## Soybean Meal Projection for 1969-70

Any attempt to analyze the supply and demand factors for soybean meal must include a probing inquiry into all the facets of the entire oils and meals complex if it is to be thorough. This includes both the domestic and the foreign situations since these articles are widely traded in world commerce. There is substitutability between the various oils and meals to varying extents and at differing price relationships.

In some instances, meal is a residual product of the oil producing function, while in others oil is a by-product of a meal producing function. In yet other instances, both oil and meal are by-products of a third article. Sunflower meal is an example of the first. Soybean oil is frequently an example of the second. Cottonseed oil and meal combine to form an example of the third instance. Because these situations exist, they must be accounted for in analyzing the supply and demand economics for the entire oils and meals complex, and in this case, specifically, for soybean meal.

Soybeans must be crushed before they have an economic value. To the farmer, they are simply a cash crop. Once crushed, the oil can be stored but the meal cannot for any appreciable length of time. Therefore, it has been customary to crush only at a rate at which the meal demand dictates. It is usually considered less expensive to store beans than meal.

Crushers are in business to make a profit on their products, just like everyone else. When they can sell oil and meal for a combined value greater than the cost of beans plus overhead and operating expense, they continue to crush. When profits diminish, they slow down or stop. Sometimes the percentage of profit from oil vs. meal fluctuates, but it's the total value which is of importance to a crusher. But it follows that in an analysis of the meal market, one must also examine the oil market.

#### Soybean Price

It also follows that one must consider the price structure of the raw product. In this case, it is soybeans. Soybeans are eligible for a government price support loan, but there is no acreage restriction or requirement for other crop control participation. This means that every bushel produced may qualify for the support loan. If the market price is not at loan level or higher, the farmer may decide to put them in loan and may eventually decide to forfeit the loan collateral. CCC gets the beans and the farmer keeps the money.

Thus, we see that market price must fluctuate around the loan in years when supply is ample, or nearly so, for anticipated needs. It may go below the loan price to force the surplus into the program, then work above the loan if necessary to attract some of them out later in the season.

The past three years the support loan price has been \$2.50 for grade number 2. This is the national average, but it varies from county to county, depending on location and usual market differences. For the 1969 crop, it is \$2.25 for grade number 1, which would be \$2.22 for number 2. The loan reduction was determined in March, when it became apparent that a burdensome carryover of beans was in prospect. But acreage increased, nevertheless. Still, the 1969 crop is estimated to be smaller than in 1968 because of adverse weather. The August estimate is 1,060 million bushels. The end-of-season carryover on August 31 is approximately 300 million bushels, virtually all of which should eventually be reported as under loan or in CCC inventory.

Sales from CCC inventory are authorized from September 1 at a formula minimum or the market, whichever is higher. This formula is based on the county loan but figures out to be  $$2.52\frac{1}{2}$  national average in store at elevators for number 1. The price advances  $1\frac{1}{2}\phi$  per month for carrying charges through June 1970, making it \$2.66. The same price prevails for July and August.

The futures market has already taken into account the probability that some of the 1969 crop must be placed into the loan. Prices to farmers in central Illinois at harvest time are customarily 12 to 15 cents under November futures. With November fluctuating around the \$2.36 level for several months, this indicates a harvest cash price of \$2.21 in central Illinois, while the loan in that area is about \$2.28. This price, of course, will advance after the harvest pressure is past and storage space is more available, and eventually it may be necessary to attract beans out of the loan. The price will also reflect weather conditions too hot and dry or too wet and cool. It also will respond to changes in projections of demand.

Meanwhile, pricing projections have been established in the other futures months as far out as the summer of 1970, based on the estimated value of November beans, and demand in the ensuing months. Similarly, pricing projections have been made for soybean oil and soybean meal. As we have seen, these are necessarily closely related. But the correlation will fluctuate as the season progresses, depending on shifts in supply and demand balances for oils and meals. So far the combined futures for soybean oil and meal in new crop months have been at a value higher than for soybean futures. This indicates a crush rate for the 1969 crop higher than the 1968 crop and it indicates that the product demand will be there to support the increased crush projection.

#### Meal Demand

All factors point to a continuing strong demand for soybean meal, especially due to a lower price compared with last year commensurate with the reduced soybean price. Livestock feeding is rapidly evolving into larger units with better business management. This will result in a continued increasing emphasis on high protein diets which make the fastest gains with better feed economy.

Cattle numbers will be about unchanged but the number fed for beef will increase. Hog numbers will increase and so will poultry. Much of the cattle feeding expansion will continue to be in the southwest. This will accommodate the increased production of cottonseed meal from the larger erop of cotton. The support price for cottonseed has been reduced substantially. CCC will attempt to avoid purchasing cottonseed meal in the price support program.

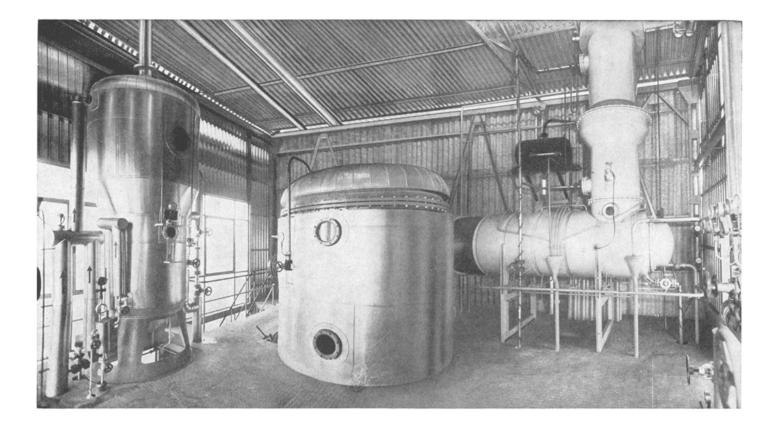
Increased hog and poultry numbers will consume additional soybean meal at least in direct ratio to the number increase, and probably more. Hog production is becoming more concentrated, the last of the three major animal groups to evolve into larger production units. Furthermore, there is likely to be less fish meal fed to poultry for two reasons. First, there is a significant increase in production of soybeans forecast for the major broiler production of soybeans forecast for the major broiler producing states. Last year the east and southeast states had a poor crop due to drouth. Second, the lower support price on beans, resulting in a lower price on soybean meal, may force a slowdown in fish meal production.

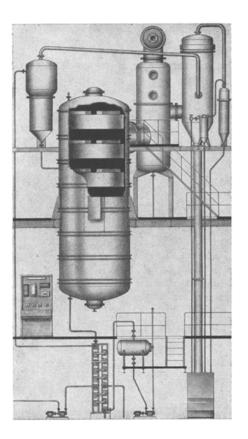
may force a slowdown in fish meal production. Consumption of urea will expand only modestly. This synthetic source of nitrogen is suitable only for ruminants. Cottonseed meal will be available in such quantities and at such prices that it will provide stiff competition for urea if CCC succeeds in its stated intent to make no purchases of cottonseed meal. However, those feeding operations which are set up to handle urea, especially in the liquid form, will continue to do so because of the ease of handling.

High-lysine corn production is not likely to expand



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to any significant extent for several years due to production problems such as field isolation, bin segregation, and lower yields.

A new technique has been developed for processing whole soybeans by farmers for animal feeding. It is being actively promoted this year, but it will be several years before its impact on the soybean meal market will be of measurable magnitude.

The U.S. economy will stabilize at a slower rate of expansion and a slower inflationary trend will be in effect. Consumer disposable income should hold constant as higher wages granted in recent labor negotiations should accommodate higher prices of manufactured goods made necessary by the higher wages. No wage roll-back is in prospect, but up-coming labor negotiations are expected to be settled with less increases than in the past year. Some consumer resistance to recent high prices of meat has been encountered, but meat prices should remain strong through the season.

Foreign meal demand will also continue to expand, with soybean meal receiving its share of expansion. The European Common Market still has not imposed its proposed use tax on oil and meal, and there is reason to doubt that it will. Something may be done on oil, but probably not on meal. A subsidy will probably be paid to slaughter milk cows and to expand beef herds, thereby curtailing the build-up of butter stocks. This should create an expansion in meal demand. Furthermore, the European economy should continue its expansion, animal production units should become more concentrated, and feeding programs will be expected to include more high protein. If the EFC imposes no use tax on oil and meal, then some of the expanded demand for soybean meal will be satisfied by bean imports and some by meal imports. If a tax is applied to both oil and meal, or just to oil, then virtually all the expanded demand will be satisfied by meal imports.

#### Soybean Oil

This market has experienced a domestic demand increase in the past season which has surprised most observers. As the season progressed, it was necessary to continually raise consumption estimates. Much the same is in prospect for the 1969–70 season, though the rate of growth may slow slightly.

The season began with soybean oil priced at historically low levels. This was largely due to: (a) low priced sunflower oil in the world market, (b) a slow-down in PL 480 exports of soybean oil and reduced government purchasing of soybean salad oil for foreign donation, (c) lard and tallow cheaper than soybean oil at 28 year lows for lard and 15 year lows for tallow, (d) increased cottonseed oil production and increased soybean production, and (e) proposed EEC use tax on oil due to large butter stocks. Before the season ended, the situation nearly reversed. Sunflower oil prices advanced, PL 480 and

## Organization Formed to Spur Soybean Market

The American Soybean Institute, an industrywide organization conceived to accelerate world market development for U.S. soybeans and soybean products, was voted into existence July 11 by delegates attending a formational meeting at St. Louis. ASI's purpose is to fund soybean and product market development programs. It will receive monies, act as a trusteeship and contract for actual market development work. The Institute voted to sign its first contract with the American Soybean Association to carry out a 17 country program.

Delegates to the ASI meeting represented 13 state soybean associations, the American Soybean Assn. and the National Soybean Processors Assn. foreign donation exports were larger than projected, lard and tallow advanced sharply due to lighter slaughter weights for hogs and cattle and due to an export subsidy on lard to the U.K., the government bought 330 million pounds of cottonseed oil, and nothing happened on the EEC tax. Furthermore, soybean oil was substituted for lard and tallow in various products because of the price relationship that developed.

In the 1969–70 season, much will depend on the same factors to determine demand and price. PL 480 and foreign donations exports of soybean oil may be down a little, and may even be partially displaced by cottonseed oil. We still don't know what will happen with the EEC use tax. If they put a tax on oil and not meal, or on both oil and meal, then our meal exports will surge and oil price will drop due to a surplus supply of oil. But any price drop will not be large because of continued expansion of the substitution of soybean oil for other fats and oils. Lard and tallow production should continue to decline as animals are fed for less fat. Surplus cottonseed oil will be purchased by CCC. East European sunflower seed production will be higher in some areas and lower in others.

#### Projections

Assuming that the soybean crop and the cotton crop are about the size of the August forecast, we project a total consumption of one billion bushels. This includes 625 million erush, 315 million exports and 60 million for seed and residual. This should be accomplished with futures prices ranging from a low of \$2.31 for the November contract to \$2.65 for July.

A crush of 625 million would produce 14.8 million tons of soybean meal. Assuming no EEC tax is imposed, this would include 11.5 million tons domestic use and 3.3 million tons exports. Depending on the details of the EEC tax, should one be imposed, this could change rather sharply. Meanwhile, we project a futures price range of \$65 on December to \$80 on July.

A crush of 625 million would produce 6.6 billion pounds of soybean oil. Assuming exports of no more than 800 million pounds, domestic consumption would be 5.8 billion pounds. To accomplish this, the indicated futures price range would be a low of 7.00 cents on December to 9.00 cents on July. However, we are not projecting that the high on oil will be at the same time as the high on meal. They seldom operate in this manner, especially given the set of circumstances expected to prevail this season. Timing, as usual, will be of paramount importance for profitable trading.

> DAVID M. BARTHOLOMEW Commodity Analyst Merrill, Lynch, Pierce, Fenner & Smith, Inc.

## • Referee Applications

#### Correction

Attention is called to the fact that first and second notices for Kenneth L. Fields of Charles V. Bacon, Inc. and Donald C. Strathdee of Industrial Laboratories, appearing in the July and August 1969 issues of JAOCS, were published with incorrect addresses. Addresses for these applicants should appear as follows.

Kenneth L. Fields, Charles V. Bacon, Inc., Chicago, Illinois 60628. Donald C. Strathdee, Industrial Laboratories, P.O. Box 185, Fort Worth, Texas 76101.

Interested parties wishing to comment on these certifications should communicate with the Chairman of the Examination Board. Please write to Edward R. Hahn, Chairman of the Examination Board, P.O. Box 1177, Columbia, S. C. 29202.