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## HOW BIG ARE THE CORN AND SOYBEAN CROPS?

As usual this time of year, the focus of the corn and soybean markets is on potential crop size. Formulating an estimate of crop size is especially difficult this year. Part of the difficulty stems from the acreage side of the equation. The USDA's June Acreage report indicated that more acres of both crops were planted (or were intended for planting) than the market had expected. In addition, the USDA's estimate of harvested acreage of both corn and soybeans is a very high percentage of planted acreage. Finally, there is some uncertainty about the magnitude of double-cropped soybean acreage following the soft red winter wheat harvest. The perception is that double cropped acreage is unusually large due to the early wheat harvest. It is not clear whether those acres were captured in the June report.

In addition to uncertainties about acreage, production potential is clouded by very diverse weather patterns during the growing season. In general, crops in the eastern corn belt were planted early. The corn crop matured rapidly due to high temperatures in late May and early June. Hot, dry conditions, however, adversely affected the pollination process in some areas and are currently hindering yield prospects. The growth of soybean plants has also been limited in some areas by dry weather. Yield implications, however, are difficult to determine. Some areas in the eastern corn belt have received ample rainfall and yield prospects are very good. Crops were planted late in some areas of the western corn belt, particularly in northern Iowa and southern Minnesota. There is a threat that a portion of that crop will not mature before the first killing frost.

While yield estimates are difficult, it is likely that corn yield potential has been reduced below the record 120.2 bushels implied in the USDA's July *Supply and Demand* report. Based on the current estimate of harvested acreage, a yield of less than 117.5 bushels per acre would result in a crop of less than 8 billion bushels. Weekly crop condition reports suggest that production potential has dropped below 8 billion bushels, perhaps well below 8 billion.

The USDA's July Supply and Demand report implied a 1991 soybean yield of 33.5 bushels per acre, about equal to the average since 1985, excluding the drought year of 1988. Potential for such a yield still exists, with late season weather being critical. The bigger question for soybeans may center around acreage. It is unlikely that production will exceed the current USDA projection of 1.97 billion bushels. The USDA will release an estimate of the potential size of the corn and soybean crops on August 12.

While crop size is very important for corn and soybean price prospects, it may not be the most important factor. Prices of both crops have recovered from early July lows as crop conditions have deteriorated, but still remain at very low levels. In general, the market has not reacted positively to fairly significant production problems over the past several months. Those problems include a 25 percent reduction in the size of the Brazilian soybean crop, a 15 percent reduction in the size of the Soviet grain crop, major flood damage to rice and wheat crops in China, a 33 percent reduction in the size of the U.S. winter wheat crop, and significant planting problems in the U.S. this past spring. Significant production problems in some parts of the world have been offset by abundant crops in Europe and the lack of purchasing power by the USSR. Unless damage to the U.S. feed grain and soybean crops is severe, price reaction may be restricted by perceptions that world grain and soybean demand will remain weak during the year ahead. There are growing indications that demand will be better than expected, particularly for soybeans and soybean products. The biggest uncertainty for grain and soybean meal demand centers around the USSR. The lack of grain and money presents a real dilemma. How will the world react?

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