

1980 Fertilizer Situation

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FERTILIZER USE MAY FALL IN 1979/80

Fertilizer use in the United States may decline by 3 to 7 percent during the fertilizer year ending this June 30. Greater than expected increases in prices farmers pay for fertilizer, energy, and interest relative to crop prices, combined with tight farm credit, will discourage fertilizer use this spring. Most forecasts made in late 1979, including USDA's, had called for a moderate increase in use this fertilizer year.

Net domestic supplies of fertilizers are expected to be about 14 percent higher this year. So, if the usual strong spring demand for fertilizer fails to materialize, prices could level off and possibly begin to decline, especially phosphates, before the planting season is finished.

Consumption

Overall fertilizer use in 1979/80 may decline by 3 to 7 percent from the record 22.4 million nutrient tons consumed in 1978/79. Consumption of phosphate fertilizer is expected to decline most severely, perhaps by 7 to 13 percent. Potash consumption may fall by 3 to 7 percent, while nitrogen use may equal last year's level or fall by as much as 3 percent.

Phosphate use is likely to fall most markedly because prices for phosphate fertilizers have increased about 50 percent since March 1979. Furthermore, phosphate nutrients carryover in the soil from one year to the next, and much U.S. cropland has been maintained at high levels of fertility. Thus, many farmers can reduce phosphate consumption in the short term without expecting significant declines in yields.

Potash too carries over from year to year, so farmers may also elect to cut potash use this spring in order to reduce production expenses. Because potash is generally cheaper per nutrient unit than other fertilizers and because potash prices have increased less rapidly than phosphates

(26 percent since March 1979), reduction in potash use is likely to be smaller than for phosphates.

Nitrogen is less stable than the other plant nutrients so it must be applied each year to maintain high crop yields. Increased acres of corn, cotton and wheat are expected this year and all are important nitrogen users. However, nitrogen prices have increased about 30 percent since March 1979 and, as a result, a reduction in nitrogen application rates will probably occur, especially on corn. Increased acreage will partially compensate for the expected rate reduction and nitrogen use may about equal last year's level or decline modestly, but less than either phosphate or potash.

Current increases in farm fertilizer prices are the largest since the 1974/75 fertilizer year. In that year, overall use of the three primary nutrients declined about 9 percent with nitrogen down 6 percent and phosphate and potash use each down 12 percent. Fertilizer/crop price ratios were generally less favorable in March 1980 than a year earlier. Compared with 1975, phosphate and potash prices relative to corn and wheat were significantly worse.

After early optimism and a brisk fall season, the current fertilizer year has recently begun looking much like the 1974/75 year. Overall fertilizer prices in March 1980 were up 29 percent from a year earlier, compared with a 35-percent rise in 1974/75. In March 1975, feed grain prices were about even with year-earlier prices, while food grain prices were down 39 percent. In March 1980 feed grain prices were up about 6 percent from a year earlier and food grain prices were up 25 percent. Although March 1980 fertilizer prices did not increase as much as in 1975, and 1980 grain prices have not declined as in 1975, other negative factors influencing fertilizer demand are more severe than in 1975. Net farm income prospects are down from a year earlier due partly to a 12-percent annual increase in the overall cost of production inputs measured in March 1980, versus 9 percent in 1975. Cost increases have been especially high for

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energy (up 61 percent), and fertilizer (up 29 percent). Interest rates on production loans are up sharply from a year ago and credit supplies are tight, especially in several Midwestern states.

On balance, economic conditions indicate a reduction in fertilizer use at least as severe as in the spring of 1975 will occur this spring. However, since many farmers who anticipated higher spring prices bought more fertilizer than usual in the fall and winter, consumption of plant nutrients for the first 7 months of the fertilizer year was up substantially. This strong early movement will probably prevent the fall in consumption for the entire fertilizer year from repeating the record decline of 1974/75, when use began decreasing during the fall and winter months.

Prices

May 1980 farm level prices for fertilizer could average about 24-26 percent higher than a year earlier. These increases stem from improved domestic demand in the early months of the fertilizer year, strong export demand, and rapidly rising production, transportation, and retailing costs. The expected decline in fertilizer use will probably bring about a leveling off of prices and possibly some declines, especially for phosphates, before the end of the current fertilizer year.

Nitrogen prices in May 1980 are likely to average 20 to 22 percent over May 1979 reflecting strong world demand and the pass-through of rising production costs, especially for natural gas, in the United States and worldwide. As domestic consumption falls short of earlier expectations, nitrogen fertilizer prices should level off at least through June.

Prices of phosphate fertilizers were up the most in the first 9 months of the 1979/80 fertilizer year, and May 1980 prices will probably average 36-38 percent above a year earlier. The rate of increase in phosphate prices experienced from May 1979 to March 1980 should not continue through May 1980. Wholesale prices have already begun to weaken. Price increases throughout 1979 were fueled by strong domestic and export demand and steep increases in sulfur prices.

Potash prices in May 1980 are likely to be 19-21 percent above May 1979. Since most U.S. potash is supplied by Canada, high prices in the international market directly affect U.S. prices. Export shortfalls from the Soviet Union, logistical problems in Canada, strong growth in U.S. consumption and sustained foreign demand have contributed to higher potash prices.

Supplies

Supplies of fertilizer materials this spring are expected to be ample relative to use. In the 1979/80

fertilizer year, production of all three nutrients is expected to be above year-earlier levels. Producer inventories could increase in the last half of the current fertilizer year. Net imports of potash are expected to increase substantially while little change is expected in net exports of phosphate and nitrogen.

Production of nitrogen fertilizer materials during July-December 1979 was ahead of the year-earlier pace. Anhydrous ammonia production was up 10 percent, and output of urea and nitrogen solutions up 28 and 13 percent, respectively. With the possibility that farm consumption will fall below year-earlier levels, ammonia prices could level off and take away some of the future incentive to reactivate idle plants.

Increased production of phosphate fertilizer compensated for generally lower inventories. Output of phosphate fertilizer materials during July-December 1979 was ahead of year-earlier levels, with production of phosphoric acid and diammonium phosphate up 8 and 11 percent, respectively. December 1979 producer inventories of diammonium phosphate were 28 percent below December 1978, but phosphoric acid inventories for the same month were up 23 percent. Overall producer inventories of phosphate in December 1979 were 10 percent below a year earlier.

U.S. and Canadian potash production is ahead of year-earlier levels and imports from Canada are also up. In July 1979-February 1980, combined U.S. and Canadian production was ahead of the same year-earlier period by about 12 percent. Inventories were down, but from higher than normal levels. In addition, heavy producer movements of potash last fall may indicate that U.S. wholesale and retail distributors replenished their stocks earlier this year in anticipation of higher prices and possible transportation delays.

Fertilizer Trade With The Soviet Union

On February 5, the Secretary of Commerce announced the suspension of phosphate exports to the Soviet Union, an action taken in the interests of U.S. foreign policy. On March 20, the International Trade Commission determined that anhydrous ammonia imported from the Soviet Union is not causing disruption in the U.S. market, thus reversing its finding of October 1979. No quotas were recommended to restrict Russian ammonia imports.

The domestic impact of the phosphate export suspension is to modestly increase supplies of phosphate materials in the U.S. market, thus slowing the upward movement of phosphate prices in 1980. Thus far, the Soviet Union has been willing to continue shipping ammonia to the United States despite the embargo on phosphate shipments to

Russia. Although actions by longshoremen could still restrict the future arrival of Russian ammonia, court injunctions have ordered the International Longshoremen's Association to unload ammonia vessels carrying Russian cargo. Arrival of the Russian ammonia should cause ammonia spot

prices to stabilize now that some of the uncertainty about its availability has diminished. Unrestricted arrival of this ammonia will enable Florida and North Carolina ammoniated phosphate producers to resume full production and prices for these products should be more stable as a result.

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