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Food, clothing and shelter are basic to man's survival. Until man's basic biological needs have been met he has little concern for exploring space, improving medical services, and expanding his recreational opportunities, for example. Meeting our food and fiber needs has been taken for granted during recent years. Agricultural programs have resulted in low food prices, thus the mere thought of scarcities of food and fiber are beyond the comprehension of most of today's generation. Recent price increases may therefore be a blessing in disguise.

Headlines, news broadcasts, and feature stories about American agriculture have rekindled an appreciation for the everyday miracle of feeding the nation's 208 million people.

Agriculture is much more than farming and ranching. Modern agriculture encompasses agricultural production to be sure, but it also includes supply and service industries who aid producers with fertilizers, seed, machinery, and information. Marketing and distribution are also included. Thus, modern agriculture engulfs the entire complex required to move goods from producers to consumers.

Consumer spending for food reached \$125 billion for 1972, making food retailing the nation's largest retail industry. In Texas alone consumers spent about \$6.4 billion at food stores and eating and drinking establishments. The importance of modern agriculture to the Texas economy is further highlighted by noting that approxi-

Because Texas is one of the nation's leading agricultural states, production and distribution of food and fiber by Texans is vital for not only Texas consumers, but for all Americans and consumers around the world. Yes, Texans have a right to be proud of their agricultural complex, but the greatest challenge may yet lie ahead.

FOOD PRICES AND SUPPLY AND DEMAND

Nearly everyone has heard someone make reference to the fact that the "laws of supply and demand" explain why the current price situation exists. Let us take a look at supply and demand conditions for food and fiber.

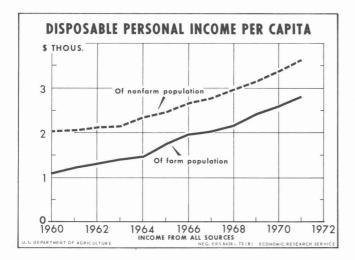
Demand Has Grown

Population—Increases in population have been substantial. With almost 55 percent of 11.6 million Texans being under 30, and 9 percent 65 or older, it is clear that the composition of the population has changed as well as the number. A similar pattern exists for the U.S.

Income—Per capita disposable income has increased (Chart 1). Increases in per capita disposable income has not only expanded the demand for food, but it has resulted in expanded demand for services associated with food. For example, 30 percent of all civilian food expenditures for U.S. farm foods was for food consumed away from home during 1972.

mately 30 percent of all gainfully employed Texans are employed in some part of modern agriculture.

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Changing Consumers—Consumers have shifted their consumption during the decade of the 60's and even during the last couple of years. As income has increased per capita meat consumption has increased 17 percent and beef alone has increased 36 percent since 1960. Also, the per capita consumption of fiber has increased about 20 pounds in the 12 years between 1960-1972. This trend may reflect our preoccupation with appearances and style.

Consumers have demanded more processed and semiprepared foods also. For example, consumption per capita of fresh fruits and vegetables has decreased, but consumption of processed fruits and vegetables has increased.

TABLE 1. FEMALE LABOR FORCE AS A PERCENT OF THE POPULATION, UNITED STATES, 1960-1972.

	1960	1970	1972
All females	34.8	42.6	42.5
Single	44.1	53.0	52.7
Total married	31.7	41.4	41.4
Husband present	30.5	40.8	40.8
Widowed or divorced	37.1	36.2	35.7

Source: U. S. Bureau of the Census, Statistical Abstract of the United States: 1972. Washington, D. C.

Not only has the number of persons employed increased, but the rate of unemployment is low. Working wives are no longer restricted to an exceptional few, as was the case a couple of generations ago (Table 1). With more than 40 percent of all wives working, the "homemakers" dual role

confronts her with many competing demands for her time. Eating out and convenience foods have become an important part of modern family life styles.

Food Substitutes—Per capita consumption of meat synthetics and analogs (usually restructured protein derived from other agricultural products) has increased from nearly zero in 1960 to about one-quarter pound in 1970. Some experts have predicted this consumption will increase to about 5 pounds in the next 5 years, and 20 pounds in the next 20 years. Recent entry of textured vegetable protein (TVP) mixed with fresh ground beef as an extender appears to be well received.

Has Foreign Trade Affected Beef Prices? The answer is "yes," but the temporary effect has caused a more dramatic increase than is expected in the long run. To understand why U. S. agricultural products have been sold abroad, one must realize that the majority of the world's 3.8 billion people live in developing countries where 50 percent or more of the population must be employed in food and fiber production just to meet their basic needs. Contrastingly, less than 5 percent of the U. S. population provides us with a relatively abundant supply of food and fiber. International bad weather has resulted in food shortages in countries where food supplies have barely exceeded subsistence levels during this past year.

As the dollar was devalued, U. S. agricultural products became less expensive for other countries. This fact coupled with World food shortages has stimulated sales of our products. The nation's economy has benefited through an improvement of our balance of payments position. Indeed, agriculture's \$5.6 billion net contribution was most welcomed.

Foreign Consumption Is Not Temporary—We market crops abroad from about 1 acre out of every 4. If this supply were made available domestically, our U. S. prices for food products would be lowered. However, the long-run price we would pay for all goods and services would probably increase substantially. Agricultural products are vital to our trading for oil and gas, and other goods which our economy desperately needs.

Furthermore, as weather conditions abroad improve, the impact will not be as dramatic. This does not mean that world demand can be expected to disappear. Many countries in Europe as well as Japan are examples of emerging affluent nations which represent significant markets for our agriculture products in the years to come.

Supply Conditions—Because of the unique nature of agricultural products, small changes in supplies result in relatively larger changes in price. Many consumers have wondered why agricultural producers do not produce the right quantities of products, i. e. no surplus and no shortages. There are several reasons why they do not. For one, it is difficult to forecast the amount required, but that is a simpler task than projecting weather conditions. Inclement weather has been responsible for decreased grain, fruit, and vegetable production in the U.S. As a result feed costs have increased, adding to the cost of producing meats and poultry.

Agricultural producers deal with biological organisms and supply cannot be turned on and off as easily as most industrial goods. Beef cattle are an excellent example. About 30 months are required to produce a 1,000-pound finished steer from conception to consumption. Even though this is longer than is required for most agricultural commodities, even poultry requires 6-9 months to realize any appreciable expansion in production.

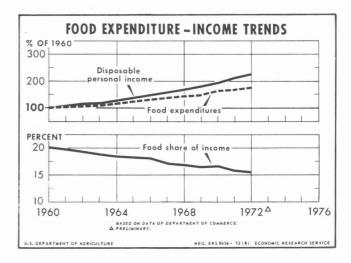
How Do You Win? During the 1960's much public furor was raised over the fact that we had generated food surpluses. Programs designed to eliminate that situation have been successful and there essentially are no agricultural surpluses today except for peanuts. Even the USDA's Plentiful Foods Program has been eliminated as of August 1973. Now public furor is once again evident, but this time surpluses appear to be favored.

CONSUMER'S FOOD DOLLAR

In spite of recent price increases, food is still one of the best bargains left in the U.S. (Chart 2), and compared to other developed countries of the world we are also better off. Additionally, more items are available to select from. In 1962 the average supermarket carried about 6,600 items compared to nearly 8,000 in 1972. Quality improvement has been substantial also. For example, 60 percent of all beef was graded choice in 1972 compared to 45 percent in 1960.

This may be of little comfort, however, if you are on a fixed or a small income. But, programs

CHART 2



aimed at providing increased food services for those in need have also been expanded. Food stamps valued at \$3.6 billion were distributed in 1972 in the U.S.

Where Does Your Food Dollar Go? If you spend \$10 in a grocery store, your typical expenditure may resemble that presented as Table 2.

TABLE 2. TYPICAL \$10 EXPENDITURE IN A SUPERMARKET.

Meat	\$ 2.83
Produce	.76
Dairy	1.03
Ice Cream	.11
Frozen Foods	.34
Bakery	.50
Dry Grocery	2.75
Non-foods	1.68
TOTAL	\$10.00

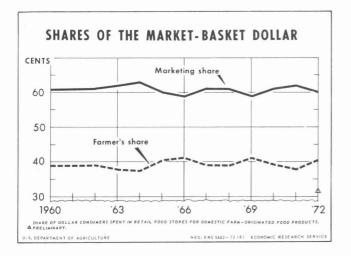
Source: Adapted from *Progressive Grocer*, April 1973, p. 208.

Within the distribution system, the share of consumers' dollars going to farmers and marketers has been rather stable (Chart 3). Differences among products and the amount of processing required results in some products having most of their value added after it leaves the farm (Chart 4).

The total marketing bill has increased (Chart 5) and marketing costs have also increased. During 1972 the net profit before taxes experienced by chain stores was about 1.57 cents out of

every dollar sale. Independent supermarkets fared better with 1.9 cents out of every dollar going to net profits before taxes. Independents still dominate the food retailing industry with about 80 percent of all stores and 51 percent of total sales.

CHART 3



CONCLUSIONS

America's agriculture is vital to the U.S. and world economy. Recent supply and demand conditions have resulted in increased food prices, but food is still a bargain compared to most items. Consumers around the world would gladly exchange life styles and living standards with most Americans.

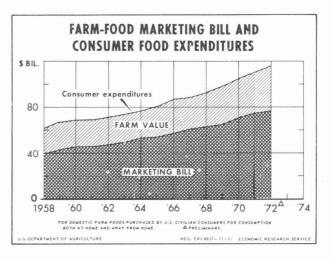
The Land-Grant System has served consumers well, but the greatest challenge is in the years ahead. To satisfy the nation's food and fiber needs as well as meet overseas commitments will require a strengthened agricultural complex.

Never before has there been so many career opportunities and challenges for modern agriculture. It is not overdramatic to say that the future success of our nation and the world depends on our agricultural leadership.

CHART 4



CHART 5



Source: Marketing and Transportation Situation, ERS, USDA, August 1973, p. 13.

REFERENCES

- Marketing and Transportation Situation, ERS, USDA, August 1973, pp. 13 & 20.
- 2. Progressive Grocer, April 1973, pp. 80, 84, & 208.
- 3. U. S. Bureau of the Census, Statistical Abstract of the United States: 1972. Washington, D. C.

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