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## PRICE SUPPORTS, ACREAGE ALLOTMENTS, AND MARKETING QUOTAS—THEIR SIGNIFICANCE TO TEXAS FARMERS

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Out of the many proposals and counterproposals presented to the Congress in 1949, a compromise farm bill was passed which will be the basis for the farm program, at least in 1950. Further revisions may be made during the coming session of Congress, inasmuch as many groups are not satisfied with the law.

Under present farm legislation, it is declared to be the policy of Congress to conserve national resources and prevent wasteful use of soil fertility and to assist farmers in obtaining a per capita income equivalent to the per capita income of nonfarm individuals (parity of income). To carry out this policy, the Congress has directed the Secretary of Agriculture to make available to cooperating producers—through loans, purchases, or other operations—price supports for (1) the six basic agricultural commodities—cotton, corn, wheat, tobacco, rice, and peanuts—at 90 percent of parity for crops produced in 1950, at from 80 to 90 percent of parity for crops produced in 1951, and at 75 to 90 percent of parity for crops produced in 1952 and thereafter, provided acreage allotments or marketing quotas are in effect; if neither marketing quotas nor acreage allotments are in effect, the level of support shall be 75 to 90 percent of parity; (2) whole milk, butterfat, and products of such commodities at 75 to 90 percent of parity; (3) wool, including mohair, at such level (between 60 and 90 percent of parity) as the Secretary of Agriculture shall deem necessary to encourage an annual production of approximately 360,000,000 pounds of shorn wool; (4) tung nuts, honey, and Irish potatoes at between 60 and 90 percent of parity; and (5) tobacco at 90 percent of parity any year that marketing quotas are in effect.

The Secretary of Agriculture may support prices received by farmers for any other agricultural commodity at 90 percent of parity or lower, the support level depending upon the supply-demand relationship of the commodity, price levels at which other commodities are being supported, the perishability of the commodity, the funds available for price-support operations, and other factors. In the expenditure of certain funds, price supports for perishable nonbasic commodities, largely fruits and vegetables, are given priority.

In order that production may be brought in line with demand and thus tend to reduce the need for price-support operations, the law provides certain devices for controlling production:

**Acreage Allotments:** Acreage allotments, which are not dependent upon approval by producers, specify the number of acres that may be planted to a specific crop. Within certain limitations prescribed by law, the Secretary of Agriculture establishes a national allotment, from which each state, county, and farm is allotted its proportionate share based upon acreage of the crop in past years, suitability of the land for production of the crop, and other factors. These allotments are adjusted at the state, county, and farm levels to make them as fair and equitable as possible. Loss of price-support

benefits on the particular crop and, in the case of cotton, loss of soil conservation payments are the only penalties for exceeding acreage allotments.

**Marketing Quotas:** Marketing quotas specify the amount of a commodity that can be sold from each farm without penalty. In general, the marketing quota for a commodity on a particular farm is the actual production from the acreage officially allotted for that crop on the farm. Marketing quotas must be proclaimed by the Secretary of Agriculture when estimated supplies of a commodity exceed normal demand by a specified percentage. To be effective, however, quotas must be approved by two-thirds of the producers voting in a referendum; if producers disapprove marketing quotas, the support price is reduced to 50 percent of parity. If marketing quotas are in effect, a producer must obtain a "marketing card" or "marketing tag" from the local Production and Marketing Administration committee before selling any of the commodity. If he has complied with his acreage allotment, he is permitted to sell all of his crop without penalty, but if he has exceeded the acreage allotment he is not permitted to sell any of the commodity until he has insured payment of the maximum penalty for selling the amount of the commodity produced in excess of his marketing quota. This penalty, which amounts to 50 percent of the parity price of the commodity, is assessed against any quantity sold in excess of the marketing quota. Moreover, the producer is ineligible for price supports on any part of his crop.

**Soil Conservation Practices:** As an incentive to compliance with the production control measures, the Secretary of Agriculture may require producers to follow certain approved practices of soil conservation in order to be eligible for price support. This requirement is most likely to apply to land taken out of production of a crop that is under acreage allotments. Benefit payments for following certain soil conservation practices, such as terracing, liming, fertilizing, and seeding rough areas to grasses, also may be withheld from producers who do not comply with acreage allotments or marketing quotas. In 1950 farmers who knowingly exceed their acreage allotments for cotton will be ineligible for soil conservation payments, but producers of other commodities will be eligible even though they exceed their allotments.

The new legislation also made certain changes in the definition of parity, revised minimum national acreage allotments for most commodities, provided for the readjustment of state acreage allotments, eliminated minimum acreage allotments for specific commodities on individual farms, provided for the establishment of an estimated loan rate for each commodity prior to the planting season, and made other minor changes in administrative procedure. These changes, however, do not affect materially the broad provisions of the farm program.

### Some Effects of the Program

Some actual and prospective legal interpretations, decisions, and rulings may be of major importance in planning crop programs in 1950 and succeeding years. For instance, it has been ruled that compliance with acreage allotments or marketing quotas in 1950 will be on an individual crop basis. This means that a farmer may comply with restrictions on cotton production but not with those on another crop and still be eligible for price-support benefits on his cotton crop and for soil conservation payments. However, if a farmer exceeds his cotton acreage allotment he will not be eligible for soil conservation payments, even though he may be in compliance with acreage allotments on other crops. The farmer apparently has freedom to plant the acres taken out of production of crops under allotment to any other crop.

Inasmuch as the foregoing privileges, to a considerable extent, may render ineffective the control of crop production, the Secretary of Agriculture may readopt a ruling which was a part of the prewar production control program. That ruling required producers to comply with all phases of a program in order to obtain benefits under any one part of the price-support or soil conservation programs. Under that ruling, a farmer who overplanted his cotton acreage also became ineligible for price supports on any other crop, such as peanuts or wheat, even though he was in compliance with the regulations on those crops. Moreover, payments for establishing certain soil conservation practices, such as terracing, contour plowing, and seeding of grasses, were conditioned upon compliance with acreage allotments on all crops under control. The freedom now accorded to farmers to shift the acreage taken out of crops under allotment is likely to aggravate greatly the problem of crop control. It seems probable, therefore, that the Secretary of Agriculture may use the authority granted to him under the law

(according to present interpretations) to specify the crops that may be planted on land taken out of production of crops under acreage allotments. Such specifications could prohibit the planting of any soil-depleting crop, such as corn, grain sorghums, rice, flaxseed, or other row crops, on acreage taken out of crops under allotment and could require the diverted acreage to be shifted to soil-building crops, such as legumes and grasses.

In 1950, acreage allotments and marketing quotas will be in effect on cotton. The Texas cotton allotment of 7,637,000 acres is about 3,000,000 acres or 27 percent below the 1949 acreage and about 10 percent below the 1947-48 average acreage. In general, individual farm allotments, under present legislation and interpretations, do not exceed the smaller of (1) 50 percent of total cropland on the farm or (2) the largest acreage in cotton during 1946, 1947, or 1948. Thus, a farmer with 200 acres of cropland who had planted 175 acres to cotton in either 1946, 1947, or 1948 and who lives in a county where the maximum cotton allotment for 1950 is 50 percent of total cropland (called the "county factor") received an allotment for 1950 of about 100 acres. On the other hand, another farmer with 200 acres of cropland in this same county who had limited his cotton acreage in 1946, 1947, and 1948 to 75 acres received a 1950 allotment of only 75 acres.

Acreage allotments are in effect on the 1950 wheat crop, and although revisions in the law have provided for increased allotments, a reduction of about 20 percent is indicated in the State's wheat acreage for 1950. Peanut growers of the State received a 20-percent reduction in their acreage for the 1949 crop and will be asked to cut their acreage another 20 percent in 1950, while marketing quotas will again be in effect. Rice production will be under acreage allotments in 1950, and marketing quotas are probable. It is expected that the Texas rice allotment will be about 400,000 acres, or 20 percent less than the 1949 acreage. Whereas acreage allotments for most crops are made upon the farm rather than the farm operator, acreage allotments for rice in Texas are expected to be made for the farmer rather than the farm. In other words, the farmer who has produced rice several years but has moved from farm to farm will be given an allotment based on the acreage he has grown rather than the past acreage of the farm he is currently operating. Acreage allotments are probable for the 1950 corn crop but will apply only to "commercial" corn-producing area, which does not include Texas.

Acreage allotments appear almost certain for all of the basic crops during the next 2 or 3 years and are probable for some nonbasic crops, such as flaxseed, grain sorghums, and potatoes, unless there is a severe decline in production, a greatly increased demand, or a major change in the farm law. During the next few years marketing quotas are probable for cotton, peanuts, rice, and tobacco and may be invoked for wheat and corn.

### What Does this Mean to Texas Agriculture?

Application of the control program on a substantial scale in Texas during 1950, for the first time in nearly a decade, follows a year in which near-record acreages, together with good to excellent yields, resulted in the largest physical volume of production in the history of the State. Of special significance were the highest per acre yield of cotton in more than 50 years and the record total cotton production. The value of production also was a record, despite some price recession. In contrast with this high production, the 1950 control program calls for a reduction in acreage of the four major crops—cotton, wheat, peanuts, and rice—which would reduce total acreage of Texas crops more than 4,000,000 acres, or 13 percent below the 30,000,000 acres harvested in 1949. Furthermore, if history repeats itself, yields of most crops in 1950 are not likely to equal the very good yields of 1949. Two successive years of favorable weather and high yields for major crops in Texas are unusual. Thus, total volume of production in 1950 appears likely to be substantially below that of 1949; this, together with the probability of some further price decline, would materially reduce the value of production and the income to Texas farmers. For example, the probable production of cotton, based on the allotted acreage of 7,637,000 acres and the 10-year (1940-49) average yield of 181 pounds, would amount to only 2,765,000 bales, or 53 percent less than the 1949 production. On the basis of 1949 prices, the reduction in income as a result of this smaller production would be nearly one-half billion dollars.

The impact of the decline in farm income will be felt throughout the State, but it will be particularly severe on communities where farm income is derived largely from one or more of the

crops under control. Communities with a diversified farm program will experience a somewhat smaller decline, and in all communities the loss of farm income will be modified to the extent that acreages can be utilized profitably for the production of crops not under control.

The immediate impact of the program on production and income of communities and individual farms emphasizes the necessity for reorganizing the operation of many farms. Acreage of crops, such as cotton, wheat, peanuts, and rice, may be reduced by allotments to the point where their production will be unprofitable. On such farms, as well as on farms where these cash crops continue to be a major source of income, there will be an urgent need for diversification to include in the farm program more than one crop and increased production of soil-building crops, including hay and pasture, which, in turn, will create a need for expanding livestock production for profitable utilization of these crops.

This diversification of farm operations, with the resulting increased stability of individual farm incomes and higher yields per acre brought about by greater use of legumes, commercial fertilizers, and crop rotations, is likely to be a major benefit of the control program. It is important, however, to keep in mind that the transition from last year's program to that of the future may work severe hardships upon individual farmers and may create innumerable financial and managerial problems. The new farm program will require additional information and skills for growing new crops, operating new machines, caring for livestock, and managing a diversified farm operation.

### Reorganizing the Crop Program

One of the first problems facing farmers in the reorganization of their farm plan is the selection of crops to be grown on the acreage taken out of production of crops under allotments. Crop plans this year may be considered somewhat as "stop-gap" measures which will be most effective in maintaining farm income and yet permit the beginning of a longer range plan for shifting to new cash crops or to larger acreages of hay and pasture and an increased livestock program. It requires several years to build a profitable livestock program and to revise the crop program in line with present and anticipated control measures. During the transition years many farmers will need to rely largely on cash crops which can be grown with present knowledge and equipment. Such a program also permits the establishment of a "base" on crops that the farmer may want to grow in later years and on which acreage controls may be imposed.

Most profitable yields and best insurance against crop failure can be obtained by considering only crops that are well suited to the soils, level of fertility, rainfall, and average growing season of the farm. The accompanying tables show the crops best adapted to each type-of-farming area in Texas, although the possibility of growing new or unusual crops should not be overlooked. Experience during recent years has shown that, with improved practices and better management, many crops formerly believed unadapted to certain areas can be grown profitably.

In so far as possible, maximum acreage of crops which will provide a high dollar return per acre should be grown in order to maintain maximum farm income. In appraising the probable value per acre of various crops, it is important to use average or normal yields for the farm and average prices received for the crop. In planning a long-range program it usually is advisable to use a 10-year average price rather than the price for any particular year, although in the next 2 or 3 years, 5-year (1943-47) average prices may be more realistic. In any event, support prices, whenever available, should be used in evaluating each crop. Both 10-year (1938-47) and 5-year (1943-47) average farm prices are given in the accompanying tables.

Total costs of producing the crop are not easily computed, but the cash costs, such as for picking cotton, for combining wheat and small grains, for seed and insecticides, and—within limits—for seeding and cultivating, can be estimated rather accurately and should be taken into consideration in appraising the relative value of each crop.

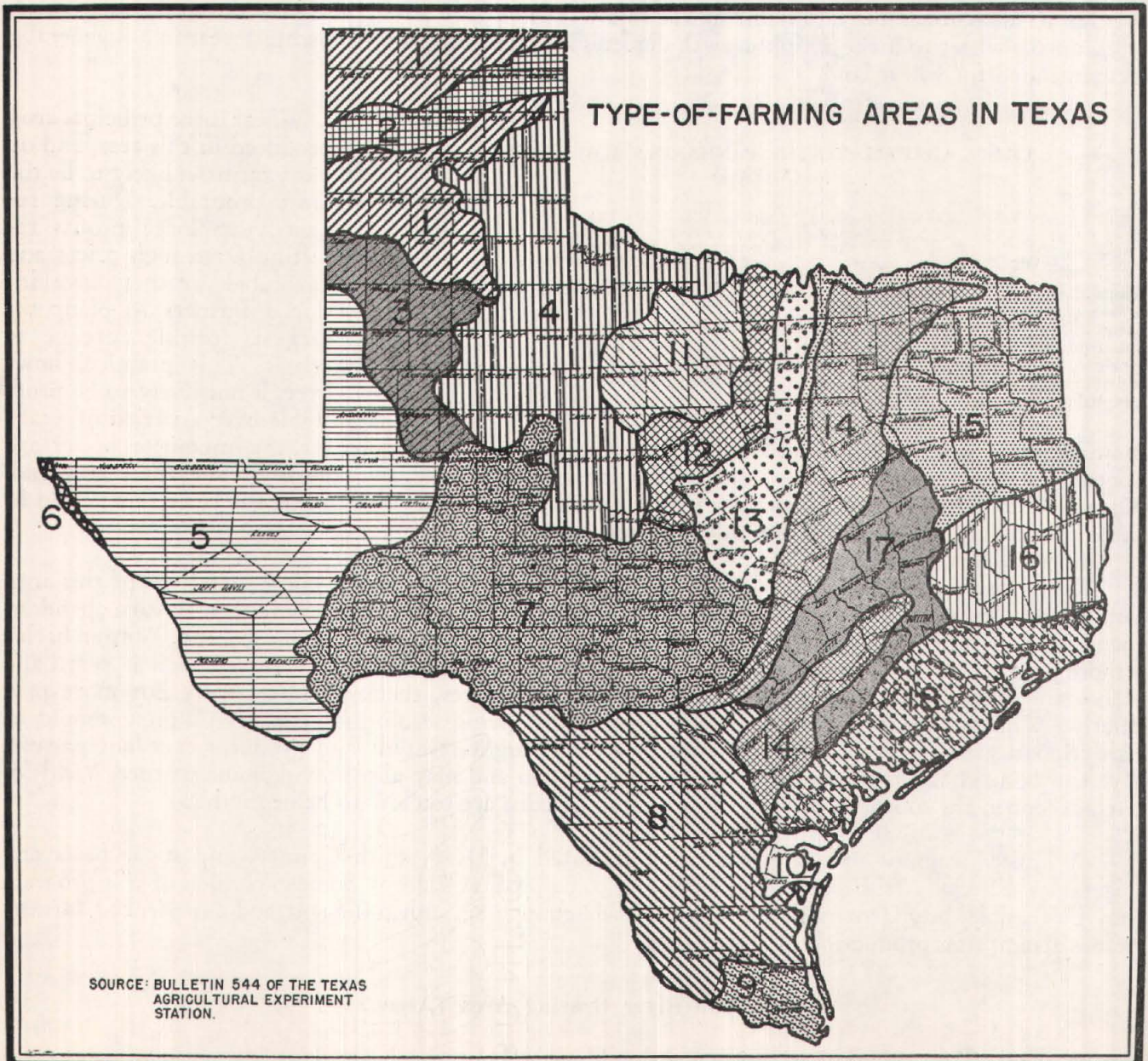
In evaluating new crops, careful attention should be given to the knowledge, skills, equipment, and labor needed for their successful cultivation. If the farmer is unfamiliar with the crop, it should be grown on a limited acreage for the first few years so that the farmer may learn the new practices and methods before risking investment in seed, fertilizer, labor, and other costs required for production

on a larger scale. The costs of additional equipment and labor needed for the production of new crops should be included in their appraisal.

Final determination of the kinds and amounts of crops to be grown on an individual farm depends largely upon the over-all farm program. If an increase in livestock production is undertaken, the acreage of feed crops should be expanded. However, if the livestock program is of minor importance, then maximum effort should be devoted to the production of cash crops and of necessary legumes and cover crops to maintain soil fertility. In any event, the crops grown should be adapted to the soil and climate of the farm, should provide a relatively high income per acre, should be within the range of the farmer's ability and of available labor and equipment, and should fit in with a desirable program of soil conservation and management.

### Crops for Texas

The wide range of soil and climatic conditions in Texas makes it desirable to discuss crop programs on the basis of type-of-farming areas in the State. These areas, based primarily on soil and climatic conditions, are outlined in the accompanying map. While the types of agriculture within each area may vary with local soil conditions, the areas are reasonably accurate in outlining types of farming in the State.



Much of the information contained in the following description of type-of-farming areas, including lists of adapted crops, normal yields, and estimated yield per acre with improved management practices, has been compiled with the help of specialists at Texas A. & M. College and Texas Technological College. However, the author takes full responsibility for the material as presented in this study. The estimates of yields are based on the average results obtained by farmers in the respective areas. Some farmers obtain much higher yields than those listed under the heading "Estimated yield per acre with improved management practices," but the yields shown are conservative estimates of results that can be expected over a period of years by farmers with average managerial ability. The average prices, which were discussed earlier, were computed from average prices received by Texas farmers as reported by the United States Department of Agriculture.

### Panhandle Wheat Area (Area 1)

In this area, lack of moisture is most likely to limit crop production; therefore, farmers should maintain a flexible crop program that can be adjusted to the available moisture supplies. Proper fallowing of land is the most important soil- and moisture-conserving practice in this area and, where practiced, has increased yields of wheat as much as 75 to 100 percent over yields on land planted continuously to wheat. Contour cultivation, use of stubble mulch, and chiseling, when necessary, are essential to moisture conservation during the fallow period. Just leaving the land idle or allowing weeds or volunteer wheat to make a rank growth depletes moisture supplies. Fallowing 1 year in 3 is generally recommended for wheat land.

#### CROPS ADAPTED TO THE PANHANDLE WHEAT AREA (AREA I)

Crop	Estimated normal yield per acre	Estimated yield <sup>a</sup> per acre with improved management practices	1943-47 Texas average farm price	1938-47 Texas average farm price
Wheat.....	9 bu.	11 bu.	\$1.62 per bu.	\$1.21 per bu.
Grain sorghums.....	12 bu.	15 bu.	1.28 per bu.	0.91 per bu.
Barley.....	10 bu.	12 bu.	1.11 per bu.	0.77 per bu.
Oats (southern part).....	20 bu.	25 bu.	0.82 per bu.	0.60 per bu.
Sorghums for forage.....	1 ton	1.25 tons	.....	.....
Sudan grass.....	1 ton	1.45 tons	.....	.....
Adapted grasses.....	.....	.....	.....	.....

Wheat is the principal crop produced in this area, and on most farms, is likely to be the most profitable. During recent years large profits resulting from high prices and favorable weather have induced farmers to plant the largest possible acreage to wheat. This practice, however, is not likely to be profitable over a period of years,

inasmuch as it rapidly depletes soil fertility and moisture supplies. Moreover, the imposition of acreage allotments will tend to limit wheat acreage to approximately two-thirds of the total cropland. Throughout this area there are sections which have been seeded to wheat in recent years that would be more profitable for the production of range and pasture grasses.

Grain sorghums and barley are two other crops well adapted to the climate and soil of this area. Grain sorghums are planted most frequently as a substitute for wheat in years when acreage abandonment is heavy and when spring rains provide sufficient moisture for a sorghum crop. Winter barley is more productive than spring-seeded barley, and the more hardy, adapted varieties, such as Ward and Reno, are generally recommended for fall planting; however, the less winter-hardy but more productive Wintex variety will survive most winters. If spring seeding is necessary, Wintex should be used. Sudan grass is a valuable forage crop that is drought-resistant and produces excellent pasture. Rye can be used as a cover crop to reduce wind erosion and may also provide some pasture. Yields of oats, except in the southern part of the area, and of corn are too low to be profitable.

A limited amount of acreage is being irrigated in Deaf Smith County, and sugar beets and vegetables, especially Irish potatoes, are proving to be profitable crops. Some expansion of this program may be feasible, but farmers should consult their county agricultural agent and experienced farmers before attempting production of these crops.

### Canadian River Grazing Area (Area 2)

This area is not suited to cropping and should be used only for pasture.

High Plains Cotton Area (Area 3)

**Dry land:** Cotton, wheat, and grain sorghums are the crops best suited to this section. Maximum acreage of these crops consistent with sound soil management and water conservation is most likely to yield highest income. Use of rye in the control of wind erosion and the practice of fallowing, including proper handling of stubble and other crop residue, to conserve moisture are desirable in most of the section.

**Irrigated:** A wide range of crops, including cotton, grain sorghums, sugar beets, vegetables, alfalfa, Sudan grass, and many pasture grasses can be grown successfully under irrigation. If necessary to reduce acreage of cotton or other cash crops, consideration should be given to the possibility of increasing the acreage of pasture mixtures, such as alfalfa and annual ryegrass. These irrigated pastures, if limited to 5 or 10 acres for each well, provide abundant feed for livestock, and net returns from grazing may equal or exceed those from the production of cash crops.

Production of vegetables, including lettuce, carrots, and potatoes, has proved highly profitable for farmers who are familiar with the problems involved and have had a reliable market outlet. However, the problems of vegetable production frequently are quite different from those incurred in the production of most field crops. For instance, a dependable local market outlet—canning plant or packing shed—is absolutely essential and should be assured before any seed is planted. Diseases and insects present special problems and must be given careful attention during the growing season. Furthermore, the harvest of the crop generally requires large amounts of hand labor and frequently must be completed within a very short period.

The higher per acre yields obtained from land under irrigation increase the amount

of plant food removed from the soil; hence, the restoration of fertility through the effective use of legumes, manure, commercial fertilizers (especially phosphate on alfalfa under irrigation), and crop residue is extremely important. Conservation of underground water supplies is also an important problem and is dependent, at least in part, upon efficient and conservative use of water for irrigation.

CROPS ADAPTED TO THE HIGH PLAINS COTTON AREA (AREA 3)

Crop	Estimated normal yield per acre	Estimated yield per acre with improved management practices	1943-47 Texas average farm price	1938-47 Texas average farm price
<b>Dry land</b>				
Cotton lint.....	185 lbs.	225 lbs.	\$ 0.25 per lb.	\$ 0.18 per lb.
Cottonseed.....	330 lbs.	400 lbs.	0.03 per lb.	0.02 per lb.
Wheat.....	9 bu.	11 bu.	1.62 per bu.	1.21 per bu.
Grain sorghums.....	20 bu.	24 bu.	1.28 per bu.	0.91 per bu.
Sorghums for forage.....	1.7 tons	2.0 tons	.....	.....
Sudan grass.....	1.7 tons	2.0 tons	.....	.....
Sudan grass for seed.....	500 to 600 lbs. per acre	have been obtained	8.90 per cwt.*	6.17 per cwt.*
Barley.....	10 bu.	12 bu.	1.11 per bu.	0.77 per bu.
<b>Soil-building crops:</b>				
Hairy vetch.....	.....	.....	.....	.....
Alfalfa.....	.....	.....	.....	.....
Abruzzi or Balboa rye..	.....	.....	.....	.....
Cowpeas.....	.....	.....	.....	.....
Adapted grasses.....	.....	.....	.....	.....
<b>Irrigated</b>				
Cotton lint.....	400 lbs.	500 lbs.	0.25 per lb.	0.18 per lb.
Cottonseed.....	720 lbs.	900 lbs.	0.03 per lb.	0.02 per lb.
Alfalfa hay.....	5 tons	6 tons	25.94 per ton	19.32 per ton
Grain sorghums.....	40 bu.	55 bu.	1.28 per bu.	0.91 per bu.
Sugar beets.....	15 tons	18 tons	10.58 per ton**	8.08 per ton**
Barley.....	40 bu.	60 bu.	1.11 per bu.	0.77 per bu.
Sorghums for forage.....	2.5 tons	5 tons	.....	.....
Sudan grass.....	2.5 tons	5 tons	.....	.....
Irrigated pasture mixtures.	.....	.....	.....	.....
Vegetables.....	.....	.....	.....	.....
<b>Soil-building crops:</b>				
Alfalfa.....	.....	.....	.....	.....
Hairy vetch.....	.....	.....	.....	.....
Austrian winter peas....	.....	.....	.....	.....
Sweet clovers.....	.....	.....	.....	.....
Ladino clover.....	.....	.....	.....	.....

\* Average price at Kansas City.  
\*\* United States average farm price.

Rolling Plains (Area 4)

Wheat, cotton, grain sorghums, and, in sandy sections, peanuts are likely to be the most profitable crops in this area. Oats and barley can be grown successfully in some sections, particularly southern

and eastern counties, and frequently are included in the rotation. In most of the area, corn is more uncertain than grain sorghums, although the development of adapted hybrid varieties is increasing the relative importance of corn. The use of rye to control wind erosion and summer fallow to conserve moisture should be included in a suitable crop rotation for many farms in northern areas. The diversity of soils and climatic conditions in this area makes it difficult to suggest definite crop rotations. In general, a legume, such as hairy vetch, alfalfa, or sweet clover, should be used in a rotation that includes cotton, grain sorghums, or peanuts. Where wheat is the major crop, summer fallow and grain sorghums should be included in the rotation. If peanuts are grown, proper precautions should be taken to prevent wind erosion of the cropped area.

#### CROPS ADAPTED TO THE ROLLING PLAINS (AREA 4)

Crop	Estimated normal yield per acre	Estimated yield per acre with improved management practices	1943-47 Texas average farm price	1938-47 Texas average farm price
Cotton lint.....	135 lbs.	160 lbs.	\$ 0.25 per lb.	\$ 0.18 per lb.
Cottonseed.....	245 lbs.	290 lbs.	0.03 per lb.	0.02 per lb.
Grain sorghums.....	15 bu.	18 bu.	1.28 per bu.	0.91 per bu.
Sorghums for forage.....	1.7 tons	2.0 tons	.....	.....
Sudan grass.....	1.7 tons	2.0 tons	.....	.....
Wheat.....	8.5 bu.	10.0 bu.	1.62 per bu.	1.21 per bu.
Peanuts.....	400 lbs.	480 lbs.	0.08 per lb.	0.06 per lb.
Alfalfa hay.....	2.0 tons	2.5 tons	25.94 per ton	19.32 per ton
Alfalfa seed.....	3 - 5 bu.	3 - 5 bu.	18.18 per bu.	13.89 per bu.
Oats.....	26 bu.	30 bu.	0.82 per bu.	0.60 per bu.
Barley.....	20 bu.	25 bu.	1.11 per bu.	0.77 per bu.
Corn.....	12 bu.	20 bu.	1.45 per bu.	1.04 per bu.
Soil-building crops:				
Alfalfa.....	.....	.....	.....	.....
Hubam & Madrid sweet clovers.....	.....	.....	.....	.....
Hairy vetch.....	.....	.....	.....	.....
Austrian winter peas.....	.....	.....	.....	.....
Adapted grasses.....	.....	.....	.....	.....

#### Trans-Pecos Area, Upper Rio Grande Valley, and Edwards Plateau (Areas 5, 6, and 7) — Irrigated Sections Only

Cotton, alfalfa, and vegetables, especially cantaloupes, are the principal crops in this area. The climate is almost ideally suited to the production of cotton, which is the most profitable crop; hence, it would appear desirable to maintain maximum production of cotton consistent with production control programs and the maintenance of soil fertility. Alfalfa produces satisfactory yields and, being a legume, stores nitrogen in the soil. Many vegetable crops could be grown, but the great distance from any large market and the competition from established vegetable-producing areas, such as the Winter Garden section in Area 8, the Lower Rio Grande Valley, and the irrigated sections of Arizona, are likely to restrict vegetable production unless a special market is developed. Grain sorghums are well adapted to these areas, and

#### CROPS ADAPTED TO THE IRRIGATED SECTIONS OF TRANS-PECOS AREA, UPPER RIO GRANDE VALLEY, AND EDWARDS PLATEAU (AREAS 5, 6 and 7)

Crop	Estimated normal yield per acre	Estimated yield per acre with improved management practices	1943-47 Texas average farm price	1938-47 Texas average farm price
Cotton lint.....	600 lbs.	650 lbs.	\$ 0.25 per lb.	\$ 0.18 per lb.
Cottonseed.....	1,080 lbs.	1,170 lbs.	0.03 per lb.	0.02 per lb.
Cotton (long staple).....	300 lbs.	325 lbs.	0.49 per lb.*	0.39 per lb.*
Alfalfa hay.....	3.0 tons	4.0 tons	25.94 per ton	19.32 per ton
Grain sorghums.....	45 bu.	60 bu.	1.28 per bu.	0.91 per bu.
Vegetables.....	.....	.....	.....	.....

\* Prices of American-Egyptian cotton at El Paso, Phoenix, and Arizona territories. Base quality is No. 2, Staple 1½ inches.

the production of grain sorghum seed might be a profitable use for some acreage taken out of cotton. The dry climate permits the production of a very clean, high-quality seed; and with the increased acreage of sorghum in Texas, the demand for seed is likely to remain strong.

#### Rio Grande Plains (Area 8)

Crop production generally is limited to the eastern counties and to irrigated sections throughout the area. Lack of rainfall is a serious limitation to production in western counties, while large sections of southern and southeastern counties are covered with brush and are not suitable for crop production.

In the eastern counties cotton, grain sorghums, peanuts, flaxseed, and broomcorn are the principal cash crops; Sudan grass and sorghums are the most productive forage crops; and annual sweet clovers,



vetches, winter peas, and guar are recommended soil-building crops. It is extremely important that farmers give adequate attention to soil-conservation and soil-building practices to maintain fertility and insure profitable yields. This is especially true in the sandier sections, where organic matter and plant food are easily depleted.

In the irrigated sections a wide variety of crops, including vegetables, citrus fruits, grain sorghums, and many forage crops, can be grown. Most of the production under irrigation has been vegetables, and considerable expansion of vegetable production and even of citrus fruits is feasible, provided adequate markets and transportation facilities are assured.

**CROPS ADAPTED TO THE RIO GRANDE PLAINS  
(AREA 8)**

Crop	Estimated normal yield per acre	Estimated yield per acre with improved management practices	1943-47 Texas average farm price	1938-47 Texas average farm price
<b>Irrigated</b>				
Vegetables.....	.....	.....	.....	.....
Citrus fruits.....	.....	.....	.....	.....
Grain sorghums.....	20 bu.	27 bu.	\$ 1.28 per bu.	\$ 0.91 per bu.
Sorghums for forage.....	3.0 tons	3.5 tons	.....	.....
<b>Dry land</b>				
Grain sorghums.....	15 bu.	18 bu.	1.28 per bu.	0.91 per bu.
Sorghums for forage.....	1.5 tons	1.7 tons	.....	.....
Peanuts.....	540 lbs.	600 lbs.	0.08 per lb.	0.06 per lb.
Cowpeas (for canning)	2.5 tons	3.0 tons	.....	.....
Sudan grass.....	1.5 tons	1.7 tons	.....	.....
Cotton lint (eastern counties).....	200 lbs.	250 lbs.	0.25 per lb.	0.18 per lb.
Cottonseed.....	360 lbs.	450 lbs.	0.03 per lb.	0.02 per lb.
Flaxseed.....	9 bu.	12 bu.	3.39 per bu.	2.53 per bu.
Broomcorn.....	300 lbs.	350 lbs.	260.00 per ton	177.00 per ton
<b>Soil-building crops: (irrigated and dry land)</b>				
Guar (in rotation with flaxseed).....	.....	.....	.....	.....
Alfalfa (western counties).....	.....	.....	.....	.....
Willamette, common, and hairy vetch.....	.....	.....	.....	.....
Austrian winter peas.....	.....	.....	.....	.....
Sweet clovers.....	.....	.....	.....	.....
Adapted grasses.....	.....	.....	.....	.....

Oats and Hubam clover recently have been introduced into the area as winter pasture crops. These crops, which are usually seeded in late September or early October and are ready for grazing by November, will carry about one yearling per acre from December to June. These winter pastures have proved valuable in eliminating weeds from fields that have been cropped continuously. The use of Hubam clover in the pasture mixture adds nitrogen to the soil, and its deep roots loosen the soil and make cultivation easier.

**Lower Rio Grande Valley (Area 9)**

A long growing season and facilities for irrigation make this area adaptable to the production of a wide range of crops, including citrus fruits, vegetables, cotton, corn, grain sorghums, and alfalfa. Citrus fruits, especially grapefruit, have been one of the principal crops, although the extensive damage to citrus orchards caused by the severe freeze in January of 1949 emphasized the value of a diversified operation. While specialization in one or two crops may improve efficiency, the increased risks of financial loss due to adverse weather or to an abnormally low price for any one crop make it advisable to build a diversified crop program. Citrus fruits, vegetables, and cotton undoubtedly will continue to be the major crops; and while it may not be feasible or desirable to combine

**CROPS ADAPTED TO THE LOWER RIO GRANDE VALLEY  
(AREA 9)**

Crop	Estimated normal yield per acre	Estimated yield per acre with improved management practices	1943-47 Texas average farm price	1938-47 Texas average farm price
<b>Irrigated</b>				
Grapefruit.....	300 boxes	375 boxes	\$ 1.10 per box	\$ 0.82 per box
Oranges.....	210 boxes	275 boxes	2.14 per box	1.66 per box
Cotton lint.....	500 lbs.	600 lbs.	0.25 per lb.	0.18 per lb.
Cottonseed.....	900 lbs.	1,000 lbs.	0.03 per lb.	0.02 per lb.
Alfalfa hay.....	3.3 tons	4.5 tons	25.94 per ton	19.32 per ton
Grain sorghums.....	50 bu.	75 bu.	1.28 per bu.	0.91 per bu.
Corn*.....	50 bu.	75 bu.	1.45 per bu.	1.04 per bu.
Vegetables.....	.....	.....	.....	.....
<b>Dry land</b>				
Cotton lint.....	175 lbs.	225 lbs.	0.25 per lb.	0.18 per lb.
Cottonseed.....	260 lbs.	340 lbs.	0.03 per lb.	0.02 per lb.
Grain sorghums.....	15 bu.	18 bu.	1.28 per bu.	0.91 per bu.
Sorghums for forage.....	1.75 tons	2.25 tons	.....	.....
Sudan grass.....	1.75 tons	2.25 tons	.....	.....
<b>Soil-building crops:</b>				
Alfalfa.....	.....	.....	.....	.....
Hubam and Melilotus indica annual sweet clovers.....	.....	.....	.....	.....
Willamette, common, and hairy vetch.....	.....	.....	.....	.....
Austrian winter peas.....	.....	.....	.....	.....
Sea breeze wheat.....	.....	.....	.....	.....
Adapted grasses.....	.....	.....	.....	.....

\*Very little corn except sweet corn and hybrid seed corn has been grown in the Valley, but yields suggest that it offers a possible alternative crop.

the production of these crops on one farm, diversification can be achieved by including on each farm more than one kind of citrus fruit or several types of vegetables or cotton plus other crops, such as alfalfa, grain sorghums, corn, and vegetables.

Conservation of irrigation water, development of adequate drainage facilities, and maintenance of soil fertility are three problems of major importance in the lower Rio Grande Valley. Continued expansion of the acreage under irrigation has caused temporary shortages of irrigation water in some sections. In other sections inadequate drainage has caused an accumulation of undesirable salts in the soil and has reduced productivity. Due to the depletion of virgin fertility, large amounts of commercial fertilizer are now being used, and many farmers are planting legumes and green manure crops to replenish organic matter and nitrogen in the soil. These problems must be given adequate attention if maximum profits are to be obtained.

### Corpus Christi Area (Area 10)

#### CROPS ADAPTED TO THE CORPUS CHRISTI AREA (AREA 10)

Crop	Estimated normal yield per acre	Estimated yield per acre with improved management practices	1943-47 Texas average farm price	1938-47 Texas average farm price
Cotton lint.....	225 lbs.	325 lbs.	\$ 0.25 per lb.	\$ 0.18 per lb.
Cottonseed.....	340 lbs.	485 lbs.	0.03 per lb.	0.02 per lb.
Grain sorghums.....	30 bu.	36 bu.	1.28 per bu.	0.91 per bu.
Corn.....	18 bu.	30 bu.	1.45 per bu.	1.04 per bu.
Flaxseed.....	9 bu.	12 bu.	3.39 per bu.	2.53 per bu.
Broomcorn.....	300 lbs.	350 lbs.	260.00 per ton	177.00 per ton
Sorghums for forage.....	3.0 tons	3.5 tons	.....	.....
Sudan grass.....	3.0 tons	3.5 tons	.....	.....
Oats (for grazing).....	.....	.....	.....	.....
Soil-building crops:				
Guar (with flaxseed).....	.....	.....	.....	.....
Hubam and Melilotus indica annual sweet clovers.....	.....	.....	.....	.....
Willamette, common, and hairy vetch.....	.....	.....	.....	.....
Austrian winter peas.....	.....	.....	.....	.....
Adapted grasses.....	.....	.....	.....	.....

Cotton, grain sorghums, and vegetables generally are the most profitable crops, although satisfactory yields of flaxseed and of forage crops, such as sorghums and annual sweet clovers, are obtained. Highest productivity of all crops, including vegetables, is obtained when a suitable rotation is followed. Furthermore, all cropping systems should make maximum use of legumes and cover crops to maintain and improve soil productivity and should provide for the production of at

least three major crops to spread the risk of financial loss due to crop failures or low prices.

### Northcentral Grazing Area (Area 11)

#### CROPS ADAPTED TO THE NORTHCENTRAL GRAZING AREA (AREA 11)

Crop	Estimated normal yield per acre	Estimated yield per acre with improved management practices	1943-47 Texas average farm price	1938-47 Texas average farm price
Peanuts.....	450 lbs.	550 lbs.	\$0.08 per lb.	\$0.06 per lb.
Wheat.....	8 bu.	10 bu.	1.62 per bu.	1.21 per bu.
Oats.....	25 bu.	30 bu.	0.82 per bu.	0.60 per bu.
Barley.....	20 bu.	25 bu.	1.11 per bu.	0.77 per bu.
Grain sorghums.....	15 bu.	18 bu.	1.28 per bu.	0.91 per bu.
Corn.....	14 bu.	30 bu.	1.45 per bu.	1.04 per bu.
Cotton lint.....	102 lbs.	200 lbs.	0.25 per lb.	0.18 per lb.
Cottonseed.....	180 lbs.	360 lbs.	0.03 per lb.	0.02 per lb.
Sorghums for forage.....	1.5 tons	2.0 tons	.....	.....
Sudan grass.....	1.5 tons	2.0 tons	.....	.....
Soil-building crops:				
Alfalfa (western counties).....	.....	.....	.....	.....
Hairy vetch.....	.....	.....	.....	.....
Hubam and Madrid sweet clovers.....	.....	.....	.....	.....
Austrian winter peas.....	.....	.....	.....	.....
Adapted grasses.....	.....	.....	.....	.....

Cattle raising predominates in this region, and crop production generally should be limited to feed crops. Cotton is grown on many farms, but yields are usually very low. A limited acreage of cash crops, such as wheat, peanuts, and cotton, can be profitable if plantings are restricted to the better soils located in the more fertile valleys and bottoms. The crop rotation should include a soil-building crop, such as alfalfa, vetch, or Austrian winter peas, to maintain soil fertility and insure profitable yields of cash and feed crops.

West Cross Timbers Area (Area 12)

CROPS ADAPTED TO THE WEST CROSS TIMBERS AREA (AREA 12)

The light, sandy character of the soil and the gently rolling topography of this region make the selection of crops extremely important. Peanuts, fruit, and watermelons are the three crops best adapted to this area. Feed crops, such as corn, grain sorghums, and small grains can also be grown, although generally yields are too low for profitable production. Cotton production is not considered profitable on most farms because yields are very low.

Crop	Estimated normal yield per acre	Estimated yield per acre with improved management practices	1943-47 Texas average farm price	1938-47 Texas average farm price
Peanuts.....	462 lbs.	550 lbs.	\$ 0.08 per lb.	\$ 0.06 per lb.
Watermelons.....	5 tons	8 tons	400.00 per 1,000 melons	285.00 per 1,000 melons
Grain sorghums.....	15 bu.	25 bu.	1.28 per bu.	0.91 per bu.
Corn.....	15 bu.	25 bu.	1.45 per bu.	1.04 per bu.
Oats.....	30 bu.	40 bu.	0.82 per bu.	0.60 per bu.
Barley.....	20 bu.	25 bu.	1.11 per bu.	0.77 per bu.
Wheat.....	12 bu.	15 bu.	1.62 per bu.	1.21 per bu.
Fruit.....	.....	.....	.....	.....
Sorghums for forage.....	1 ton	1.5 tons	.....	.....
Soil-building crops:				
Hairy vetch.....	.....	.....	.....	.....
Austrian winter peas.....	.....	.....	.....	.....
Hubam and Madrid sweet clovers.....	.....	.....	.....	.....
Adapted grasses.....	.....	.....	.....	.....

The sandy nature of the soil makes it imperative that the crop rotation include a soil-building crop, and hairy vetch is the legume best suited to this area. Much of the land that is too light or too steep for cultivation may be profitably seeded to appropriate grasses for permanent pasture.

Black and Grand Prairies (Areas 13 and 14)

The soil and climatic conditions of the area are favorable for the production of such crops as cotton, grain sorghums, corn, oats, and wheat. In recent years these crops have been very profitable where suitable programs to control erosion and maintain fertility have been followed. The land also is well adapted to many improved grasses, clovers, and other forage crops which are especially valuable in crop rotation programs to reduce diseases, particularly cotton root rot, and to restore soil fertility. If cotton and corn or cotton and grain sorghums are to be the principal crops, then the rotation should

CROPS ADAPTED TO THE BLACK AND GRAND PRAIRIES (AREAS 13 and 14)

Crop	Estimated normal yield per acre	Estimated yield per acre with improved management practices	1943-47 Texas average farm price	1938-47 Texas average farm price
Cotton lint.....	170 lbs.	300 lbs.	\$ 0.25 per lb.	\$ 0.18 per lb.
Cottonseed.....	255 lbs.	540 lbs.	0.08 per lb.	0.02 per lb.
Corn.....	25 bu.	35 bu.	1.45 per bu.	1.04 per bu.
Grain sorghums.....	20 bu.	33 bu.	1.28 per bu.	0.91 per bu.
Oats.....	31 bu.	40 bu.	0.82 per bu.	0.60 per bu.
Barley.....	22 bu.	30 bu.	1.11 per bu.	0.77 per bu.
Wheat.....	15 bu.	20 bu.	1.62 per bu.	1.21 per bu.
Sweet clover for seed.....	350 lbs.	400 lbs.	16.09 per cwt.	12.61 per cwt.
Peanuts (sandy areas only).....	450 lbs.	575 lbs.	0.08 per lb.	0.06 per lb.
Sorghums for forage.....	2.5 tons	3.0 tons	.....	.....
Sudan grass.....	2.5 tons	3.0 tons	.....	.....
Alfalfa.....	2.5 tons	3.0 tons	.....	.....
Soil-building crops:				
Hubam, Madrid, and Evergreen sweet clovers.....	.....	.....	.....	.....
Hairy vetch.....	.....	.....	.....	.....
Austrian winter peas.....	.....	.....	.....	.....
Adapted grasses.....	.....	.....	.....	.....

make maximum use of winter legumes, such as Austrian winter peas and hairy vetch, to maintain soil fertility. A rotation of cotton and sweet clovers has been effective in controlling cotton root rot and has increased cotton yields as much as 100 percent. The use of fertilizers, including nitrogen and phosphate, generally is recommended and is most effective when applied with a legume or cover crop. Use of adapted hybrid seed corn will increase corn yields materially. Throughout the area there

are sections where the land is too rough or the soil too thin for profitable field crop production; these sections would be more profitable if seeded to adapted pasture grasses and legumes.

Northeast Sandy Lands and Piney Woods (Areas 15 and 16)

Cotton was once king in this part of Texas, but with the exhaustion of virgin fertility and invasion of the boll weevil it has generally given way to other crops or to livestock production. Much of the acreage formerly planted to cotton has been allowed to grow up in brush, trees, and native grasses.

Reforestation should be encouraged on the land best adapted to forests. Other land which is best suited to permanent-type pastures can be very productive if fertilized and seeded to adapted pasture grasses and legumes.

This area also is well adapted to the production of truck crops, such as tomatoes and watermelons, and to sweet potatoes, fruits and a wide variety of hay and pasture crops, and these crops constitute the basis for a profitable crop program. Some corn, particularly hybrids, and grain sorghums for feed are profitable if properly fertilized. Yields can be maintained at relatively high levels if these crops follow a fertilized soil-building legume or several years of a fertilized hay or pasture crop. Vegetable and fruit production may be very profitable, if dependable market outlets are assured.

#### CROPS ADAPTED TO THE NORTHEAST SANDY LANDS AND PINEY WOODS (AREAS 15 and 16)

Crop	Estimated normal yield per acre	Estimated yield per acre with improved management practices	1943-47 Texas average farm price	1938-47 Texas average farm price
Hay and pasture crops: (These are also soil-building crops when properly fertilized)				
Hairy vetch.....	.....	.....	.....	.....
Kudzu.....	.....	.....	.....	.....
White Dutch clover.....	.....	.....	.....	.....
Hop clover.....	.....	.....	.....	.....
Bur clover.....	.....	.....	.....	.....
Sudan grass.....	.....	.....	.....	.....
Dixie Crimson clover.....	.....	.....	.....	.....
Bermuda grass.....	.....	.....	.....	.....
Singletary peas*.....	.....	.....	.....	.....
Adapted grasses.....	.....	.....	.....	.....
Tomatoes.....	3.75 tons	5 tons	\$ 2.55 per bu.†	\$ 1.89 per bu.†
Watermelons.....	6 tons	10 tons	400.00 per 1,000 melons	285.00 per 1,000 melons
Sweet potatoes.....	75 bu.	150 bu.	2.18 per bu.	1.56 per bu.
Peanuts.....	400 lbs.	500 lbs.	0.08 per lb.	0.06 per lb.
Peas, edible dry.....	10 bu.	15 bu.	.....	.....
Corn (fertilized).....	15 bu.	30 bu.	1.45 per bu.	1.04 per bu.
Grain sorghums (fertilized).....	15 bu.	30 bu.	1.62 per bu.	0.91 per bu.
Cotton lint.....	150 lbs.	250 lbs.	0.25 per lb.	0.18 per lb.
Cottonseed.....	225 lbs.	375 lbs.	0.03 per lb.	0.02 per lb.

\* Livestock must be removed when the blooms appear because the seeds are toxic.  
† Season average price, both early and late, for fresh market.

Soil-building crops, such as legumes, should be included in a rotation program to replenish organic matter and rebuild soil fertility on the major portion of the cropland. Because of the area's relatively abundant rainfall, the light, well-drained character of most of the soils, and generally low level of available plant food in the soils, most crops are very responsive to applications of commercial fertilizer, some yields having been doubled and trebled by proper application of fertilizer. In applying fertilizer, farmers should follow closely the recommendations which are prepared annually by specialists at Texas A. & M. College, copies of which can be obtained from local county agricultural agents.

#### Post Oak Area (Area 17)

##### CROPS ADAPTED TO THE POST OAK AREA (AREA 17)

Crop	Estimated normal yield per acre	Estimated yield per acre with improved management practices	1943-47 Texas average farm price	1938-47 Texas average farm price
<b>Bottomland</b>				
Cotton lint.....	200 lbs.	350 lbs.	\$ 0.25 per lb.	\$ 0.18 per lb.
Cottonseed.....	360 lbs.	630 lbs.	0.03 per lb.	0.02 per lb.
Corn.....	25 bu.	35 bu.	1.45 per bu.	1.04 per bu.
Grain sorghums.....	20 bu.	30 bu.	1.28 per bu.	0.91 per bu.
Oats.....	30 bu.	40 bu.	0.82 per bu.	0.60 per bu.
Alfalfa hay.....	2.0 tons	2.5 tons	25.94 per ton	19.32 per ton
Sorghums for forage.....	1.5 tons	2.0 tons	.....	.....
Sudan grass.....	1.5 tons	2.0 tons	.....	.....
<b>Upland</b>				
Peanuts.....	400 lbs.	500 lbs.	0.08 per lb.	0.06 per lb.
Corn (fertilized).....	15 bu.	30 bu.	1.45 per bu.	1.04 per bu.
Grain sorghums (fertilized).....	15 bu.	30 bu.	1.28 per bu.	0.91 per bu.
Oats.....	20 bu.	30 bu.	0.82 per bu.	0.60 per bu.
Sudan grass.....	1.0 tons	1.5 tons	.....	.....
Sorghums for forage.....	1.0 tons	1.5 tons	.....	.....
Watermelons.....	5.0 tons	8.0 tons	400.00 per 1,000 melons	285.00 per 1,000 melons
<b>Soil-building crops: (Bottomland and Upland)</b>				
Sweet clovers.....	.....	.....	.....	.....
Willamette, common, and hairy vetch.....	.....	.....	.....	.....
Dixie wonder peas.....	.....	.....	.....	.....
Dixie crimson clover.....	.....	.....	.....	.....
Adapted grasses.....	.....	.....	.....	.....

Crop production in this area should generally be limited to the more fertile soils found in the interior prairies and along the river bottoms. Cotton, corn, and alfalfa are well suited to the fertile bottomlands, and peanuts are adapted to the sandy upland. The light, sandy nature of the upland soils makes it imperative that crop rotation be followed and that it include, at least 1 year in 3, a soil-building crop, such as sweet clover, hairy vetch, Austrian winter peas, or other green manure crops. Even in the fertile river bottoms, crop rotation and use of soil-building crops pay big dividends.

## Gulf Coast Prairie (Area 18)

Although cattle raising predominates in this area, rice, cotton, vegetables, corn, and grain sorghums can be grown profitably on certain soils. Production of rice is a specialized operation that requires a large amount of operating capital and is profitable only if the most efficient methods are used. Rice production should be confined to the soils having a tight subsoil accessible to ample supplies of irrigation water. Providing for adequate irrigation is of paramount importance, and the cost of irrigating is high, even when done on an area basis from one of the rivers. Other capital requirements include large-scale machinery, such as self-propelled combines and large field equipment. These factors tend to make small-scale operations generally unprofitable. Experimental data and actual experience of farmers show that highest yields are obtained when a rotation of 1 year of rice and 3 to 5

years of pasture is used. After the rice crop is harvested, the land should be limed (if soil is acid), fertilized, and seeded to adapted grasses. These pastures provide a high-quality feed for cattle; and when the sod is turned under, valuable plant food which will increase yields of rice is returned to the soil. Recent experiments have shown that rice yields also can be increased by application of commercial fertilizer to the rice crop itself. Nitrogen and phosphate fertilizers have given the best results to date. Local recommendations as to time, amount, and kind of fertilizer should be followed.

CROPS ADAPTED TO THE GULF COAST PRAIRIE  
(AREA 18)

Crop	Estimated normal yield per acre	Estimated yield per acre with improved management practices	1943-47 Texas average farm price	1938-47 Texas average farm price
Cotton lint.....	215 lbs.	350 lbs.	\$ 0.25 per lb.	\$ 0.18 per lb.
Cottonseed.....	450 lbs.	500 lbs.	0.03 per lb.	0.02 per lb.
Rice.....	50 bu.	60 bu.	2.15 per bu.	1.62 per bu.
Corn.....	18 bu.	30 bu.	1.45 per bu.	1.04 per bu.
Grain sorghums.....	18 bu.	30 bu.	1.28 per bu.	0.91 per bu.
Alfalfa (in river bottoms)....	2.5 tons	3.0 tons	25.94 per ton	19.32 per ton
Sweet sorghums.....	2.0 tons	3.0 tons	.....	.....
Sudan grass.....	2.0 tons	3.0 tons	.....	.....
Soil-building crops:				
Melilotus indica and Hubam				
annual sweet clovers.....	.....	.....	.....	.....
Madrid and Evergreen				
biennial sweet clovers....	.....	.....	.....	.....
Willamette, common, and				
hairy vetch.....	.....	.....	.....	.....
Dixie wonder peas.....	.....	.....	.....	.....
Dixie crimson clover.....	.....	.....	.....	.....
Adapted grasses.....	.....	.....	.....	.....

Development of a profitable crop program in this area probably should be built around (1) specialized production of rice, with cattle; (2) vegetable production, with annual legumes; (3) cotton, corn, and grain sorghums, with soil-building legumes; or (4) forage crops—largely pastures—for a livestock program. These general crop programs, with necessary modifications to meet local conditions, are likely to be most profitable.

# Review of Business, Industrial, Agricultural, and Financial Conditions

## DISTRICT SUMMARY

The open weather prevailing between late October and mid-December enabled farmers in most areas of the Eleventh Federal Reserve District to complete harvesting operations and to accelerate stalk destruction and fall plowing. In most areas, however, plowing has been retarded because of the difficulties experienced in harvesting crops. Growth of small grains has been retarded by the lack of moisture. Although the condition of ranges and pastures declined during November, it is much better than a year ago. Livestock are going into the winter in good to excellent condition.

The daily average production of crude petroleum in the District, which had risen substantially from July to November, declined markedly in December due to the cutback of production allowables in Texas. At mid-December the production rate was nearly 500,000 barrels smaller than in December 1948. A further moderate reduction in Texas allowables has been announced for January 1950.

The value of construction contracts awarded in the District showed only a moderate decline from October to November and was about one-fifth larger than a year earlier. Residential building, while 22 percent below the high level of the preceding 2 months, exceeded the November 1948 volume by nearly 30 percent.

Sales of department stores in the District increased by a smaller amount than is usual from October to November and were about 6 percent less than in November 1948. Late reports indicate that Christmas buying in December was very good and may equal or exceed the previous year's dollar volume. Furniture store sales increased further in November and were substantially larger than the low volume in November 1948.

During the period between November 9 and December 14, the deposits, loans, and investments of weekly reporting member banks in leading cities of the District continued to increase. The increase in deposits reflects chiefly the receipts from farm marketings and the flow of funds to banks in the leading cities.

## BUSINESS

Department store sales in the Eleventh Federal Reserve District in November showed a small increase over the generally satisfactory volume of the previous month, but the increase was noticeably less than had been evident from October to November in other recent years. The dollar sales volume was 3 percent higher than in October, although 6 percent lower than in November a year ago, which, it will be recalled, was the first month in which the weakening in the postwar sales boom became definitely noticeable.

The failure of November sales to show as large an increase as in earlier years is not necessarily discouraging. While the degree of strength in Christmas buying sometimes may presage the trend of sales in the months to come, the November sales volume does not indicate any noticeable weakness. October sales in the District were unusually good, making a normal seasonal increase in November more difficult. Furthermore, the favorable reports for the first part of December may reveal a continuation of the shift away from the early Christmas buying which was typical of the war years. Moreover, the 6-percent decline in November sales from year-earlier levels was probably no greater than the decline in prices during the past year, and, consequently, the physical volume of goods sold may have been as high as, or higher than, a year ago. In this

connection, it is worth noting that prices of apparel and house-furnishings, two very important groups of department store merchandise, declined approximately 7 percent in the past year, as measured by the consumers' price index compiled by the United States Bureau of Labor Statistics.

## WHOLESALE AND RETAIL TRADE STATISTICS

	Number of reporting firms	Percentage change in				
		Net Sales			Stocks†	
		Nov. 1949 from Nov. 1948	Oct. 1949	11 mo. 1949 comp. with 11 mo. 1948	Nov. 1949 from Oct. 1948	Nov. 1949 from Oct. 1949
<b>Retail trade:</b>						
Department stores:						
Total 11th Dist.....	48	-6	3	-6	-4	6
Corpus Christi.....	4	-3	-19	1	10	9
Dallas.....	7	-6	5	-7	-3	6
Fort Worth.....	4	-2	4	-3	-5	1
Houston.....	7	-11	11	-9	-6	10
San Antonio.....	5	-7	-4	-5	-1	12
Shreveport, La.....	3	2	-1	-#	..	..
Other cities.....	18	-5	-#	-5	-6	1
Furniture stores:						
Total 11th Dist.....	45	10	4	..	-16	-2
Dallas.....	4	52	-6	..	-27	7
Houston.....	3	6	4	..	..	..
Port Arthur.....	3	19	31	..	..	..
San Antonio.....	3	5	7	..	..	..
Shreveport, La.....	4	12	4	..	-16	-18
Wichita Falls.....	5	-13	-4	..	-3	4
<b>Wholesale trade:*</b>						
Automotive supplies....	3	-43	-17	..	-24	-3
Drugs and sundries....	3	15	-2	6	..	..
Dry goods.....	5	1	-15	-21	-30	-2
Grocery (full-line wholesalers not sponsoring groups).....	42	-7	1	-7	-13	-1
Hardware.....	6	-6	-7	-15	-9	-1
Industrial supplies.....	3	-25	4	..	-6	-5
Machinery equip. and supplies except elec....	3	-7	-24	..	..	..
Tobacco products.....	11	2	2	3	33	17
Wines and liquors.....	6	-23	19	..	3	-21
Wiring supplies, construction materials distributors.....	3	9	7	..	-33	-9

\*Preliminary data. Compiled by United States Bureau of Census.

†Indicates change of less than one-half of 1 percent.

‡Stocks at end of months

## INDEXES OF DEPARTMENT STORE SALES AND STOCKS

Daily average sales—(1935-39=100)

	Unadjusted*			Adjusted		
	Nov. 1949	Oct. 1949	Sept. 1949	Nov. 1948	Oct. 1949	Sept. 1949
11th Dist.....	442	414	404	472r	362	378
Dallas.....	405	372	385	432	335	347
Houston.....	483	417	451	544r	400	379

## STOCKS—(1935-39=100)

	Unadjusted*			Adjusted		
	Nov. 1949	Oct. 1949	Sept. 1949	Nov. 1948	Oct. 1949	Sept. 1949
11th Dist....	405	384	367	429r	369	370

\*Unadjusted for seasonal variation.

r-Revised.

Christmas buying in November produced few new developments in the recent pattern of sales of individual departments as compared with year-earlier levels. Sales of major appliances, up 20 percent over November 1948, continued to make one of the brightest showings of any of the departments. Lifted by an extremely strong demand for television sets, the radio-phonograph department in November registered sales gains over last year of 25 percent, following a 35-percent year-to-year increase in October. On the other hand, sales of women's and misses' coats, suits, and dresses continued to run substantially below the levels of a year ago. Moreover, men's clothing sales, which declined 11 percent, ran counter to their predominantly favorable showing of the past 6 months. Basement store sales, which during the first 6 months of the year showed consistent gains, fell markedly below sales of November a year ago.

The pattern of a high volume of credit sales and of a slowing in collections continued in November. Credit sales comprised 69 percent of total sales, the same proportion as the near-postwar high level of October, representing the highest credit-to-total sales ratio for any November since 1940. Collections on

instalment accounts continued the noticeably declining tendency of the past 6 months, amounting to only 15 percent of the outstanding accounts, as compared with 16 percent in the preceding month and 19 percent in November 1948. The ratio of collections to regular accounts, however, showing little change during 1949, averaged 52 percent. Unlike instalment collections, regular-account collections in relation to accounts outstanding continued to run substantially better than prewar levels, although down appreciably from the wartime high.

Department store stocks in November, continuing the upward trend of the previous 3 months, showed about a normal seasonal rise. At the end of November, stocks were only 4 percent less than on the same date of 1948, which is the smallest year-to-year decline since last March. Partially accounting for this narrowing gap were the tightening inventory controls at this time a year ago, which resulted in a less-than-seasonal increase in stocks during November 1948. In view of price declines, aggregate stocks are probably as large as, or larger than, a year earlier, although differences in the stock levels exist among various items. Consumer durable goods, which have been selling well during the past several months, have lower stocks, while the stocks of women's coats and dresses, sales of which have been off substantially throughout the year, are higher. With the delivery of Christmas merchandise, orders outstanding at the end of November were down 8 percent from a month earlier. In relation to year-earlier levels, the 9-percent decline in orders outstanding was the smallest for any month since July 1948.

Furniture stores in the District reported a rise in sales of 5 percent in November, following an 11-percent increase in October which initiated the delayed fall seasonal upswing in 1949. November sales were appreciably higher than the depressed level of November a year ago but fell noticeably below the unusually high volume of November 1947. Both cash sales and credit sales were up. While the ratio of credit sales to total sales has shown little change since last April, running around 90 percent, it was 6 percentage points higher than in November 1948. Furniture store stocks rose 5 percent for the third successive monthly increase. Nevertheless, a continued conservative inventory policy is reflected by the 14-percent decline in stocks from year-earlier levels.

Accounts receivable showed a small increase for the eighth consecutive month to reach a new peak 24 percent higher than in November a year earlier. On the other hand, collections were practically unchanged from October to November and were 2 percent below the November 1948 level, despite the large increase in accounts receivable during the past year.

**AGRICULTURE**

Nearly 5 weeks of uninterrupted open weather during November and early December permitted rapid completion of harvesting operations, and by mid-December most of the District's record cotton crop, valued at more than \$1,000,000,000, had been gathered. In the High Plains of Texas, gins operated at capacity 24 hours a day, and some seed cotton was stacked in fields as harvest of a bumper cotton crop neared completion. As of December 1, 1949, the Texas cotton crop was estimated at a record 5,900,000 bales and the yield per acre at 264 pounds of lint—the highest yield since 1894. Compared with last year and the 10-year (1938-47) average, all sections of the State showed increases in per acre yield and total production. This is the fifth cotton crop of 5,000,000 bales or more in the State's history. Lower grades and shorter staples of cotton continue to sell at prices above the loan rate, and movement into the government loan has been slower than a year ago. As of December 15, 1949, only 432,921 bales had been accepted for the loan in

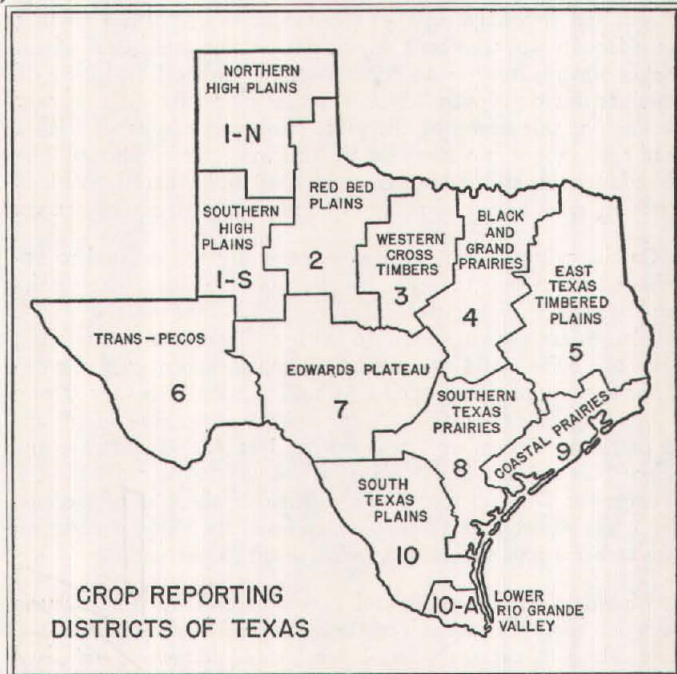
Texas and New Mexico and a total of 1,748,223 bales—including 335,479 bales in process—in the United States, compared with 500,756 and 3,389,790 bales, respectively, as of December 16, 1948. Ginnings in Texas prior to December 1 totaled 4,864,000 running bales, compared with 2,916,000 bales for the comparable period in 1948. An unprecedented number of 1,660,000 bales was ginned during the month of November.

TEXAS COTTON BY CROP REPORTING DISTRICTS

Crop reporting districts	Yield per harvested acre (pounds)			Production, 500 lb. gross weight bales (thousands)		
	Average 1938-47	1948	1949 indicated Dec. 1	Average 1938-47	1948	1949 indicated Dec. 1
1-N Northern High Plains.....	179	279	301	54	115	210
1-S Southern High Plains.....	192	139	282	447	558	1,500
2 Red Bed Plains.....	158	150	247	493	496	1,130
3 Western Cross Timbers.....	118	132	185	39	22	50
4 Black and Grand Prairies.....	158	160	215	714	773	1,085
5 East Texas Timbered Plains.....	143	164	205	293	226	540
6 Trans-Pecos.....	483	494	551	79	140	185
7 Edwards Plateau.....	126	81	205	39	20	75
8 Southern Texas Prairies.....	168	203	283	292	278	495
9 Coastal Prairies.....	213	282	284	120	170	195
10 & 10-A South Texas Plains and Lower Rio Grande Valley.....	212	269	373	152	355	625
State.....	170	176	264	2,722	3,153	5,900

SOURCE: United States Department of Agriculture.

The estimate of the United States cotton crop on December 1 was 16,034,000 bales, an increase of 510,000 bales over the November 1 figure. The improvement was general throughout the Cotton Belt, with only New Mexico showing a slight decline and estimates for Virginia and California remaining unchanged. Yield per acre, estimated at 285.8 pounds, compares with the record of 312.6 pounds in 1948. Total ginnings in the United States prior to December 1 were 13,976,000 bales, compared with 12,744,000 bales as of the same date in 1948.



Moisture supplies in the major wheat-producing areas of the District were depleted rapidly during the open weather in November and early December, resulting in some deterioration of the wheat crop, particularly in western counties of the Texas Panhandle. Light, general rains later in December checked the deterioration but were not sufficient to renew growth for additional pasture. Outside the Panhandle small grains are making

satisfactory growth, although additional rains would be beneficial. Seeding of the south Texas flax crop is making rapid progress under favorable conditions.

Throughout the commercial vegetable areas conditions continue favorable, and all mature crops are moving to market in volume. Good rains the second week in December improved materially the crop prospects in the Coastal Bend section and brought relief to the Raymondville area, where serious moisture deficiencies had threatened the onion crop. Harvest of citrus fruit continues active, with quality and size of grapefruit exceptionally good. The very small crop of grapefruit and a weak demand for oranges are reducing the movement of these citrus fruits to market from Texas, with total volume of marketings currently less than one-half the volume of a year ago.

## CASH RECEIPTS FROM FARM MARKETINGS

(In thousands of dollars)

State	October 1949			October 1948	Cumulative receipts Jan. 1 to Oct. 31	
	Crops	Livestock	Total	Total	1949	1948
Arizona.....	\$ 14,923	\$ 6,348	\$ 21,271	\$ 16,713	\$ 161,246	\$ 168,477
Louisiana.....	32,882	9,223	42,105	60,787	244,380	255,780
New Mexico.....	11,643	31,199	42,842	50,151	136,494	132,824
Oklahoma.....	33,078	30,892	63,970	118,583	501,675	557,100
Texas.....	192,527	74,212	266,739	276,482	1,544,335	1,574,849
Total.....	\$285,053	\$151,874	\$436,927	\$522,716	\$2,588,130	\$2,689,030

SOURCE: United States Department of Agriculture.

Ranges and pastures continue to provide an adequate supply of cured feed throughout most of the District, but wheat pastures have failed to provide as much feed as had been anticipated. As a result, the demand for stockers in northwest Texas has eased considerably, and some cattle are being marketed. In other areas small grains, rescue grass, and clovers responded to light rains during mid-December and are furnishing adequate feed in central, southern, and eastern Texas counties. Hay, grains, and roughage supplies for winter supplemental feeding are adequate to abundant in all areas. The condition of all ranges was reported at 84 percent on December 1, a decline of 5 points during November or 3 points more than the average decline for this season of the year. However, compared with a year ago, ranges and pastures are in far better condition. The abundant rains throughout most of 1949 and generally reduced stocking rates have permitted rapid recovery of native grasses.

Cattle, calves, sheep, and lambs generally are in good to excellent condition as they go into the winter, although not making the rapid gains registered during the fall months. Ewes with fall lambs are showing some shrinkage. Ranchmen are holding back top heifers and ewe lambs for replacements, and the demand for stocker cows, spring heifers, and lambs is very strong as breeding herds and flocks are being expanded. The condition of cattle on December 1 was reported at 87 percent, 1 point below November 1 and 5 points above the 10-year (1938-47) average for December 1. The condition of sheep as of December 1 was reported at 87 percent, compared with 89 percent on November 1 and the 10-year average of 83 percent.

Abundant feed supplies and favorable weather for pastures in most areas encouraged cattle and lamb feeding operations. The volume of cattle feeding in the United States was estimated by the Bureau of Agricultural Economics on December 1, 1949, to be about the same as, or slightly larger than, a year earlier. The total July-November movement of feeder cattle into the Corn Belt was a record, although the movement during November was substantially lower than the very heavy volume during September and October. The greatly reduced numbers of sheep and lambs throughout the country have restricted the number available for feeding, and the volume of lamb feeding this season is expected to be smaller than a year ago. The proportion

of the lambs being finished on wheat pasture this season is larger than in 1948, with this type of feeding particularly heavy in Kansas, where about 500,000 lambs are reported to be on pasture.

Total receipts of livestock at the Fort Worth and San Antonio markets during November were 2 percent above October 1949 but 33 percent below November 1948. The seasonal increase over October was due to a 24-percent increase in calves and a 39-percent increase in hogs, which more than offset declines of 28 percent and 6 percent in sheep and cattle, respectively. All classes of livestock shared in the decline from a year ago, with sheep registering a 61-percent decline.

## LIVESTOCK RECEIPTS

(Number)

Class	Fort Worth market			San Antonio market		
	Nov. 1949	Nov. 1948	October 1949	Nov. 1949	Nov. 1948	October 1949
Cattle.....	57,720	69,108	65,417	34,886	38,714	33,281
Calves.....	46,307	54,056	34,831	24,369	34,664	22,178
Hogs.....	62,950	86,995	45,008	8,784	7,452	6,577
Sheep.....	33,164	87,324	43,069	21,894	52,267	33,474

## TOP LIVESTOCK PRICES

(Dollars per hundredweight)

Class	Fort Worth market			San Antonio market		
	Nov. 1949	Nov. 1948	October 1949	Nov. 1949	Nov. 1948	October 1949
Slaughter steers.....	\$28.00	\$31.00	\$27.00	\$21.50	\$27.50	\$21.50
Stocker steers.....	23.00	25.50	22.25	17.00	20.00	17.00
Slaughter cows.....	17.50	21.00	17.00	17.00	20.00	17.00
Slaughter heifers and yearlings.....	28.00	30.00	27.00	25.00	25.00	20.50
Slaughter calves.....	24.50	26.00	25.00	23.25	25.25	22.50
Stocker calves.....	24.50	26.50	24.50	23.50	26.00	23.00
Slaughter lambs.....	23.75	25.00	23.50	22.50	21.50	22.00
Hogs.....	17.50	26.00	20.25	17.50	25.00	20.25

Prices received by Texas farmers as of November 15 averaged about 2 percent above those at mid-October, according to the Bureau of Agricultural Economics. The increase of 6 points in the Texas price index halted a declining trend evident since March 1949. The advance in the index for Texas, which was in contrast with a slight decline for the United States, was due primarily to substantial price increases for early season truck crops and citrus fruits. Grains, oil-bearing crops, dairy products, and poultry also made slight advances, while cotton lint, sweet potatoes, cowpeas, hogs, and eggs declined from the mid-October level.

Reports from spot markets since mid-November indicate that this generally upward trend has continued to mid-December, with prices for cotton, wheat, grain sorghums, oats, corn, and slaughter calves showing increases, while only hog and slaughter lamb prices declined appreciably.

## FINANCE

Total loans and loans for commercial, industrial, and agricultural purposes at selected member banks in leading cities of the District increased during the 5-week period ended December 14, with advances being reported for each week of the period. Although minor fluctuations occurred in real-estate loans, loans for the purpose of carrying securities, and in the category "all other" loans, the increase in commercial, industrial, and agricultural loans amounting to about \$48,200,000 accounted for all of the increase in total loans. In previous issues of this Review attention has been called to the continuous expansion in the volume of loans for business, industrial, and agricultural purposes since mid-August. To some extent, that expansion can be explained by an increase in business purchases to readjust inventory positions and by seasonal developments with respect to financing agricultural production and general merchandis-



ing stocks. If the usual seasonal pattern is followed with respect to commercial, industrial, and agricultural loans at selected member banks in these leading cities, the expansion may be expected to come to a temporary end within a few weeks and be replaced by a gradual decline as businesses tend to liquidate their indebtedness.

Investments in United States Government obligations at these selected member banks rose between November 9 and December 14 from \$1,228,000,000 to \$1,247,000,000 as holdings of Treasury bills increased \$30,000,000 and holdings of Treasury notes rose by \$1,450,000. Partially offsetting declines were reported for certificates of indebtedness and Government bonds. This net increase in investments, together with the steady increase in the volume of loans, testifies to the comparatively easy position of these banks which has enabled them not only to meet the rising loan demand but also to add to their investment portfolios.

A substantial increase in demand deposits, exclusive of Government and interbank deposits, amounting to about \$80,312,000 was reported for the 5-week period and raised the total of this class of deposits to about \$2,276,000,000. Other major categories of deposits, such as interbank demand deposits and time deposits, also rose during the period, while United States Government deposits showed only a very minor decline.

On December 14 most of the major asset and liability accounts of the selected weekly reporting member banks in this District were at or near peak levels for the year. For instance, total resources of these banks amounted to \$3,712,404,000, or about \$147,500,000 more than the comparable figure for last year, as loans, total investments, and balances with domestic banks showed substantial increases. The largest decline during the period occurred in the member bank reserves with the Federal Reserve Bank and was, of course, the consequence of the successive reductions in reserve requirements which occurred during the year. In fact, it was largely because of these reductions in reserve requirements that the banks were able to increase their investments in short-term Government obligations at a time when loan demand was expanding.

country banks. Gross demand deposits and time deposits as reported during November, however, were about \$74,000,000 and \$43,000,000 larger, respectively, than the amounts reported during the same month in 1948. It will be recalled that during the first half of 1949 readjustments in business activity resulted in a gradually declining trend which was reflected in a decline in deposits at the District's member banks. During the second half of the year, however, the recovery in business activity and the significance of agriculture as an income producer in this District were of more than sufficient strength to regain the losses of the first 6 months, with the consequence that indications at present point toward a somewhat higher total of deposits for the District's member banks at the end of 1949 than was reported a year earlier.

GROSS DEMAND AND TIME DEPOSITS OF MEMBER BANKS

Date	Eleventh Federal Reserve District (Averages of daily figures. In thousands of dollars)					
	Combined total		Reserve city banks		Country banks	
	Gross demand	Time	Gross demand	Time	Gross demand	Time
November 1947.....	\$5,288,063	\$543,685	\$2,524,890	\$337,324	\$2,761,173	\$206,361
November 1948.....	5,407,874	584,125	2,584,489	379,905	2,823,385	214,220
July 1949.....	4,977,743	629,655	2,417,780	402,930	2,559,963	226,725
August 1949.....	5,020,379	635,371	2,443,350	410,782	2,577,029	224,589
September 1949.....	5,146,942	648,045	2,503,549	421,452	2,643,393	226,593
October 1949.....	5,278,971	652,043	2,573,396	421,811	2,705,275	230,232
November 1949.....	5,432,103	636,996	2,666,217	408,479	2,815,886	228,517

SAVINGS DEPOSITS

City	Number of reporting banks	November 30, 1949		Percentage change in savings deposits from	
		Number of savings depositors	Amount of savings deposits	Nov. 30, 1948	Oct. 31, 1949
		Louisiana:			
Shreveport.....	3	43,427	\$ 24,901,517	-0.2	-0.8
Texas:					
Beaumont.....	3	12,003	6,077,904	-1.6	-0.5
Dallas.....	8	142,475	77,552,715	-0.5	-0.3
El Paso.....	2	31,784	22,358,761	0.8	0.3
Fort Worth.....	4	43,997	35,484,972	3.2	0
Galveston.....	4	22,276	21,142,996	-1.9	0.2
Houston.....	8	94,776	74,336,600	1.9	-0.1
Lubbock.....	2	1,851	3,318,872	-7.7	1.8
Port Arthur.....	2	5,800	4,500,574	-5.9	-0.3
San Antonio.....	5	40,648	43,741,377	-3.3	0.3
Waco.....	3	9,825	10,174,399	2.4	0.9
Wichita Falls.....	3	7,614	4,511,795	-0.3	-2.3
All other.....	55	64,520	54,333,773	1.6	0.2
Total.....	102	520,996	\$382,936,255	0.2	-0.04

CONDITION STATISTICS OF WEEKLY REPORTING MEMBER BANKS IN LEADING CITIES — Eleventh Federal Reserve District

(In thousands of dollars)

Item	Dec. 14, 1949	Dec. 15, 1948	Nov. 9, 1949
Total loans and investments.....	\$2,545,219	\$2,336,438	\$2,479,392
Total loans—net†.....	1,156,714	1,115,528	1,111,155
Total loans—gross.....	1,167,777	1,121,849	1,120,900
Commercial, industrial, and agricultural loans.....	819,561	789,214	771,347
Loans to brokers and dealers in securities.....	6,658	6,754	5,999
Other loans for purchasing or carrying securities.....	46,932	57,972	48,508
Real-estate loans.....	90,486	87,732	88,277
Loans to banks.....	79	86	69
All other loans.....	204,061	181,091	206,765
Total investments.....	1,377,442	1,214,589	1,358,432
U. S. Treasury bills.....	141,132	64,047	111,038
U. S. Treasury certificates of indebtedness.....	347,299	244,079	348,774
U. S. Treasury notes.....	45,452	66,507	44,001
U. S. Government bonds (inc. gtd. obligations).....	713,503	719,187	724,180
Other securities.....	130,056	120,769	130,389
Reserves with Federal Reserve Bank.....	472,558	571,568	446,764
Balances with domestic banks.....	366,029	329,501	311,024
Demand deposits—adjusted*.....	2,029,209	2,015,334	1,946,248
Time deposits except Government.....	445,315	404,032†	432,331
United States Government deposits.....	47,336	33,209‡	49,293
Interbank demand deposits.....	717,643	650,038	665,534
Borrowings from Federal Reserve Bank.....	0	0	0

\* Includes all demand deposits other than interbank and United States Government, less cash items reported as on hand or in process of collection.  
† After deductions for reserves and unallocated charge-offs.  
‡ Revised.

Gross demand deposits of all member banks in the District followed a similar trend during November to that which was reported by the selected banks in leading cities, although time deposits at the District's member banks declined during the month, with decreases occurring at the Reserve city banks and

Relatively little change was reported in bank debits of reporting banks in 24 cities in the District and in the annual rate of turnover of deposits of these banks during November. The change in bank debits was negligible as contrasted with the figures reported for October and amounted only to a decline of 2 percent from figures of November a year ago. Likewise, the annual rate of turnover during November was slightly less than in the preceding month—12.5 as compared with 12.7—but more significantly lower than the 13.1 figure reported in November a year ago. Largest increases in bank debits were reported from Lubbock and from Roswell, New Mexico; Galveston reported the extreme decline of approximately 14 percent.

Principal changes in the condition of the Federal Reserve Bank of Dallas during the month ended December 15 include a slight decline in gold certificate reserves, an increase of about \$16,000,000 in holdings of United States Government securities and total earning assets, and an increase in member bank reserve deposits, reflecting the growth of demand deposits at the District's member banks. Notes of this bank in actual circulation continued to rise in response to strong seasonal requirements and on December 15 totaled \$645,591,000, about \$8,000,000 more than the amount reported outstanding on November 15 and approximately \$17,000,000 above the figure reported on the comparable date in December 1948.

BANK DEBITS, END-OF-MONTH DEPOSITS, AND ANNUAL RATE OF TURNOVER OF DEPOSITS

(Amounts in thousands of dollars)

City	Debits*			End-of-month deposits* Nov. 30, 1949	Annual rate of turnover		
	November 1949	Pctg. change over			Nov. 1949	Nov. 1948	Oct. 1949
		Nov. 1948	Oct. 1949				
Arizona:							
Tucson.....	\$ 49,852	-16	-2	\$ 77,483	7.8	8.3	8.0
Louisiana:							
Monroe.....	39,630	3	-5	42,321	11.2	11.0	11.6
Shreveport.....	127,794	-11	-3	171,251	9.1	10.3	9.5
New Mexico:							
Roswell.....	17,177	2	17	20,022	10.6	10.2	9.7
Texas:							
Abilene.....	37,914	4	-1	39,172	11.9	10.3	12.2
Amarillo.....	98,517	5	-1	93,062	12.8	13.2	13.4
Austin.....	109,578	3	-3	107,009	11.9	12.6	12.4
Beaumont.....	96,926	-6	5	91,662	12.7	12.1	12.2
Corpus Christi.....	74,134	-2	-7	80,215	11.2	11.3	12.1
Corsicana.....	12,897	16	1	20,793	7.6	6.5	7.8
Dallas.....	1,038,680	-4	-2	796,065	15.7	17.4	16.2
El Paso.....	141,776	2	-1	120,445	14.3	14.6	14.5
Fort Worth.....	329,431	-3	1	308,639	12.8	14.0	13.1
Galveston.....	65,036	-3	-14	94,101	8.3	8.3	9.6
Houston.....	1,047,407	-3	2	959,559	13.3	14.3	13.3
Laredo.....	15,209	-3	3	21,710	8.5	8.5	8.5
Lubbock.....	91,243	15	30	68,512	16.3	14.0	13.2
Port Arthur.....	32,171	-5	-6	39,771	9.8	10.4	10.8
San Angelo.....	33,244	7	-1	40,350	10.0	9.2	10.2
San Antonio.....	245,631	5	4	320,978	9.2	8.8	9.8
Texarkana.....	15,365	-5	-5	23,934	7.9	8.5	8.6
Tyler.....	42,662	4	3	50,530	10.2	9.1	10.0
Waco.....	56,003	6	8	70,550	9.6	9.5	8.9
Wichita Falls.....	56,591	-1	2	83,981	8.2	8.3	8.0
Total—24 cities.....	\$3,875,878	-2	-1	\$3,742,115	12.5	13.1	12.7

† Indicates change of less than one-half of 1 percent.  
 \* Debits to deposit accounts except interbank accounts.  
 \* Demand and time deposits at the end of the month include certified and officers' checks outstanding but exclude deposits to the credit of banks.  
 † This figure includes only one bank in Texarkana, Texas. Total debits for all banks in Texarkana, Texas-Arkansas, including two banks located in the Eighth District, amounted to \$25,812.

CRUDE OIL PRODUCTION

(Barrels)

Area	November 1949		Increase or decrease in daily average production from	
	Total production	Daily avg. production	Nov. 1948	October 1949
Texas:				
District				
1 South Central.....	818,300	27,277	-388	-170
2 Middle Gulf.....	3,994,200	133,140	-44,835	5,119
3 Upper Gulf.....	12,474,500	415,817	-88,413	14,802
4 Lower Gulf.....	6,158,750	205,292	-49,478	7,789
5 East Central.....	1,125,400	37,513	-14,282	1,879
6 Northeast.....	10,978,300	365,942	-55,973	22,620
7a North Central.....	8,104,250	270,141	-26,874	17,646
Other fields.....	2,874,050	95,801	-20,099	4,974
7b North Central.....	1,892,750	63,092	4,892	39
7c West Central.....	1,648,050	54,935	6,040	3,140
8 West.....	19,187,300	639,577	-107,023	55,346
9 North.....	4,307,250	143,575	955	4,077
10 Panhandle.....	2,768,950	92,298	3,578	177
Total Texas.....	65,353,750	2,178,458	-344,927	114,818
New Mexico.....	3,919,700	130,657	-3,578	5,455
North Louisiana.....	3,767,500	125,583	11,793	2,923
Total Eleventh District.....	73,040,950	2,434,698	-336,712	123,196
Outside Eleventh District.....	82,177,200	2,739,240	-120,005	12,334
United States.....	155,218,150	5,173,938	-456,717	135,530

SOURCE: Estimated from American Petroleum Institute weekly reports.

Daily average production of crude petroleum in the United States at mid-December amounted to 4,934,000 barrels, representing decreases of 240,000 barrels from the November rate and nearly 700,000 barrels from the rate in December 1948. In recent months crude oil runs to refinery stills have been at a level about 300,000 barrels daily below the level at this season in 1948.

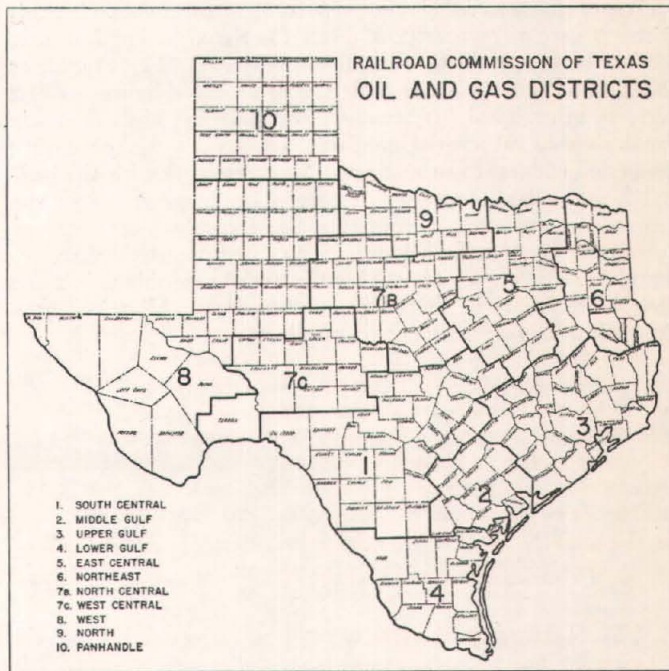
CONDITION OF THE FEDERAL RESERVE BANK OF DALLAS  
(In thousands of dollars)

Item	Dec. 15, 1949	Dec. 15, 1948	Nov. 15, 1949
Total gold certificate reserves.....	\$991,163	\$ 640,148	\$701,908
Discounts for member banks.....	0	0	20
Foreign loans on gold.....	2,468	6,667	2,926
U. S. Government securities.....	785,904	1,042,036	769,666
Total earning assets.....	788,372	1,048,703	772,612
Member bank reserve deposits.....	813,273	967,657	793,084
Federal Reserve notes in actual circulation.....	645,591	628,738	637,414

On December 5 the Secretary of the Treasury announced that holders of the 2-percent Treasury bonds of 1949-51, the 3 1/8-percent Treasury bonds of 1949-52, and the 2 1/2-percent Treasury bonds of 1949-53—all called for redemption on December 15—would be offered a 1 3/8-percent Treasury note maturing in 4 1/4 years in exchange. It was also announced that the holders of Treasury certificates of indebtedness maturing December 15 would be offered this same exchange privilege. On December 15 the Secretary of the Treasury reported that total exchanges of these issues amounted to \$4,672,101,000, as compared with total maturities of \$4,894,000,000. The Secretary of the Treasury also announced early in December that holders of the 1 1/4-percent certificates of indebtedness maturing on January 1, 1950, would be offered a 1 1/8-percent 12-month certificate in exchange.

INDUSTRY

The national demand for petroleum products has been increasing gradually since the midyear low. During the 5 weeks ended December 10, the demand for the four leading petroleum products was 326,000 barrels daily above the level in the corresponding period a year earlier and about 900,000 barrels per day above the June low, reflecting the recent sharp increase in the demand for kerosene and fuel oils and the sustained demand for gasoline. While the temperatures in the heating oil area during the first 10 days of December averaged much colder this season than last, the warmer weather earlier this fall accounts for the fact that, in terms of degree-days, the 1949-50 season through December 10 averaged nearly 4 percent warmer than the 1948-49 season.



Crude petroleum production in the Eleventh District increased by 123,000 barrels daily in November, reaching a rate of 2,435,000 barrels per day. Due to the sharp reduction in Texas allowables, District production fell to around 2,270,000 barrels per day at mid-December, at which level it was still 220,000 barrels daily higher than the 1949 low point reached in July but 490,000 barrels daily below the near-record rate in December 1948. The decrease in this District from November 1949 and from December 1948 accounted for the major proportion of the similar changes in petroleum production in the Nation. The reduction of Texas allowable production for January by 83,000 barrels per day is about half offset by production allowed from new wells, so that January production in the District should decline only moderately.

Stocks of crude oil, after declining for several months, increased during November by 5,057,000 barrels in the Eleventh District and 6,420,000 barrels in the Nation, these increases amounting, respectively, to 4 percent and 3 percent. Stocks of petroleum products have been changing in line with seasonal patterns, with gasoline stocks beginning to move upward from their seasonal low registered in October and kerosene and gas and distillate fuel oil stocks commencing to decline from their seasonal high at the end of October. Residual fuel oil stocks, after changing but little for several months, declined by 5 percent in November. The result of these diverse movements was a relatively small change in the total stocks of the four major products during November.

As a result of the colder weather during early December, as well as the reduction of the output, prices of both home heating oil and residual fuel oil have firmed.

BUILDING PERMITS

City	November 1949		Percentage change valuation from Nov. 1948		Jan. 1 to Nov. 30, 1949		Percentage change valuation from 1948	
	Number	Valuation	Nov. 1948	Oct. 1949	Number	Valuation	from 1948	from 1948
Louisiana:								
Shreveport.....	337	\$ 992,147	54	- 38	3,814	\$ 20,665,969	- 21	
Texas:								
Abilene.....	130	592,005	106	13	1,233	6,083,795	26	
Amarillo.....	209	1,093,211	113	- 22	2,930	15,348,325	53	
Austin.....	252	1,686,905	105	- 27	2,678	20,669,143	- 1	
Beaumont.....	359	1,069,938	20	6	3,924	9,460,912	4	
Corpus Christi...	298	1,054,387	- 14	52	3,142	13,724,630	- 10	
Dallas.....	1,647	7,833,621	- 4	58	16,014	69,760,142	- 18	
El Paso.....	316	1,939,515	356	- 27	3,177	13,201,954	22	
Fort Worth.....	782	2,956,049	9	53	7,377	26,361,574	- 2	
Galveston.....	118	175,110	28	- 42	1,719	8,247,224	136	
Houston.....	535	4,325,137	- 44	- 60	6,646	77,475,796	- 16	
Lubbock.....	240	3,787,947	134	204	2,305	13,410,184	- 1	
Port Arthur.....	189	910,429	170	295	1,930	4,400,833	43	
San Antonio.....	2,027	4,904,989	85	31	14,203	33,703,222	3	
Waco.....	210	1,131,085	119	4	1,940	10,436,787	- 4	
Wichita Falls....	96	301,330	37	- 3	1,044	4,874,621	35	
Total.....	7,745	\$34,753,805	21	- 1	74,076	\$347,855,611	- 6	

Significant developments in the construction situation in the Eleventh District during November included the contraseasonal increase in nonresidential construction contract awards, which had been lagging during recent months, and the moderateness of the seasonal decline of total awards. Residential awards during November totaled \$28,000,000, or within 22 percent of the very high level of the previous 2 months and 28 percent more than during November 1948. Apartment housing projects and low-cost housing continued to account for a large part of these residential awards. Housing for military personnel near army and air force bases also contributed to the high level of residential activity. The rise in nonresidential awards was accounted for by some pipe-line projects in Louisiana.

VALUE OF CONSTRUCTION CONTRACTS AWARDED

(In thousands of dollars)

	November		October		January 1 to November 30	
	1949	1948	1949	1948	1949	1948
Eleventh District—total...	\$ 65,618	\$ 54,074	\$ 65,745	\$ 680,930	\$ 609,538	
Residential.....	27,780	21,693	35,641	267,925	234,356	
All other.....	37,838	32,381	30,104	419,005	465,182	
United States—total.....	957,761	611,216	1,061,751	9,413,420	8,735,595	
Residential.....	435,235	264,033	500,702	3,803,535	3,351,269	
All other.....	522,526	347,183	561,049	5,609,885	5,384,326	

\* 37 states east of the Rocky Mountains.

SOURCE: F. W. Dodge Corporation.

The cement industry continues to reflect the high level of construction activity. Cement production in Texas during October was 11 percent higher than during the corresponding month of 1948. During the first 10 months of 1949, cement production in the State was 10 percent higher than in the comparable period of the previous year. Cement shipments have

likewise been higher than a year ago. Stocks of cement at Texas mills failed to increase during October and, though 56 percent higher than a year earlier, were considerably below prewar levels.

CEMENT

(In thousands of barrels)

	October		September 1949	January-October	
	1949	1948		1949	1948
Texas:					
Production.....	1,307	1,178	1,315	12,352	11,225
Shipments.....	1,308	1,221	1,426	12,242	11,400
Stocks, end of month....	538	344	539		
United States:					
Production.....	19,057	19,349	19,181r	174,843	169,564
Shipments.....	21,277	20,324	22,763r	177,294	173,478
Stocks, end of month. .	8,577	6,094	10,799		

r—Revised.

SOURCE: United States Bureau of Mines.

The Texas cottonseed products industry registered greater gains than the Nation during the first 3 months of the 1949-50 season, with cottonseed receipts at mills in the State being 30 percent higher than a year earlier, crushings 28 percent higher, and oil production 34 percent higher. The record Texas cotton crop—approximately 87 percent larger than last year—should yield a record 2,000,000 tons of seed in addition to the seed retained by farmers. Receipts at mills during the first 3 months of the 1949-50 season amounted to about 49 percent of this season's estimated total. Normally a somewhat higher proportion of the season's total would reach the mills during this period, but the maturity of the crop was later than usual in some areas and difficulty was experienced in picking and ginning cotton, as well as in storing and handling the large volume of seed. A substantial fraction of the seed produced has been bought by the Production and Marketing Administration to be held for gradual movement to the oil mills. Much of this seed has been stored in the open, particularly in West Texas.

DOMESTIC CONSUMPTION AND STOCKS OF COTTON

(Bales)

	November		October 1949	August 1 to November 30	
	1949	1948		This season	Last season
Consumption at:					
Texas mills.....	13,525	11,979	13,574	52,234	51,385
United States mills....	771,833	685,881	725,602	2,871,526	2,850,043
U. S. Stocks—end of month:					
In consuming estab'm'ts.	1,455,149	1,635,081	1,130,457		
Public stg. & compresses	10,516,430	8,458,339	8,365,773		

COTTONSEED AND COTTONSEED PRODUCTS

October 1949

	Texas		United States	
	August 1 to October 31 This season	Last season	August 1 to October 31 This season	Last season
Cottonseed received at mills (tons).....	973,105	750,336	2,983,346	3,196,661
Cottonseed crushed (tons).....	491,833	382,812	1,541,024	1,414,304
Cottonseed on hand October 31 (tons)...	555,132	431,718	1,574,820	1,871,377
Production of products:				
Crude oil (thousand pounds).....	152,595	114,208	491,783	438,531
Cake and meal (tons).....	231,241	183,231	681,574	640,767
Hulls (tons).....	111,721	85,151	363,059	322,680
Linters (running bales).....	149,071	128,428	472,065	444,187
Stocks on hand October 31:				
Crude oil (thousand pounds).....	17,574	13,736	62,162	42,795
Cake and meal (tons).....	23,953	30,442	116,912	80,246
Hulls (tons).....	41,583	24,671	124,294	42,795
Linters (running bales).....	44,309	68,600	186,970	170,842

SOURCE: United States Bureau of Census.

The price of cottonseed in wagon lots in Texas has averaged about \$43.50 during recent weeks, which compares with an average price of about \$75.00 per ton during the corresponding period of 1948. The lower level of prices this season reflects the effect of the increased supply of cottonseed and the gradual easing of the world fats and oils situation.

United States production of fats and oils in 1949 is estimated at a new high of 11,600,000,000 pounds, including the oil

equivalent of soybeans and peanuts exported for crushing abroad. Consumption in 1949 was smaller than a year earlier, reflecting the decline in industrial activity. Exports more than doubled, while imports were small. With domestic output expected to continue large in 1950, prices of most fats and oils are likely to remain low compared to prices in other postwar years. Total production of edible fats and oils during the October 1949-September 1950 season has been forecast at about 8,800,000,000 pounds, or 1 percent larger than during the previous season. While butter, lard, and other edible animal fat production will rise to about 4,800,000,000 pounds, the production of edible vegetable oils is expected to decline about 9 percent to around 4,000,000,000 pounds, due to smaller soybean and peanut crops. Cottonseed oil production in the Nation should rise about 8 percent as a result of the larger supply of seed from the 16,000,000-bale cotton crop, the largest in 12 years.

The cotton textile industry in November continued the rise in activity which commenced last summer. During the first 4 months of the 1949-50 season, cotton consumption in both Texas and the Nation slightly exceeded that during the corresponding period of the 1948-49 season. In Texas, the increase reflects, in part, the gradual approach to normal operations at the McKinney mill, which reopened at midyear after having been shut down because of tornado damage a year earlier. Exports of cotton cloth from the United States during the first 10 months of 1949 were 1 percent above those of the same period of the previous year, although exports during the July-October period fell 27 percent below the average for the first half of 1949 and 19 percent below the 1948 average. This decline in foreign shipments since midyear has partially counterbalanced the effect of the sharp upturn in domestic demand.