

# Soybean Prices Plummet To Lowest in 27 Years

arm prices for U.S. soybeans are expected to plummet to their lowest level since the 1972/73 marketing-year average as farmers confront the third consecutive year of record soybean crops. As supplies mount, prices are expected to fall to \$4.10-\$4.90 per bushel in 1999/2000 from \$5 per bushel last season.

Compounding the impact of a bumper crop is the uncommon concurrence in 1998/99 of lower export demand and weaker prices. U.S. soybean exports lagged behind the brisk rate of a year earlier, falling from 870 million bushels to 790 million in 1998/99.

With many Asian importers still recovering from serious economic crises, only western Europe and China advanced soybean imports in 1998/99. In addition, no U.S. soybeans were shipped in calendar 1998 to Brazil and Argentina, which collectively imported 48 million bushels in late 1997 to bridge the gap between tight old-crop supplies and new-crop production. Russia received more U.S. shipments of soybeans and soybean meal in 1998/99, which were mainly donations under the P.L. 480 program. Exports of U.S. soybean meal and oil also dropped, creating much narrower crush margins that curtailed domestic soybean crushing. U.S. ending

stocks of soybeans are forecast to swell to about 385 million bushels in 1998/99, nearly twice as high as a year earlier.

Slow U.S. sales have stemmed in part from large global carryin stocks and record soybean production that increased world supplies in 1998/99 and contributed to a highly competitive world market. Brazil's very large 1999 harvest followed last year's record crop and swelled its soybean exports to an all-time high. The country's currency devaluation last January raised internal soybean prices and accelerated marketing and export of both its 1998 stocks and the new crop harvested in April-May.

Brazilian soybean meal production and exports cooled considerably after the devaluation, but Argentine crushers have more than compensated for the Brazilian slowdown. Although adverse weather prevented Argentine yields from surpassing the previous season's high, farmers planted record soybean area for 1999 harvest, and Argentine exports of soybean meal have been soaring since early this year. India also produced a record soybean crop and exported its inexpensive meal throughout Asia.

# Loan Rates Factor into 1999 Soybean Plantings

U.S. soybean acreage has increased each year since 1992. U.S. farmers planted 74.1 million acres of soybeans in 1999, up from last year's record 72.4 million. Ten of the top 12 soybean producing states (those with the highest average yields) planted record acreage in 1999, absorbing acres previously planted to corn and wheat. Only a few southern states planted fewer soybeans than last year, where farmers shifted more land into cotton and rice. Favorable weather conditions are leading to expected bumper yields, pushing the 1999 soybean crop estimate to 2,870 million bushels, 113 million bushels greater than the 1998 record.

While total demand is expected to increase, the forecast increase in 1999 production is larger. However large the 1998/99 carryover inventory may seem, it could pale in comparison to the prospective record 1999/2000 carryout of 540 million bushels. In combination with large wheat and corn supplies, such stockpiles of soybeans would seriously strain existing U.S. storage capacity this fall and further pressure prices down. Under these circumstances, it may seem unusual that U.S. farmers would plant so many soybeans in the first place. This can be partially explained by the increase in cropland available for soybeans last spring when U.S. winter wheat acreage declined 3 million acres from a year ago.

The other major factor for greater U.S. soybean planting is the marketing loan program, which supports farm incomes when local prices drop below local loan rates. Rather than sell program crops at low harvest-time prices, eligible farmers may use a Commodity Credit Corporation (CCC) marketing assistance loan to pay production expenses, using their crop as collateral. When prices rise later, they can repay the loan and sell the crop. However, if prices do not rise, producers may repay the loan at less than the announced loan rate plus accrued interest whenever the posted county price (PCP) is lower than the county loan rate (rather than simply forfeiting the collateral, which was the only option provided under legislation prior to the 1990 Farm Act). Alternatively, farmers may forego putting their crop

#### U.S. Soybean Supplies Continue to Expand

Billion bu.

3.5
3.0

2.5
2.0
1.5
1.0
0.5
0.8
85/86
90/91
95/96

Season beginning September 1. Excludes small amounts of imports. 1998/99 and 1999/2000 forecast.

Economic Research Service, USDA

under loan by receiving a loan deficiency payment (LDP) on eligible production, a particularly attractive option if farm storage is limited. The LDP rate is the amount by which the loan rate exceeds the PCP on a specific date.

Unlike years prior to the 1990 Farm Act, the loan rate does not prop up cash prices, which can adversely affect international competitiveness. The absence of a market price floor also prevents accumulation of costly, hard-to-dispose-of stocks through forfeiture to the CCC.

According to the statutory loan formula, national average marketing assistance loan rates for wheat, corn, and oilseeds are required to be no less than 85 percent of the simple average of prices received by producers during the preceding 5 years (excluding the high and low years), subject to specified maximums and a \$4.92per-bushel minimum for soybeans. In March, USDA announced that the 1999 national average loan rates for soybeans, corn, and wheat would be \$5.26, \$1.89, and \$2.58 per bushel, respectively, the same as last year. Under the 1996 farm legislation, these loan rates were the maximum allowed.

At planting time last spring, soybean cash prices for 1999/2000 were expected to be

well below the loan rate. But given relative production costs and expected yields, farmers favored soybeans over corn. The ratio of the soybean marketing loan rate and December corn futures, at 2.7-2.8, was above breakeven level for most farmers. In addition, risk-averse farmers can better stretch their operating loans by planting more soybeans, because the U.S. average variable cost of soybean produc-

tion is approximately half the cost of corn production (soybean cost is about \$81 per acre or \$2 per bushel), and soybean yields tend to suffer less under the stress of dry weather. So, even with weakening soybean cash prices last spring, farmers were still assured of a better return by planting soybeans than planting corn.

What would raise prices? Based on the loan rate formula, the U.S. soybean loan rate should decline only slightly in coming years. This would continue to encourage a high level of soybean planting in the U.S. next year, despite very low market prices. On the other hand, the low price environment will likely dampen competitors' acreage and stimulate world demand. Foreign yields could slip as costs rise for imported inputs such as fertilizer, chemicals, farm equipment, and improved seeds, while the returns from investing in those inputs fall. Yields have been remarkably good for all the major producers in the last few years, but there is always potential for drought to cause crop failure and shrink supplies.

#### Weak Vegetable Oil Sector Likely To Prolong Low Soybean Prices

World soybean production will edge higher again in 1999/2000, to 157.2 million metric tons. The increase is based almost entirely on greater U.S. output, which

#### Prices for Soybeans to Remain Below Loan Rate

\$ per bu. 10 1990 Farm Act 8 Farm price 6 4 Marketing assistance loan rate Price support loan rate 2 1970/71 75/76 80/81 85/86 90/91 95/96

U.S. season-average farm price (September-August). 1998/99 and 1999/2000 forecast. Economic Research Service, USDA

should expand not only the volume but also the world market share of U.S. exports. When planting begins later this year in South America, weaker soybean prices relative to corn and wheat will drive South American producers to reduce soybean area.

The weakened financial situation of Brazilian farmers, inflated production costs, and intense U.S. competition will offset the price-enhancing effects of the January currency devaluation. Brazil's soybean harvested area is expected to decline 3 percent, causing a modest drop in production from 31 million metric tons to 30.5 million. Consequently, Brazil's exports of soybeans and soybean meal would slip slightly.

Likewise, Argentine farmers are anticipated to shift more area from soybeans to wheat and corn. Argentine soybean crushing should remain stable in 1999/2000, allowing a slight increase in soybean meal exports. However, the reduction in available supplies would cut soybean exports from 3.3 million tons to 2.2 million. Similarly, Paraguay's 1999/2000 soybean production is projected down to 2.85 million tons from 3.1 million this year, resulting in an equivalent reduction in exports. Offsetting lower soybean meal exports from Latin America are higher exports of fish meal-another high-protein feed-which will continue recovering from the harmful impact of El Niño on 1998 South American fish harvests.

Cheaper imported soybean meal is supporting global consumption, particularly within the European Union (EU), the world's largest import market. However, high rates of crushing in the major soybean producing countries and high EU supplies of competing oils will also weaken crush margins in the EU. Thus, EU nations are importing more soybean meal than soybeans. In 1999/2000, EU soybean meal imports are projected higher to 20 million tons, compared with 16.8 million in 1997/98.

Next year, the EU will begin its agricultural policy reform, known as Agenda 2000. The incremental reduction in oilseed subsidies and low world prices are likely to reduce EU oilseed plantings. A proposed EU ban on use of animal pro-

#### Chinese Policy Alters World Trade in Oilseeds & Products

In China, soybeans, soybean meal, and soybean oil are subject to import duties set at 3, 5, and 13 percent, respectively. In addition, China levies a value-added tax (VAT) of 13 percent. In 1995, the Chinese government relaxed import quotas and waived the VAT on soybean meal as a means of providing support for the domestic livestock sector. The VAT exemption for soybean meal succeeded in boosting imported supplies for an expanding livestock sector, pushing imports from a negligible amount in 1994/95 to 4.2 million metric tons in 1997/98.

The wave of meal imports undermined domestic prices and left processors with excessive stocks that they could not sell at a profit. In addition, chronically large differentials between domestic and foreign vegetable oil prices enticed refiners to circumvent taxes and quotas on imports of crude soybean oil by not re-exporting the refined oil as required. Large supplies of oil and meal suppressed crushing margins and led to a great deal of idle crushing capacity. Yet, surplus domestic oilseed stocks increased, as access to supplies was discouraged by restrictions on interprovincial movement. Oilseed crushing plants (mostly state-owned enterprises) incurred massive losses.

These events sparked a reform program to make crushing facilities profitable. In 1998, Chinese authorities were able to strengthen enforcement of import quotas for vegetable oils. China also recently redefined the list of VAT-exempt feed products to exclude soybean meal and other oilseed meals. Reducing tax evasion and ending soybean meal's VAT-exempt status provided a greater incentive to import oilseeds for domestic processors to turn into protein meal and vegetable oil. As a consequence, U.S. exports of soybean meal to China fell about 700,000 metric tons in 1998/99 (more than 80 percent) from the previous year. Imports of soybean meal from all sources are forecast to stabilize near 1.85 million tons in 1999/2000.

teins in all livestock feed would also encourage replacement with oilseed meal. As a consequence, EU imports of oilseeds and oilseed meal should be bolstered.

Weaker prices have diminished the incentive for soybean sowing in China, reducing projected 1999 output to 13 million tons from 13.8 million in 1998. Recent policy changes will shift the composition of China's imports further toward soybeans rather than soybean meal and soybean oil. It is likely that the prospective decline in domestic supplies would boost China's 1999/2000 soybean imports to near 4.4 million tons from 3.6 million this season. However, a comparatively modest increase in Chinese soybean meal consumption will continue to limit soybean meal imports.

Elsewhere in Asia, economic growth appears to be on the upswing again, and lower food prices will help this recovery. As in 1998/99, foreign food aid and export credits for soybeans and soybean products will be used as needed to counter problem areas, such as Russia.

For 1999/2000, U.S. soybean crushing is forecast at a record 1,655 million bushels. While an imminent return to the very profitable crush margins of 2-3 years ago is not anticipated, lower soybean prices and firming values for soybean meal as foreign competition lessens should ease the difficulties faced by domestic processors. Meal prices, likely stabilizing in 1999/2000 at around \$130-\$155 per ton, were twice that level only 3 years ago. Large global meat supplies have sharply cut hog prices, which will lead to decreased pig production and limit U.S. soybean meal consumption in 1999/2000. Low prices have already promoted inclusion of soybean meal in livestock rations at liberal rates, so domestic disappearance can rise only modestly, due mostly to gains in poultry consumption.

U.S. export prospects are bright for soybeans and soybean meal. The U.S. dollar has been relatively strong, but exports could benefit from recent weakening. U.S. soybean exports are forecast to climb to a near record 915 million bushels, up 16 percent from 1998/99. Foreign soybean meal consumption is forecast up 2.3

million metric tons in 1999/2000 while foreign production is projected to increase only 0.7 million. U.S. soybean meal exports will benefit from this gap, and are projected to rise from 6.95 million short tons this season to 8 million in 1999/2000.

On the other hand, abundant world vegetable oil supplies and fewer Chinese imports will make exporting U.S. soybean oil a real challenge. A worldwide boom in planting competing high-oil oilseeds is projected to lift 1999 global oilseed production. The world's major rapeseed producing countries (including the EU, China, Canada, and India) all increased crop area, and sunflowerseed planting rose in Russia and Eastern Europe. During the last 2 years, world palm oil output sagged from a severe drought in Malaysia and Indonesia, which caused an atypical price premium versus soybean oil. But now, a strong recovery in palm oil production is developing, which should recapture markets throughout Asia and the Middle East that were lost to soybean oil. And, based on greater Philippine output, world coconut oil supplies will rebound above the pre-drought level.

China has recently emphasized greater domestic production and imports of high oil-content rapeseed and palm oil imports to satisfy oil needs, which are in greater deficit than protein meal requirements. Consequently, China is expected to import only 1.3 million tons of soybean oil in 1999/2000, down from 1.65 million 2 years earlier.

Shipments to India are expected to account for a large portion of the gains in world vegetable oil trade. In India, even small price shifts can cause a substantial change in consumption. Lower world prices and India's reduction in oil import tariffs last year have favored vegetable oil consumption. While India's domestic output of soybean oil was robust, total consumption of all vegetable oils grew faster—28 percent in 1998/99—causing vegetable oil imports to soar. Imports in 1999/2000 should moderate, with palm oil accounting for a larger share.

Even at bargain prices, U.S. soybean oil exports in 1999/2000 are forecast to decline to 2 billion pounds from 2.35 billion this year. Intense international com-

petition is expected to depress the national average price to 15-18 cents per pound, down from 20 cents in 1998/99 and the lowest since 1986/87. Despite steady growth in domestic soybean oil demand, record production is expected to swell ending stocks to an all-time high of 2,470 million pounds.

Until world demand can work down large global stocks of soybeans and soybean products, U.S. producers will rely on government loan deficiency payments and loan benefits to support their incomes. Farmers received loan deficiency payments on three-fourths of the 1998 soybean harvest, totaling \$875 million. With LDP rates around 75 cents per bushel, payments could exceed \$2 billion on soybeans in 1999/2000. While 1999/2000 soybean farm income will not approach the profitable 1997/98 level, LDP's should allow the majority of producers to more than cover variable costs of production.

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#### Oil Crops Yearbook

Covering the market for soybeans, other oilseeds, and their products. Presents the outlook for production, supply, demand, trade, and prices.

Summary release date: October 22. Full text and .pdf versions available within 2 weeks of summary release.

### Oil Crops Outlook updates are released monthly

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