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This is the first of two articles examining the problems of the economics of agriculture, the 1996 Farm Bill, and some of the solutions being suggested to solve the perceived problems in agricultural policy.

The Federal Agriculture Improvement and Reform Act of 1996 was supposed to be a watershed event in U.S. agricultural policy, a move away from government mandated supply control programs toward a more market oriented farm policy. Producers would make their production and marketing decisions based on the supply and demand conditions of the market rather than the artificial price signals of support prices, loan rates, and loan deficiency payments. The crop insurance program was modified and the non-recourse marketing assistance loan program would be left in place to provide a safety net in case of low prices and planting flexibility would allow producers to switch between crops to maximize profitability, depending upon the signals of the market. Unfortunately, the actual results of the act fall far short of the benefits anticipated during its formulation. Excess production has continued to increase stocks levels, increasing the downward pressure on prices. With all grain prices low the planting flexibility that was to be a boon to farmers has been of little help. Where did we go wrong?

The Economics of Agricultural Production

One of the main problems was the over-reliance on the export market to absorb our excess production. Generally, this would not be a problem as on average 25 to 50% of our grain production is exported, depending upon the commodity. Unfortunately, no one was in a position to predict the Asian economic crisis, which seriously impacted the ability of many of our best customers to import grain. This crisis reduced their effective demand, or their wants backed up by purchasing power. Although the desire was still there, the decline in the value of their currencies relative to the U.S. dollar priced foreign buyers out of the market. This reduction in export sales further increased domestic grain stocks and put additional downward pressure on prices.

Economic theory tells us that, in the short run, as the price of a good decreases, the quantity demanded will increase. However, this is generally not the case with grain and food products in the domestic market. The inelastic demand for food, i.e. relatively small changes in production levels result in relatively large price changes, hampers extra domestic sales. Although food is a necessity for life, the U.S. population in general is not underfed. The result is that even dramatic changes in food prices have little effect on consumption levels. We may change the mix of products we consume but we don't generally reduce or increase our consumption levels based on price changes. This leaves the export market and non-food uses of agricultural products to dispose of the excess production. When the export market also contracts, lower prices and higher stocks levels are the results.

The second problem that farmers have to deal with are the loan rate levels. For any producer it is economically rational to produce at a loss in the short run as long as he is covering his variable costs of production. In general, these "out of pocket" costs vary between $1.20 to $1.50 per bushel for corn and $2.10 to $2.50 for soybeans (Good, 2000). With the loan rate for corn set at $1.89/bu. and for soybeans at $5.26 (national levels) producers can cover their variable costs and have something left to contribute toward fixed costs. Thus, producers make the logical decision and continue production. However, this is a short run phenomenon. To remain in business in the

long run, all costs must be covered. This is the position producers are currently facing. Forecasts for two or three more years of low prices will force marginal producers to re-evaluate their operations. It is very likely we will continue to see a sizeable number of producers exit agriculture in the next few years.

This leads to a third problem that affects agriculture. Even though we have seen the number of producers decrease dramatically over the last 50 years, we are still cultivating approximately the same acreage. This is the result of the adoption of new technologies, physical and biological, that have allowed farmers to dramatically increase their productive efficiency. As farmers go out of business, the main productive asset, the land, does not lay idle. So even as the number of producers continues to decrease, total agricultural production continues to increase, and the benefits are passed on up the distribution chain.

In addition, the economic structure of the farming sector contributes to this overproduction problem. Generally, agriculture is viewed as a perfectly competitive industry. This implies that there are no barriers to entry or exit; there is a large number of producers, none of which is large enough to individually affect the market; they are price takers; perfect information exists; and they produce a homogeneous product. Since no single producer can influence the commodity price their logical decision is to produce where their marginal cost of production is equal to the marginal revenue they receive (price of the product). This fallacy of composition, that the actions of an individual do not affect the group, increases total production, driving prices down. Escaping perfect competition is a longstanding goal of many agricultural producers. By differentiating their product or developing a degree of supply control producers obtain some price setting power. Escaping from this "price taking" situation would greatly enhance producers' opportunities to maintain profitable production levels. Yet many producers are unable to effectively price their products when the opportunity arises.

Design of the 1996 Farm Bill

Although the premise behind Freedom to Farm was correct, there was a breakdown in reaching its final form. The move toward a more market-oriented policy was a good choice economically, although the decision was not made by choice. These changes were a direct result of the Uruguay round of the GATT negotiations and the birth of the WTO. However, the safety net provisions that were included distorted the market. Even though farmers had the flexibility to switch between crops, how many options do they really have when all commodity prices are low? Their logical decision was then to ignore the price signals of the market, since that was not the actual price they would receive at the time of sale. Loan rates became a price floor, encouraging production in excess of that dictated by supply and demand conditions. This resulted in burgeoning stocks levels and further downward price pressure. This also increased government outlays as LDP's increased.

Typically, government programs tend to deal with the symptoms, rather than the causes of problems. Low farm incomes and commodity prices are merely symptoms of the larger problem that exists in agriculture, inelastic demand. We need to face the fact that there is a finite demand for the agricultural commodities we produce. Planting fencerow to fencerow is not a viable option if we want to return prices to profitable levels. The factors that shift demand for a product are well known and include prices of substitute and complementary goods, income, population, and tastes and preferences. Since the U.S. population is well fed, price changes and changes in preferences will only change the mix of goods we consume, not the total volume. As a result, we have generally been concerned with the population shifter, the export market. Our international economic development efforts around the world have focused on developing new markets by increasing income levels and changing tastes and preferences in less developed countries. We would like many of the so-called "Third World" countries to develop to the degree that they can purchase or export goods but not enough to become competitors in the export market, such as Argentina and Brazil.

It may be logically argued that most of the hunger problems that exist in the world today are not production problems but income and distribution problems. Given the productive capacity that exists in the U.S., South America, Europe, the former Soviet Union, and Australia the capacity to produce enough food and grain to feed the world exists. The problem is that it must be moved from the areas of excess production to the deficit areas **and** the capacity to pay for the products must exist. This would give the producers the economic signals

they need to make informed decisions regarding what, how, and how much to produce. This information is vital to aligning producer supply with consumption demand. However, the one fact that should be remembered is that achieving market equilibrium has nothing to do with profitability. Equilibrium only tells us that the quantity supplied is equal to the quantity demanded. Price and quantity are determined but producer costs of production will determine profitability.

References

Good, Darrel. "Prospect for continuing low prices stir policy debate." @griculture Online, wysiwyg://154/http://www.agriculture.co...ml_43805_Prospects&sp;for&sp;

The 1996 FAIR Act: A New Direction in Farm Policy or a Failed Experiment Part 2

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The article above laid out some of the economic problems of the agricultural sector. This article will discuss some of the options being examined to solve the problems related to the 1996 FAIR Act.

The real problem that exists in agriculture today is that we are expanding production at a faster rate than demand. In 1798, the Reverend Thomas Malthus published his seminal work "*An Essay on the Principle of Population, As It Affects the Future Improvement of Society.*" Malthus was convinced that population growth would exceed the capacity of the earth to produce food. Adoption of new productive technologies has, up to this point, proven him wrong. However, to assume that we will be able to continue to increase production faster than population growth would be foolhardy. There is an upper limit to our productive capacity, even with further technological advances. At that point it would appear our pricing problems would be over. However, one would expect the more efficient or aggressive producers to bid up the price of land, pricing the less efficient producers out of the market. Until then, we will continue to deal with price fluctuations in an industry where low prices are the norm, not the exception.

Short Term Fixes

Due to the price conditions that exist in agriculture many producers, and policy makers, are encouraging possible modifications to the current farm bill to alleviate some of the financial stress in the industry. A number of possible solutions have been developed. A few of these options will be examined here.

Flexible Fallow

This is one of the more popular options being considered. This program would give each producer the option to idle from 0 to 30% of their acreage in exchange for higher loan rates on their remaining production. For example, if the loan rate for corn was $1.89/bu., a producer choosing to idle 0% of his acres would receive that rate. However, if he decided to idle 30% of his acres, he would be eligible for a loan rate of $2.75/bu. This approach would help grain producers in two ways. Their incomes would increase and the stocks levels would be reduced, lessening the downward pressure on prices. However, what would our competitors do? As prices increase due to lower production levels in the U.S., they would logically respond by increasing production and making further inroads in the export market. Depending upon participation levels, ag businesses should not be negatively impacted in the long run, although there may be some short term economic hardships in areas of high participation. A unilateral reduction in production would be beneficial in the short run but have large, negative, long term effects. Prices would increase due to the lower production levels but this would encourage increased production in other countries, increasing our competition in the export market and putting increased downward pressure on prices. This program would have the U.S. paying the costs of the program, reducing our production levels, and the rest of the world reaping the benefits, the increased prices that would result from this action.

The NFU Solution

The National Farmers Union has developed a plan for the five major grain exporters to take 3% of their land out of production annually until grain prices double. This plan would have the U.S., Canada, the EU, Argentina, and Australia take an additional 3% of their land out of production each year until prices rise to an agreed upon level. These

countries would then monitor prices and manage set-aside acres to maintain stable price levels. Each country would be free to determine how to get farmers to participate and countries with current set-aside programs would increase the levels until all participating countries had approximately equal set-aside levels. The Canadian government would offer farmers $40/acre to voluntarily idle land. The slow rate of change should allow ag businesses to adjust with minimal difficulties. Is this a viable solution? It does solve the problem of flexible fallow in that it is not a unilateral program. However, due to the different political policies and goals of the participating countries, cooperation is not likely to occur. If we can't get domestic producers to agree on policy issues, how can we expect an ethnically and culturally diverse group such as the one being proposed to agree on a single agricultural strategy? However, the basic strategy is sound. As long as production exceeds demand, prices will be low. Some type of supply control is likely to be necessary to get much price improvement. Without government intervention this usually comes in the form of crop failures in other parts of the world which then stimulate the export market. Another problem here is slippage. Since all countries will be setting aside their marginal land, production decreases will be less than the land retirement amounts. At 3% reduction annually, it would take a few years to see significant production reductions and price increases.

Plan B

Plan B is an approach developed by Dave Kruse to use the provisions of the FAIR Act in an offensive strategy to increase corn prices and discourage foreign competition in the soybean market. Farmers would voluntarily shift 25% of their corn acres to soybeans next year. This would theoretically eliminate the corn carryover and yield corn prices between $3 and $4/bu., depending upon the compliance level. No LDP would be paid on corn and this money would go to the additional LDP paid on soybeans. Soybean producer income would be protected (at the loan rate) and corn income would increase. During the next crop year production would revert back to a more traditional acreage split. Agricultural businesses would be affected in the short run. Since fewer inputs are needed in soybean production, there would be a reduction in input purchases. This should not be a dramatic difference. Is this a viable option? Probably not. In order to make the program work, high compliance levels are required. Since this is a voluntary program, there is a large incentive to cheat and be a free rider. Without guarantees of success or a penalty for non-compliance, participation is likely to be very low, drastically reducing the projected impact. In addition, the U.S. will be storing huge volumes of soybeans. This could create storage problems for other crops and additional problems in maintaining the condition of the soybeans to maintain their value.

There is one factor that should be considered in any plan to increase farm prices and incomes, capitalization. The usual scenario in agriculture is for the benefits of farm programs to be added to the price of the productive assets we employ. The real key is how to increase prices and incomes without having the extra income absorbed by increased costs of production.

Treating the Problem

If we take an objective look at agriculture, we can see that the two basic problems that we need to deal with are the perfectly competitive market and the inelastic demand for the commodities we produce.

Inelastic Demand

The elasticity of demand refers to the relationship between price, quantity demanded, and total revenue. In general, the law of demand tells us that as price increases, less of a good will be demanded. However, we also know that since food is a necessity, cheaper products will be substituted for more expensive ones and our total food consumption amount stays fairly constant. Inelastic demand means that we get relatively large price changes resulting from smaller changes in quantity supplied. Since this is the case, producer revenues are increased only when prices increase. On the other hand, if demand was elastic we could increase total revenue by decreasing prices. Since elasticity is determined by the number of substitute goods available, there is not much that can be done about this situation, until someone develops a substitute for food.

Perfect Competition

Perfect competition is a different situation. Since the conditions for a perfectly competitive market are well defined, they can be approached individually.

A disclaimer is in order here. Even though the solutions may be easy to solve in theory, reality is an entirely different matter.

As agriculture continues to evolve we continue to see farm numbers decrease and farm size increase. Although there is still a long way to go, over the last fifty years we have seen a drastic reduction in the number of farms and an even larger decline in the number of viable, commercial farms. As this number continues to decline, organizing the remaining producers into a cohesive group should become easier. Acting as a group and exerting a degree of supply control will allow producers to escape perfect competition and develop some price setting power. This has been successfully accomplished in the citrus fruit industry through marketing coops.

The second thing producers can do is differentiate their products. As long as farmers produce commodities instead of identifiable products, they will remain price takers. The degree of differentiation will then determine their ability to charge a premium price for their production. Purebred livestock producers have done this for years. Other producers must develop some identifying characteristic for their products in order to capitalize on this opportunity. Oil content and protein levels are two ways to differentiate grains.

In the short run, government intervention in one form or another is likely to be necessary to maintain farm income levels. The diverse interests involved in agricultural policy formulation will determine the forms and levels of support. As farm numbers continue to decrease there will be increasing pressure to reduce funding. All parties having an interest in the future of agriculture should be keenly interested in the formulation of the next farm bill. Will it be a continued move toward a market oriented future or a retreat into our protectionist past? Only time will tell.

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November and December Workshop Opportunities for South Dakota Farmers and Ranchers

Nov. 14 -	Flandreau – Grain & Livestock Outlook
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Nov. 28 & 29 -	Faulkton – Pricing for Profit workshop
Dec. 4 & 19 -	Elk Point or Beresford – Intermediate Marketing
Dec. 5, 7,12 & 14-	Brookings - Pricing for Profit, phase 3
Dec. 11 & 18 -	Clark - Pricing for Profit, phase 1
Dec. 19 -	Highmore - Bootstraps
Dec. 20 -	Roscoe or Hosmer – Staying in Business, Phase 1
Dec. 27 & 28 -	Miller – Accounting Workshop

Contact your local Extension office for specific details regarding these meetings.

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