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SMALLER FERTILIZER SUPPLY

The 1968-69 fiscal year marks the first downturn in supplies of primary plant nutrients in the United States since the end of World War II. (The fertilizer year extends from July 1 through June 30.) Thus far in fiscal 1969, supplies are about 5 percent less than in the same period last year. Changes in trends of several variables have occurred over the last few years.

Producers of the primary plant nutrients nitrogen, phosphate, and potash — adjusted production downward at the beginning of the present fiscal year because consumption did not reach market expectations in the spring of 1968. At that time, a short spring and more-than-average precipitation adversely affected consumption of the basic nutrients.

U.S. consumption of basic nutrients this spring has been slowed somewhat by wet weather throughout most of the Nation. Some analysts feel that domestic fertilizer consumption this year will not surpass significantly the 3-percent increase in fiscal 1968, which was well below gains achieved in the two previous years.

Inventory patterns suggest that the fertilizer industry anticipates that the rise in demand for plant nutrients in the spring of 1969 will be below last year's gain. Production of nitrogenous and phosphatic materials during the first half of 1969 were about the same as the corresponding period a year earlier, and shipments of potassic materials lagged behind the similar period in fiscal 1968. According to the Agricultural Stabilization and Conservation Service, these production and shipment patterns reflect the industry's efforts to bring supplies more nearly in line with market demand.

In addition to an expected reduced rate of expansion in domestic markets, total exports of fertilizer material in fiscal 1969 may show little change from the previous year. Shipments to countries in which the Agency for International Development has active agricultural programs make up a large percentage of total plant nutrients exported by the United States. AID countries accounted for 59 percent of total U.S. exports of plant nutrients in fiscal 1968, including 56 percent of the nitrogen, 81 percent of the phosphate, and 28 percent of the potash shipped last year. Total AID shipments are expected to be smaller in fiscal 1969, according to the ASCS. This year, however, increases are expected in exports of phosphate rock, anhydrous ammonia, urea, ammonium nitrate, potassium chloride, potassium sulphate, and concentrated superphosphate.

Supply and consumption patterns for each of the primary nutrients have varied considerably, and indications are that these patterns are continuing to show different trends in fiscal 1969. Each of the three primary nutrients is concentrated in a basically different region of production and consumption, and a late spring or a high level of precipitation in a specific area can impact heavily upon the market for one particular nutrient. The supply situation for each of the major nutrients is discussed below.

Nitrogen

Domestic supplies of nitrogen for fertilizer use in fiscal 1969 are expected to total 6,949,000 tons, or 1 percent above the actual supply in the previous year, according to the ASCS. The supply from domestic sources likely will increase,

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but larger exports this year probably will offset the gains in the U.S. supply.

A large proportion of the additional domestic supply of nitrogen in fiscal 1969 is the result of high inventories at the beginning of the year. Inventories of anhydrous ammonia (the basic nitrogen source) were especially large at the beginning of this fiscal year. Despite these large inventories, production of anhydrous ammonia during the first 6 months of this fertilizer year was about equal to that for the same period last year. Trade sources expect production to increase during the last 6 months of fiscal 1969.

Because of the buildup in anhydrous ammonia supplies last year, production capacity in the United States has declined slightly since the end of fiscal 1968. Currently, operating anhydrous ammonia plants are estimated to have effective capacity of about 16 million tons, down from the 18 million tons of capacity in January 1968.

According to the ASCS, a number of the small anhydrous ammonia plants and some of the older multi-train plants have shut down, or tentative plans are to shut them down by the end of the 1969 fertilizer year. The current operating capacity includes 26 modern plants, each of which is capable of producing 600 or more tons of anhydrous ammonia per day. These plants represent 53 percent of total U.S. capacity.

The ASCS reports that the anhydrous ammonia plants under construction at three new locations, together with expansions at four existing locations, will add nearly 2.4 million tons to present U.S. capacity. However, the added capacity may be offset somewhat if more small plants and multi-train plants continue to close down.

The shift to larger anhydrous ammonia plants has been stimulated by the entry of major oil and gas companies into the fertilizer industry. According to the ASCS, oil and gas companies have financial interests in about 43 percent of current plant capacity.

The quantity of nitrogenous material sold in fiscal 1969 naturally will depend upon consumption during the spring of this year. After two consecutive years of overcapacity, increasing inventories, unfavorable market conditions, and relatively low prices, producers have had high hopes for a better market this fiscal year. The industry has solved some of its problems this year by reducing excess capacity and inventories. Up to this time, however, the weather has not been favorable for nitrogen applications. Generally, nitrogen is applied in early spring, and rains at that time will cancel application of the fertilizer.

In general, market analysts foresee little increase in the domestic consumption of ammonia and nitrogen products. However, adjustments in production have allowed producers better prices relative to a year ago.

Phosphates

Producers of phosphates have also adjusted production downward. According to the ASCS, supplies of phosphatic fertilizers for domestic use are expected to total 4,028,000 tons in fiscal 1969, or 8 percent less than in 1967-68. Inventories have declined nearly one-third since January 1968.

Because of the better balance between supply and demand this year, prices of most phosphatic materials have increased since July 1, 1968. Some market analysts believe that the supply-demand situation for phosphates has improved much faster than has that for the other two primary nutrients, and the industry may be moving toward a better balanced market as compared with the two previous seasons. According to early estimates, higher prices have resulted entirely from adjustments on the production side of the market. There is no indication that the demand for most phosphatic materials has increased substantially in fiscal 1969.

Potash

The ASCS reports that net domestic supplies of potash in 1968-69 are expected to total 3,834,000 tons, or about 9 percent less than last year. Imports are anticipated to be down 5 percent from a year earlier, but exports may be about 10 percent greater.

During the first half of fiscal 1969, shipments of potassic materials lagged behind the corresponding period a year earlier. Despite reduced shipments, prices for most potassic materials have not made the gains noted for the other primary nutrients.

At the beginning of this fiscal year, some market observers were forecasting a 6-percent jump in potash consumption in 1968-69. At the present time, however, such a gain appears doubtful.

A Hard-Earned Lesson

Regardless of how successful the fertilizer industry is in the current fiscal year, much can be learned from the two previous years. The basic conclusion drawn from the experience during the 1967-68 period is that the rate of increase in fertilizer production was based on estimates of longrun demand. In the short-run, however, fertilizer application is affected by such minute things as raindrops and the number of dollar bills in farm income.

Farm Income Affected by Inflation

Southwestern farmers had larger realized net farm income in 1968 than in the previous year, but these farmers, along with other workers in the United States, felt the effects of inflation. On the national level, realized net farm income in 1968, at \$14.9 billion, was up about \$600 million in current dollars from a year earlier; however, if prices paid by farmers are accounted for, the constant-dollar gain amounted to only \$100 million.

Last year, realized net farm income rose at a faster rate in the five southwestern states of Arizona, Louisiana, New Mexico, Oklahoma, and Texas than the 4-percent gain in the Nation as a whole. Increases in realized net income per farm ranged from 1 percent in Oklahoma to 11 percent in Texas. Both Louisiana and New Mexico registered gains in realized net farm income which were greater than the national average. Part of the relatively small increase in net income per farm in Oklahoma resulted from a slight decline in the number of farms last year.



SOURCE: U.S. Department of Agriculture.

The outlook for farm income in the Southwest in 1969 is dependent upon the national agricultural situation. Realized gross farm income is expected to rise slightly because of an increased volume of marketings. According to the U.S. Department of Agriculture, a small gain in direct Government payments is expected, and little change is anticipated in average prices received by farmers.

It is quite possible that gains in production expenses during 1969 will exceed increases in gross farm income, reports the Economic Research Service. Accordingly, realized gross farm income in the United States may fall a little short of the \$14.9 billion received during 1968. Average net income per farm probably will remain unchanged.

(In dollars)						
Area	1966	1967	1968	1966	1967	1968
Arizona Louisiana New Mexico Oklahoma Texas	87,566 10,345 23,417 10,631 16,078	94,728 12,146 25,590 10,442 15,680	101,777 13,400 27,928 10,917 17,020	23,547 4,120 8,550 3,456 5,817	25,850 4,995 8,182 2,872 4,701	27,147 5,467 9,032 2,907 5,216
United States	15,314	15,593	16,617	5,000	4,526	4,863

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SOURCE: U.S. Department of Agriculture.

Farm income in 1969 likely will vary by regions, and some areas will fare better than others. Because of the present surplus conditions of many crops, regions which depend heavily upon income from livestock and livestock products, especially cattle, probably will show improvement in farm income during 1969.

Fiber Use at Record High Cotton's Share Down

Domestic use of textile fibers in the United States reached record high levels during 1968 from the standpoint of both total and per capita consumption, reports the U.S. Department of Agriculture. These records came during a year in which cotton's share of the market dipped to an all-time low, while consumption of man-made fibers advanced to peak levels. Domestic consumption of textile fibers totaled 10.2 billion pounds during 1968, reflecting a 9-percent gain over the previous record set in 1966. Domestic per capita consumption reached 50.9 pounds, compared with 46.9 pounds in 1967 and the previous peak of 49.5 pounds recorded in 1942.

The USDA says that a breakdown of individual fiber usage shows that —

• Consumption of noncellulosic man-made fibers (polyester and acrylic) amounted to 3.6 billion pounds in 1968, up one-third from a year earlier and an all-time high for the 21st consecutive year. Per capita consumption of these materials rose to 18.0 pounds, compared with 13.7 pounds in 1967; the share of the market increased to 35.3 percent — also a record high.

• Consumption of rayon and acetate, at 1.7 billion pounds, was up 13.5 percent from 1967 and was also a record high for the sixth successive year. Per capita consumption of these fibers moved up to 8.6 pounds, and the market share reached 16.9 percent.

• Cotton consumption in 1968 totaled 4.4 billion pounds, which was 6 percent below the preceding year and the lowest level since 1964. Cotton's share of the textile market, at 43.2 percent, marked the first time it had dropped below 50 percent, although 1968 was the eighth straight year in which the fiber's share had declined. Per capita consumption, at 22.0 pounds, was down from the 23.5 pounds in 1967 and was the lowest figure since 1963.

• Wool consumption amounted to 466 million pounds in 1968, or 10 percent above the previous year. Per capita consumption was 2.3 pounds, compared with 2.1 pounds in 1967. Wool's share of the textile market was 4.6 percent, up from 4.5 percent a year earlier.

• In 1942, cotton's share of fiber usage in the United States was 81.3 percent; wool's share was 9.1 percent; rayon-acetate's share was 9.3 percent; and noncellulosic man-made fibers' share was 0.3 of 1 percent. Per capita consumption of these fibers in 1942 showed that cotton amounted to 40.2 pounds; wool, 4.5 pounds; rayon-acetate, 4.6 pounds; and noncellulosic fibers, 0.2 of a pound.

Feeder Characteristics in Texas and Oklahoma

According to a recent study by Raymond A. Dietrich of the Texas Agricultural Experiment Station, about two-thirds of Texas feedlot operators look for cattle weighing less than 500 pounds, while the same proportion of Oklahoma operators prefer heavier weights. Preferences about cattle weight are related to the size of feedlot operations, and operators of smaller feedlots generally prefer the lighter weight animals.

The most common weight range for heifers was from 400 to 500 pounds, and most steers weighed between 600 and 700 pounds. Moreover, there was a definite preference about age of the cattle. More than one-third of the feedlots surveyed preferred feeder cattle between 6 and 8 months of age; about 40 percent wanted feeder cattle between 12 and 20 months old. Nearly one-half of the cattle feeders preferred steers rather than heifers; 38 percent bought heifers; and 17 percent had no preference but watched market conditions and price differentials before deciding which animals to purchase.

Concentrates made up three-fourths of the feed ration in Texas and about two-thirds of the total in Oklahoma. Grain sorghum, or milo, the single most important feed item, accounted for 60 percent of the total ration in Texas and for 50 percent in Oklahoma.