World Protein Markets—a Supplier's View

EARL L. BUTZ, U.S. Secretary of Agriculture, Washington, D.C.

ABSTRACT

There is a growing need for soy proteins to meet the desire for more protein in the affluent countries and the deficiences of proteins in the "third world." We are, and are determined to be, a consistent and dependable supplier of soybeans to our global customers. We ask in return that our producers be assured of the freedom to market through a world trade system that is liberal and expanding. U.S. agriculture has moved in the direction of a market system that will allow freedom for producers to respond to growth in demand. An international food policy that is effective and workable must include an expanding system of trade. The language of food crosses every boundary and that is the language we speak in order to expand the horizons of peace.

INTRODUCTION

Much of what is being referred to as a world food shortage is not a food shortage at all but rather a reaction to recent prices for animal proteins. Except for a few isolated areas, there is no general hunger, but rather a situation of protein deficiency and protein desire.

Let us make a distinction between deficiency and desire:
(A) Many people in the lesser developed areas of the world have a protein deficiency in their diets, and this can be a very real health problem. (B) In other areas, people may be accustomed to meat, milk, and eggs, and are eager to maintain or expand consumption of these products at lower prices.

Many countries have the capacity to expand livestock and poultry production, and in the process, to lower prices of those products. This potential accounts for much of the market growth opportunity for soybeans and other feed-stuffs around the world. But even in areas where livestock and poultry development may come more slowly, there is the opportunity to expand protein consumption in other ways.

Soy protein provides a means of both extending the animal proteins and replacing them with high quality protein that is relatively inexpensive to produce. There is a tremendous growth opportunity in the utilization of soybeans directly as human food. And, while soybeans have an ancient and honorable place in the cuisine of the Orient, the world potential for direct human use of soybeans has hardly been scratched.

SOY PROTEIN-BASIS FOR BETTER EATING

It was not until the mid-1960's that the western world began to give serious consideration to soybeans as food, other than for babies and dietetic uses. Current trade estimates of U.S. soybeans used for human consumption in both domestic and foreign markets are placed at ca. 1.0 million metric tons per year—hardly a dent in the U.S. crop. Food use accounts for only ca. 3% of U.S. soybeans crushed and exported, compared with the 85% that goes into animal feeds and 12% into industrial uses.

But a much brighter future is in prospect. Some estimates indicate a soy protein food market for U.S.

soybeans of perhaps \$2 billion by 1980 contrasted with \$75 million or so today. Research scientists at the U.S. Department of Agriculture say that by 1980 vegetable proteins could amount to the equivalent of 8% of our country's total red meat production. And some private sources have predicted that as much as 20% of the 1980 meat supply will be composed of vegetable protein meat analogues.

There is, for example, a growing acceptance of soy-extended ground beef, which is increasingly being seen in U.S. supermarkets at prices below those for the all-meat products. Soy protein is also used as an extender in frozen meat dinners, quick-heat servings, and many other convenience items.

In addition, the institutional trade already is using soy protein to a considerable degree, not only in ground beef but also in other meat dishes. Soy-protein products are increasingly used in hospitals, health care facilities, government institutions, college and university food services, food processors, and restaurants.

USES OF TEXTURED VEGETABLE PROTEIN IN SCHOOLS

A major breakthrough came in 1971 when the USDA authorized use of textured vegetable protein (TVP), fortified with vitamins and minerals, in our Type A School Lunch Program and in lunch or supper of the Special Food Service Program for Children. As a result, textured soy protein can now form as much as 30% of meat patties, stews, sauces, and similar meat, poultry, or fish dishes.

At present, these textured vegetable proteins are derived entirely from soybeans, but it is possible that cottonseed, peanuts, safflower seed, sunflower seed, and grains will be used increasingly as well. In USDA programs, plant proteins are blended with other foods, and the combination results in foods with a better balanced amino acid pattern than if these foods were used alone.

Schools are able to buy textured vegetable protein at about 18 cents per lb. (hydrated weight) and mix this at a 30:70 mix with lean red meat which sells for more than \$1 per lb. During the 1971-72 school year, ca. 23 million lbs. of textured vegetable protein (hydrated weight) were used in the school lunch program, and that amount almost doubled in the following year.

The USDA Food and Nutrition Service has set up a system for evaluating, accepting, listing, and monitoring plant proteins being used in its several feeding programs. In addition to textured vegetable proteins, USDA is now using other plant protein products in its food programs and is considering still others.

High protein enriched macaroni is used as a partial meat alternate. Analogues, derived from soy, cereal grains, and other products, are being used primarily as meat alternates in religious schools. Feeding programs for American Indians of the Navajo nation are using lysine fortified wheat flour. A formulated milk-based product has been approved for children's feeding in a Special Food Service Program for Children.

Also being considered are a variety of formulated bakery items to use soy and perhaps other plant proteins to augment both quantity and quality of proteins. Soy-fortified cornmeal or tortilla flour is proposed to upgrade the protein in cornmeal in the South and Southwestern U.S. areas where corn is an important part of the diet. Also, guidelines are being written for formulated pizzas to be used in USDA food programs.

Soy protein in blended food products also has become increasingly important as a food supplement used in combating malnutrition in U.S. programs for needy people in other countries. Since 1966 the blended foods—cornsoy-milk and wheat-soy—have been included among the commodities donated under Title II of Public Law 480 to feed needy people and to meet emergencies caused by natural disaster or human conflict.

Corn-soy-milk and wheat-soy blends have supplied badly needed nourishment for school feeding programs, maternal and child feeding programs and for the food-forwork program aimed at relieving hardships of the unemployed and underemployed.

These products have been well received. The largest shipments have gone to the Near East and South Asia, followed by Latin America, Africa, and East Asia. Commercial purchases of blended food products have increased as well. The wheat-soy blend is now sold under Title I of PL 480 and under the CCC export credit sales program. The particular virtue of the blended foods is that they provide a large amount of nutrition at relatively low cost.

During the past years, research has provided ways to fortify cereals with high protein additives. As formulas were perfected, soy-fortified cornmeal, bulgur, rolled oats, and sorghum grits became available as highly nutritious food supplements. All of these food items are now included under Title II donations programs sponsored by U.S. voluntary agencies. Title II food resources are also channeled through the World Food Program, a multilateral food assistance program active in many countries.

EXPANDING COMMERCIAL OPPORTUNITIES

These varied uses being made of soy proteins would certainly seem to augur a variety of expanded commercial opportunities. As with any new product, there are also problems, and we invite the other countries represented at this Conference to join us in trying to eliminate these impediments to market expansion.

The U.S. will invite other countries at the multilateral trade negotiations in the fall to review the classification and tariff treatment of edible proteins. Many of you here are experts in this field and can play an important role in helping to identify the standards that make for meaningful tariff classifications.

The U.S. has been particularly concerned about various tariff treatments accorded to related soy proteins such as concentrates, isolates, and peptones. In such major markets as the United Kingdom, Denmark, and Ireland, these protein products have enjoyed relatively free tariff treatment and, in some instances, are duty free. However, with the expansion of the European Community, these countries will now be required to merge their tariffs with those of the original six. In this merger, the U.S. hopes the classification of these proteins will remain in the low tariff category BTN 35.04 (peptones and other protein substances and their

derivatives), the most widely accepted classification for these commodities, and not be subject to reclassification into higher tariff categories, some of which are subject to a duty, plus a variable levy, in the Community.

The U.S. has challenged an earlier decision of the Nomenclature Committee of the Customs Cooperation Council, which determined that the method of manufacture of a protein substance is the basis for a tariff classification. In our view, this decision, which affected a large number of West European countries, was more the result of misunderstanding than a deliberate attempt to limit market opportunities for soy concentrates. However, even if the decision reclassifying these items into a higher duty classification resulted from a misunderstanding, the result unfortunately is the same—an expected adverse effect on trade.

In our view, there is a need for reexamination of current classifications in this broad area of soy proteins to assure the most liberalized tariff treatment of this vital category of food proteins. In view of the wide interchangeability of these items, an effort should be made for the maximum number of items to be grouped in a low-tariff category.

In recent months, there has been a good deal of comment about a world protein shortage, with the implication that soybeans are not sufficiently available even to take care of all direct food needs. This is ridiculous in view of the small percentage of soybeans going directly into food and the large increase in overall soybean marketings for all uses.

Even with export controls in effect for a time last summer, the U.S. exported 19% more soybeans and soybean meal in the marketing year that ended August 31 than it did the year before. Almost half of our 1972-73 shipments went to the European Community either as beans or as soybean meal. In terms of soybean equivalent, exports to the Community amounted to 332 million bushels (9.0 million metric tons)—an increase of 14% over the preceding year.

We estimate that soybean and meal exports to the European Community not only covered the Community's entire increase in consumption for the year, but also went partly to fill the shortfall in shipments from other traditional suppliers. In other words, U.S. soybean farmers more than held up their end in providing for increased use in the Community, while taking up part of the slack in supplies of fishmeal from Peru, peanuts from Nigeria, and other world supplies which fell short in the past year.

Moreover, we are producing in 1973 a soybean crop 24% larger than last year's record crop. We are, and are determined to be, a consistent and dependable supplier of farm commodities to our global customers. We ask in return that our producers be assured of the freedom to market through a world trade system that is liberal and expanding.

U.S. agriculture has moved in the direction of a market-oriented system that will allow freedom to produce for market demands. This is entirely consistent with our goals in international trade. We believe that farmers—and national economies—benefit from trading policies that permit producers to respond to growth in demand, and to the changing diets of consumers.

An international food policy that is effective and workable must include an expanding system of trade. And for a world that wants to eat better, that system of trade must surely include the soybean.