The Worldwide Challenges to American Agriculture

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Americans are awakening to the fact that world affairs are not the concern of the diplomat and soldier alone. They involve the farmer in the country, the businessman on main street, the laborer in the city, the teacher in the classroom—yes, every citizen.

This issue of Minnesota Farm Business Notes is devoted to a discussion of two worldwide challenges to United States and Minnesota agriculture:

- The competitive challenge for world markets.
- The humanitarian challenge to alleviate hunger and promote economic development.

THE COMPETITIVE CHALLENGE

The agricultural exports and imports of the United States are an important part of world trade even though the United States is generally regarded as an industrial nation. We are the world's leading exporter of agricultural commodities; in recent years we have supplied about one-sixth of total world agricultural exports. Only the United Kingdom imports more farm products than we do. Our actions in world trade, therefore, greatly influence the actions and welfare of other nations.

Agriculture is important also in our own total export picture. Roughly one-fourth of all U. S. exports are of agricultural origin. And within the context of U. S. agriculture itself, foreign trade is important. At present, production from about one crop-acre in six is exported.

The composition of agricultural exports since 1925 by major commodity groups is shown in the figure. In this chart quantities are valued at 1952-54 prices. Consequently changes in volume of farm products are shown.

For cotton, wheat, and tobacco—our three leading export commodities—we generally export 30 to 50 percent of production. The relative importance of exports for other crops is much less, but soybeans and feed grains export sales have increased greatly in recent years.

Animal products in general are not as important in export trade as crops, but changes are taking place. For example, we exported very little poultry prior to 1955 except to Canada. In 1960 exports of U.S. poultry were valued at $50 million. Most of this went to Western Europe, especially Germany.

The growing importance of exports of feed grains, soybeans, and poultry is especially important to Minnesota farmers. Producers and handlers of these commodities must now keep abreast of changing consumer needs and preferences, not only in the United States, but throughout the world.

Government is important

Governments, our own and foreign, are extremely important factors influencing world trade. This importance is intensified for agricultural commodities because of the widespread adoption of domestic agricultural price and income programs throughout the world. Importing countries have adopted restrictive devices such as tariffs and import quotas in order to protect and stimulate domestic agricultural production. For the same reasons, exporting countries, such as the United States, also have employed restrictive import measures. In addition, they have employed two-price plans and other forms of export subsidies in order to be competitive in price on "world-markets."

All of our wheat and cotton and most of our feed grain exports receive some form of government assistance. Recently only about 40 percent of total agricultural exports were sold without some form of government assistance. (See table 1 in the "Outlook Corner.")

The area trade groups are another kind of government force. The most significant in recent years is the European Economic Community (EEC), better known as the Common Market. When trade groups such as EEC organize to stimulate greater economic growth of countries within the group, there are strong pressures to use discriminating trade practices against nonmember countries. Current agricultural proposals of EEC could significantly reduce our agricultural trade to Western Europe, the area on which we depend for more than half of our total dollar exports of agricultural commodities.

But trade is a two-way proposition. Americans must be careful in their criticism of other countries' and economic communities' trade practices. We, too, follow restrictive trade practices and we, too, face constant pressure by special interest groups to increase the scope of these restrictive measures. If we yield to pressures to restrict imports, the result will be to reduce exports.

Few countries have a greater stake in achieving the objective of freer trade than the United States. As the leader of the free world, we must exert restraint to guarantee that individual

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actions on our part are not in conflict with that objective.

Market development

There has been a reawakening of interest in world markets by U.S. agricultural groups. Public Law 480 (The Agricultural Trade Development and Assistance Act of 1954) has played a major role in this reawakening. Sales for foreign currencies (provided for in Title I of the Act) have accumulated large sums of foreign currencies in U.S. government accounts in foreign countries. One authorized use of these currencies is “to develop new markets for U.S. agricultural commodities on a mutually beneficial basis” (Section 104(a) of PL 480).

In cooperation with U.S. and foreign trade groups, the Foreign Agricultural Service has conducted market development activities in 52 countries since the program began in 1955. Among the commodities for which individual projects have been activated are cotton, wheat, soybeans, poultry, feed grains, tobacco, and many others.

Market development activities under Section 104(a) have covered a wide range of activities. Examples are: trade team visits by both American and foreign groups, advertising campaigns, educational campaigns (e.g.—cooking demonstrations, distribution of recipes), seminars on feeding high protein meals (soybeans), fashion shows (cotton), and evaluation of quality of grain shipments. In addition, U.S. representation at international trade fairs has been sponsored by the USDA with market development funds.

The expansion of poultry trade with West Germany is a good example of industry-government cooperation in market development. A PL 480 authorization for sale of frozen, eviscerated poultry was negotiated in 1955. Sales were slow at the outset. The German market was unaccustomed to frozen, eviscerated poultry, and effective marketing channels and facilities did not exist. Through joint efforts of trade and government representatives, the sales were made.

German consumers quickly became aware of this new product. Cooking and serving demonstrations, consumer advertising, and public relations with the trade helped to build this market. These activities were conducted jointly by industry and government under the market development provisions of PL 480. Since the first PL 480 transaction, a total of $39 million of U.S. poultry has been sold to Germany for dollars.

U.S. producers and German consumers have shared the benefits.

Recent evaluations of market development projects in Italy, Japan, and Germany by representatives of three land grant universities indicate that market development projects have helped to expand foreign markets for U.S. agricultural commodities. In order to achieve maximum effectiveness, however, there is an urgent need to extend the scope of market development activities to include work within the United States.

American producers and trade personnel need to acquire an awareness of the requirements of foreign markets. We need to understand the competitive conditions that prevail in foreign markets, and, most of all, we need to make changes that will make us more effective competitors in world markets.

We may need to change existing grades and standards or establish special export standards, modify government regulations (e.g.—regarding price support activities), improve port facilities, improve inspection procedures, and encourage the production of breeds and varieties specifically for export needs. The changes needed call for action by individuals and organizations at all levels—individual producers and firms, trade and producer commodity associations, general farm organizations, and the government.

Trade barriers throughout the world are a deterrent to trade that must be attacked primarily at the government level. However, even with a freer trade, United States agriculture will be able to meet its full export potential only if we establish a favorable worldwide reputation for the quality of our agricultural products and the dependability of our marketing services at competitive prices. Primary responsibility for achieving this rests with the producers and the trade.

THE HUMANITARIAN CHALLENGE

We have talked a good deal in recent years about the possibility of using our surpluses to feed the hungry people of the world. We have been motivated in part by the hope that we can export our surpluses and our adjustment problems. We have also been motivated by a humanitarian motive—to help the less fortunate people of the world.

This humanitarian concern is desirable. We have been much more fortunate in obtaining a high standard of living than have most people of the world. We can help them to improve their standards. This task involves complex problems, however, and must be studied carefully in order to achieve the desired ends.

How large is the shortage of food?

The Foreign Agricultural Service of the USDA estimates that approximately one-half of the people of the world live in countries where the supply of calories is below the standard we would consider adequate.

Food consumption is considerably below standard in a few countries. For example, FAO (Food and Agriculture Organization of the United Nations) estimates that persons in Latin America need 2,500 calories per day. This provides for basic physiological needs and allows for a wastage of 15 percent between the retail level and consumption. In six of the Caribbean and Central American countries, consumption falls below 2,000 calories, or more than 20 percent below the standard. In most countries of the world, the difference between needs and supplies is not this large.

Dietary deficiencies are much greater in other food elements than in calories. Proteins, especially animal proteins, are very short in a large part of the world. An illustration of this comes from an estimate made by the government of India for the years 1955-56 (see the table). The average supply of the main energy foods—cereals, legume vegetables, fruits and nuts, and sugar—was approximately equal to needs. However, there was a very large shortage of vegetables, oils, milk, and meat.

Amount of food needs

How large is the world food gap?

Absolute figures are hard to visualize; one method is to compare the gap with the total production of some products

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Food consumption compared with a balanced diet, India, 1955-56

<table>
<thead>
<tr>
<th>Item</th>
<th>Balanced diet (ounces per adult per day)</th>
<th>Estimated consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cereals</td>
<td>14</td>
<td>15.4</td>
</tr>
<tr>
<td>Beans, peas, etc.</td>
<td>2.9</td>
<td></td>
</tr>
<tr>
<td>Vegetables</td>
<td>10</td>
<td>2.6</td>
</tr>
<tr>
<td>Ghee and veg. oil</td>
<td>2</td>
<td>0.4</td>
</tr>
<tr>
<td>Milk and milk prods.</td>
<td>10</td>
<td>4.5</td>
</tr>
<tr>
<td>Meat, fish, eggs</td>
<td>4</td>
<td>0.4</td>
</tr>
<tr>
<td>Fruits and nuts</td>
<td>3</td>
<td>2.0</td>
</tr>
<tr>
<td>Sugar</td>
<td>2</td>
<td>1.6</td>
</tr>
</tbody>
</table>

of the United States. To balance the food gap of calories and proteins in the deficit countries would take the equivalent of 33 percent of U.S. annual milk production and 40 percent of U.S. annual dry bean and pea production, and 120 percent of U.S. annual wheat production.

Where are these deficits? The largest deficits are in southern and eastern Asia. Most countries in this area produce less than they need. This area also holds more than one-half of the population of the world. A little more than a third of the people of Africa live in countries with a food deficit; these are mostly in eastern and northern Africa. Less than one-third of the people of Latin America live in countries with a net food deficit.

These figures, rough as they are, tell only a part of the food problems of the world. Even though a nation may have more food than is needed for all of its people, individuals within the country may have inadequate diets. For example, some individuals within our own country or state have inadequate diets; this may be due to lack of purchasing power. In underdeveloped countries, it may also be due to lack of adequate distribution facilities.

How can we help?

In total, there are food shortages in the world. How can our food help? We cannot improve materially upon the overall diet of the world, that requires more food and money than we have. Moreover, we are not in a position to guarantee that the food gets to those individuals who really need it.

Adding more food to some countries would reduce the death rate and increase the population. While this may be desirable, it could give rise to extra suffering if our flow of food to these people could not be continued until domestic economic growth had eliminated the need for it.

Food contributions will continue to be desirable in case of national disasters, such as the earthquakes in Chile or in case of drought or flood. These contributions, however, are temporary and merely offset unusual losses which may have been suffered in the country.

Longterm contributions must be tied to efforts to help the nations achieve a higher productivity and a higher standard of living. This higher standard of living involves better balanced diets, freedom from fear of starvation in unfavorable years, and, more important, greatly increased supplies of nonfood products. In general, our food donations should aid these nations to speed up their economic development.

One need for most nations is increased production of industrial products and improved marketing facilities. This requires capital goods—machines with which to build factories, roads, and harbors, and machines with which to equip the factories.

Another need is increased production of agricultural products—and many nations have potentials of large increases. Persons familiar with India, for example, estimate that it would be possible to double or triple their output. It would not be easy, but it would be possible.

Both the industrial and the agricultural expansion will need transfers of goods other than food into the country. It will also require a large amount of technical assistance. Food can be used as a means of helping to make it possible for these countries to pay workers on development projects, to provide the extra energy and balanced diets needed for some of the strenuous jobs, and to provide insurance against famine in case some new developments are unsuccessful, or in case results from attempts to increase agricultural production come slowly.

Prerequisites to success

The task of providing food is not solved merely by a decision to give or loan the food to a nation. Several prerequisites are needed for successful use of the food.

1. The nation must have the facilities needed to unload, store, and transport the food to the areas where it is needed. We take these things for granted, but they are not adequate in many nations of the world.

2. The nation must be able to determine who in the country should receive the food; it must have a government sufficiently strong to ensure that the food goes where it is needed and to pay the costs associated with this distribution.

3. When the food is used for economic development, there must be an organized plan of development; the nonfood resources that are needed must be provided; and the plan must cover a sufficiently long period of time to make completion feasible.

Many hazards are encountered in the use of food to help feed the needy and to promote economic development. Among the more important of these problems are:

1. Transfers of large amounts of agricultural products to a country may upset markets and cause harm to producers. For example, many farmers in India sell wheat in order to obtain cash for purchase of goods they cannot produce. A drop in the market price due to U.S. shipments may cause real hardship to these people. Their reductions in purchases may, in turn, affect incomes of merchants and craftsmen in their area.

2. Transfers of food to a country may cause severe political opposition by persons who are affected. For example, Japanese dairy farmers are disturbed by importation of dairy products, even though dairy production is low in the nation. The per capita production is only 40 pounds, or 60 glasses per year. Yet, one of the authors attended a meeting at which a group of Japanese dairy farmers were proposing the following resolutions for transmittal to their government:

   a. Establish a price support policy for milk,
   b. Buy surplus dairy products,
   c. Stop importing dairy products.”

3. Transfers of food to a nation may reduce the pressures needed to expand and improve their own agriculture.

4. Transfers of food to a nation may also tend to hide the problems caused by their expanding population, and reduce efforts to solve this problem.

The task of helping to feed the hungry people of the world is an important and challenging task. It is an important step in helping to ensure that our method of living can survive.

On the other hand, it is a very complex job. Success will depend upon our willingness and ability to study the needs and adjust our thinking to the problems involved, and our willingness to pay the necessary costs.
Outlook for U.S. Exports

Export volume of U.S. farm products reached a record high in 1960; export value—$4.5 billion—was the second highest on record (see the figure). Increased gold and dollar holdings in leading U.S. export markets, easing of trade restrictions, lower world prices, and the continued press of population on limited resources—particularly in underdeveloped countries—contributed to the rise. Another important factor was government aid and surplus disposal programs (see table 1).

In highly developed economies such as the United Kingdom, Canada, Japan, the Netherlands, and West Germany; cotton, feed grains, fats and oils, oilseeds, and animal products are important. These countries constitute the primary dollar markets for U.S. agricultural exports. A high proportion of transactions with underdeveloped countries, such as India, are for local currencies under Title I, PL 480. The primary need is for food grains—mostly wheat.

The prospects are for increased agricultural production throughout the foreign free world in the next 10 years, but consumption will also increase. By 1970 food and fibre import needs in free world nations outside the United States will be larger than now. This is according to Foreign Agricultural Service estimates (table 2).

The Far East, Latin America, and Africa are areas where import requirements will be greater. The deficit in Western Europe is expected to decline during the next 10 years.

Projections for feed grains and fats and oils are particularly significant for Minnesota farmers. Foreign free world feed grain import needs for 1970 are estimated to be 83 percent greater than now. The greatest share of this increase will be in western Europe. The livestock industry there will expand as incomes increase and the population demands more expensive foods. This industry will likely require relatively large quantities of imported feeds.

Similarly, free world import needs of fats and oils are expected to increase. By 1970, they will be 104 percent greater than the recent average. Western Europe, Latin America, and western Asia will have larger import requirements.

The estimates presented previously represent projections of consumption needs less production in free world countries other than the U.S. This includes projected exports from such countries as Canada. Even so, the United States will not have an exclusive franchise in filling these requirements. Certain Soviet Bloc nations may develop surpluses of feed grains and fats and oils over the next 10 years. This will be a factor in determining how much of the free world needs the United States will supply.

Government will continue to play an important role in the movement of U.S. farm commodities abroad. In the future, "Food for Peace" will probably place increased emphasis on the overall nutritional needs of underdeveloped countries. While food grains will undoubtedly be of major importance in the program, other products—dairy, meats, poultry, and fats and oils—will receive relatively greater emphasis.

### Table 1. U.S. exports, commercial and under government programs, 1953, 1956, 1960

<table>
<thead>
<tr>
<th></th>
<th>1953</th>
<th>1956</th>
<th>1960</th>
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<tbody>
<tr>
<td>Exports</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial*</td>
<td>1.8</td>
<td>1.6</td>
<td>1.9</td>
</tr>
<tr>
<td>Without govt. assistance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>With government assistance</td>
<td>0.6</td>
<td>0.5</td>
<td>1.3</td>
</tr>
<tr>
<td>Under government programs</td>
<td>0.4</td>
<td>1.4</td>
<td>1.3</td>
</tr>
<tr>
<td>Total</td>
<td>2.8</td>
<td>3.5</td>
<td>4.5</td>
</tr>
</tbody>
</table>

* Includes commodities bought with loans from Export-Import Bank and credits extended by the CCC.

† Commercial exports assisted by payments in cash or kind or by sales at less than domestic market prices.

Source: Foreign Agricultural Trade Outlook Charts—1961 USDA, FAS.

### Table 2. Projected import needs for foreign free world nations

<table>
<thead>
<tr>
<th></th>
<th>1965</th>
<th>1970</th>
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<tbody>
<tr>
<td></td>
<td>thousand metric tons</td>
<td></td>
</tr>
<tr>
<td>Wheat and rice</td>
<td>11,390</td>
<td>12,000</td>
</tr>
<tr>
<td>Feed grains</td>
<td>7,610</td>
<td>11,450</td>
</tr>
<tr>
<td>Fats and oils</td>
<td>1,377</td>
<td>2,375</td>
</tr>
</tbody>
</table>

Source: Foreign Free World: Supply and Demand for Farm Products, USDA, FAS, mimeographed, June 1960.