222 33,459 36,200	1,000 acres 56,1 57,9 64,8 71,7	100 100 120 150
1921-22: 1922-23: 1923-24: 1924-25:	1,000 <u>acres</u> 59 39 56 155 258	1,000 acres 242 165 346 419 573	1,000 <u>ocres</u> 85 87 64 116 174	1,0 eer 3 3 3 3 4	00 es 59 62 70 39 18	1,000 ccres 51,992 29,222 33,459 36,200 41,279	1,000 acres 56,1 57,9 64,8 71,7	100 100 120 150 180
1921-22: 1922-23: 1923-24: 1924-25: 1925-26: 1926-27:	1,000 <u>acres</u> 59 39 56 155 258 272 177	1,000 acres 242 165 346 419 573 611 570	1,000 ocres 85 87 64 116 174 239 216	1,0 <u>ser</u> 3 3 3 3 4 4 5	00 <u>es</u> 59 62 70 39 18 85 29	1,000 ccres Cl,992 29,222 33,459 36,200 41,279 43,434 40,062	1,000 acres 56,1 57,5 64,8 71,7 80,7 87,8	100 100 150 150 180 150
1921-22: 1922-23: 1923-24: 1924-25: 1925-26: 1926-27: 1927-28:	1,000 <u>acres</u> 59 39 56 155 258 272 177 210	1,000 acres 242 165 346 419 573 611 570 533	1,000 ocres 85 87 64 116 174 239 216 239	1,0 <u>ser</u> 3 3 3 3 4 5	00 <u>es</u> 59 62 70 39 18 85 29	1,000 ccres 51,992 29,222 33,459 36,200 41,279 43,434 40,062 40,036	1,000 acres 56,1 57,5 64,8 71,7 80,7 87,8 84,6	400 320 350 350 350 570 330
1921-22: 1922-23: 1923-24: 1924-25: 1925-26: 1926-27: 1927-28: 1928-29:	1,000 acres 59 39 56 155 258 272 177 210 245	1,000 acres 242 165 346 419 573 611 570 533 700	1,000 ocres 85 87 64 116 174 239 216 239 284	1,0 <u>ser</u> 3 3 3 3 4 5	00 <u>es</u> 59 62 70 39 18 85 29	1,000 ceres 51,992 29,222 33,459 36,200 41,279 43,434 40,062 40,033 43,036	1,000 acres 56,1 57,9 64,8 71,7 80,7 87,8 84,6	100 100 150 150 180 150 170 170
1921-22: 1922-23: 1923-24: 1924-25: 1925-26: 1926-27: 1927-28: 1928-29: 1929-30:	1,000 acres 59 39 56 155 258 272 177 210 245 301 315	1,000 acres 242 165 346 419 573 611 570 533 700 663 740	1,000 ocres 85 87 64 116 174 239 216 239 284 369 387	1,0 ser 3 3 3 3 4 5 5 5 4 4	00 <u>es</u> 59 62 70 18 29 30 56 73	1,000 ccres 21,992 29,222 33,459 36,200 41,279 43,434 40,062 40,036 43,036 43,326 43,136	1,000 acres 66,1 57,5 64,8 71,7 80,7 87,8 84,6 78.5 85,5	400 320 350 350 350 470 560 560
1921-22: 1922-23: 1923-24: 1924-25: 1925-26: 1926-27: 1927-28: 1928-29: 1929-30: 1930-31: 1931-32:	1,000 acres 59 39 56 155 258 272 177 210 245 301 315 336	1,000 acres 242 165 346 419 573 611 570 533 700 663 740 865	1,000 ocres 85 87 64 116 174 239 216 239 284 369 387 335	1,0 2er 3 3 3 3 4 5 5 4 4 4 4	00 <u>es</u> 59 62 70 73 85 85 90 93 93 93 93 93 93 93 93 93 93	1,000 ccres 51,992 29,222 33,459 36,200 41,279 43,434 40,062 40,036 43,326 43,326 43,496	1,000 acres 56,1 57,5 64,8 71,7 80,7 87,8 84,6 78,5 85,5 85,5 82,5	400 900 320 750 780 570 530 530
1921-22: 1922-23: 1923-24: 1924-25: 1925-26: 1926-27: 1927-28: 1928-29: 1929-30: 1930-31: 1931-32: 1932-33:	1,000 acres 59 39 56 155 258 272 177 210 245 301 315 336 342	1,000 acres 242 165 346 419 573 611 570 533 700 663 740 865 1,072	1,000 ocres 85 87 64 116 174 239 216 239 284 369 387 335 325	1,0 eer 33 33 44 55 54 44 43	00 <u>es</u> 59 50 70 70 70 70 70 70 70 70 70 7	1,000 ccres 21,992 29,222 33,459 36,200 41,279 43,434 40,038 43,036 43,328 43,136 43,496 42,599	1,000 acres 56,1 57,5 64,8 71,7 80,7 87,8 84,6 78.7 85,5 82,6 73,1	400 320 350 350 350 470 560 560 560
1921-22: 1923-24: 1923-24: 1924-25: 1925-26: 1926-27: 1927-28: 1928-29: 1929-30: 1930-31: 1931-32: 1932-33: 1933-34: 1934-35:	1,000 acres 59 39 56 155 258 272 177 210 245 301 315 336	1,000 acres 242 165 346 419 573 611 570 533 700 663 740 865 1,072 1,091 1,186	1,000 ocres 85 87 64 116 174 239 216 239 284 369 387 335	1,0 eer 33 33 34 4 5 5 5 4 4 33 4 33 4 4 33 4 4 4 5 5 5 4 4 4 3 4 4 4 4	00 <u>es</u> 59 62 70 73 85 85 90 93 93 93 93 93 93 93 93 93 93	1,000 ccres 51,992 29,222 33,459 36,200 41,279 43,434 40,062 40,036 43,326 43,326 43,496 42,599 46,827	1,000 acres 56,1 57,5 64,8 71,7 80,7 87,8 84,6 78.7 85,5 82,7 76,3	400 320 320 350 360 470 560 490 490
1921-22: 1922-23: 1923-24: 1924-25: 1925-26: 1926-27: 1927-28: 1928-29: 1930-31: 1931-32: 1931-32: 1933-34: 1934-35: 1935-36:	1,000 acres 59 39 56 155 258 272 177 210 245 301 315 336 342 480 707 763	1,000 acres 242 165 346 419 573 611 570 533 700 663 740 865 1,072 1,091 1,186 1,366	1,000 ocres 85 87 64 116 174 239 216 239 284 369 387 375 325 337 345 392	1,0 ser 33 33 34 4,5 5 5 5 4 4 3 4 5 5	00 55 56 57 57 57 57 57 57 57 57 57 57	1,000 ccres 21,992 29,222 33,459 36,200 41,279 43,434 40,062 40,036 43,326 43,326 43,496 42,599 46,827 48,794 51,930	1,000 acres 66,1 57,5 64,8 71,7 87,8 84,8 85,5 85,5 82,7 76,8 75,6	400 320 320 350 360 470 560 560 200 490 210
1921-22: 1923-24: 1923-24: 1924-25: 1925-26: 1926-27: 1928-29: 1929-30: 1930-31: 1931-32: 1931-32: 1933-34: 1935-36: 1936-37 3/:	1,000 acres 59 39 56 155 258 272 177 210 245 301 315 336 342 480 707	1,000 acres 242 165 346 419 573 611 570 533 700 663 740 865 1,072 1,091 1,186	1,000 ocres 85 87 64 116 174 239 216 239 284 369 387 3.35 3.35 3.35 3.35	1,0 ser 33 33 34 4,5 5 5 5 4 4 3 4 5 5	00 <u>es</u> 59 562 70 18 18 18 19 19 18 19 19 19 19 19 19 19 19 19 19	1,000 ceres 21,992 29,222 33,459 36,200 41,279 43,434 40,062 40,038 43,328 43,136 43,328 43,496 42,599 46,827 48,794	1,000 acres 66,1 57,5 64,8 71,7 80,7 87,8 84,6 85,5 82,1 76,2	400 320 320 350 360 470 560 560 200 490 210
1921-22: 1922-23: 1923-24: 1924-25: 1925-26: 1926-27: 1927-28: 1928-29: 1930-31: 1931-32: 1931-32: 1933-34: 1934-35: 1935-36:	1,000 acres 59 39 56 155 258 272 177 210 245 301 315 336 342 480 707 763	1,000 acres 242 165 346 419 573 611 570 533 700 663 740 865 1,072 1,091 1,186 1,366	1,000 ocres 85 87 64 116 174 239 216 239 284 369 387 375 325 337 345 392	1,0 ser 33 33 34 4,5 5 5 5 4 4 3 4 5 5	00 55 56 57 57 57 57 57 57 57 57 57 57	1,000 ccres 21,992 29,222 33,459 36,200 41,279 43,434 40,062 40,036 43,326 43,326 43,496 42,599 46,827 48,794 51,930	1,000 acres 66,1 57,5 64,8 71,7 87,8 84,8 85,5 85,5 82,7 76,8 75,6	400 320 320 350 360 470 560 560 200 490 210

Compiled from official sources and reports of the International Institute of Agriculture or estimated by the Bureau of Agricultural Economics.

^{1/} Includes Manchuria. 2/ Comparable data not available. 3/ Preliminary.