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Economics in a World of Change : Highlights of Papers Presented at the Eleventh Agri-Business Day

South Dakota Agricultural Experiment Station

Department of Economics, South Dakota State University

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ECONOMICS IN A WORLD OF CHANGE

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Highlights of Papers Presented
at the

Eleventh Agri-Business Day

April 4, 1973

Economics Department
Agricultural Experiment Station

South Dakota State University
Economics Pamphlet 141

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Fritz and Arlyne Lahman of Hecla, S.D. are shown receiving the Agri-Business Man of the Year award for 1973 from John Thompson, Head of the Economics Department. Dr. Thompson noted that this was the first time that the award had been presented to more than one individual.

The Lahman Manufacturing Company makes stack movers, front end loaders, haystack forms, highway signs, cattle guards and other equipment related to farm and ranch operations. Most of the production items, as well as the manufacturing equipment, has been designed by Mr. Lahman.

The Lahmans are deeply concerned about their hometown community of just over 400 persons, 55 of whom they employ. They take great pride in their employees and provide incentives that maintain high levels of employee loyalty and economic well being.

ECONOMICS IN A WORLD OF CHANGE

Highlights of Papers Presented at the
Eleventh Agri-Business Day

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Compiled and Edited by Robert J. Antonides

LONG-RANGE PLANNING FOR AGRIBUSINESS IN THE 1970'S

RONALD ANDERSON
CORPORATE PLANNER
CONTINENTAL GRAIN COMPANY
NEW YORK

Can American agriculture save the dollar? This was the cover headline of the March 15 Forbes magazine. Probably no greater tribute could be paid to American agriculture. It summarizes better than anything else the improving image of, and respect for, American agriculture.

American agriculture has emerged, after decades of subsidizing the American consumer at prices often below cost, as the most competitive American sector in the world economy.

Having lacked the muscle to pass along rising costs, as other sectors were, agriculture went through the pains of becoming efficient. Agricultural productivity increased 3 1/2 times in the last 20 years. This efficiency is now being called upon to both cover our world excess and to maintain our living standard at a level to which we have become accustomed.

The current situation has created record farm income and prices and is highly favorable to agribusiness. However, the euphoria over the present situation can easily cloud the trends of the future. Thus, the need for planning.

For any agribusiness company to do long-range planning, a sequence of activities should be followed. The exact sequence may vary, but it should include some of the following:

1. The development of a broad economic guide that forecasts general economic conditions.
2. An evaluation of our present position. This should identify our business, markets, competition, strength and weaknesses.
3. A forecast of changes in our business environment, including changes in demand, supply, competition, government regulations, labor and productivity.
4. The setting of key measurable objectives. These could be specific profit goals, market share, or entering new markets.
5. The formulation of strategies to achieve the objectives. Strategies should provide a guide within which all actions should be restricted. Possible strategies might be:
 - a. Introduction of new products or services.

- b. Special geographical, product, or market emphasis.
 - c. Expansion of manufacturing, handling or service capabilities.
 - d. Expansion into new territories.
6. Determine the action programs needed to achieve the objectives. Within this group, diversification and acquisition programs could be included.
 7. A financial forecast.

These steps can help a business manage its resources, and can be adapted to any size business, including farming. It can be a brief outline or an extensive analysis. This morning I want to direct my attention to a discussion of the broad economic factors that will affect agriculture in the 1970's. Then, I will try to identify some of the specific opportunities and limitations affecting this area.

Present Position

Are today's record prices and exports for many agricultural commodities signaling the beginning of that golden era in agriculture that has always been just beyond our grasp?

The current popular belief is that the present agricultural boom was caused by the Russian crop failure. This may have provided the frosting on the cake, but other, more basic developments in politics and economics were more important. In 1971, prior to its crop failure, Russia imported feed grains. This means that it has made a basic political change to upgrade the diet of its people and, further, will have to continue to import feed grains. Similar political changes have occurred in Eastern Europe and may, at this time, be developing in China.

Economic prosperity is the second development sustaining the current boom. Growing per capita income and improved foreign exchange in numerous countries is improving the nutritional levels. People in Europe, Japan and other countries have become more prosperous and are reaching across the seas to the American garden for more nourishment. The continued strong export demand for soybeans, wheat and feed grains in spite of current high prices is a good measure of the world's growing economic power. Even within the United States, rising per capita consumption is being maintained because per capita income is up 62% since 1965, compared to only a 33% increase in food prices. Other factors contributing to the current boom include the 1970 corn blight which reduced livestock production, continued population growth, and dollar devaluations.

One countering economic development of major proportions was the establishment of the Common Market which established high fixed prices for wheat, feed grains and other agricultural products. This development encouraged marginal production, discouraged consumption and caused reduced exports to the Common Market during the late 60's. This development may have temporarily masked the real trend in international agricultural trade because exports to most other areas continued to grow, but because the Common Market is such a large segment of the world market, total world trade declined. Since 1966, the United States has lost \$200 to \$300 million a year in feed grain exports to Western Europe. On top of that, Britain, Ireland and Denmark, customers for \$550 million worth of United States exports per year, have just entered the Common Market, imperiling that export demand.

We have been in an era in which, in many countries, self-sufficiency was stressed and where incomes and foreign exchange would not sustain imports or high prices. Most shortcomings in production were satisfied by rationing rather than imports. Today, much of this is changing because of the before-mentioned political and economic changes around the world. Even the Common Market will have to relax its policies if it wants to keep its products in the U.S. market.

The Promise for the Future

In forecasting the future, there is a great tendency to merely extrapolate from the past. However, in any period after--such as post war, post depression, or post Russian grain trade, we seldom go back to the pre-existing situation. We usually enter upon a new era.

This could well be the beginning of the era of "the world economy." Some prime factors contributing to this type of world interdependency are:

1. The emergence of Japan as an economic superpower.
2. The massive accumulation of foreign exchange by Middle East oil countries (4 billion in 1970 and estimated to be 50 billion annually by 1980).
3. The dependence of the Soviet Bloc and China on Western capital, Western technology and U.S. agriculture.
4. The corresponding U.S., Japanese and European dependence on these areas for energy and minerals.

The era of self-sufficiency by even great powers such as the United States, China and the U.S.S.R. is over. The costs of production and the limits of specific resources will encourage countries to produce what they can do best. As countries become less self-sufficient and more dependent upon others for resources and markets, the risk of international conflict should decline.

The fear associated with becoming dependent for certain basic necessities has always haunted man along every step, from the beginnings of civilization when the first city dwellers became dependent upon their country cousins, to the present developments toward international levels of dependency. Perhaps economics can succeed where politics and diplomacy have failed in improving man's behavior and cooperation. An article in the January 30th Milling and Baking news asked, "What role for wheat in Vietnam war settlement?" We can only speculate on what role the Chinese and U.S.S.R. need for U.S. wheat played.

More and more countries are finding, just as the American farmer realized long ago, that it is too costly and inefficient to be self-sufficient in all areas of production. Japan is the first country to admit that it cannot begin to produce its agricultural needs and, thus, is moving towards a free agricultural market. Unfortunately, the E.E.C. has taken a step backwards and is trying to support an inefficient agricultural structure at great expense to its consumers and to international trade. A recent U.S.D.A. Foreign Agricultural study concludes that if unhindered by trade restraints, the highly efficient U.S. grains - oilseeds - livestock complex could roughly double U.S. exports of agricultural products to more than \$18 billion by 1980. The import rise would be far less than this, moving up only 50% to about \$9 billion, thus tripling the agriculture surplus from \$3 billion in 1972 to a potential \$9 billion. Competitive advantages would exist for U.S. grains, tobacco and poultry, while disadvantages would prevail for U.S. dairy products, sugar, wool, lamb, mutton, and peanuts.

I cannot stress too strongly the difficulty with which free trade will be accomplished. You can easily imagine the political impact resulting from a foreign threat to the U.S. dairy or textile industries. Such problems exist in all countries. We can be thankful that certain types of production like tea, coffee and bananas, to name a few, never developed in the United States because protectionists would have found the means to protect this inefficient production at the expense of the consumer. More and more individual countries will have to face the fact that they are not the most efficient producers of certain products. Just as in the United States, each state long ago gave up trying to be self-sufficient. South Dakota could be self-sufficient in textile manufacturing, but only at great expense. Production patterns within the United States have constantly shifted to more competitive areas as they develop. These shifts are now occurring on an international basis.

The previous discussion has given us an indication of agriculture's present position and has summarized the broad economic climate that we expect to develop in the 1970's. I centered on the international scene because agriculture in the future will be competing to a greater extent on an international scale. This information should be helpful to agribusiness, along with the following discussion on U.S. production patterns, for identifying possible areas of opportunity.

Changing Production Patterns

Within the United States, agricultural production and consumption continue to change. During the last decade, there has been an accelerating trend towards specialization in agriculture. The census of agriculture shows that in the 5 years from 1964-1969, the number of farms declined 13 1/2%--that is not surprising. However, farms with cattle declined 25%, farms with hogs 37%, dairy 50% and poultry 61%. Furthermore, there have been major shifts in production to new areas of the country. Poultry shifted into the South and Southeast, beef feeding is shifting into the Southwest, and areas of the Eastern corn belt have been going away from livestock and into cash grain production. Furthermore, the type of grain production in many areas continues to change.

These shifts in production and consumption do not just happen. They are brought about by the interaction of competitive forces. In the international market, the American farmer has been able to capture over 50% of the international feed grain trade, primarily because he has become the most efficient agricultural producer in the world. On the domestic side, feed lots prospered in the Southwest better than anywhere else because that is where the best resources for feed lots prevailed.

Farm Labor

One of the resources affecting agricultural production is farm labor. During the last 20 years, farms have become greatly consolidated and most of the excess farm labor has migrated to the cities. The low farm prices prevailing during most of the 1950's and 60's and the high capital investment required to enter farming did not encourage many young men to enter farming. As a result, the average age of farmers in most states is over 55 years of age.

Concern is now being expressed by the government and others that the shortage of young farmers could cause problems for certain segments of agriculture in the next decade. I feel that this has already affected the higher labor intensive segments of agriculture such as hog, sheep, and dairy production. It might also explain why some farming areas have gone almost exclusively to cash grain production. There has been major expansion in poultry and beef feed lot production because they lend themselves to automation and mechanization. However, productivity gains have been slower to improve in some other sectors. As an example, 10 fat lambs are about equal in value and weight to one steer--which would you rather take care of?

I think we can assume that farm labor will become even more expensive and that those segments of agriculture that cannot be handled from the tractor seat or with a high degree of automation will continue to decline in importance. Farmers are becoming less inclined to continue producing unless returns are attractive. Furthermore, the agricultural segments that prosper will be those that can provide wages, working conditions and living conditions commensurate with city workers. It is important in long-range planning for agribusiness to be cognizant of labor and worker

satisfaction because this will ultimately determine the location, type and volume of production.

Transportation

One of the more important resources affecting production and agribusiness patterns is transportation. We assume that major changes in transportation will occur during the 1970's. Originally, rail transportation rates for agriculture commodities were based on shipment from Western production areas to the Eastern consuming areas. In the case of grain, these rates allowed transit or accumulation at terminal markets for later shipment. The rate was the same whether the transit privilege was used or not. Thus, the rate on the direct move was higher than otherwise justifiable. These transit rates on a single car basis have too many built in inefficiencies, some of which are:

- Circuitous routing of grain.
- Unloading and later reloading.
- Stops for inspection.

In recent years, the rapid number of rate increases has greatly compounded the problem of inefficient transportation structure. An example is the feed grain rates from South Dakota, Nebraska and Kansas to California and the Pacific Northwest. These rates were 70 cents/cwt. in 1967 but are about 95 cents/cwt. now. The resulting higher feed costs have caused poultry and livestock producers on the West Coast to lose competitiveness with Texas and Arkansas producers. West Texas used to ship feed grains to California until the feed lots moved into West Texas.

Over the years, changes in production, markets and competition has increased the need for structural changes in the transportation system. In fact, innovations are the only way to compensate for rising labor costs.

Transportation changes have occurred much faster east of the Mississippi River than west of it. This was because competition from trucks and barges captured an increasing share of the growing export and Southeast poultry market.

The effect that competition had on this change can be exemplified by the fact that in New England where barge and truck competition does not exist, the old rate structures have remained mostly intact. The freight rates on feed grain from the Midwest to New England are roughly double what they are to the Southeast, both about the same distance. As a result of this disparity in freight rate structures, poultry production in New England, which is close to the Northeast consuming market, has had difficulty holding its own while production in the Southeast has increased over 200%.

Unfortunately, a major barge and truck competition was not present west of the Mississippi either. As a result, very little progress was made on rate structures until about 18 months ago. In 1971, the Rock Island Railroad published trainload rates on corn and beans from Iowa to Houston. Only a few elevators in Iowa could load trains at that time. Last summer, the CNW and Milwaukee Railroads published similar rates and included the Great Lakes ports. Now, over 100 elevators in Iowa and Minnesota are loading, or have expressed an interest in loading trains. I think we can assume that train movements will expand into the surrounding states as well. Furthermore, trains to the Pacific Northwest should follow.

In the future, we expect a major change in rate structure and flow of commodities from this upper Midwest area. Single car grain rates will be replaced by volume bare bone rates direct from the origination point to the destination. Additional services requested by shippers or purchasers will carry additional charges. The efficiencies of volume shipments can no longer be denied. One hundred car trains out of Illinois to the Atlantic or the Gulf can make turn-around of 8 days, compared to about 25 days for single cars.

New Export Market

Major structural changes from this area are needed in order to provide the growing export demand to Asia from our West Coast. A major new export market for the products from this area is developing because this area is the closest production area available that can provide increased supplies to the Pacific Northwest. One new export facility has already been built and two more are being planned for the Pacific Northwest to handle this export volume. Some of these facilities are located on Puget Sound, which provides the only U.S. deep water port for handling the future large bulk carriers. Since our exports to the Asian markets are already several hundred million bushels above current Pacific Northwest exports, it is only logical to assume that a major flow of grain from this area to the Pacific Northwest will occur. The export volume potential from the Pacific Northwest is limited only by the amount of grain that can be competitively delivered to its ports.

Transportation is a major factor determining the trend of agricultural production and this area of the country has traditionally been at a competitive disadvantage in transportation. Part of this is geography and part of this is the fact that rates per ton-mile are some of the highest in the country. The adoption of better marketing and transportation innovations has been slow. This is a very important consideration because the agriculture production from this area must compete for national and international markets with the production from better-favored rate areas. After all, the local farm price is the port export price less freight and handling.

There is a new study being commissioned by the Old West Regional Commission to study the impact of transportation rates on the economy of this region. This study will compare comparable freight rates from other regions to competitive markets to measure the extent of any discrimination

in freight rate levels that might be hindering the development of this area's economy. This study should be encouraged and the results studied with great interest.

Higher transportation and handling costs reduce the local farm price, which, in turn, lowers farm income, land value and productive incentive and discourages high volume-low unit value crops. It is no accident that farmers in this area have historically been the heaviest users of government crop diversion and loan programs.

In areas where transportation has been extremely competitive, the farmer's price of grain has been significantly higher. In the feed grain areas, this has discouraged livestock production. Illinois is a good example. Central Illinois corn at the farm has traditionally averaged 10-12¢ per bushel higher than Central Iowa. As a result, Central Illinois has gone almost exclusively to cash grain, whereas Central Iowa has traditionally marketed most of its grain through livestock.

What would it mean to the economy of this area if a 10¢/bu. improvement in marketing efficiency on grain could be achieved? On 50 bushels per acre corn land, this could improve the net returns by \$5.00 per acre. Even if we applied this to only 50% of the total land area within a radius of 10 miles of any town, the value would exceed \$500,000.

Furthermore, since each dollar of productive output requires approximately 70¢ of direct inputs, agribusiness would benefit from the increasing and changing productive incentive. A recently published guide by the U.S.D.A. on input-output shows the direct inputs required from every sector of agribusiness to produce each dollar value of a commodity. From this guide, the effect of production changes on any agribusiness sector can be estimated.

Effect of Energy

Another factor affecting the transportation trends in his area is the rising cost of energy. A Stanford study indicates that it takes 3-1/2 times as much fuel to move a bushel of grain by truck as it does by rail. If gasoline costs double within a short time, costs will affect trucking more than rail. A major reduction in long-haul trucking should be anticipated and, in fact, should be welcomed. If this nation is ever to cope with its pollution problems, it will have to get its traffic back on the railroads. This is all the more reason to improve our facilities and marketing efficiency.

Northwest Production Trends and Opportunities

Transportation and other economic factors are already having a profound affect upon agriculture and agribusiness in this Upper Midwest territory. There appears to be a slippage in livestock production or, at best, a very slow growth over much of the area. Cash grain marketings have sky-

rocketed in Minnesota and Iowa since the mid-sixties. In Minnesota alone, cash grain marketings since 1966 have increased from 300 to 450 million bushels, a gain of 50%, while production increased 30%. Increasing yields, declining consumption by livestock and an accelerated shift to corn production has produced this change. South Dakota and North Dakota now appear to be entering the take-off stage in cash grain marketings.

It is important for agribusiness, including farming, to identify what kind of livestock and crop production will be competitive in this area during the 1970's. Furthermore, what types of large integrated operations will develop and in what types of production can family operations best compete?

I think that cash grain production will intensify in Minnesota, South Dakota, North Dakota and Montana as our transportation structures improve, and especially when the deep water ports in the Pacific Northwest increase their draw.

In the livestock sector, there appears to be some potential for large feed lots in South Dakota and Montana. However, the decline of the small cattle feeder will probably accelerate because the mechanized large feed lots will bid feeder cattle away from the smaller feeders.

I am not trying to indicate that there is no place for the smaller operator in livestock production. Quite the contrary is true--but the best opportunities to compete with smaller operations appear to be in areas where the large integrated operations have difficulty competing. These would include:

1. Beef cow herds.
2. Hog production. (Because management and labor intensity continue to be a limiting factor to super-large operations).
3. Small cattle feeders that are set up to utilize large amounts of cheap roughages.

The individual resources of land, labor and capital available will determine what strategy to pursue in either the livestock or crop sector.

Opportunity for American Agriculture

The continuing developments in international politics and economics, combined with population growth, should make the 1970's a dynamic era for American agriculture and agribusiness. The gains of the Green Revolution have about equaled population growth throughout the world. However, as we push world production higher and higher, we rely more and more on this level of production and the impact of short falls in production becomes greater. A 10% reduction at the 250 million ton production level provides a short fall of 25 million tons vs. 15 at the 150 million ton level.

Crop short falls in any area of the world will have a greater impact upon American agriculture in the future. This is because the improved economic strength and changing political concerns has reduced the inclination or willingness for belt tightening if domestic production does not measure up. Therefore, we can expect future up-cycles in American agriculture to be much more dramatic, and, perhaps, more frequent, maybe similar to the present one. The present up-cycle is certainly well above long-term trend average but it is not necessarily abnormal. We tend to make projections for the future based upon averages, but especially in agriculture with so many variables, it is certainly normal to have cycles. We project average feed grain exports of 1.4 billion bushels by 1980, but we should be prepared to expect fluctuations of 25-50% during individual years to be normal. This means that in the grain industry we might want to plan our facilities so we could handle the peak year and not the average.

This morning, I have briefly theorized and made some assumptions on the economics and opportunities facing agriculture and agribusiness. We must remember that we are in a period of accelerating change and many of the assumptions we used today will change tomorrow. Therefore, forecasts will have to be revised more frequently.

Long range planning is an attempt to specify and to control what will occur. Without this, we can only react to change. The planning process steps are tools that can be used to implement this planning - a cookbook - use the recipes you want.

There has always been resistance to change and there always will be, but as Victor Hugo reminded us, "Stronger than all armies is an idea whose time has come." I, for one, do not long for the "good old days." We often hear people reminiscing about the "good old days." I'm trying to determine just when they existed. Books like "The Grapes of Wrath," "The Johnstown Flood," "The High Dakota's," and "Black Boy," give us examples of just how good those "good old days" really were. So, as much as we are beset by problems, the future looks brighter than ever.

CURRENT INTERNATIONAL WHEAT SITUATION
JOSEPH HALOW
EXECUTIVE VICE PRESIDENT
GREAT PLAINS WHEAT, INC., WASHINGTON, D.C.

This is perhaps the fourth time I have attended wheat seminars in South Dakota in the past three years. I have been very pleased to see the large turnout for these seminars---each one of them has been well attended. It is particularly gratifying to find such an expression of interest in discussing in open meetings all the facets of the wheat industry. Although it is helpful to distribute published material on what is transpiring in agriculture, it is never quite the same as open discussions such as these. It is of much greater value to be able to participate in groups, where you may discuss either with the speakers or your fellow participants the questions which are surely in all our minds and attempt to devise a means of coping with them.

That there are many questions is understandable. The entire agricultural situation appears to have changed---not only here but abroad as well. The changes we have noted this year came, in fact from abroad. It is very important that we evaluate them and attempt to determine whether or not they are permanent. If they should not be permanent, we should attempt to determine their possible duration and how we might best work within this changed situation to the benefit of the U.S. wheat industry and, in fact, all of U.S. agriculture.

The long dock strike in the 1971/72 marketing year had a particularly bad effect on the U.S. grains industry. It did, first of all, cause a drop in our exports, which depressed our markets. What was perhaps an even more harmful effect was that it obscured for us here in the United States what was happening abroad. Because our own grain markets were depressed many thought all world markets were depressed and felt we had to come to the end of one peak and were going into another period of large surpluses and decreased demand. It actually prevented many from noting that a change was coming about in the world markets.

Those of you who read Milling & Baking News may remember reading in the February 13th edition the reprint of a presentation made by Morton Sosland, Editor, in addressing a seminar for institutional investors in Minneapolis. Mr. Sosland stated that he felt we had come to the end of the "cheap food era". He based this assumption on various social and economic factors, some of which have been brought vividly to the forefront this year and which we should consider here. The total effect may be a movement almost of the dimensions of a revolution.

I believe it may have been historian Arnold Toynbee who said that wars do not change the course of mankind---they merely accelerate it. I feel we have had a somewhat similar situation here this marketing year. The changes we have experienced became evident to us as a result of a wheat sale of historic proportions to the Soviet Union and a smaller

wheat sale to the People's Republic of China. And yet I do not feel that the sales themselves actually brought on the change---they merely served to accelerate and accentuate the change which has been taking place for some time and which became very apparent when other factors helped bring it to the forefront. By other factors I mean, of course, a coincidence of poor crops in various important grain producing areas. A great deal of the exceptional demand we note this year was weather induced---poor weather in the Soviet Union, drought in India, the People's Republic of China, Australia and South Africa. We cannot, however, attribute all this demand to weather factors alone. Grain consumption has been increasing gradually the last several years. It has been fairly obvious since early 1970, for example, that the Soviet Union was in need of increasingly larger amounts of grain. It became apparent in that year when the Soviets had what appeared to be a record crop, but were, nevertheless, still net grain importers.

In attempting to assess supply and demand for wheat in the world markets it has become necessary not only to consider wheat in context with all grains but to consider wheat and other grains even in context with various other foods. In some parts of the world grains compete very actively with various root products, such as potatoes, even for animal feeds. Only recently have we in the United States come to think more generally of a total grains concept, rather than considering grains only as wheat, corn, sorghum, etc. Wheat still occupies a unique spot, providing perhaps the greatest flexibility, since it is both the most generally accepted bread grain and is also, as we in the United States are learning, a very acceptable feed grain as well.

Many economists have tended to overlook wheat in looking for growth in grain consumption. There is a well recognized theory that world use of wheat for food has remained fairly static, with increases in some areas being off-set by decreases in others. Use of feed grains, on the other hand, is increasing as the world diets are being changed to include more livestock products. Even if part of the increased export demand for feed grains should not be extended to wheat as well, the wheat markets will continue to be strengthened by the pull on other grains, for the grains are interrelated.

It is this apparently increasing world-wide demand for livestock products which has been causing such a strong pull on world grain supplies. We can perhaps comprehend the possible extent of this demand when we consider the fact that it takes about 2.2 pounds of grain to produce one pound of chicken, about four pounds of grain to produce one pound of pork and eight pounds of grain to produce one pound of beef. The largest surge in demand appears to be for beef, which has the lowest conversion factor from grain to meat.

Through the last several decades we have noted a continued improvement in the diets in the developed countries, reaching higher levels as the economies of these countries improved and the people were able to afford to buy what they wanted. When I referred earlier in this presentation to a virtual revolution in consumption I was thinking of the increased demand for better diets among the less developed countries and in the socialist countries. Actually such a demand may have always existed; what is different now is that the demand is apparently strong enough or concentrated enough to make itself be felt by the governments of these countries and the fact that they are responding to the demand.

The Soviet Union and other countries in Eastern Europe appear to have embarked on a program to supply more animal protein products to their people. The commitment is apparently so strong that they are willing to expend foreign exchange to buy abroad the foods which their people want---whether it be grains to support their expanded livestock industries or the livestock products themselves. This appears to be the policy also of the People's Republic of China. There are many other countries where this same phenomenon is taking place---I merely mention these countries because their requirements have had the greatest impact on world grain marketing. The effect is as though we had suddenly added a huge new group of people to the consuming population.

If we could count on this to continue we could sit back relaxed, for many of our marketing problems would be resolved, and we could be faced with continued demand for all we could produce, with the resultant attractive prices which our products would bring. The continuation of stronger world demand is, however, tempered by various factors, some positive and others negative. Because world grain stocks have been so greatly reduced world grain trade will depend on this year's production to a far greater extent than usual. Our own reliance on exports will mean that our markets will be very greatly affected by the crop outcomes in other countries. There are some estimates that Soviet import requirements this year may range from 10,000,000 to 20,000,000 tons --- an incredible range. How does one plan here to accomodate such a possibility?

We have already acknowledged the fact that a good portion of the demand this year was the result of a coincidence of poor weather in various important producing areas. We cannot, of course, expect that the poor weather will continue in the same intensity in the same areas. In the Soviet Union, for example, last summer's drought appears to have been broken. There was not a great deal of snow in the winter wheat area, but the winter wheat appears to be in good condition, after a relatively mild winter. There has been a great deal of snow in the spring wheat area. Unless the Soviets should again have as dry a spring and summer as they had last year---which does not seem likely---they should have better crops this year. Yet the production problems in the Soviet Union are only in part due to land and weather---much of their problem is one of agricultural policy. Even the Soviets acknowledge this when they cast blame on the "planning," or lack of planning, which did not make available all the necessary inputs for agriculture. As a result of this---as well as the fact that stocks in the Soviet Union must be either very low or non-existent--- we can expect the Soviets to continue to need imports.

The People's Republic of China was in such need of imports this year they even imported grains from the United States---not direct, but through a third country. The improvement in relations between Mainland China and the United States had apparently not yet progressed to the point where they could announce to their people they had purchased large quantities of grains from the United States. There were reports of poor weather in China last year, and there are indications that poor weather is affecting grain plantings in China this year as well. China has been an importer of about 5 million tons of grain annually and, with a growing population could increase these requirements if they cannot be met by domestic production. Our relations

with China have now improved to such an extent that we are establishing a liaison office in Peking and the Chinese one in Washington. The United States will surely sell more grains to China during the 1973/74 marketing year---there are, in fact, reports that the Chinese have already bought some grains for shipment after July 1st.

The drought in Australia which reduced Australia's wheat crop to something slightly less than 2,000,000 bushels and caused Australia to cut back on its exports this year appears to have been broken. Earlier concern that it might continue into this coming crop year have been removed with adequate rainfall during the last two months. Australian farmers are now looking forward to planting more grains in response to stronger demand and promise of higher prices.

In its third consecutive year of banner exports, Canada's shipping capacity is severely strained and Canadian carryover stocks will be reduced almost to nothing before their new crop comes in. Canada has ambitious plans for a large increase in production of wheat, barley and other grains this year and has already offered an attractive price incentive to Canadian producers. The Canadian winter has, however, been very mild, and the Canadians are concerned that the lack of snowfall may have left their subsoil moisture content quite low. Unless Canada has ample rains in April Canadian planting intentions may be altered.

There have been reports of drought and frost damage to wheat crops in the Middle East. The extent of the damage cannot yet be determined, but crops in Syria, Iraq, Jordan and Israel have probably been affected. The crop in Turkey may also be smaller, so that the import requirements of all these countries may be increased.

In the Far East, India is apparently having serious problems with adequate supplies of grains to feed its people. Despite reports of a better spring crop in India, there are still other reports that people are starving. India's import needs have been estimated to be as high as 5 million tons.

Other very important factors which will strongly influence our grain trade include politics and international trade policy. These are of particular importance because of the greater trend in the world to trading in blocs and by government monopolies.

Again using the Soviet Union as an example---and this year's experience with the Soviets should be enough justification for my continuing to use them as an example---the entire pattern of world trade would have been different this year had the Soviets elected to "tighten their belts". The difference would, of course, have varied with the extent to which they cut down on their consumption. The Soviets apparently did not elect to do this but showed themselves willing to expend foreign exchange to buy what they needed. In countries such as the Soviet Union, where politics may override economic considerations---or where politics and economics are actually the same---balance in supply and demand can be determined by the stroke of a pen. We are now assuming that this may no longer be completely possible, or the Soviets would not have elected to make such huge purchases this year, but we cannot ignore the fact that there is a middle ground---

the Soviets do not have to take one extreme or the other. They can tighten their belts to the extent they are able or willing to continue to import.

Consider the effect of a little belt tightening in a country with a large population. Recently in a presentation he made, Bill Goodale, of Continental Grain, estimated that if the Chinese should decide that each citizen of China can live adequately on 24 ounces of grain a day instead of 26 ounces, the result would be an annual impact of 672 million bushels less demand. For India the impact would be a decrease in annual demand of 440 million bushels. Translated into terms of consumption of livestock products, Morton Sosland of Milling & Baking News estimated that one more pound of chicken a year for each Chinese would require about 33.5 million bushels of grains. The possible swings in trade are staggering.

International trade policy is also of vital importance. Without the very active world trade which has developed, particularly since World War II, it is difficult to imagine that the world would have reached such a state of prosperity. Anyone who considers our chronic balance of trade and payments problems could really come to the conclusion that at least some of this has been at the United States' expense. Our poor showing in the international markets and weakened dollar are bringing the United States to a strong confrontation with some of our most important trading partners. The United States is pressuring Japan to take steps to reduce its trade surplus with the United States, a surplus which amounted to about \$4 billion last year. Up to the time of the Soviet wheat purchase from the United States Japan was the United States' largest commercial wheat customer. By tacit agreement with the United States Japan already takes a little more than half of all its wheat imports from the United States. The Japanese still have some restrictions against certain imports from the United States---agricultural as well as industrial, and negotiations to have these restrictions eased will be a major effort in the months to come.

An interesting current event is the fact that a group from Taiwan is visiting the United States, attempting to make multiple-year commitments for purchases of agricultural products from the United States. The basis for the Taiwanese effort is not necessarily in order to be sure of obtaining supplies but because of their own healthy trade surplus with the United States. The Taiwanese are astute enough to realize that they cannot continue to enjoy such a trade surplus with the United States if they don't make a strong effort to increase their purchases from the United States as well. The Taiwanese, like the Japanese, consider it necessary to buy what they can from the United States if they don't want to lose the United States market.

The European Economic Community (E.E.C.) likewise enjoys a trade surplus with the United States. The U.S. has continued to protest the Community's Common Agricultural Policy of high support prices and a variable levy which will not permit any free market play in sale of grains to the Community. The Common Agricultural Policy (C.A.P.) will be one of the major points of contention in upcoming negotiations with the Community as the United States tries to improve access for United States grains into the Community. The expansion of the Community to include the United Kingdom, Ireland and Denmark will also affect U.S. grain trade.

The Community has fiercely defended its agricultural policy, but the time may now be quite propitious for attempting to negotiate better access for U.S. grains to the E.E.C. The inflationary spiral and escalating food costs in the United States, considered unbearable here, are relatively modest compared to the rate of inflation in food prices in the Community of nine, increasing consumer pressure for relief. The C.A.P. is, therefore, obviously not working in the interests of the consumers who support it. There is evidence, in fact, that Community officials are beginning to recognize this and that the Community may soon find it in its own interests to move to policies which would encourage the use of grains to expand livestock production.

The ability of the Soviet Union, the Eastern European countries and the People's Republic of China to continue to buy from the United States will be affected by their ability to export their own products. The Administration is trying to obtain approval for a trade pact which would involve giving the Soviets Most Favored Nation status, which the Soviets are anxious to obtain. The Senate is withholding approval of the pact until the Soviet Union lifts an emigration tax which has been affecting Jewish emigrants to Israel.

All the problems in the grain industry are not in foreign countries, for no country has a monopoly on them. In the United States we are now having our share of them---oddly enough at a time when our agriculture is quite healthy.

Our transportation system is now straining under what is perhaps the greatest grain movement in our history. It is fairly obvious to all that we will not complete shipment this year of all the grain which has been sold into export. Grains are being moved in open hopper cars, and continued heavy rains in the Midwest have caused some grain to arrive wet at the Gulf. Because of the rail car shortages and other bottlenecks, grain is backed up to the country elevators, many of which are unable to bid on grains because they have no more capacity. At the West Gulf ports there are about 50 steamers waiting, some of them as much as three or four weeks, to get loaded. The shortage of rail cars and congestion at the elevators is expected to continue into the harvest

of the new crop. Farmers are now already expressing concern about what they will be able to do with their grains when they are harvested in May, June and July.

If we have indeed come to the end of the cheap food era, it has not been without a fight. Consumer reaction to the strong markets and the furor created over the Soviet sale will certainly influence those who will have to make decisions on new farm legislation to be determined this year. Consumer concern over prices could have an effect on our exports as well, for high prices are being linked with the exceptionally large export sales this year. Along with the clamor for price controls there are those who request export curbs.

It is fortunate that the United States has recognized the fact that agricultural exports will be vital to the United States efforts to improve its balance of trade and payments. The U.S. could, otherwise, possibly consider export curbs, which would be disastrous. Not only would the dismal prospect of market restriction weaken prices in the United States, but the lack of a constant source of suppliers from the United States would have a disheartening effect on importing countries and other exporting countries as well. This would strengthen production ideas abroad and would destroy our image as dependable suppliers. It would cause foreign buyers to look for alternate solutions to supplying their needs from the United States. Export curbs could, in short, result in permanent or at least long-term loss of markets.

Bowing to continued demand from Labor union leaders and consumer pressure for price controls, last week President Nixon announced establishment of ceilings on retail prices of beef, pork and lamb. Although this is contrary to the position taken earlier by the Administration, ceilings established seem to have been as close as the President could come in an attempt to meet the pressure for ceilings without really reversing his position against price controls. The ceilings were set at levels at about which meats had been sold 10% of the time during the past month. Consumers reply that the ceilings were set at the highest price levels, and others have pointed out that since retail meat prices had already begun to decline, the President's announcement may actually have established a target price rather than a ceiling. Whatever the case may be, the important point is that a ceiling has been established and, perhaps, a new precedent set.

Although farm prices are, in theory, unaffected, establishing ceilings on retail prices would, if maintained over a period of time, still have an effect on farm prices, for obviously the pressure would work downward from the retail level to farm livestock and grain prices.

Actually it is almost impossible to establish ceilings on farm prices without some sort of export control. If we had ceilings on farm prices here at a time such as now, when world demand is strong, the ceilings would keep our prices from rising whereas world prices would work higher. This would create a very strong pull from foreign markets, making it necessary for the United States to ration exports. Lower prices and reduced export possibilities would discourage production further here,

leading to further shortages in the United States. The resultant effect would be world shortages and higher world prices---a healthy demand situation in which the U.S. farmers would not be able to participate to the extent they would otherwise be able.

It seems to me that I have perhaps raised more questions than I have answered. If I could, however, answer even part of these questions now I would require a better crystal ball than I think has been devised. In most instances I feel we shall have to wait and see. A great deal hinges on what happens during this coming year---indeed in the coming months---and how we react. It is not possible for anyone to attempt to stick his head in the sand and ignore world events---too much depends on understanding what is transpiring and being able to cope with it.

DEVELOPMENT DISTRICTS

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If you have been or are confused by such terms as "multi-jurisdictional planning and development districts", "sub-state planning districts", "model rural development districts", and "Council of Governments", there is good reason for your bewilderment. Each of these terms is used to describe approximately the same organizational structure. States and agencies use different terms. In South Dakota, we use at least three; Model Rural Development, Planning and Development Districts and Council of Governments. What are these districts? How and why were they formed?

On December 4, 1970, the Governor of South Dakota issued an order entitled "Executive Order Establishing the Multi-County Planning and Development Districts" which states:

WHEREAS, Bureau of the Budget Circular A-80 recommends that the several states develop a Districting Systems and insures full cooperation on the part of the Federal government thereto; and

WHEREAS, such a regional approach would contribute to the enhancement of the principles of planning and development inherent in the solution of the problems of the State of South Dakota; and

WHEREAS, many State Departments and Agencies currently maintain districts of various sorts, designs, and delineation; and

WHEREAS, greater efficiency in the operations of State's government would result in the development of planning and development districts by eliminating duplication of effort while combining a variety of resources at all levels of government; and

WHEREAS, the philosophy of planning from the local level upward through the structure of government thus preserving the goals and objectives of local government would be enhanced by a system of planning and development districts; and

WHEREAS, the existence of planning and development districts would improve the quality of governmental service to the people of South Dakota by coordinating all resources from Federal, State, as well as local units of government; and

WHEREAS, great savings to the people would result from the technical assistance such a system would provide;

IT IS THEREFORE BY EXECUTIVE ORDER directed that all State Departments and Agencies implement a system of Planning and Development Districts pursuant to the following design.

The order then goes on to list the various counties to be included in each of the six (6) districts thus created and assigns the responsibility for the administration of the districts and orders all departments and agencies of state government to conform to these district boundaries by July 1, 1971.

To date, four of the six planning and development districts are organized and operating with a director and staff. The districts organized are: I, II, V and VI. District I uses the name of the First Planning and Development District; District II, which expanded from a Council of Governments encompassing the Greater Metropolitan Area of Sioux Falls has adopted the name of Southeastern Council of Governments. District V and VI use the names Fifth and Sixth Planning and Development District.

All the districts could be called councils of governments because they are organized by the procedure of the chairman of the boards of county commissioners and heads of member governments such as mayors and township supervisors signing a joint cooperative agreement. This agreement includes the representation on the governing board and the financing arrangements. It is similar to the by-laws of a non-profit corporation.

The South Dakota Planning and Development Districts are supported by the three levels of government, federal, state and local. Federal funds, up to this time, constitute the largest proportion of assistance. Federal funds are channeled to the districts through the many programs administered by the various federal agencies. Such programs might include comprehensive planning, water and sewer planning, criminal justice planning, solid waste disposal, comprehensive health planning, housing and economic development.

Local government funds are used to meet the matching requirements of the federal programs. The amount varies, depending upon the program. State support currently is limited to organizational leadership, coordination between districts and cooperation by the many departments and agencies of state government.

The chief function of a planning and development district is to focus upon the problems which cross local government boundaries. Day to day operations are conducted by the professional planning staff. These activities include data collection, identification of problems and a search for ways and means of meeting the area needs. The planning staff is guided by goals and policies established by the governing board. The professional staff might be described as the technical service unit to the member governments. As such they assist the local planning commissions with their planning and zoning activities. They assist local units of government in preparing grant applications for funding. Such applications might be for the purchase of special equipment used in law enforcement, low rent public housing or water and sewer facilities and many more.

Districts cooperate with other agencies and institutions in their efforts to develop plans and improve services in their area. For example, the First District assisted South Dakota State University Extension Service to obtain special needs funds to hire an environmental education specialist to acquaint the people of the ten-county area with the policies and regulations of the Environmental Protection Agency and the South Dakota pollution control statutes.

Districts might contract for services too. The next speaker will discuss in some detail the Human Needs Assessment Survey which was undertaken by the Institute of Social Sciences here at South Dakota State University. The funds for the study were obtained by the First District. The results, however, will be used, not only by the First District Planning staff but by a host of local, state and federal agencies.

PRELIMINARY FINDINGS OF HUMAN NEEDS
ASSESSMENT SURVEY
DALE E. ROTH, PROJECT LEADER
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The First Planning & Development District was designated as one of three rural Targets of Opportunity for Service Integration in the nation. The federal government is interested in pursuing the possibility of integrating and coordinating federally sponsored social service programs to eliminate or at least minimize fragmentation and inefficiency in the management, the organization and the field delivery of the multitude of human service programs.

The need for certain data about human needs became readily apparent and the Needs Assessment Survey project was conceived. The governor of South Dakota and the Office of the Budget encouraged each state agency to contribute questions and areas of inquiry to the Survey to secure the information necessary to design a valuable delivery system.

The First Planning and Development District received a grant from the Federal Department of Health, Education and Welfare to conduct a human needs assessment survey in the 10 county area. A sub-contract was made with the Institute of Social Sciences to carry out the survey project.

The major objective of the study was to collect and tabulate data covering the areas of demography, human needs, attitudes and other related socio-economic conditions of the residents of the First Planning and Development District.

Through the use of two conceptual models, Roland L. Warren's "Functions of Community" and Abraham Maslow's "Hierarchy of Individual's Goals", the interview instrument was constructed. The questions were grouped into the following 20 areas of inquiry:

Demographic Factors
Unemployment
Employment
Income - Financial
Community Services
Law & Law Enforcement
Environment
Community Participation
Transportation
Health
Nutrition
Clothing
Child & Adult Care

Problems in Living
Marriage & Family
Leisure/Recreation
Juvenile Problems
Education
Religion
Housing

The Housing section also includes interviewers' observations of both interior and exterior conditions of each residence.

Over 2000 tables have been selected as the basis for the general summary report to be released in September 1973 by the First Planning & Development District.

It is not possible to go into great detail at this time so I will share a few highlights with you. Hopefully, this will give some indication of what is available.

A composite picture of human needs and their interrelationships can be constructed by political sub-division, such as by county, township, and town. The data can also be subdivided by social or demographic characteristics and/or by household location (urban, rural non-farm, farm).

How the Survey was Conducted

The Institute of Social Sciences interviewed 1,845 households and 61 institutionalized elderly persons in the First Planning District. This was a six percent sample drawn from the ten counties in proportion to the population of each organized town, township and county.

The household was the unit of analysis for the most part, and was defined as a room or group of rooms with one entrance, shared by its occupants for the general purposes of living and eating.

Twenty-four full-time interviewers completed the survey between October 6 and December 12, 1972. The questionnaire took an average time of one hour and 18 minutes to complete.

General Characteristics of the Households

Households averaged approximately three members apiece. Nearly 35 percent of the households were located on farms, 26 percent were in small towns, and 39 percent were in municipalities of 2,500 or more.

Responses concerning employment indicated that 74 percent of the households had at least one gainfully employed member. The remainder were either retired, not looking for work, or unemployed. More than 30 percent had at least one retired member (retired persons accounted for 13 percent of the total number of individuals in the sample).

Only 2.5 percent of the households had at least one member unemployed; of these, two-thirds were actively looking for work. ("Unemployed" did not refer to homemakers unless they were seriously looking for jobs outside the home.)

Among the principal wage-earners in our sample, 37 percent classified themselves as farmers, 12 percent as self-employed businessmen, and 51 percent said they were salaried.

By examining the data, we can determine the degree and location of unemployment and whether the unemployed person is willing to retain, commute, or move in order to find work. We also know what to expect in the event that currently employed people lost their jobs, with respect to retraining, commuting and taking lesser-skilled jobs (Table 1).

People are generally opposed to accepting local, state, or federal welfare assistance and strongly prefer to retrain or commute or enter private business if current jobs were lost.

We know how farmers and businessmen are faring with the cost-price squeeze and what each group is doing about it (Table 2). Specifically, four out of five farmers (83%) said they were caught in the cost-price squeeze, resulting in shrinking income. Many were increasing their operations to combat the situation. An additional one-sixth of the respondents indicated the farm operator or wife had taken an additional job to help out. There were 28 percent who said they were doing nothing about the situation, mainly because they didn't know what to do. However, a small group of farmers indicated they planned to retire soon so were going to ride it out.

We also have farmers' evaluation of the public and private agencies and organizations who supply them with information and assistance (Table 3).

Although a smaller proportion of businessmen were found with shrinking income as compared to farmers, still, the majority (55 percent) of the businessmen had the problem (Table 4). The situation was being met by getting an additional job, expanding operations or raising prices. One-fourth of the businessmen were doing nothing about the problem.

Lending agencies seemed to be most helpful to the businessmen. The Small Business Administration and trade associations also accounted for a substantial amount of assistance.

One out of five (20%) principal wage-earners showed some dissatisfaction with their jobs, saying they would prefer another occupation if they had a choice.

Table 1
 What steps would you consider if faced with loss of employment?

	Would consider	Opposed	Undecided	NA/NR
Commuting 30 miles or more - - - - -	57%*	35%*	7%*	1%*
Moving - - - - -	62	31	6	1
Retraining - - - - -	65	24	9	1
Job of lesser skill level - - - - -	49	39	12	1
Part-time employment - - - - -	69	26	4	1
Drawing unemployment - - - - -	47	40	9	4
Applying for welfare assistance - - - - -	20	68	11	1
Asking financial assistance from county commissioners - - - - -	14	74	11	1
"Other" government assistance - - - - -	20	44	16	20
Self-employment - - - - -	72	16	10	2

*Percents do not always total 100 due to rounding.

Table 2

Many farmers are now faced with serious shrinking of income while the cost of living continues to rise. Do you find yourself faced with this situation?

Yes: 83% No: 14% Anticipate this: 2%

If yes, what are you doing about it?

Increasing operation - - - - 32%
Additional job - - - - - 11
Wife employed - - - - - 5
Work harder - - - - - 10
Group action - - - - - 3
Political action - - - - - 2
Other - - - - - 7
Nothing - - - - - 28
NR/DK - - - - - 1

Table 3

Farmer Evaluation of Agricultural Agencies and Organizations

AGENCY	USED			NOT USED
	Helpful	Not helpful	DK	
ASCS	91%	3%	3%	3%
SCS	67	2	14	17
Cooperative extension	39	3	27	30
PCA	18	2	29	49
Ag. Officer at bank	41	1	27	27
Doane's Ag Service	13	4	42	39
Crop & Livestock Reporting Service	32	13	16	38
County Agent	62	3	8	26
Farmers Union	38	3	18	38
Farm Bureau	8	2	36	51
NFO	15	4	16	62
Grange	0	1	64	31

Table 4

Many businessmen are now faced with serious shrinking of income while the cost of living continues to rise. Are you faced with this situation?

Yes: 55% No: 39% Anticipate this: 4% DK/NR: 2%

If yes, what are you doing about it?

Additional job (husband or wife) - - - 20%
Group organization - - - - - 2
Increase my prices - - - - - 12
Work more/get bigger - - - - - 24
Decrease family spending - - - - - 10
Doing nothing - - - - - 25
Other - - - - - 6

Which agency has been most helpful to you?

Small Business Administration - - - - 12
University Business School - - - - - 2
University Extension - - - - - 1
Trade Associations - - - - - 19
Other (usually banks or loan officers) 32
Chamber of Commerce - - - - - 1
NA or None of these - - - - - 8
DK - - - - - 19
NR - - - - - 6

Farm Section

Nearly eight percent of the farmers interviewed said they raised only grain; six percent raised livestock alone. The rest--85 percent--raised some combination of grain and livestock.

Most farmers (64 percent of them) said some combination of grain and livestock farming was apt to be most successful for young farmers in light of the current agricultural situation. One out of five thought a dairy operation would be the best bet.

When we asked what marketing methods farmers thought would prevail in the future, no single response received a clear majority. One out of four said "farmers cooperatives." One out of five (20 percent) said "contract marketing," and another one out of five felt that farmers bargaining groups would play a major role. Only eight percent thought hedging on the futures market would be an important marketing method in the future.

Asked what marketing methods they considered unsatisfactory, farmers as a group failed to reach a consensus or had no opinion at all.

Mobility

Our inquiry into population mobility showed that 18 percent of the households had at least one member move out in the past two years. Of those that moved about a fourth stayed within the county, another fourth moved out of the county but within the state, and about half moved out of state. The average age of those who moved was a little over 20.

Reasons for moving were as follows: employment, 21 percent; school, 33 percent; marriage, 29 percent; armed forces, seven percent; and other reasons, 10 percent.

The elderly make up a rather large portion of the population: those 60 years of age and older comprise 19 percent of the population here, as compared with a national average of 14 percent.

Finances

Two-fifths of the households received their main support from self-employment, rents, investments, dividends, or inheritance. One-third received their main support from salary or wages. Social security was the primary source of income in 17 percent of the households.

A total of 84 households and 14 institutionalized elderly, five percent of the total sample, said they had received some form of welfare assistance in the past year. This assistance was the major source of income in 1.4 percent of the sample households, according to the respondents.

Community Services/Problems

When asked about community services at least one out of five were dissatisfied with dog control, traffic control, jails and correctional facilities, and recreation for children. Two out of five were dissatisfied with teen-age recreation and street or road conditions.

One county health facility (County II) appears to be negligent in providing reasonably prompt health services (Table 5). The respondents indicated they had to wait long periods of time for their medical appointments; however, most of them were generally satisfied with the quality of the medical service.

Responses to "What is the most serious problem in your community?" disclosed problems ranging from welfare cheating to inefficient school busing and from the breakdown of family life to loose dogs (Table 6). Chemical dependency was often cited (12 percent), with four percent naming liquor and eight percent saying drugs were the most serious problem. Lack of recreation for youth was also an often-mentioned concern followed closely by lack of jobs. When we group "lack of jobs" with "other related problems" as lack of industry, low farm prices, high cost of living, high taxes, and out-migration of youth, we find that at least one out of five (20 percent) of the respondents were primarily concerned with the state of the economy. Problems having to do with law and morality accounted for another nine percent of the responses.

Law Enforcement

Responses to the section dealing with law and law enforcement showed most respondents to be satisfied with law enforcement in their communities. There were 79 percent who were "completely satisfied" with the highway patrol, 72 percent "completely satisfied" with the county sheriff and 56 percent responded similarly when asked about their city police.

Environmental Problems

Slightly less than seven percent of the respondents were most concerned about the appearance of their communities, complaining about such problems as littering; junk cars; and decaying, empty houses and farmsteads. Another seven percent objected to the nuisance aspect of weeds, insects, and wildlife. Nearly six percent cited forms of air pollution: open burning, objectionable odors, car exhaust fumes, etc. Two out of five (40 percent) said they could not think of any environmental problems.

Table 5

Problems Encountered at Health Facility

	COUNTY I	COUNTY II	COUNTY III	COUNTY IV	COUNTY V	COUNTY VI	COUNTY VII	COUNTY VIII	COUNTY IX	COUNTY X
Had to wait too long:										
Yes	36%	53%	33%	22%	10%	19%	15%	19%	19%	14%
No	63	46	67	77	90	80	85	79	81	84
Bad experience with health service:										
Yes	6	10	3	5	8	2	7	3	14	2
No	94	89	97	94	92	98	93	95	86	95
Bad reputation of health service?										
Yes	4	6	3	2	1	2	3	2	6	0
No	95	91	97	97	99	97	97	96	93	100
Health care too expensive:										
Yes	37	46	80	68	38	45	63	64	75	62
No	62	52	20	31	63	54	37	34	25	35
Satisfaction with medical facilities:										
Dissatisfied	11	20	44	11	12	29	15	15	15	31
Satisfied	86	78	55	87	88	69	84	84	84	68

Table 6

Most Serious Problem in Community (by County)

	Percent									
	County I	County II	County III	County IV	County V	County VI	County VII	County VIII	County IX	County X
Youth-related - - - - -	9	8	16	9	8	10	10	12	12	14
Economic - - - - -	17	15	15	16	24	24	12	28	28	34
Environmental - - - - -	2	4	1	6	5	4	7	3	4	4
Law & Order - - - - -	8	6	6	7	7	6	14	3	11	1
Chemical Dependency - - -	9	10	12	22	5	18	14	9	9	4
No Problems-DK-NR - - - -	31	23	38	24	15	22	31	24	24	33
Other problems not listed here - - - - -	24	34	12	16	36	16	12	21	12	10

Most Serious Problem in Community (by Location)

	Percent		
	Urban	Rural non-farm	Farm
Youth-related	10	12	9
Economic	18	17	25
Environmental	4	6	4
Law and Order	6	8	6
Chemical dependency	18	8	10
No problems-DK-NR	21	27	28
Other problems not listed here	23	22	18

Transportation

Questioned about transportation problems, one out of nine households reported having some difficulty. Almost half of these said the reason was that they were too old to drive or had no car. One-fourth, however, said they encountered problems because one car was insufficient for their household and their varied activities.

One out of five senior citizen households indicated that when they wanted to go somewhere they had to be taken by someone else. Half of these said they would take advantage of a subsidized transportation system if it ever became available.

Health

The study has been able to directly supplement State Health Department data by providing heretofore unavailable information on immunizations, chronic and acute health conditions, sight, hearing and other physical disabilities.

The extent of health insurance coverage among the people of the First Planning and Development District is now known, as well as the influence that lack of health insurance has upon use of health services.

We inquired about the incidence of 48 separate health conditions. Arthritis, rheumatism and back trouble were reported 19 percent of the time. Circulatory disorders such as stroke, heart attack, hypertension and arteriosclerosis accounted for 16 percent of the reported diseases. Nearly eight percent were respiratory in nature: bronchitis, emphysema and asthma. Deafness in one or both ears made up six percent of the reported conditions. Serious sight impairments accounted for another three percent of the conditions.

The incidence of these types of health conditions probably reflects the large proportion of older people in the First Planning District.

In an attempt to predict the possible success of family planning programs in this district, we asked whether respondents would be interested in receiving information or assistance in family planning (this question was asked only of women 18-45 years of age). More than 14 percent said they would. Half of those questioned indicated they were already using some method of birth control.

Most of the households in the District (83 percent of them) were covered by health insurance. Many were covered by more than one policy.

Four out of every five respondents (80 percent) indicated willingness to accept help from a physician's assistant, or a paramedic. Only seven percent said they would not; most of the rest said it would depend on the seriousness of the complaint.

When we asked what health facilities respondents would like to see in this area, 47 percent said either they did not know or that none were needed. Of the 53 percent who did think additional services were needed, most said "more doctors" or "more specialists" or a "local doctor". Over seven percent wanted to see more dentists in their community.

Other Health-related Facts

Nearly six percent of the households said a telephone was not readily available to them in case of emergency and a large share of these blamed party lines or poor service.

Half of the households said they spent \$50 or less on medicine in the past year. Only five households said they had spent nothing; medicine had cost \$500 or more for slightly more than two percent of the households.

One of every eight households felt they were not fully informed about Medicare or Medicaid.

Nutrition and Clothing

Asked if they would purchase food stamps if they needed them and qualified, fully 75 percent of the households said "yes".

Only 5 percent felt they were unable to provide an adequate diet for their households. Most said they would buy more meat, eggs, or cheese if they could afford it.

Nearly seven percent said they had been unable to provide adequate clothing for their families in the past year.

Day Care

More than a third of the respondents with children said more child day-care centers were needed in this area. Of these, one of every four said they would actually use such a center.

Problems in Living

Asked who they consulted when they had personal or family problems, about half the respondents cited friends, neighbors or relatives. Family doctors were favored over any other professional when counseling was needed, followed by clergymen.

Four out of five indicated willingness to use area mental health centers if they felt counseling was needed.

Leisure/Recreation

Most leisure and recreational activities that household members participated in were of a non-strenuous nature. Respondents averaged 19.4 hours at leisure or recreational activities per week.

In regard to availability and use of Senior Citizen Centers, almost two-thirds of the senior citizens interviewed said there was one in their area but that they did not attend.

A general absence of youth centers seemed to pose a problem. A majority thought there was a lack of things for teen-agers to do in their community. Only eight percent of the teen-agers in the sample were said to attend youth centers, but 75 percent of the respondents said teen-agers in their households would attend if there were one available to them.

Education

In the area of education, almost a third of those interviewed said they were concerned about not having enough education either to get a good job or advance in their present employment situation.

Slightly over one-fourth had at one time or another participated in an adult education course. Some 1,800 respondents were asked to list three kinds of adult education courses they would be interested in taking; 831 indicated their interests. Vocational courses were mentioned more than any other kind, being named by 65 percent of those interested in taking courses. About 41 percent wanted academic courses normally offered in either high school or college. About 31 percent named homemaking courses, 27 percent said handicrafts, and 5 percent named physical education courses.

Over half said they felt the adult education courses they had named would help maintain or improve their job skills.

Most respondents tended to rank their local elementary and secondary schools above average. Asked about specific programs offered within these schools (such as college preparatory, agricultural education, vocational and career education) many were not familiar enough with these to offer an opinion one way or the other.

Religion

A large proportion of the sample, 73 percent, said religion was very important in their lives and also that they attended church regularly. Just one out of five, however, thought people in their communities would think less of someone who did not go to church.

Housing

Most people in the First Planning District, 77 percent, owned their own homes. More than half of these homeowners had paid off the mortgages. Only 27 percent of the homeowners with mortgages had monthly payments of less than \$100. About 30 percent paid between \$101 and \$199 each month.

For one out of every five who rented their homes, the average rent payment was just under \$70 per month.

A little more than 87 percent said their housing was adequate.

Institutionalized Elderly

We interviewed 61 persons living in nursing homes and retirement centers. Ages of those interviewed ranged from 50 to 96, with an average age of 79. Males made up 36 percent of the total; 64 percent were females. Four out of five were either widows or widowers; 11 percent had never married. (Probably few close relatives alive.)

Slightly more than half of these institutionalized elderly depended on social security as their main source of income. Savings, rents, and investments were the primary source of income for 28 percent. Just over half (51 percent) had incomes of less than \$2,500 a year.

Transportation was said to be a problem for two out of five of those interviewed.

Most of these elderly persons said they had come to the retirement home to live because of ill health.

Half of this sample preferred to live in retirement homes; most of the rest wished they were still in their own homes.

Conclusion

These preliminary findings are partial and show only the frequency of responses to questions. These frequencies are being broken down by county, location, age, sex, and other variables for more detailed study. A general report will be completed by September and will be given to the First Planning and Development District office.

POLICY IMPLICATIONS OF SOUTH DAKOTA
FARMERS' ATTITUDES TOWARDS RESIDENTIAL AND VOCATIONAL CHANGES

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WHAT ARE PEOPLE SEEKING WHEN THEY ENTER FARMING?

WHAT FACTORS ENCOURAGE SOME TO LEAVE FARMING?

WHAT CONDITIONS CONTRIBUTE MOST TO VOCATIONAL
SATISFACTION?

WHAT DISTINCTIVE ROLE DOES PART-TIME FARMING PLAY?

WHAT PROBLEMS DIFFERENTIATE THE MAN IN FARMING, UNABLE
TO LEAVE, FROM THE MAN ECONOMICALLY INCAPABLE OF
CONTINUING TO FARM?

Public and agricultural policies deeply influence the lives of farmers and their families. Thus, questions such as the above must be answered if appropriate policies are to be designed.

Agriculture is characterized by transition. Policies must be addressed to the needs of the farmer in this transitional setting. This research is designed to seek answers to these questions and others related to agricultural transition.

The above questions and statements are printed on the inside front cover of the forthcoming SDSU Experiment Station Bulletin No. 609, "Farmers View Vocational and Residential Adjustment". That bulletin is the primary final report of an attitudinal study of vocational and residential adjustment as viewed by selected farmers, part-time farmers, and ex-farmers, with particular implications for public policy. Since that study, as a research project, is discussed in relative detail in the bulletin, this paper is not intended to be an exhaustive presentation of research methodology, collected data, derived conclusions, and consequent recommendations. Rather this paper is designed to discuss the background of the study, present information concerning how the study was conducted (beyond what is presented in the bulletin), offer in its original form information obtained about farmers' attitudes and experiences, and discuss the logic of the recommendations that are presented elsewhere.

"The Farm Problem"

The topic of this year's Agri-Business Day is "Economics in a Changing World". To the degree that this is a genuinely changing world, a study of vocational and residential transitions is particularly appropriate.

The university courses which we teach in Economic Principles include a section on "the farm problem", but what is it?

The existence of the farm problem is commonly assumed. Disagreement as to its identity is common. What parts of the big agricultural picture are most crucially problematic? What facets of transitional agriculture are most painful and to whom? Are we possibly saying "the farming problem" when we continue to talk about "the rural living problem"?

The author is an ex-farm boy from a successful farm. Farm life to him was not one of pressure but productivity. "Transition" involved new ways to farming rather than new employments for ex-farmers. "The farm problem" posed challenging conflicts that demanded further study, but not pathos and tragedy.

By contrast, the stereotypic image of many of America's farms is one of the farm families slaving, struggling, and finally being "forced out of" farming in search of survival in the non-agricultural labor force for which they are not prepared. One of the interviewers for this study was from such a farm. His sincere desire to be free from the farm went unfulfilled, since he died there in a tragic farm accident only days after completing his share of this investigation.

The more obvious elements of the farm problem, however defined, usually involve (a) more farmers than necessary, (b) labor:capital and labor:land imbalances, (c) rapidly changing productivity of non-labor inputs, and (d) low relative product prices resulting in low profit margins. But what are the most difficult adjustments? Where can help be most productive?

How do you Study "The Farm Problem"?

Behind the design of the study was the author's suspicion that moving from the farm evokes quite separate emotions from ceasing to farm. Further, solutions to some of the problems caused by one of these transitions would solve problems normally attributed to both. Being forced from farming or from the farm causes sufficient pain to attract considerable attention; thus measures taken to decrease this pain should be practical and effective.

To approach a study of this nature, the people closest to the pain were considered primary sources of vital information. Thus farmers, particularly those involved in or close to vocational or

residential transition, were considered most valuable. An attempt was made to identify from property tax records, and subsequently interview, all farmers and accessible ex-farmers in two townships in Brookings County, two townships in Huteson County and two districts in Haakon County. This particular sampling procedure was designed to allow a study of the influence of type of farming area (small acreage annually cropped farms in Brookings and Huteson County as opposed to large acreage cattle ranches in Haakon County) and of the availability of off-farm employment (moderate such employment in Brookings County as opposed to very little such employment in Huteson and Haakon counties).

The questionnaire and interviews were designed to deal primarily with the interviewees' background experience with, and attitudes toward, rural living and the farm vocation. Respondents were farmers and ex-farmers. Some of the farmers were full-time, others part-time. Some of the farmers were "mobile" (i.e., had changed vocations) whereas others were stable (i.e., had not changed vocations). The ex-farmers interviewed were, of course, all mobile in that they had at one time farmed. No interviews were conducted with people without farming experience since the emphasis was on farm adjustment.

What Was Behind Farmers' Actions?

Typical of the information gathered from the respondents are the answers given to two key questions: "What are the main factors that keep you farming?" and "Why did you stop farming?"

Responses which the farmers gave were later grouped into categories and headings were assigned. Farmers were retained in farming by factors titled superior income level, investment, security, enjoyment, working and residential conditions, and training and experience.

Farmers who were retained in farming by its superior income level indicated so by comments to the effect that they stay in farming to "make money" and "to make a living".

The fact that the farmer had his money and wealth invested in the agricultural operation was mentioned as a retentive factor.

Some farmers are kept farming by the security it offers. They noted that they farm "as a hedge against inflation", "because the other job won't support the family" and because of the "uncertainty of the other job". (The latter two are, of course, part-time farmers.)

Some farmers continue to farm for the enjoyment it offers, as indicated by their reference to "having things to do" (as related to health problems) and to having "a hobby".

Several farmers made reference to working and residential conditions as they specifically identified their "satisfaction of watching things grow" or appreciation for "the fresh air". Some consider farming to be "work that I enjoy doing" while others specifically "dislike town life". On the farm "you can be more independent" and have "a good place to raise a family". (Notice the lack of distinction between farming and rural living.)

Training and experience retain some, since they feel they are "not trained for anything else" or that they are "too old to find another job". Others made reference to training by noting that they were "raised on the farm" or to experience by noting that they farm in order "to keep the home place going".

The factors which are considered responsible for causing the ex-farmers to stop their former farming vocation were classified as relating to economic necessity, economic practicality, non-economic factors beyond the farmer's control, and voluntary choices.

Economic necessity was considered descriptive of farmers who were "unable to make a living" or who were "in financial ruin". In some cases the respondent specifically noted that he "couldn't get enough land".

Factors which made it economically practical for a man to stop farming were summarized with comments stating that it was "not economical to keep going" or that the entry into farming had been an example of "poor timing". It was economically practical to leave farming when a farmer "made a profit on the sale of the farm" or had a "full-time, off-farm job which offered more money". Contingencies and uncertainties suggested that the exit was practical for some who were "afraid of losing capital" or who believed their "machinery was too old". Work quality problems were exemplified with reference to being "unable to find help on the farm" or being "unable to do the work the way it should be done".

Apart from sheer economic necessity, other factors beyond the farmers' control were cited by some respondents. Various farmers made specific reference to "bad weather", "age", or "health". Tenancy problems were noted where the farmer "rented and the farm was sold to someone else who wanted to operate it".

Voluntary exits from farming were indicated by some respondents. Farmers "wanted to try something else" or recognized the disadvantages of the "long distance to school". Some farmers "retired" or left the farm "so the son could move onto the farm".

What do Respondents Think of Farming and Rural Living?

Generally speaking, farming or ranching as a vocation was considered to be more economically risky than non-farm vocations. However, respondents thought the agricultural vocation offers at least equal income opportunity. Farming was considered to offer equal or greater prestige than non-farm vocations, though generally prestige was not thought to be a valid criterion for comparative evaluation. Leisure offered by farm as opposed to non-farm vocations generally failed to differentiate between the two.

The rural residence was compared to its urban counterpart on the basis of convenience and found to be at least equally convenient though generally the location of the residence, ipso facto, was not considered the determinant of relative convenience. Rather, convenience was more a function of the proximity of the residence to the primary employment of the head of the household than was it a function of the specifically rural or urban location. Quite consistently the rural residence was considered to be a superior place to raise children. It was also frequently identified as offering less costly family living.

Particular meaning may be attached to answers which commonly occur in conjunction with other specific answers to other questions, i.e., does a given respondent's answer of one type to one question serve in part to predict his answer to another question? Most prominent among this type of interrelationships between responses is the observation that farmers frequently compromise income security in order to obtain the lower living costs or child-raising advantages of the rural residence.

What had been Respondents' Relevant Experience?

Respondents also represented accumulated background experience in addition to, and possibly as a result of, these attitudes toward farming and toward rural living. Thus their backgrounds were also studied.

Exits from farming were as likely to be for what were considered voluntary reasons as for involuntary. Further, most farmers who believed their exit from farming to be involuntary considered it to be due to non-economic factors. Both these observations tend to dispute the common stereotype of the farmers "forced from farming".

The entry of farmers into agricultural production was no more nor less satisfying than the exit from agriculture. This comparison is the same whether drawn on the basis of a discussion of the degree to which various benefits expected from a vocational change were fulfilled or on the basis of a specific comparison between expected income changes and actual income changes.

The discussion of factors which kept farmers in agriculture revealed considerably greater dissatisfaction with the lack of vocational choice and flexibility than did a discussion of factors which precipitated necessary exits from farming. That is to say, farmers "forced from" farming were less resentful of circumstance and fate than were those "trapped in" farming.

Factors which are most influential in keeping full- and part-time farmers in agriculture are those relating to living and working conditions.

Only one category of factors is more influential in keeping full-time farmers in farming than in keeping part-time farmers-- those factors related directly to training and experience. Logically part-time farmers are not constrained by limited training and experience, since their other employment represents use of non-farm training and/or experience.

Only one category is more influential in holding part-time than full-time farmers in farming. Factors in this category relate directly to economic security. Apparently many part-time farmers choose this vocation mix for the sake of economic and other security rather than income level and economic opportunity. Respondents seeking high incomes with less reference to security more commonly had moved entirely into or entirely out-of-farming, though security factors did not differentiate between these directions of move.

As expected, satisfaction with changes in employment is related to income received. However, the frequency with which an increase in income was received or the size of the increase in income proved to be a less dependable determinant of satisfaction with the job change than did a surpassing of income expectations from the job change, whether income was expected to increase, decrease, or remain constant.

Satisfaction with the current employment differentiated between the men who are employed full-time in a vocation and those who are pursuing multiple employments, though farmers and ex-farmers were not thus differentiated. Those who moved entirely into farming or entirely out of farming expressed comparable satisfaction with their current employment, whereas those which are now part-time farmers were admittedly less satisfied with their current employment. The frequency with which income expectations were fulfilled or exceeded was similar for the full-time farmers and for the ex-farmers.

So What Should We Do?

Given these observations and conditions, what means are available for alleviating pressures and the consequent pain which may exist with reference to "the farm problem"?

First, the part-time farmers sought and found security but in doing so generally sacrificed income and as a group were less satisfied with their current vocations. Since satisfaction was most commonly a function of actual income changes relative to expected income changes, entry into part-time farming is evidently an income disappointment. Thus, measures which would increase income for part-time farmers are called for. Policies which would encourage employers to locate so as to offer part-time non-farm employment to the part-time farmer would be practical. Also redescription and redesign of some existent jobs so as to adapt to part-time employees would be valuable.

Important and yet not primary is the consideration of commuting facilities. Well-kept and appropriately located commuting roads from farming areas to off-farm employment are important. Capacities of these roads for peak load times and parking for commuters' cars in the area of employment should also be considered.

Since the vocational immobility of full-time farmers is a primary source of frustration and pain, as indicated by responses obtained in this study, measures which would increase this mobility are vital. Retraining in the past has often been refused or has gone unused once obtained. Still if training and experience preclude the entry of full-time farmers into other vocations, training and experience in these other locations must be provided.

Further effort is necessary to increase the participation of farmers in retraining efforts and to increase their employment in rewarding vocations where this training is utilized. Retraining must be more available, possibly by more flexible training schedules, more convenient geographic location of the retraining, and greater correlation between retraining efforts and farmers' prior skills and knowledge. In addition more promotion is needed for the retraining efforts and the benefits to be derived therefrom.

In Closing . . .

There has been a need for a detailed look at various facets of what traditionally has been called "the farm problem". If public policy is ideally designed to meet the needs and decrease the pains of people, to identify the primary sources of pain as described above is a first and very necessary step in designing relevant and productive public policy. This study is an attempt to meet the need for that detailed look.

The specific recommendations as outlined above are relevant but not crucial to the value of the study. These represent only a sampling of ways in which public policy might be addressed to the evident problems mentioned.

THE ROLE OF FEASIBILITY STUDIES IN CREATING EMPLOYMENT
OPPORTUNITIES IN SOUTH DAKOTA

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Many people in South Dakota are interested in creating additional employment opportunities in the state, especially for young people, and in the smaller towns. The results of the human needs survey reported earlier today show the great importance of economic problems in the minds of people -- at least in the First Development District of South Dakota.

The question arises as to what role, if any, do economic feasibility studies have in this process? My objectives are to discuss what feasibility studies are, to explain that feasibility studies do have a role in creation of employment and to indicate what that role is and what it is not.

What do I mean by an economic feasibility study?

Feasible means "capable of being done, affected, or accomplished." In other words, "workable and practical." A feasible plan is a workable and practical plan, and a feasibility study is designed to reach conclusions concerning a plan to conduct an enterprise.

Feasibility studies are inherently multi-disciplinary. They can be considered as economic feasibility studies when the primary criteria for accepting a plan or choosing among alternative plans are economic - such as profitability, or employment and income effects.

Feasibility studies are not the same as opportunity identification or opportunity screening studies. Often, requests for feasibility studies are stated as generalities such as:

"Is a specified enterprise feasible?" and

"What enterprise is feasible for our town?"

Studies responding to such questions are in the opportunity identification category which ends up with a "shopping list" of alternatives for further study.

Feasibility studies must be specific as to objectives and limited in scope in order to offer reasonable probability of obtaining meaningful and useful conclusions as a basis for a choice among alternative plans, or a "go - no go" decision.

Achieving specificity in objectives means identifying who are the clients for the study and what are their goals. Thus, feasibility studies are necessarily subjective in the sense of being addressed to the goals of principals. Yet, to be helpful they must be objective in the sense of being logical in structure, using valid and reliable methods, and maintaining integrity of data. As explained earlier, they are not fishing expeditions. Assumptions must be taken as to the future, but they are not, per se, forecasts of the future. However, because the conclusions of feasibility studies rest on assumptions as to the future it is essential that principals believe the assumptions used in the analysis. Only then can valid conclusions be obtained that will likely be applied.

As suggested above, the "Who" is very important in feasibility studies. Several categories of "Who's" must be identified:

- *Who is asking the question
- *Who benefits
- *Who pays the costs
- *Who decides
- *Who else might be affected

The goals and preferences of the "Who's" and the resources available to them determine not only the objectives of a feasibility study but its scope and organization and the payoff criteria that measure the degree of attainment of the objectives.

There are many kinds of projects or proposals for investment that may require feasibility studies.

Some of the typical motives for feasibility studies include:

- *New product
- *New market
- *Merger
- *Acquisition
- *Investment in new geographic area
- *Documentation for financing, loans or equity
- *New sources of raw material
- *Sale or alternative use of existing facilities
- *New jobs

Formal and detailed economic feasibility studies are essential for initiating projects when lending agencies such as the federal government require them, or when decision is required by a group of people who need to be informed. Such feasibility studies may sometimes be essential in promoting employment, but they are not a cure-all for communities hoping for economic development.

A feasibility study is but one step in the process of developing an enterprise. First, someone must get an idea for an enterprise and prepare a plan. Only then can a study evaluate feasibility. If the plan is found

feasible and decision taken to proceed detailed plans are prepared and the plan executed. An evaluation of feasibility is needed in each case but the kind and complexity of study that is appropriate varies with the size of investment and other circumstances. For example, the approach to a study varies considerably for enterprises oriented chiefly to people, raw materials, or markets. Other factors are technical complexity and extent of previous research.

For example, here in South Dakota there is much agricultural material that will be processed somewhere, whether in or out of the state. If the degree of raw materials orientation is high the traditional factors of transportation and processing costs weigh heavily in the location decision. A community might persuade a firm to locate on the basis of findings in such a feasibility study.

On the other hand, for many packaged food products, access to market is critical and transportation and processing cost is a smaller share of total cost. Often the advantages for a firm in marketing are uniquely associated with that firm and impossible to assess with respect to a location in South Dakota for firms in general. Moreover, companies with comparative advantage in marketing often prefer to evaluate these themselves when choosing locations.

One of the best kinds of enterprises for employment of South Dakota people is one based on "people availability" such as one requiring office work or semi-skilled work in light manufacturing. Yet, because they are not closely tied to raw material sources, such businesses have a wide choice of locations. There are thousands of kinds of such activities so it would be hard for a community to conduct a feasibility study without first knowing the identity of the parties proposing the business. In any case, in such circumstances the decision to locate might focus more on the human resources of the community and less on the economic feasibility of the enterprise.

A typical economic feasibility study includes most or all of the following elements:

- *Markets size and location
- *Demand projections
- *Price assumptions
- *Market shares
- *Facility investment
- *Working capital
- *Operating costs
- *Financing costs
- *Income taxes
- *Profitability
- *Employment and income
- *Investment timing
- *Product flow and plant layout diagrams

As discussed previously, the method of approach varies with importance of key attributes of the situation; e.g., attributes of the town (people, infrastructure), access to market, or raw material availability.

Feasibility study methods are varied and multi-disciplinary in character. Valid and reliable statistical methods are required. Projections of profit and loss, cash flows and balance sheets far into the future are often necessary to calculate profitability even when there is much uncertainty about the future. Correct application of accounting and financial analysis methods as well as technical and economic analysis are essential so that businessmen, bankers, and engineers can interpret the results.

A measure of profitability is often the central criterion for enterprise success. Typical measures of profitability are rate of return on investment (ROI) and internal rate of return on investment also known as discounted cash flow (DCF). ROI is suitable for evaluation of an established going enterprise or one projected to continue over a period at about the initial level of throughput. DCF is suitable for a growing enterprise especially a project with considerable delay after investment of capital to receiving net returns from the enterprise.

Feasibility studies are not necessarily optimizing, sophisticated or complex. This depends on the questions and the time and resources available for the study. It is tempting to "shoot field mice with an elephant gun" and this has been known to happen when high-powered tools of analysis are available. Nevertheless, advanced techniques such as simulation models are often used to advantage now that electronic computers make them quite possible. Simulation is a valuable technique even when the theory or the mathematics in an analysis is not complex because it enables repeated computations with varying assumptions. This is known as sensitivity analysis.

As I said earlier, if a client does not accept the assumptions the results of a study are useless. Using sensitivity analysis is a way for the analyst to keep from "playing God" with the assumptions. Then when a client disagrees with the assumptions, the model can be re-run with his assumptions about future sales, prices, operating efficiency, discounts, or other variables. Moreover sensitivity analyses provide vital insights into the direction and magnitude of effects caused by varying assumptions and may considerably reduce uncertainty about the reliability of conclusions.

When needed, how do we get feasibility studies done and get on with the job of development? That's a tough question and the answer is not clear cut.

There is a place for universities and other public agencies in conducting or contributing to feasibility studies when the results will be made public. In other cases companies will conduct their own evaluations or the use of private consultants would be in order. In some cases local talent may need to be used.

Regardless of the approach local leaders will improve their chances for success if they keep in mind how a study is conducted. Local individuals or groups can do a better job of buying or requesting research if they understand how to conduct a study. Since cost of competent studies by independent sources may not be justified by enterprise size in some cases, local people may need to perform their own evaluations if they want to spur development and create jobs.

Essentially, one conducts a feasibility study by carrying out the following steps:

- (1) Assess resources and define goals
- (2) Formulate objectives
- (3) Limit scope
- (4) Define success criteria
- (5) Determine method of approach
- (6) Conduct the study

In South Dakota many communities start thinking about development with first-stage processing of the agricultural commodities produced in the area. As I explained, this kind of industry best fits the approach of seeking a least-cost location based on transportation and processing cost and is a logical place to start. Yet, other types of enterprises will probably be needed too if the potential use of employable people is to be achieved and these may require a different approach to feasibility.

I am afraid there is no single or clear cut answer as to the best method of approach. The efforts of government agencies, private consultants, private industry and local citizens will all be involved in varying degrees in each case.

The degree of "professionalism" required in a feasibility study varies with circumstances. When financing agencies require, where group decisions are involved, where the question is complex, when feasibility is marginal, or when replication in application occurs - a professional may be needed. In other cases, harnessing locally available talent is cheaper and may be more successful in less complex situations. The high interest of people directly concerned, specificity in objectives, and limited scope may make the job possible. In this regard, perceiving the objective which is to be achieved and limiting the scope are a major step toward an answer to a feasibility question. Often the task is complex because the issue of what goals are to be sought becomes confounded with the question of whether a plan to achieve a goal is feasible. So, if people concerned can articulate their objectives and agree on them and limit the scope of a study, they stand a good chance of getting usable help from professionals on the method of approach.

AGRI-BUSINESS OUTLOOK FOR SOUTH DAKOTA IN 1973

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I. General Economic and Business Outlook

Expansion in the Nation's economic activity will continue and gain momentum in 1973. Although there will be increased upward pressure on prices during the year, real output will grow at a rate near the 6.5 percent of 1972. The overall outlook is for accelerated consumer spending, non-residential fixed investment, and inventory accumulation. A major problem of the national administration will be the continuing problem of controlling price inflation.

Recent trends in selected major economic indicators are shown in Table 1, on the following page. Gross National Product (GNP), which is a measure of the total value of all goods and services produced in the U.S., is currently at a level of 11.1 percent higher than a year ago. However, around 5.0 percent of this rise is due to price inflation during the past year, leaving a real growth in total output of about 6.1 percent. Other economic indicators (disposable personal incomes, industrial production, hourly wage earnings, and civilian employment) show sizeable increases over a year ago. Likewise, so do wholesale prices and consumer prices, illustrating the inflationary trends in the economy.

Significant gains in employment and continued increases in industrial production are in prospect for 1973. The pressure on Phase III controls will be periodically intense as approximately 4.7 million workers will be involved in wage negotiations, in an environment of declining unemployment and slower gains in labor productivity. The likelihood of near - capacity utilization in some key industries could bring added pressure on wage contracts.

Rising wage rates, increased employment, and large income tax refunds will offset increased social security taxes and will boost disposable personal income at a faster rate than in 1972. Although the initial impact of the tax refunds has traditionally been an increase in savings, consumers may choose to maintain or step up the sharp increase in expenditures that came during the latter half of 1972.

Higher farm and wholesale commodity prices point to a continuing rise in retail food prices in 1973. The acceleration of retail food prices over a year earlier will occur quite certainly during the first half of 1973, because increased food production and supplies will not become available until then at the earliest. For the year, the all-food retail price index will likely rise more than the 4.3 percent increase of last year.

Table 1. Major U.S. Economic Indicators, late March 1973

	Now	Year Ago	Change
Gross National Product, GNP (Bil.\$)	1,236	1,109	11.1%
Population, U.S. (Millions)	209.5	207.9	+ 0.8%
Disposable Personal Income (Bil.\$)	828.2	758.5	+ 9.2%
Industrial Production (1967 = 100)	120.8	110.0	+ 9.8%
Hourly Earnings, Manufacturing (1967 = 100)	140.1	132.6	+ 5.7%
Civilian Employment (Millions)	81.8	79.4	Up
Unemployment Rate	5.6%	6.4%	Down
Wholesale Price Index (1967 = 100)	126.9	117.3	+ 8.2%
Consumer Price Index (1967 = 100)	129.8	124.0	+ 4.7%
Government Controls	Phase III	Phase II	----

Although the growth in the money supply is expected to slow down and may put some upward pressure on short-term interest rates, a credit-crunch is not in prospect in the near future.

The international monetary situation remains unsettled and prospects for any major improvement are uncertain. Efforts to stabilize international monetary relationships will have an important bearing on developments in the U.S. economy.

Agricultural exports may continue to be the bright spot in the overall U.S. trade balance picture. Farm exports in the first half of fiscal 1973 totaled \$5.2 billion, and for the full fiscal year may be well over the \$10 billion mark. Two-thirds of the first half increase in farm exports was due to increased volume, one-third to increased prices. Agriculture's important contribution to the overall U.S. trade balance (exports above imports) could be at an all-time high, around \$3-1/2 billion compared with \$2 billion the previous year.

II. Agricultural Outlook for 1973

Many unusual factors are affecting the outlook for U.S. agriculture and farm incomes in 1973. Consumer demand for food, already high, seems to have increased even more in early 1973. Export demand for our farm products has continued to boom. Prices of most important farm commodities have gone consistently higher. At the same time, transportation problems and bottlenecks in the movement of farm crops have developed, and the dollar has been devalued. Furthermore, government farm programs were changed in late March in an effort to attract more acres into feed grain and soybean production. Hence, in many respects, the agricultural outlook is a mixture of favorable and unfavorable developments.

With the higher farm commodity prices, however, and considering the various program changes to boost crop output, realized net farm income for the nation may reach \$21 billion for 1973, which would be a new record. Earlier this year, a slight decline from the 1972 record of \$19.2 had been predicted by USDA forecasts. The earlier forecast has now been changed.

Estimates of cash receipts from marketings of livestock and livestock products are that they may be up \$5 billion or more above 1972, based on sharply higher livestock prices and slightly larger marketings. Crop receipts are forecast almost \$4 billion higher, with both prices and volume of marketings up substantially. Some offset to these increased cash receipts will undoubtedly result from a cutback of more than \$1 billion in direct government payments under farm programs, from the record \$4 billion paid out in 1972. In total, gross income to the U.S. farmers and ranchers may rise almost \$8 billion and amount to \$74 billion, compared to \$66 billion in 1972.

Farm production expenses will show an unusually large increase of around \$6 billion in 1973, due mainly to sharply higher costs of purchased feed, feeder livestock, and seed. Also, prices for inputs of non-farm origin (such as fuel, power and machinery, farm supplies, interest payments) are rising more than they did in 1972. Furthermore, the permitted increase in planted acreages this year will require the use of more purchased inputs. In spite of the increased production expenditures, gross farm income should be up sufficiently to allow realized net farm income to reach the predicted highest level ever.

Following are brief statements pertaining to the situation and market prospects for major farm commodities important in South Dakota.

Feed Grains

The combined acreage of feed grains (corn, grain sorghum, oats, and barley) in the U.S. indicated for 1973 by a March 1 USDA estimate, would have totaled 122 million acres, six percent more than in 1972. A normal growing season on this acreage would give feed production of about 209 million tons, five percent more than in 1972 and only one percent larger than the record 1971 crop.

Feed grain production at this indicated level would have been well below projected requirements (feed use and exports) for the 1973-74 feeding year. Grain consuming animal units are projected to increase about four percent over the 119 million units of the current feeding season. This increase in livestock and poultry units, even with the probability of some slippage in feeding rates due to higher feed prices, could require around three to five million more tons of feed grains to be fed next season. If exports expand further, as expected, total feed needs would surpass what the estimated March 1 plantings would produce. Hence a very tight supply situation for feed grains next year was implied by these earlier estimates.

As a result, the U.S. Department of Agriculture on March 26 again altered the 1973 Feed Grain Program so as to encourage the planting of additional feed grain acreages. The 25% set-aside option of the program was lowered to 10%. Thus corn, sorghum, and barley growers who signed to participate in the 25% plan automatically had their required set-aside reduced to 10%. Payment on the production from half the farm base acreage of 32¢ per bushel for corn, 30¢ per bushel for sorghum, and 26¢ per bushel for barley were left unchanged.

This feed grain program change should free up an additional 13.5 million acres for the production of grain, other crops, and forage. About 2.5 to 3.5 million of this acreage may be planted to corn, with a smaller increase in the other feed grains. With normal yields, this should produce about 10 million more tons of feed grains than estimated earlier on the March 1 report. This extra production would help to ease the tight supply - demand situation in feed grains.

Market prices of corn this past winter and spring have been ranging mostly 25¢ to 40¢ a bushel higher than a year earlier. Prices during the next few months could ease downward, but will surely stay well above year - earlier levels because of continued strong export demand and also domestic use. Grain sorghum, oat, and barley prices will maintain their normal relationships to corn prices. All feed grain prices will be highly sensitive to weather and growing conditions and to economic developments this spring and summer.

Soybeans

Soybean supplies for the current market year in the U.S. are estimated at almost 1.4 billion bushels, about six percent above last year. Total use (crushings and export) is estimated about equal to 1972 production, so carryover next September will be very low.

In March, farmers indicated plans to plant nearly 54 million acres to soybeans this spring, or about seven million acres above 1972. With recent Feed Grain Program changes, however, acreage could top 54 million. The 1973 production, from March intentions, would be a record 1.5 billion bushels, 17 percent above the 1972 crop. This would boost total 1973-74 supplies by around 200 million bushels over a year earlier.

Based on these early indications, the extremely tight soybean situation may ease. Although use during the next year is expected to expand, the larger supply from 1973 production would provide for some reserve and help to temper the continuing upward price pressures. Larger increases in exports of soybeans or soybean products will maintain the present tight supply situation.

Monthly average soybean prices at Chicago jumped from \$3.33 per bushel last October to \$7 in early March before receding more recently. They will likely continue extremely strong until results of the 1973 growing year become apparent. The exceptionally strong demand for soybeans continues -- the consequence of reduced foreign production of protein, particularly Peruvian fish meal, and the depleted stocks and increasing requirements for high-protein animal feeds.

Flaxseed

According to March planting intentions, farmers growing flax intend to increase their 1973 seedings by 11 percent or to 1.3 million acres. Increases were indicated for all the major producing states -- South Dakota, up 16 percent; North Dakota, eight percent; and Minnesota, eight percent. Higher flaxseed prices, along with changes in government farm programs which made more acreage available for planting crops, apparently have caused farmers to change their earlier crop plans.

Flaxseed prices received by farmers advanced from \$2.49 per bushel last July to \$4.38 in March, averaging \$3.16 for the period. This was well above the \$2.35 of a year earlier, and the 1972 support price of \$2.50. March prices for flax were the highest since March 1951, when prices were high as a result of the Korean War. A tightening supply situation for oilseed crops, both in this country and abroad, is responsible. Even with prospects for larger 1973 acreage, flaxseed prices are expected to continue strong and for the season will average well above the \$2.37 of the previous marketing year.

Wheat

Prospects for record exports continue to dominate the 1972-73 wheat scene. At 1,150 million bushels, they will total one-third more than the old export record of 1965-66. Developments in the world wheat economy continue to have a bullish effect on the market. Present indications are that world demand for wheat will remain very strong well into the 1973-74 marketing year.

Planting intentions of farmers as of March 1 were for spring wheat plantings of 15.4 million acres, or 21 percent above last year's level. Durum acreage was estimated 18 percent higher and spring wheat up 22 percent. These planting intentions were higher than earlier estimates, reflecting spring wheat growers' response to the elimination of required set-aside acres under the 1973 Wheat Program, which was announced in mid-January.

The 1973 winter wheat crop was estimated last December at 1,278 million bushels. However, the subsequent elimination of required set-aside acreage is expected to increase the winter wheat harvest above the December estimates. Thus, the total 1973 wheat harvest could be up 14 percent above 1972, and around 100 million bushels above anticipated 1973-74 demand.

This suggests that wheat prices may ease off with the 1973 new crop harvests. On balance, 1973-74 prices should be quite strong, although averaging somewhat below the current season, but substantially above other recent years. Prices will continue to be very responsive to world weather conditions and foreign food needs.

Livestock

The overall livestock and meat situation is currently being influenced and will continue to be influenced for an indefinite period by a development of last week. On March 29, President Nixon announced a ceiling on prices of beef, veal, pork, lamb and mutton. The ceilings became effective immediately, covering the processor, wholesale and retail levels. They do not apply to live animal prices.

Ceiling prices are based on the 30-day period which ended March 28. Each firm determines the ceiling price for each meat item below which 90 percent of its sales were made during this period. Although prices received by farmers for live animals remain uncontrolled, the likely effect reflected to South Dakota producers (based on average market prices during March) will be market tops of \$43-45 for choice grade slaughter steers, \$36-38 for barrows and gilts, and \$41-43 for choice spring lambs. As announced, the ceiling prices will remain in effect indefinitely.

Slaughter Cattle

Fed cattle marketings in the first half of 1973 will be up only moderately. On January 1, there were four percent more cattle on feed. Western feedlots carried 14 percent more. Corn Belt numbers were off two percent. Severe late-winter weather in the southern plains states followed by spring flooding and mud conditions in much of the Corn Belt caused heavy death losses, slow gains, and reduced marketings.

Choice slaughter steers at Mid-West markets advanced from a fall low of around \$32 per cwt. in late November to \$44 or more in early March, even though total beef output has been up above a year ago. Prices may be expected to weaken at times this spring and summer, if larger marketings of fed cattle and hogs develop. Any rise will be restricted by the recent ceilings imposed at the retail level. Throughout the year, prices will likely run \$5 to \$7 per cwt. higher than a year earlier. Extremely strong consumer demand continues to support the cattle market.

Feeder Cattle

The Nation's cattle herd rose more than four million head during 1972, to a figure of 122 million at the beginning of this year. Beef cattle accounted for all of the 1973 cattle inventory gain. Cow numbers increased more than two million head, to a total of almost 53 million. The 1973 calf crop probably will increase four percent or more, compared with a 2.5 percent growth last year.

In spite of increased cattle numbers, total cattle and calf slaughter in 1972 actually decreased slightly, reflecting a holdback of beef cows and heifers for continued herd build-up. A larger feeder cattle supply and a strong fed cattle market should result in some increase in placements of cattle on feed this year. However, this could be dampened by high costs of feed, sharply higher protein supplement, and higher prices of feeder cattle.

Feeder cattle prices were record high in 1972 and are expected to remain high at least until late in 1973. In March, yearling feeder steers climbed to over \$51 per cwt. at most Mid-West markets, or about \$10-\$12 higher than a year ago. Prices will continue near recent levels, as long as there is no substantial weakness in fed cattle prices.

Hogs

On March 1, there were only two percent more market hogs on Corn Belt farms than a year earlier. There were fewer heavy hogs, but more light ones. These hogs will provide most of the pork slaughter supply in this area during the spring and summer. Also, recent estimates are that there will be five percent more sows farrowing during the March-May period this year, providing more hogs for slaughter.

Barrows and gilts at seven major hog markets rose to nearly \$40 per cwt. in early March, about \$15 above a year ago. Hog prices toppled in late March in response to market uncertainties and temporary but sharply heavier marketings. Prices could probably slip a little further this spring before edging up seasonally this summer. Hog prices are expected to remain \$6 to \$10 above last year's levels at least until late in 1973.

Sheep, Lambs and Wool

There were 17.7 million sheep and lambs on U. S. farms and ranches at the beginning of 1973, down five percent from a year ago. The loss came in the breeding flocks, meaning another drop in the lamb crop this year.

Slaughter of sheep and lambs in the first quarter of 1973 was down 13 percent from a year ago. With fewer stock sheep and a smaller 1973 lamb crop in prospect, lower slaughter rates are expected through the remainder of the year.

Spring lambs topped \$42 at the Sioux Falls market in early March, which was \$13 per cwt. higher than a year earlier. They have weakened some since then, but can be expected to continue near recent levels this spring. Lamb prices usually decline seasonally in the late summer and fall.

Farm prices of shorn wool during 1973 will average sharply above last year, probably topping the Wool Act incentive price of 72 cents a pound. Prices have come down some from the peak prices posted in mid-March. Estimates are that approximately two-thirds of the 1973 clip had been sold or contracted prior to the market break. Wool prices overseas, including the March drop, have dominated the U. S. situation. Domestic supplies of raw apparel wool this year are down, with smaller stocks and production declining, whereas mill use has held up.

Dairy

Milk production in the U.S. last year rose by 1.5 percent. So far in 1973 it has been down slightly, due to sharply higher feed costs and short feed supplies in several major dairy areas.

Milk prices to farmers in early 1973 were up seven percent from a year earlier. For all of 1973, prices of manufacturing milk likely will average above the new dairy price support level of \$5.29 per cwt. The recent changes in support purchase levels which favor cheese relative to butter and nonfat dry milk may encourage a shift from milk to cheese.

III. Trends in South Dakota's Agricultural Income

Livestock are of paramount importance in the agricultural economy of South Dakota. Of the total cash receipts from farm and ranch marketings each year, approximately 50-53 percent of it comes from the sale of cattle and calves, between 15-18 percent from the sale of hogs, about seven percent from dairy products, and two to three percent each from the sales of sheep and poultry. In total, about 80 percent of annual cash sales comes from livestock and livestock products, while around 20 percent comes from the cash sales of crops. It is recognized, of course, that most of the feed grains and roughages produced in the state are marketed through livestock. Their value is realized in this manner, in addition to the 20 percent received from cash crop sales.

1972 was an especially good livestock year for South Dakota farmers and ranchers. It was a good year, both price-wise and income-wise. Cash receipts from sales of livestock and livestock products went over the one-billion dollar mark for the state, by far the highest ever, and considerably above the \$867 million figure for 1971 (see Table 2). An increased volume of cattle sales, but mainly the higher prices throughout the year for hogs, sheep and cattle, made the higher cash income possible. Cash receipts from the sale of crops during 1973 in the state amounted to \$242 million, only slightly below the sales for 1971 and 1970.

Table 2. South Dakota Agricultural Income

	1970	1971	1972
	(in millions of dollars)		
Sales of Livestock and Products	797	867	1,002
Sales of Crops	255	247	242
Government Payments	<u>92</u>	<u>78</u>	<u>111</u>
Total Gross Income	1,144	1,192	1,355
Production Expenditures	<u>796</u>	<u>878</u>	<u>957</u>
Net Agricultural Income	<u>348</u>	<u>314</u>	<u>398</u>
Total Number of Farm Agricultural Units	46,500	45,500	44,500
Average Net Per Farm	\$7,484	\$6,901	\$8,944

Source: FIS 221 and FIS 220 Supplement "Farm Income Situation," Economic Research Service, U.S.D.A. and "South Dakota Agriculture--1972," South Dakota Crop and Livestock Reporting Service.

Government payments in cash to farmers in South Dakota were the highest ever, amounting to \$111 million from all types of farm programs, compared with \$78 million the previous year and \$92 million in 1970. Most of the 1972 payments to farmers were paid out under the 1972 Feed Grain and Wheat Programs. Government payments in 1972, as a component of total gross agricultural income (which includes all livestock and crop receipts) accounted for eight percent of the gross income figures. Government farm program payments in recent years have been running about six to eight percent of gross agricultural income in the state.

With continuing inflation and sharply rising costs of farm production inputs, agricultural production expenditures have increased by around \$80 million in each of the past several years. This is apparent in Table 2. Total production expenditures in the state went up from \$796 million in 1970 to \$878 million in 1971, and further upward to \$957 million

(almost a billion dollars) in 1972. These are annual increases of 10.3 percent and 9.0 percent in production costs in each of the past two years. Fortunately, in 1972 gross agricultural income was up sufficiently to more than offset these increased expenses. (NOTE: It may be helpful here to point out that these figures on "production expenditures" are estimates of total cash operating costs, depreciation, and all farm expenses paid, and do not include any interest on farm capital investment, unless interest was actually paid as an expense, nor value of farm operator labor or family labor, unless labor wages were actually paid.)

Net Agricultural income for South Dakota in 1972 (gross income, minus expenditures) amounted to an estimated \$398 million. If this figure is divided by the total of all agricultural units in the state, large and small, the average net agricultural income per unit was \$8,944. This was a considerable improvement above the average per farm net income of either 1971 or 1970.

Prospects for increased total income from livestock in 1973 appear favorable at this time. Number of all cattle, now at approximately 4-1/2 million head, are at an all-time record high in the state. The 1972 crop of beef calves was four percent higher than in 1971 and reached a figure of almost two million head. Hence, increased marketings of both feeder and slaughter animals can be anticipated during 1973, and at prices sizeably higher than those of 1972.

A late 1972 USDA report on hogs and pigs indicated that South Dakota hog producers were increasing their early spring sow farrowings by eight percent. This implies that more hogs will be produced for marketing in the latter half of 1973. Total hog income in the state during 1973 should be noticeably higher than in 1972.

Although sheep numbers in South Dakota have gradually decreased during recent years (as they have in the nation), the 1972 state lamb crop numbered 879 thousand head. This was one percent above the 1971 lamb crop, and three percent more than the 1970 crop. Sheep were generally profitable for their producers in 1972. Prospects are that this improved income situation for sheep and lambs will continue during 1973. Larger milk marketings and somewhat higher milk prices in prospect point to higher cash receipts from dairying in 1973, perhaps in the three to five percent range for the state. Rising production costs, however, may limit the gains in net dairy income.

IV. Importance of Agriculture in Our State's Economy

The Business Research Bureau, School of Business, at the University of South Dakota, Vermillion, annually publishes pertinent information on the levels and changes in personal income for South Dakota and our neighboring states. These are compiled from data obtained from the Office of Business Economics, U.S. Department of Commerce, and the Survey of Current Business. The most recent reports currently available on all personal incomes received by South Dakotans are for the year 1971.

A comparison of types of industry of the various sources of all civilian personal incomes in South Dakota for the years 1970 and 1971 is shown in Table 3. As can be noted, agriculture ranks as the top source. Agriculture maintained its strong first place ranking during 1971, accounting for 26.3 percent of the total in 1971, compared to 24 percent in 1970. (By way of explanation, it should be noted that Agricultural Incomes in this tabulation pertains not only to net farm income but also to farm property rentals, and farm wages received, as personal incomes.)

Government stayed in second place as an industrial source of personal income in 1971, with 18.5 percent of the total. Wholesale and Retail Trade remained at near 18 percent, approximately the same as in 1970. All types of Services (personal, business, repair, lodging, professional, amusement, recreation, social and related services) accounted for 13 percent in 1971, slightly lower than in 1970.

Manufacturing of both durable and non-durable goods, provided about eight percent of personal incomes both years. Next in order of importance during 1971 were Transportation, Communications, and Public Utilities with 6.1 percent; Construction 4.9 percent; Finance, Insurance and Real Estate 3.7 percent; Mining 1.4 percent; and all other industrial sources 0.5 percent.

Table 3. Industrial Sources of Personal Income -- South Dakota

	1970		1971	
	Amount	% of Total	Amount	% of Total
(In millions of dollars)				
Agricultural Incomes	366	24.0	445	26.3
Government Sources	294	19.2	314	18.5
All Wholesale and Retail Trade	283	18.5	299	17.7
All Personal, Business, Professional, Social, and Recreation Services	211	13.3	220	13.0
Manufacturing	128	8.4	136	8.0
Transportation, Communications, and Public Utilities	90	5.9	104	6.1
Construction	70	4.6	83	4.9
Finance, Insurance and Real Estate	59	3.9	62	3.7
Mining	19	1.2	23	1.4
Other	8	0.5	8	0.5
Total	1,528	100.0	1,693	100.0

Source: "South Dakota Business Review," Volume XXXI, No. 2, November 1972, pages 6-7, by Business Research Bureau, School of Business, University of South Dakota, Vermillion, South Dakota.

Significance of Tourism. A recent travel study by the Business Research Bureau at the University reported that during the three summer months of 1972, 5.5 million people from out-of-state visited South Dakota. These people spent \$96.5 million while in the state. During the other nine months of the year, out-of-state travelers spent an estimated \$71.6 million, for total expenditures during the year of \$168.1 million. This figure may be compared with the size or magnitude of the major industrial categories shown in Table 3.

Undoubtedly at least a part of the tourism spending would fall into and be reported under such sources of personal income to South Dakotans as retail trade, personal services, transportation, communications, and possibly others. The University travel study concluded that from this total annual expenditure figure of \$168.1 million it is apparent that "South Dakota's travel business ranks high among the State's contributors to basic income." (Source: "South Dakota Business Review", Volume XXXI, No. 3, February 1973, p. 6-9, School of Business, University of South Dakota, Vermillion, South Dakota).