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MINNESOTA farm business NOTES



MARKETING U. S. FARM PRODUCTS IN S.E. ASIA AND JAPAN

Luther Pickrel*

Although the number one customer of the American farmer is the American consumer, overseas markets provide a significant outlet for his products and are important to his income. The farmer citizen has another stake which he can hardly afford to overlook, i.e., the broader stake all of us have in the foreign policy position of our country. It is important that everyone recognizes the relationship between our domestic agricultural programs, our foreign economic policy, and the poverty-freedom struggle now taking place throughout the world.

The following brief reviews are intended to give a picture of our agricultural export possibilities and trade interests in several Far Eastern countries.

JAPAN

Japan is one of the most important foreign customers of the U. S. farmer. During most of the last decade she has been buying more than one-third of a billion dollars worth of U. S. products annually. During this period she has frequently been the leading market for a number of agricultural products. Among these have been soybeans (\$100 million worth last year) and cotton. Japan has been the second most important export market for feed and flour, third for barley, and fifth for animal fats and oils. She provides U. S. livestock producers with an overseas market for about \$35 million worth of products per year. Japan is also a major outlet for tallow, hides and skins, and a growing market for U. S. lard and sausage casings. All of these commodities are in abundant supply

in the United States and every pound exported expands the market of our livestock producer. Most of Japan's purchases have been for dollars. Recently it was announced that Japan will reduce trade restrictions which have limited U. S. exports in the past. If such trade liberalization materializes, this, combined with a rising per capita income and a rapidly increasing middle class, could result in expanded Japanese demand for U. S. agricultural commodities.

An important problem for future markets is likely to be a shortage of dollar exchange due to the decline in U. S. military operations in that part of the world and a reduction in U. S. purchases (primarily processed goods) of the things Japan wants to sell us. Nor can one ignore the pressures for protectionism being generated by Japanese farm groups and a number of their political leaders. This pressure is apt to continue as long as 39 percent of their people are on farms and opportunities for industrial expansion are limited.

MALAYA-SINGAPORE

This newly independent member of the British Commonwealth is one of the few countries in this area selling more to the United States than we buy from them. Their population is 8.5 million, with a per capita income of about

\$250 per year. Although this is high by Asiatic standards, it is a misleading figure. About 80 percent of the Malaysians see only a fraction of this as cash each year. High incomes among the Chinese and Indian rubber tappers, tin miners, and merchants (mostly Chinese) account for the high average. Twenty percent of the population (including the groups mentioned above) provides a good, if small, market for about \$8 million worth of agricultural products per year. Most of this is for frozen and canned poultry, canned pork, dairy products, textiles, soybeans, fruits, and vegetables.

Competition for this market is tough. The U. S. has some advantages in quality canned goods and certain frozen products—especially poultry and fruit. Our beef prices are too high to compete with Australian beef. Our tobacco is limited to the amounts necessary for blending with cheaper Rhodesian tobacco for cigarettes. With both population growth (3 percent per year) and rising income, Malaya is one of the few underdeveloped nations where commercial trade for dollars can be increased now.

THE PHILIPPINES

This former island possession of the United States is the second most important dollar market for U. S. agricultural products in this area of the world. The value of U. S. farm products exported to the Philippines amounted to almost \$68.5 million in 1958. About 30 percent of this total was dairy products. Tobacco, wheat flour, rice, wheat products, cotton, fats, and oils were the other major items. Opportunities for expanding U. S. agricultural exports to the Philippines appear to lie in three commodities: cotton, dry milk solids, and wheat. Evaporated fluid milk plants are operated in the Philippines using dry milk solids and coconut oil for fat content. This product seems to be well

Value of U. S. exports to selected Asian countries, fiscal year 1958-59

Country	Total	Under special
	agric. exports	gov't. programs
	Thousands	Percent
Japan	\$317,443	4.8
India	250,865	99.8
Philippines	68,440	40.1
Pakistan	45,717	99.9
Hong Kong	25,582	32.6
Thailand	8,263	1.6
Malaya and Singapore	4,155	16.9

* Mr. Pickrel recently visited the countries reported on in this article. No attempt is made to discuss a number of other Asian countries to which we ship sizable quantities of agricultural commodities.

accepted by the consumers and under-sells evaporated milk. The result has been a shift from canned imports to imports of dry milk solids. This is encouraging for the nonfat dry milk market.

THAILAND

Thailand is an example of an agricultural exporter whose markets can be significantly affected by U. S. export programs. It is a country of 23 million people with a per capita income of \$100 per year which receives substantial amounts of economic and military aid from the U. S. Their purchases of agricultural products from the United States have been about \$8¼ million per year for the past several years. Their major purchases have been tobacco, dairy products, grains, and cotton goods. Prospects for increased purchases of U. S. agricultural products for dollars are not encouraging for the near future.

INDIA

This nation of more than 400 million people represents a classic example of the difference between need and economic demand. Their need is almost incalculable; their effective demand is relatively small. The reason for this is to be found in their extremely low productivity. Per capita income is only about \$65 per year compared to about \$2,200 for the United States. Their caloric intake is about 1,800 to 2,000 a day, 400 to 600 calories less than the estimated minimum for good health.

U. S. agricultural exports to India amounted to more than \$250 million in 1958. All except 0.2 percent of this was under special government programs—mainly Public Law 480. Food, grains, cotton, and feed grains were the major commodities involved. In May of this year another Public Law 480 agreement was signed by India and the United States. Under this agreement we will ship India about \$1.3 billion worth of agricultural products (mainly wheat, 587 million bushels; and rice, 22 million bags) during the next 4 years. Most of the Indian currency received will be given back to India or loaned to her for economic development.

India's needs do not appear to be diminishing. Her population is increasing by at least 8 million a year. It is expected to reach 10 million a year by 1965. It is estimated that to maintain even the present low calorie diet, she will need to import 5 million metric tons of food annually above what she can purchase on commercial markets.

PAKISTAN

What has been said for India can almost be repeated for Pakistan. Among the differences are—there are fewer people (about 88 million), and their income is even lower. Prospects for economic development if measured in terms of natural resources are, if anything, less encouraging. Here, too, the need is great with economic demand almost nonexistent.

Summary

In general, we appear to be exporting about as much of our agricultural production as is feasible under existing circumstances. Among the countries mentioned, those with the greatest need are least able to express that need in the market place. Our Public Law 480 program recognizes this and is provid-

ing vast quantities of foods from our surplus stocks, (mainly grains) for local currencies or as emergency grants. But this program is not entirely trouble-free. For one thing, its major objective is to get rid of burdensome surpluses rather than to aid economic development abroad; therefore, the needs of these countries are often not adequately met.

The U. S. farmer with his high capital investment and labor efficiency can certainly expect to compete effectively for foreign markets with most native producers in spite of problems of distance and their low wage rates. Problems to be faced include now to give the foreign customer what he wants and to encourage freer trade. But prospective gains make the effort worthwhile.

FARMING IN KOREA SEEMS LIKE LARGE SCALE GARDENING

Jin Hwan Park* and S. A. Engene

Farming in Korea, as in most of the Far East, differs greatly from Minnesota. Farms are much smaller—almost like over-sized vegetable gardens. Land is used very carefully, but labor is used freely.

South Korea is about half as large as Minnesota. It has 5 million acres of cultivated land; Minnesota has 21 million. Crowded into this small area are 22 million people, compared with about 3½ million in Minnesota. Almost 70 percent of the people live on the land, on 2.2 million farms.

The average size of a farm is 2¼ acres. As shown in table 1, most Korean farmers have less than 5 acres of land. As a basis for comparison, a typical city block or typical farmstead in Minnesota is 5 acres. Almost one-half of the Korean farmers have less than a quarter of a city block of land.

The average income is low on these farms, as shown in table 2. The 560 farmers for whom data are given were a representative figure for the country.

One thousand hwan is equal in foreign exchange to about one U. S. dollar, so it is possible to read the table in terms of dollars. On the other hand, most of the farmer's purchases are made domestically; here the purchasing power is considerably higher than

is indicated by the foreign exchange rate. It is difficult to make a satisfactory comparison, but, roughly 1,000 hwan will have domestic purchasing power equal to 2 to 3 dollars for Minnesota farmers. Even with this adjustment, income of Korean farmers is very low.

The Korean farmer uses much of his production for direct consumption in the home. The total value of production on the average farm in 1957 was 480,000 hwan, but of this only 146,000 hwan, or 30 percent, was sold on the market; this compares with 95 percent or more on a Minnesota farm.

Most of the farmer's income goes for food. The household expense, in thousands of hwan, for the 560 farmers included in table 2 was:

Food	368
Residence maintenance	5
Light and heat	60
Clothing	31
Education, health, others	63
Taxes, public charges	15
Total	542

About one-third of this was purchased on the market with cash; the

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other two-thirds was produced on the farm.

The total living cost was 542,000 hwan, compared with farm earnings of 529,000 hwan (table 2). In 1957, income did not cover expenses. Apparently earnings have been more favorable in past years, since many of these farmers own a large equity in their farms.

The average investment in these farms was 1,450,000 hwan. This is approximately 3 times the gross value produced on the farms, as shown in table 2. This is comparable with Minnesota farms; the records of farmers in the Southeast and Southwest Minnesota Management Services show that the value of the assets used on the farm are 3 to 4 times the value of the annual production.

Of the total value invested in the average Korean farm, 69 percent was tied up in land and 13 percent in buildings (including the residence). Crops on hand took another 13 percent, leaving only 5 percent invested in machinery, livestock, materials, and cash. Minnesota farmers have a much larger proportion invested in machinery and livestock.

The value of livestock and livestock products was only 2 percent of the total production on these farms. Crops produce more food per unit of land than do livestock, and land is scarce. Some farmers raise a few rabbits, chickens, pigs, and less than half of the farms raise 1 or 2 head of cattle.

Since they use much of the crop production in the home, they raise a large number of different crops, to help give variety. The number of crops grown per farm is shown in table 3. The small farmers averaged almost 6 crops per farm, while the larger farms averaged 15 different crops. Only a third of these crops was grown on an area as large as ¼ acre. Even those crops for which the largest acreage was grown were divided into several fields. Small fields are so common that the farmers use as one unit of measurement the "pyung," which is roughly 36 square feet (6 x 6 ft.).

Table 1. Distribution of South Korean Farms, by size of farm, 1958

Size of farm, acres	Percent of farms
Less than 1.2	42.8
1.2 to 2.4	30.7
2.4 to 4.8	20.4
4.8 to 7.2	5.7
7.2 and more	0.4
All sizes	100.0

Source: Statistical Year Book, Ministry of Agriculture and Forestry, Korea, 1959.

The average size of family on these farms is 6 to 7 persons. There this is the equivalent of 2 or more persons working (see table 4). This compares with about 1½ workers on a typical Minnesota farm.

Most of the crop work is done by hand; with small farms and fields, machinery is not economical. The hours spent per acre to raise and harvest some of the crops that are familiar to Minnesota farmers are:

Barley	460 hours
Wheat	450 hours
Corn	520 hours
Rice	800 hours
Apples	2,000 hours

This compares with 4 to 10 hours per acre for the typical field crops in Minnesota.

In spite of the high labor requirements for their crops, labor is not fully used on the small farms (see table 4). The farms with less than 1.2 acres provide only about 72 days of work per man per year. If a man could work 250 days per year, this would mean only 29-percent utilization. The large farms provide much more efficient utilization of the labor.

This large supply of labor per farm shifts the nature of the farmer's problem. The Korean farmer must get high production per acre, at as low a cash cost as possible; he can afford to use labor rather lavishly to do this. The Minnesota farmer, on the other hand, tries to conserve his labor, and is willing to use his land more wastefully.

This description of farming in Korea indicates some of the problems facing that nation, and many other nations, in improving their standards of living. It also indicates some of our problems as we attempt to aid those nations.

Land is scarce; to increase food production, they must increase production per acre. They must increase productivity of land very markedly if they wish to shift to more livestock and livestock products in their diet.

They must change production practices or change to new crops in order to achieve this increased production. It may not be serious if these changes use more labor; there is a surplus of labor on the farms.

More non-farm jobs are needed in order to raise the levels of living. These jobs will depend upon future expansion in the industrial development of the nation.

Table 2. Average farm income and farm expenses per farm, 560 farms, 1957

Item	Total value	Part which is cash
(1,000 hwan)*		
Income		
Rice	307	86
Barley and wheat	68	10
Other crops	99	42
Sericulture (silk)	1	1
Livestock and products	7	5
Miscellaneous	4	1
Total farm	486	146
Off-farm income	110	92
Total income	596	238
Farm expenses		
Seeds and fertilizers	31	
Livestock and feed	4	
Machinery	2	
Light and heat	3	
Hired labor	22	
Rent	3	
Miscellaneous	2	
Total farm expense	67	54
Farm earnings	529	184
Interest on capital	60	
Family labor earnings	469	
Number of working persons	3.0	
Labor earnings per person	156	

* 1,000 hwan is approx. equal to \$1.00.
Source: Agricultural Year Book, Korean Agricultural Bank, 1959.

Table 3. Number of crops planted per year, 1958-59

Acres per farm	Number of farms	Number of crops with acreage exceeding		
		1/40 acre	1/12 acre	1/4 acre
Under 1.2	47	5.8	3.4	1.9
1.2 to 2.4	128	9.5	5.9	3.1
2.4 to 3.6	116	11.1	7.4	3.8
3.6 to 4.8	65	14.0	10.1	4.7
4.8 to 7.2	62	14.2	9.8	5.2
7.2 and over	31	15.3	11.3	6.6

Source: Unpublished data, Dept. of Agricultural Economics, Seoul National University.

Table 4. Labor supply and days worked per farm on 450 farms, 1958-59

Size of farm	Days worked*	Working persons†	Work per person
Acres	Days	Persons	Days
Under 1.2	152	2.1	72
1.2 to 2.4	240	2.4	100
2.4 to 3.6	408	2.5	163
3.6 to 4.8	547	2.7	203
4.8 to 7.2	709	2.8	256
7.2 and over	989	2.7	366

* Per farm.
† Children, women, aged persons, partially employed off farm, etc., adjusted to adult man equivalent.
Source: Unpublished data, Dept. of Agricultural Economics, Seoul National University.

THE OUTLOOK CORNER

Agricultural Exports Essential

World Trade Trends in Agricultural Products

During the 1957-58 marketing year the United States exported about 25 percent or more of her production in wheat, cotton, tobacco, soybeans, rice, and barley. Our total share of world trade since 1948-52 is shown in table 1.

Major agricultural imports of the United States during the 1957-58 period accounted for over 50 percent of the world trade in coffee, about 35 percent in cocoa beans, and 25 percent in both rubber and sugar.

Major U. S. Agricultural Exports

Trends in total exports of agricultural products by the U. S. since 1953 are shown in table 2. These are: (1) grains and feeds continue as the major agricultural export commodities although the volume has fluctuated; (2) livestock products and vegetable oils have become more important; while (3) fruits and vegetables and other commodities have held fairly constant.

Major Foreign Markets

Although the United States exported agricultural products to over 100 countries in 1959, 62 percent of the exports went to ten countries (table 3). The United Kingdom brought \$425 million worth in 1959; and Canada, a close second, purchased \$385 million worth.

Export Aids

Aids to export sales of agricultural products are shown in table 4. These

Table 1. World and U. S. agricultural exports: value at 1952-54 average prices, calendar year average 1948-52 and annual 1953-58*

Year	Agricultural exports	
	World total	U. S. share
	billion dollars	percent
1948-52 av.....	21.8	3.4
1953	23.7	2.9
1954	24.2	3.1
1955	25.3	3.5
1956	27.6	4.7
1957	28.3	5.2
1958	27.0	4.5

* Foreign Agricultural Outlook Charts, FAS, USDA, November 1959.

have become more important in recent years. Only 39 percent of the agricultural export sales were unassisted in fiscal 1957; 45 percent, 1958.

Table 3. U. S. agricultural exports by destination, calendar year 1959

Country	1959 Million dollars
United Kingdom	425
Canada	385
Japan	334
The Netherlands	319
West Germany	305
India	209
Cuba	132
Belgium	123
Italy	117
Yugoslavia	102
Others	1,498
Total	3,949

Table 2. U. S. agricultural exports: total value at actual prices and percent of total for specific commodity groups, years ending June 30, 1953-59*

Year	Total agri cultural exports	Percent of total agricultural exports for						To- bacco-	other
		grains and feeds	cotton, excl. linters	livestock products	vegetable oils and oilseeds	fruits and vegg.			
	mil. dol.								
1953	2,819	42	20	11	6	8	10	3	
1954	2,936	30	23	14	8	9	10	6	
1955†	3,144	28	22	14	10	9	10	7	
1956†	3,496	34	10	20	12	10	11	3	
1957†	4,728	34	24	15	10	7	7	3	
1958†	4,002	33	21	15	10	9	9	3	
1959†	3,720	42	11	14	11	10	9	3	

* Foreign Agricultural Trade, USDA, page 45, 1959.

† Food for relief and charity included in commodity breakdown.

Table 4. U. S. agricultural exports: value under specific government programs and dollar sales, years ending June 30, 1954-59*

Type of export	1954-1959			1959 prel.
	1954- 1956 av.	1957	1958	
	million dollars			
Foreign currency sales	421	1,303	887	939
Donations	372	253	265	189
Barter	152	401	100	132
Dollar sales	2,227	2,771	2,750†	2,460†
Total	3,193	4,728	4,002	3,720

* Foreign Agricultural Charts, FAS, USDA, November 1959.

† About 30 percent of these sales were made at less than domestic prices and so were partially subsidized by government programs.

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