

Targeting Policy Toward Each of Three Agricultures

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Introduction

Food security begins at the farm level. As crop production practices become more uniform, as livestock becomes increasingly huddled-together in large operations and as agriculture's genetic base narrows so is there an increased risk of security breaches at the farm level. While commodity agriculture is likely to stay with us, as a society, we may want to redirect it somewhat and foster other farm organizational structures that are inherently geared to using more diversely-based production techniques and genetic foundations to produce a broader variety of foods. Much of this diversity is already there in form of community supported agricultures, cooperative arrangements among mid-sized operations, direct marketing, etc. What policies can be developed to bolster agriculture as a whole while facilitating and encouraging an agricultural system that is broadly-based and diverse? Since others at the conference have eloquently defended the need for a broad-based agriculture to help ensure certain aspects of food security, this paper discusses a first-pass-way of grouping farms and policies that could be directed at each group. Much of the discussion centers on family farms.

Family Farm: Concept versus Definition

The goal of "saving the family farm" is one of the pleas that has been used for decades to justify farm legislation and farm policy prescriptions. The proponents of farm legislation argue that federal farm programs are necessary to ensure that family farmers are not driven off the land. Opponents of farm programs point to declining farm numbers as sufficient evidence that these prescriptions do not, in fact, help save family farms.

The problem is that while the concept of "saving the family farm" has a gut level appeal that resonates with the American public, it is difficult to come to an agreement on its meaning. The conditions of agricultural production vary widely from crop to crop and region to region. Likewise, technological innovation has radically changed the labor and capital requirements of farming over the last three-quarters of a century. At one time and in one region, family farming meant forty acres and a mule. There was a time that family farming meant a farmstead on every quarter section of ground in many parts of the Midwest. Today a husband and wife team, using the latest horsepower and hydraulics, can manage a 2,000 acre grain and hay operation in Kansas with very little hired help.

Those seeking to lend some measurable substance to the term, "family farm," have suggested three characteristics: ownership, management and labor. While the definitions vary from person to person, it is generally expected that on a family farm the producer would own at least some land and provide a majority of other capital. It would also be expected that the farm family would provide a majority of labor and decision making (management) (Paarlberg).

Recently Lobao and Meyer have used the term "farming as a livelihood strategy" (Lobao, 2001). When combined with ownership, management and labor, farming as a

livelihood strategy provides a clearer picture of what many consider to be family farms. Under current programs as many as 94% of U.S. farmers are unable to earn a livelihood from their work on the farm. At the same time the benefits of current agricultural policies are skewed toward producers whose annual sales exceed \$250,000.

Since the size and composition of agriculture differs so widely, it is easy to understand why a single set of agricultural programs does not fit all needs. In this paper, we look for categories or groups of agricultural operations that could be used as focal points to formulate agricultural policies that are better tailored to specific agricultural situations and needs. Of particular concern will be to identify governmental policies that support a structure of agriculture in which a family engages in agriculture with the purpose of earning a livelihood from that activity. Overall, the more targeted policies that we envision would distribute the benefits more evenly among the diverse set of agricultural producers.

The Policy Setting

Unique Issues

There are a number of issues that we must take into account as we look at strategies that have the potential to strengthen farming as a livelihood strategy. Unlike automobiles, books, and computers, but like water and air; food is an absolute requirement for life itself. As a result most governments show an interest in food production that they show for few other products. While, in the midst of WWII, the US government could convert automobile manufacturing lines to the production of armaments leaving the public to find other means of transportation, the availability of food was ensured through the use of ration coupons.

Unique Market Characteristics

The agricultural sector and particularly crops is distinct from most other economic sectors in a number of crucial ways. The price elasticity of supply and demand are not sufficient to bring about a timely equilibration of the market. Just as a diabetic does not purchase more insulin in response to a price decline, so most people do not increase their aggregate food intake from three meals a day to four in response to lower prices. A decline in the price of lumber may stimulate more do-it-yourselfers to take on the weekend project of building a new deck but, lower prices do not significantly increase the aggregate demand for food. Lower prices may stimulate people to eat out more often and to pay for additional processing of the foods they prepare at home, but they do not significantly increase total food consumption.

Similarly, farmers tend to plant all of their acres under a wide price range. They may change the mix of crops in an attempt to maximize the revenue per acre, but they will plant all of their crop acreage particularly as long as the revenue per acre is above the out-of-pocket variable cost of production. Any dollar earned above that level can be applied to fixed costs like taxes. And on rented ground the producer has every incentive to use every acre possible. It makes no sense to rent ground and leave it unplanted. Unlike many other sectors where a few firms determine the size of the industry and can reduce production in an attempt to restore profitability, agriculture is composed of a large number of independent operations, no one of which can affect either price or industrial capacity. As a result, crop agriculture tends to use all of its productive capacity all of the time and let the weather determine the final production numbers.

One of the little recognized factors in low crop prices is the role of public investment in research and extension in increasing supply at a faster rate than population growth. The inevitable result of this supply increase in the face of an inelastic demand is lower prices. In this paper we are not at odds with the policy of public research in food production as a means of ensuring an abundant food supply for everyone. In fact, it would be immoral not to look for ways to ensure a sustainable supply of food adequate to meet the needs of the populace. However, if the government is going to interfere in the marketplace to increase the supply of food, then we would agree that it is appropriate for the government to put in place mechanisms by which that excess productive capacity can be managed for the long-run benefit of both producers and consumers.

Early Policies

From the earliest colonial period in the territory that became the United States through the 1920s, the primary public agricultural policies can be described as developmental policies. These policies were oriented toward the opening up and development of the agricultural lands of the country and included land surveys, land sales, land grants to war veterans, land grants to companies to encourage the development of railroads to open up vast agricultural areas, and the granting of homesteads for individuals. Today developmental policies continue in various forms including farm credit programs, rural electrification, support for Land Grant Colleges, and the funding of agricultural research and extension.

Compensation Policies

The 1930s saw the introduction of compensatory policies that provided price and income support for farmers. Initially the emphasis was on various mechanisms to support the price of selected commodities, indirectly providing support for producers. Typical of compensatory policies were ones which included programs to store surplus commodities during periods when production was greater than demand, programs to provide non-recourse loans to farmers thus establishing a price floor, and acreage control programs to manage the use of the productive capacity of US agriculture. In recent years the emphasis has shifted to income supporting programs that are de-coupled from production.

The point of all of this is to argue that agriculture is different and the public policies a society chooses to put in place for crop agriculture will be different from those one might use for restaurants, software developers, or pharmaceutical firms. The challenge for pharmaceutical firms is the high cost of developing new drugs and getting them successfully through the regulatory process. Therefore some form of patent protection is necessary if we want the firms to continue to develop new medicines. Similarly, the challenge for agriculture is the very low price responsiveness of the market on both the consumer and the producer side. As we have seen, another challenge is public policies that have been put in place to ensure that we always have access to a safe abundant supply of food.

Policies for Three Agricultures

The question, therefore, is not one of whether or not the government has any role in establishing a public agricultural policy, but rather how do we tailor the policies in a way that addresses the unique characteristics of the agricultural sector and at the same time meets the needs of society as a whole. To that end we will look at three sets of

policies that provide a glimpse of what US agricultural policy might look like if we seriously view farming as a livelihood strategy. One policy component is to reinstitute a program of supply management and humanitarian reserves. Secondly we will look at policies that are needed to strengthen the role of “civic” agriculture. The last policy component is a set of policies targeted toward farmers in the middle who could join together using their management skills in meeting the needs of specialized markets like meat raised without the prophylactic use of antibiotics. These three are just the tip of the iceberg and are offered just to get the ball rolling.

Commodity Agriculture: The Macro Component

The foundational set of policies that will benefit farmers worldwide is the institution of an international program of supply management for the major crops, corn, wheat, soybeans, and perhaps rice. There are three elements to this policy: (1) the establishment of an international humanitarian food reserve and (2) the institution of an acreage reduction program by the top two or three producers of a given crop (3) coupled with a storage program to maintain prices within a predetermined range. With the adoption of the 1996 Farm Bill and its adoption of a radical free-market approach to agricultural programs, prices for the major US produced commodities fell by as much as half from their 1995-1996 highs. For instance, for a given year ending stocks-to-use ratio, by 1998 the price of corn was \$0.45 a bushel lower than in the immediately preceding years; soybeans were \$1.09 a bushel lower and cotton was \$0.15 a pound lower. While US producers were partially shielded from the impact of these low prices by a combination of fixed payments, emergency payments and Loan Deficiency Payments (LDPs), farmers in much of the rest of the world had to bear the brunt of lower prices without any protection.

As the oligopoly price leader in the major agricultural commodities, the US non-recourse loan rate set a floor under the market for producers of these commodities in lands around the world. Typically small operators in an oligopolistic market price their products just under the price leader and quickly clear their markets. When the price floor was removed, the prices fell taking farmers around the world with them. Counter to the accusations that US subsidies drove US production up and world prices down, it was the decoupling of US farm payments from the non-recourse loan program that hurt farmers worldwide. The high payments that critics talk about were the result of low prices not the cause. Again, the cause was the decoupling of US payments from the non-recourse loan program and the elimination of annual acreage reduction programs in the US.

In the Long-Run. An international supply management program, then is the foundation of a policy regimen that intends on benefiting the majority of farmers in the US and the world. That a large number of farmers around the world produce either one of these major crops or a substitute means that such a program would produce benefits far beyond the circle of large country producers who receive the direct payments for participating in the program. That the bulk of the payments in the US have been directed to a limited number of farmers is a problem that must be addressed. The payments need to be structured in such a way as to encourage a critical mass of farmers to participate in supply management programs while directing the bulk of the benefits to small and medium sized farmers.

Combine Energy and Agricultural Policies. One of the new and innovative means of addressing the need to manage the supply of storable crops is to put some of that land into the production of dedicated bioenergy crops like switchgrass. Instead of “paying farmers not to farm”—an accusation made about acreage reduction programs in the past—a payment could be provided so that farmers would be able to provide the crop to a utility at a rate competitive with coal or bunker oil. As a perennial crop, switchgrass would help reduce soil erosion while remaining available for conversion back to crop production should the need arise. The payments could be directed in ways that strengthen farming as a livelihood strategy. They could also be targeted toward farmers who are within a certain radius of a co-fired electrical generation facility leaving farmers at a greater distance to continue to grow their storable commodities. Switchgrass production could also be targeted to areas facing serious disease or pest infestation, taking the land out of grain or seed production long enough to significantly reduce the risk. This would be important in nematode infested fields for which a two-year corn-soybean rotation is not sufficient to reduce the nematode numbers. If the subsidies were paid to the utilities instead of the farmers then it could be argued that the benefits were being socialized to all of society. Utilities, then, could be required to target some of the benefit over and above the aid to switchgrass producers to low income rate payers.

Civic Agriculture

The second set of policies are those that benefit civic agriculture. In a recent article in *Rural Sociology*, Lyson and Guptill, contrast civic agriculture with commodity agriculture. While commodity agriculture is focused in providing an unending stream of an undifferentiated, standardized commodity to a supply chain that reaches around the globe, civic agriculture is a locally based agricultural production system that is focused on meeting the food needs of a relatively small area and often uses direct sales to distribute its products.

Takes on Various Forms. “The organizational manifestation of civic agriculture include farmers’ markets, community gardens, and community supported agriculture (CSA) and other forms of direct marketing” (Lyson and Guptill, p. 371). Typically civic agriculture is composed of small to medium scale farmers who are not able to earn a livelihood in extensive commodity agriculture. Rather than seeking to earn a small amount of money from each acre of a large operation. Civic agriculture farms the land much more intensively focusing on high value production.

What we are seeing is the reintroduction of a form of agriculture that gave New Jersey its nickname, “The Garden State.” In the past truck farmers, working on small family sized plots in New Jersey, provided New York City and Philadelphia with much of the agricultural produce they needed. Today, CSAs around various population centers are growing in both in terms of the quantity of food produced and in terms of the number of farmers who are turning to civic agriculture as a means of engaging in agriculture as a livelihood option.

Specific Issues and Needs. The needs of civic agriculture have not been a major concern of the triad of experiment stations, land grant colleges and agricultural extension service that has been so much a part of commodity agriculture. Directing some of the funds of these agencies could pay rich dividends both in terms of the availability of sustainably

produced local agricultural products as well as the opportunity for more small to medium sized operators to earn a livelihood on their acreage. The August 2004 issue of Glynwood Center's *Gleanings* identifies a set of needs for farmers engaged in civic agriculture:

- “Access to new markets such as local restaurants, retail stores and institutional buyers, where the farmer can receive a fair price for his or her product;
- An efficient distribution network that doesn't require the farmer to make the deliveries;
- More local facilities such as community kitchens and slaughterhouses where farmers can produce value-added products;
- Smarter consumers who understand the value of local food and appreciate that price is only one consideration; and
- Educated politicians and boards who understand how their policies and decisions either support or undermine farming.”

Farms in the Middle

Analysts have noted the hollowing out of US agriculture with a few large operations producing the largest quantity of bulk commodities (gross sales above \$250,000), a large number of farms with sales under \$100,000 and a decreasing number of farms in between, the very operations for whom farming presently is a livelihood strategy. As Lyson and Guptill have reported, most of those who are engaged in civic agriculture are in the group of farmers with annual sales of less than \$100,000. The challenge is to first identify the characteristics of this third group or category of agricultural entities. And identify a set of policies for this group that utilize to advantage the skills and resources those farm operations that are in the middle range of \$100,000 to \$250,000.

Distinguishing Characteristics. This type of family operation offers are management skills, the ability to meet the needs of specialty markets that are too expensive for the large integrators to deal with, and flexibility and adaptability.

As we noted earlier, most observers have considered the supplying of the majority if not all of the management for the farm operation one of the key characteristics of a family farm. In recent years, with contracting and vertical integration taking over the poultry and hog industries, and the GMO contracts that farmers have to sign to obtain access to the seed, the key management functions have been removed from the farmstead and placed in a far-off corporate office. With time we expect to see these trends increase in operations of this sort. For instance, with contracting replacing the auction market in tobacco, we would not be surprised to see the management function move to an off-farm office somewhere.

Example or Model Arrangements. Recently we have observed the movement of some operators away from low-cost/low-profit commodity production and into tailoring their production to meet the needs of a well defined specialty market. For instance some small-scale African-American farmers in Georgia are going into goat production to meet the needs of a growing Islamic immigrant population who prefer goat meat and desire to have it ritually slaughtered. To meet the needs of this market requires a degree of participants among farmers because it is larger than any one farmer can fulfill and yet too small for the integrators to worry about. As long as the market size for this particular

product remains in this intermediate size it offers an opportunity for some producers to engage in agriculture as a livelihood strategy.

In a similar effort a group of cattle producers are organizing an effort to provide beef for hospitals that want to serve meat that has not been raised with the prophylactic use of antibiotics. In this case small operations where the producer is actively involved in providing both the labor and the management are in a much better position to manage the incidence of disease by identifying, isolating and treating those who do have veterinary problems from the rest of the herd that large feedlots with tens of thousands of animals in a relatively confined space are unable to do. The challenge is to find the means of organizing a sufficient number of operators who will raise their cattle according to the needs of the end user, in this case a group of hospitals, by maximizing the management skills of the individual operators.

Laura's Lean Beef is one example of how this kind of marketing can work to the benefit of mid-size farmers. The following from the Laura's Lean Beef website gives some insight as to how this all works:

"Although the company has grown larger and more sophisticated, its priority is to remain true to its original values," [Laura] Freeman said. The family farm is at the heart of its operation. "We realize that it's more expensive for farmers to produce cattle to our specifications, so we pay a premium over market price," she said. "Quality, not quantity, is the key to economic survival for America's family farms."

Although the company has undergone eight logo changes due to brand development, the heart of its marketing effort remains direct communication with its customers. "We started our mailing list in 1985. Today it contains over 250,000 names," Freeman said. The company's customer service representatives communicate with over 3,500 consumers each month...

"Good communication between the people who produce food and their customers is part of America's farming tradition we think should be preserved," Freeman said.

Another model is Organic Valley Family of Farms™ which began in 1988 as a small, organic cooperative in Wisconsin. Today Organic Valley® consists of 619 organic farms in eighteen states from California to Maine. They market products from milk to meat to vegetables and have organized and market their products in such a way as enable the producers to reap a greater portion of the retail dollar than general commodity production would. Their website strives to make connections with the consumers and is replete with pictures of children with calves, husbands and wives in farm settings and detailed descriptions of their agricultural practices. All of this combines to reestablish a partnership between the producer and the consumer that has been lost as the commodity chains have become longer and longer. Organic Valley® describes itself as a model for agricultural production and marketing.

Policy Possibilities. Public policies that would provide for additional of structures by which these operations could be organized should be looked at. Certainly publicly funded research and extension should be called upon to provide support to farmers who wish to identify and meet the needs of smaller markets, reestablishing the historic connection between producer and customer.

Extension programs could be built around doing feasibility and logistical studies, developing clearinghouses for producers, market participants, lawyers, accountants and other professionals, providing educational programs on approaches to ensure consistently high-quality products that meet the expectations of the identified customers and providing other facilitating services.

Federally sanctioned entities could be developed to handle some of these tasks, especially if legal protection was needed to accomplish required collaboration among producers and other participants. Federal Marketing Boards provide the precedent for such federal structures, although the responsibilities and activities would likely be much different.

Also, the federal government could do more of what it has long done but shape its policies to specifically help mid-sized family farms. Examples include providing ready availability to subsidized credit and expanding publicly financed research that specifically boosts the availability of public domain technology to family farmers. Also, the federal government should enforce existing, and perhaps create new, market concentration, environmental and labor related laws, especially those that would primarily apply to larger operations.

Willard Cochrane has suggested that “mid-sized-agriculture-in-the-middle” family farms should receive a no-strings-attached annual payment of \$20,000. This annual payment would be a tangible expression of society’s desire to preserve individual family farms and family farms in general.

It is important to remember that the continual increase in productive capacity of US and international agriculture relative to typical demand growth and random weather effects will require programs to help stabilize agricultural markets. Programs that are specifically targeted to civic agriculture and/or agriculture in the middle groups could not totally replace programs that provide price and income protection for agriculture as a whole.

Summary and Conclusions