The 1996 Farm Bill: What to (Re) Do in 2002

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I. INTRODUCTION

In 1996 free market Republicans and budget-cutting Democrats asked farmers to accept reduced farm subsidies; in return, Congress promised farmers an expansion of export markets and elimination of planting restrictions.[1] Deregulation of America's agricultural policy, or "freedom to farm" was intended to be the first substantial change in almost sixty years of government support. Past federal farm policies used price support loans to provide price stability, deficiency payments and subsidies to maintain farm incomes, and production controls to balance supply with demand.[2] These policies determined what, where, and how crops were planted and raised, influenced the market value for farmland, and reshaped the structure of farming.[3] Federally decided, but locally administered, these policies infused billions of taxpayer dollars annually into American agriculture.

Currently, the world is experiencing extremely depressed values for most agricultural commodities. When the 1996 Farm Bill was passed, prices were at historically high levels and there was optimism for continued prosperity. In 2002, the 1996 Farm Bill will expire. If nothing is legislated, American agricultural policy, in accordance with the terms of the 1996 Farm Bill, will revert back to traditional federal regulation policies.

The 1996 Farm Bill is a progression in the right direction. American agricultural policy needs to wean itself from traditional government involvement. However, until the promise of expanding export markets underlying the 1996 Farm Bill is achieved, the federal government must continue to infuse money into American agriculture through temporary emergency support and new innovative programs.

This paper will first examine the rationale of government subsidies and whether government funding promotes legitimate objectives. Second, this paper will give an historical perspective of agricultural subsidies in the U.S. starting with New Deal legislation. Then, the 1996 Farm Bill will be discussed and critiqued. Finally, this paper will present

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policies that effectively promote, expand, and manage agriculture, while still leaving individual decisions to the farmer.

II. JUSTIFICATION OF GOVERNMENT INTERVENTION

Like other industrial nations, the U. S. actively manages and regulates agriculture for many reasons. Initiated in the 1930s, U. S. farm policy was justified because of the deep depression in the farm economy.[4] Economists reasoned that because such a large percentage of people lived on rural farms, artificially stimulating commodity prices would benefit a large percentage of the population while also preventing farmers from migrating into cities and joining the masses of unemployed.

Besides being justified to stabilize the nation's economy, a viable farm policy also equalizes the burdens agriculture faces being in a highly competitive market. Being a competitive market, no individual farmer can influence prices. As a price taker, farm income is directly correlated to market prices that swing drastically because of uncontrollable forces. Local weather, for example, dictates the size of the crop farmers will be able to sell. International weather shapes the supply other countries will be able to consume and sell to U.S. customers. World equity and currency markets influence price values of importing or exporting goods, while domestic and foreign government policies restrict importation and exportation of goods. Arguably, it is not fair for farmers to absorb market swings that are outside their control. For instance, the President has the authority to embargo sales to other countries to protect domestic needs or for foreign policy reasons.[5] An embargo for political reasons can drastically affect prices when the embargoed country historically purchases U. S. agricultural commodities or is an active purchaser in the world market. In 1979 the U.S. initiated a grain embargo on the Soviet Union following the Soviet invasion of Afghanistan.[6] As a result, grain prices dropped significantly. Presently Cuba, Iran, Libya, North Korea, and Sudan are prohibited from importing U.S. agricultural goods; however, these five countries import over six billion dollars annually in agricultural commodities from other countries.[7] Current U.S. agricultural export sanctions represent nearly fourteen percent of the world's rice and ten percent of the world's wheat markets.[8] Ten percent of the world's wheat consumption represents 10.4 million tons of wheat that the U. S. prohibits American farmers from selling.[9]

Being able to produce more food than is domestically demanded, American farmers are also subject to overproduction.[10] Expanded production technologies, including more efficient machinery, innovative seeds, and developments in pesticides and herbicides have outpaced domestic demand for food. As a result, chronic oversupplies weigh on domestic markets and pressure farm incomes.[11] One obvious benefit is the low cost of food available to American consumers. Americans only devote 10.9 percent of their disposable income to food.[12] Whereas in other developed countries a larger share

of disposable income is allocated to purchase food.[13] Interestingly, these same developed countries channel substantially more funding into their farm policies than the U.S.[14]

In addition, the domestic food supply is a matter of national security.[15] Short-term demand typically increases dramatically during periods of war, national unrest, natural disaster, and economic uncertainty.[16] Counterbalancing domestic food supplies take years to accumulate; therefore, until lagging supply can equalize demand, prices skyrocket. Proactive government intervention prevents dramatic price swings by encouraging voluntary farmer involvement in planting and conservation programs and by setting aside excess foodstuffs for emergencies through subsidies. Without subsidies, commodity markets become more volatile. The domestic food supply is critical to national security; therefore, the government must ensure an adequate supply is available. As former Secretary of Agriculture Henry Wallace said, "[it] is the declared policy of [the farm bill] to protect consumers as well as to raise the income of farmers".[17]

As Wallace stated, government support to farmers is viewed as a means to support the income of farmers and preserve rural identities. Family farms protect a "way of life."[18] They contribute to the agricultural economy, and many feel family farms are the most appropriate use of rural land.[19] At the turn of the century over twenty-five percent of Americans were directly involved in farming.[20] However, today less than two percent of the U. S. population lives and works on a family farm.[21] To illustrate the transition, in 1990 only 93,780 Iowans described farming as their primary occupation — down from 125,763 in 1980.[22] Today, only seven percent of Iowa's work force is engaged in farming, leaving more school teachers, health care workers, or business managers in the state than farmers.[23] Agricultural industrialization, i.e., technological advances that produce efficiencies, has been in large part responsible. However, the lack of career opportunities in rural communities, barriers to entry in agriculture, the lack of financial rewards and insecurity in farming have contributed to the decline in family farms. Steps at the state level have been made to promote small farm family values by restricting the growth of corporate farming,[24] but economic growth in rural areas remains stagnant.

III. HISTORICAL PERSPECTIVE

Agricultural subsidies have been used for generations, either by directly funding farmers, or by protecting agricultural interests by affecting imports and exports. Countries use three primary policy instruments to support agriculture: internal price supports; border restrictions such as tariffs, quotas, and restrictive licensing measures; and export subsidies.[25] Countries that produce agricultural surpluses include, but are not limited to, the U.S., Canada, Australia, and the countries that form the European Union. In 1996, the European Union alone accounted for more than eighty-three percent of the world's total export subsidies.[26]

Before 1933 the agricultural policy in the U.S. targeted expanding research and education rather than subsidies. One example of this philosophy was Congress's setting aside federal property to establish land-grant colleges in primarily rural areas for education and research in 1862. Another instance occurred when Congress expanded research capabilities in 1887 by authorizing a system of state agricultural experiment stations. Then in 1914 Congress provided farmers with additional educational resources by enacting the cooperative federal-state Agricultural Extension Service.[27]

However, this mentality changed due to President Roosevelt's New Deal reforms, in particular the Agricultural Adjustment Act (AAA) of 1933. During World War I wheat prices in Kansas City averaged $2.52 per bushel, but by July of 1929 the price was only fifty-one cents.[28] The voluntary AAA was intended to achieve "parity" in agriculture by restoring purchasing power to profitable levels.[29] Parity was intended to stabilize farm income by federal government intervention when prices became unprofitable. Future federal government payments would be based on prices from 1909 to 1914, when commodity prices were perceived as profitable. To increase income toward parity, payments were offered to raise prices artificially with the objective that later production could be controlled and reduced by the government. With less production, demand would be balanced and "real" prices would naturally increase to the government's artificially inflated prices.[30] The AAA attempted to accomplish these objectives by monitoring production control. By tying government aid to planting restrictions, future agricultural production could be managed by a central entity. Instituting payments of benefits and allowing for mandatory loans helped cushion unprofitable periods. Crop insurance and soil conservation helped prevent a repeat of Depression Era dust storms.[31] By planting non-harvested grasses to prevent erosion, soil conservation also reduced the acres available for production.

Despite the successful participation by farmers, the AAA made only insignificant reductions in planted acres.[32] Instead of the government controlling the acres that went into production, farmers naturally responded to the higher prices by avoiding restrictions and planting more acres. Wheat farmers avoided restrictions by planting wheat on rented acres and by putting their own land under the AAA's reduction program, all the while collecting government payments.[33] On January 6, 1936, the U.S. Supreme Court held the AAA was unconstitutional in *U.S. v. Butler*.[34] The Roosevelt administration responded by immediately sponsoring the Soil Conservation and Domestic Allotment Act, which basically shadowed the AAA.[35]

In 1938, Congress passed a more comprehensive farm bill, which incorporated the revised AAA.[36] In 1942, the U.S. Supreme Court, after a change in ideological thinking, upheld the constitutionality of the 1938 Act in *Wickard v. Filburn*, by holding the Secretary of Agriculture has the power to promulgate wheat acreage quotas.[37] After

Wickard, the foundation for agricultural regulation and direct farm subsidies was firmly established as a constitutional matter.[38]

Under the 1938 Act, the Commodity Credit Corporation (CCC) was authorized and is still partially in affect today.[39] Under the portion of the CCC that survives, farmers are offered a nine-month "loan" in exchange for a security interest in the crop. The "loan rate" determines the value of the loan. In periods of depressed prices, when the cash (or market) price is below the loan rate, the farmer can default on the loan and forfeit the crop to the CCC. The farmer is guaranteed the higher loan rate price, rather than the cash price. In times of inflated prices, when the cash price exceeds the loan rate, the farmer must pay off the loan. In essence, the farmer is receiving the cash price and the loan rate is insignificant. In theory, the loan rate offers a temporary price floor for a farmer's crop.

In 1952, with the election of Dwight D. Eisenhower, farm policy of the previous nineteen years shifted.[40] The new Secretary of Agriculture, Ezra Taft Benson, promoted "freedom to farm" for the first time. Freedom to farm was touted as a farmer's freedom to make individual planting decisions without government supervision or financial support, in exchange for federal cooperation in developing and expanding U.S. agricultural export markets.[41] To increase the amount of grain shipped from the U. S. and to scale down surpluses, Benson advocated government aided sales and donations to other countries.[42] Congress enacted the Agricultural Trade Development Act of 1954, known as Public Law 480 (PL 480 or "Food for Peace"), which significantly enhanced the nation's ability to manage agricultural commodity surpluses.[43] Basically PL 480 authorized surplus grain to be given away to needy countries as famine relief or in exchange for foreign currencies, which in turn were funneled back to the countries for economic development.

The original goal of PL 480 was to ship approximately one billion dollars of U.S. surpluses to needy countries. Under PL 480, $700 million of U.S. surpluses were exchanged for foreign currencies. The remaining $300 million was for famine relief. But as the program matured, it became a tool used for political purposes.[44] Rather than targeting the most needy countries, political decisions were made to allocate food to politically sensitive countries.

In addition to PL 480, in 1956 Congress approved the Soil Bank Program, a voluntary program to idle land. At its peak the Soil Bank Program removed fifty-eight million acres from production.[45] Even though the Soil Bank Program was discontinued in the early 1970s, other voluntary soil conservation efforts evolved and are still in place today.

With the election of John F. Kennedy, the 1960s brought renewed interest in, and funding for, agricultural policy. The Food and Agricultural Act of 1965 implemented the widely recognized food stamp and school lunch programs. Excess agricultural supplies were channeled to school-aged children and low-income families who were not receiving

or consuming adequate nutritional diets. In addition the Kennedy Administration attempted to create, but Congress failed to pass, a mandatory supply management program intended to coordinate production with government controls.

The Agricultural and Consumer Protection Act of 1973 further expanded the bureaucracy of the federal government's involvement in agricultural subsidies. In an attempt to modify the 1938 parity-based farm bill, deficiency payments were implemented to create a more localized approach to direct farmer payments. The act created local agencies to determine local production factors and administer payments, with the belief that a decentralized agency would be more in tune with local conditions. Deficiency payments were a calculation of congressionally determined target price payments and locally determined yields and acres.[46] In addition, in 1977, the Secretary of Agriculture authorized an extension of non-recourse loans from three to five years, paid farmers annual storage costs, and waived or adjusted interest rates.

The 1980s introduced a new initiative: Payment in Kind (PIK) certificates. Unlike earlier support measures, PIK certificates limited production. PIK certificates intended to reduce the number of acres planted by paying farmers not to plant. Either the farmer received direct payment or was paid with surplus government owned grain. PIK certificates become politically unpopular as media sources reported large farmers receiving substantial payments for, in essence, doing nothing.

All of these changes to agricultural programs made for complicated government policies and thus were justifiably criticized. In the early 1980s George S. Dunlop, chief of staff of the Senate Agricultural, Nutrition, and Forestry Committee stated, "[t]here is an increasing realization that U.S. agricultural policy is at a crossroads, that what we are doing just doesn't work."[47] First, the initiatives penalized efficient farmers by rewarding farmers with poor management skills with government payments for financial losses.[48] This has been the failure of many reform proposals that target support payments. As the name suggests, target support payments target specific farmer categories, usually family farms.[49] Eligible farms receive subsidies to lift income to government determined "target" incomes.[50] The downside is that it is inherently difficult to avoid preserving inefficient farms. By supporting specific farm categories rather than using production-determined criteria, there are no means to weed out inefficient farmers. As long as a farm family meets the income requirement they would presumably be entitled to the government aid. Second, the arbitrary federal targeting criteria caused farmers to adjust income statements to be included in favored status programs.[51] Third, the policies tended to be over-inclusive. It was difficult to assign criteria that would benefit the farms it intended to support without inadvertently including farms it never meant to target.[52] Rather than only supporting struggling farms as intended, large financially stable farmers reaped the rewards of being eligible for federal aid. Finally, because the government programs

encouraged high production, exports were essential to maintain agricultural prices and hold down government expenditures, which rose when prices fell.[53]

IV. THE 1996 FARM BILL

Crop prices rebounded significantly in the mid-1990s from late 1980 crisis levels.[54] The rebound was attributed to an export program that flourished with depressed U.S. dollar values and inflated foreign currencies, particularly in the economically expansive Eastern Rim countries.[55] The Federal Agriculture Improvement and Reform Act of 1996 ("the 1996 Farm Bill") was introduced under the Republican-controlled Congress.[56] Because of a perceived changing economy and continued positive price outlook, the Farm Bill intended to ease government regulations.[57]

The Farm Bill guaranteed $35 billion in diminishing fixed payments to farmers for seven years, in an attempt to wean farmers off government support.[58] Loan rates and loan deficiency payments (LDPs) continued, but were capped at 1995 levels and could not exceed seventy- five thousand dollars per person.[59] The statutory language of the Farm Bill contained an expiration clause of 2002, in par, to ensure President Clinton would sign the Farm Bill,.[60] As a political move, President Clinton believed signing the bill would demonstrate a willingness to accept, at the time, politically popular deregulation reforms.[61] Furthermore, a failure of the bill could be blamed on the Republican-controlled Congress. Therefore, if no additional legislation is passed before expiration, the 1996 Farm Bill will expire and earlier farm policies will be revisited.

A. Failure of the 1996 Farm Bill

The failure of the Farm Bill was in large part due to a retreating world economy and a stronger U.S. dollar.[62] The 1996 Farm Bill was modeled assuming the economies of the Pacific Rim countries would continue to prosper.[63] As Asian currencies became depressed and the U.S. dollar strengthened, the Asian purchasing power for U.S. goods diminished dramatically. Each percent increase in the value of the dollar compared to Asian currencies generated a 1.1% decline in the price of corn and a 1.5% decline in the price of wheat.[64] Therefore, the 16% appreciation in the value of the U.S. dollar that occurred between 1995 and 1997 was responsible for a 17% and 24% decline in U.S. corn and wheat prices, respectively.[65]

Between 1990 and 1996, the U.S. agricultural trade balance with the rest of the world increased by almost eleven billion dollars.[66] As a result of weaker Asian currencies and a stronger dollar, the U.S. agricultural trade balance declined twelve billion dollars between 1996 and 1998.[67] This drop of net exports contributed to a sharp decline in domestic commodity prices and equaled a six percent decline in farm revenue.[68]

During the first three years under the 1996 Farm Bill, 1996 to 1998, over $22.9 billion was paid out.[69] Of this $22.9 billion, sixty-one percent went to only ten percent

of the recipients.[70] Since 1998, an additional thirteen billion dollars outside the intended scope of the 1996 Farm Bill had been authorized and distributed because of depressed crop prices.[71] As a result, the first three years the 1996 Farm Bill existed did not reduce federal support as Congress intended, when compared to what the 1990 Farm Bill would have paid out during the same three-year period. For example, in North Dakota the market transition payments to farmers under the 1996 farm bill totaled about $808 million between 1996 and 1998.[72] Under the deficiency-payment provisions of the 1990 Farm Bill, North Dakota farmers would have received fifty million dollars less over the same three-year period.[73] Since the 1996 Farm Bill only suspends certain provisions of permanent price support instituted under the AAA in 1938, the threat of high cost, parity price-based permanent price support provisions will force Congressional action.[74] If parity levels were tied to loan rates, as they were until the early 1970s, [75] current parity prices would be more than three times current prices.

V. PROPOSALS

The rationale that supports a viable farm policy is still justified, like it was sixty years ago. Farmers continue to be price takers. Unable to alter prices individually, they are susceptible to changing world economies, foreign policies, and weather. With one hand tied behind their back, they are still expected to compete internationally with foreign competitors who benefit from subsidized government policies.

The objectives of a viable farm policy can be achieved without reverting back to an outdated, inefficient system that only directly affects a shrinking percentage of the U.S. population. The 1996 Farm Bill introduced "freedom to farm" with the government's promise to open up foreign markets.[76] Farmers relied on the government's promise, as if it were a contractual agreement, and supported the bill. Until foreign markets are opened the government must continue to be actively involved in agriculture. With the cooperation of the federal government, the future of farming in the twenty-first century will depend on expanding export markets, reinvesting in cooperative efforts to develop processing and value-added products, utilizing contract farming to secure income, riding out the evitable storm of fluctuating commodity prices by improving marketing skills, and implementing expansive conservation and conditional support initiatives.

A. Expanding Export Markets

The federal government's commitment to maintain and encourage export markets under Freedom to Farm has been tested during the past few years of depressed world currencies. Trade initiatives like the North American Free Trade Agreement (NAFTA), General Agreement on Tariffs and Trade (GATT), World Trade Organization (WTO), and Free Trade Agreement of the Americans (FTAA) are encouraging attempts to reduce protectionism by foreign governments.

Implemented in the early 1990s, NAFTA has resulted in a massive shift in the structure of trade and production within North America. U.S. exports of corn and other feed grains have increased.[77] For example, U.S. grain exports to Canada (primarily corn and other feed grains) increased 127% between 1990 and 1998.[78] Similarly, U.S. corn exports to Mexico increased by forty-seven percent during that period.[79] By reducing foreign protectionist measures, the dynamics of trade and production within North America have shifted resources back to their optimal use and increased global social value.[80]

Beyond NAFTA, the mosaic of GATT and the WTO will largely determine the shape of further reforms in agriculture exports.[81] GATT was an organization of mostly industrialized western countries, including the U.S., chartered to expand world trade. [82] Since 1947, GATT facilitated the expansion of world trade by sponsoring multilateral trade negotiations to progressively reduce tariffs and restrain or eliminate other government trade distorting practices.[83] By the mid-90s, GATT was officially replaced by the WTO in an attempt to expand world trade.

After the WTO's Uruguay Round Agreement on Agriculture in 1995, WTO member-countries agreed to reduce domestic price support policies by twenty percent per year for a six-year period.[84] This agreement reversed escalating foreign agriculture support spending. However, for countries that funded aggressive agricultural policies before the agreement, particularly those of the European Union, the agreement's twenty percent reduction per year still enables those countries to hold unfair trade advantages over competing WTO member countries. In 1995 the European Union's budgeted allowance for farm support was four times that of the U.S..[85] Under the terms of the WTO, each member must reduce support spending by twenty percent per year. Even though total allowances will decrease, the European Union can continue to spend four times that of the U.S. toward farm support. The 1999 WTO agrement authorized the U.S. to spend $19.9 billion and the U.S. actually spent seventeen billion dollars.[86] In 2000, the WTO authorized the U.S. $19.1 billion and actual spending projections were estimated at $18.6 billion.[87]

Because WTO reductions only limit policies linked to current production or prices, the central issue in future WTO meetings will be how far and how fast the rates of reductions of other agricultural subsidies and tariffs should be.[88] If WTO limits are tested by future U.S. farm bill production and price-based spending, then negotiations for free trade with other WTO members, including the European Union which has promised a freeze on spending until 2006,[89] will be hampered and the WTO agreement will be in serious jeopardy.[90]

Democrats, supported by farmer lobbyists, have proposed "counter-cyclical" aid.[91] Counter-cyclical aid would supplement income when commodity prices are low by offering a "cushion" of support.[92] Similar to counter-cyclical aid, an eleven-member farm

policy panel recently proposed a new subsidy program that would guarantee payments to producers when nationwide farm income fell below a certain level.[93] However, to be within WTO restrictions, support initiatives must not be related to current production or prices.[94] Both the counter-cyclical initiative and the panel proposal are price support proposals.[95] When prices reach a pre-determined level, government funding would be triggered to supplement farm income.[96] As such, these proposals risk pushing U.S. spending through, and in violation of, WTO limits and jeopardize future free trade negotiations.

Alternatively, income-based programs are not restricted by the WTO agreement.[97] Income-based programs offer farmers a set income stream, with little payment modifications for management or production efficiencies. In essence, farmers become "salaried" by the government. In theory, income-based programs serve as a disincentive for farmers to increase production when prices are low.[98] Under an income-based program farmers will not see any additional financial benefit for increasing production because the income the farmer receives is not a reflection of the amount of crops the farmer raised. However, in practice, the program serves as a disincentive for farmers to reach optimal efficiencies and encourages inefficient, "lazy" practices.[99]

Besides the effort to reduce world trade restrictions, the WTO has also taken the initiative to encourage opening markets to traditionally isolated consumers.[100] For instance, the WTO has actively attempted to normalize trade between its members and China.[101] Traditionally, China has been a net exporter of corn.[102] However, over the last five years China has imported an average of forty-seven million bushels of corn.[103] Analysts believe further efforts to normalize trade and change consumption habits will more than triple the amount of bushels of corn currently exported to China.[104]

Market access and subsidies have a substantial and immediate impact on free trade for agricultural products.[105] Current agreements have failed because of the difficulty in enforcing and the reluctance of members to abide by the terms.[106] Numerous exceptions and political motives have hampered attempts to open up trade.[107] By scaling back subsidies, as the WTO does, there will be expanded markets for imported products.[108] It has been estimated the FTAA alone would raise U.S. farm income by $180 million annually.[109]

China also represents developing countries that live in a continuing state of poverty and hunger. These developing countries have neither the cash nor credit worthiness to purchase American surpluses. However, this growing group represents an enormous potential. PL 480 still continues to be instrumental in reaching out to developing countries on a limited basis.[110] However, PL 480's low interest loans still burden countries saddled by debt. Developing countries will probably never be able to pay off the debt. Therefore, on a scale larger than American agricultural policy, an effort has to be made to relieve indebtedness of developing countries to foster expanded world

trade. Without the burden of significant debt, developing countries can return to world trade forums as a consumer of American goods. As former Secretary of Agriculture Bob Bergland wrote, "[e]xperience has taught us that as those low incomes rise, the first thing that people do is eat better."[111] Therefore, as economies improve in developing countries, consumer preferences will change and will demand more from countries exporting agricultural goods in the long-term.

B. Reinvesting in Cooperative Efforts

Traditionally, farmers have been considered at a disadvantage as to bargaining power.[112] Inputs such as seed, fuel, and fertilizer are purchased individually without the benefits of discounted prices. As already mentioned in the justification for a farm policy, farmers are also hampered when selling their goods because of their highly competitive price-taker position. In response, farmers have combined their efforts to counter unfair conditions or unequal economic forces. This combined effort has produced successful organizations, or cooperatives. Cooperatives are not-for-profit organizations that intend to provide one or more competitive potential buyers for farmer grain and to provide more farm services than might otherwise be available.[113] Cooperatives help farmers obtain inputs and services that may not be financially feasible to obtain individually.[114] As non-profit organizations, cooperatives disburse profits to members through patronage. Patronage is the share of the cooperative's profit that is either withheld and used as reserves by the cooperative or distributed to investors on the basis of their investment.[115] Typically, the amount withheld is a larger percentage, while the smaller distributed patronage is paid annually in cash. The withheld amount accumulates and, if the cooperative remains financially stable, is gradually returned to the individual member after a certain number of years.[116] Cooperatives are successful, both financially and in participation, when competitors create uncompetitive markets. Uncompetitive markets encourage additional firms, such as cooperatives, to enter the market and compete competitively, but still profitably, with the other market participants. As agriculture trends further toward industrialization, cooperatives can continue to compete and return prosperity to their individual member farmers.

To regain momentum and redefine the cooperative ideal, cooperatives need to promote alternatives to traditional cooperatives, thereby enabling members to become more efficient farmers and generate additional revenue through patronage payments. Land O' Lakes, a large regional cooperative, promotes an independent pork production program. This program advises hog farmers on production, purchases surplus at reduced rates, and collectively markets the swine of their members.[117] Land O' Lakes offers an alternative to production contracting, which will be described later in detail, by purchasing supplies and marketing as a collective group rather than as individuals.[118] Throughout the Midwest other pork producers are forming feeder pig cooperatives to build jointly owned

farrowing operations and marketing networks to obtain price premiums from packers. Construed around the same principle as Land O' Lakes pork production program, these jointly owned farrowing and marketing organizations have collectively been able to negotiate with suppliers and pork processors with a larger bargaining position. Besides the swine industry, other cooperative efforts have been successful. Over thirty smaller cooperatives have formed the Heart of Iowa. The Heart of Iowa is a program that markets high value, or specialty crops, on behalf of their members.[119] A similar marketing association in Benton County, Iowa, has also been created to promote specialty and high value crops.[120] New cooperative endeavors throughout the Midwest will help generate a new era of joint cooperative efforts by farmers to generate revenue.[121]

However, cooperatives must balance the line between offering profitable alternatives and stepping on the efforts of members. Farmland Industries, a large regional cooperative based in the Midwest, is extremely active in the processing, distribution, and retail sales of pork.[122] However, Farmland received harsh criticism from their farmer owners when they vertically integrated their pork processing, value-adding, and feed sales operations to include hog production.[123] Vertical integration is the expansion of business into different stages of production.[124] By phasing out hogs, Farmland became a direct competitor with members it was obligated to serve, thereby creating an atmosphere of discontent.[125] By continuing to concentrate on production and retail sales and not competing directly with its members, Farmland can enable farmers the access to markets not traditionally available.

C. Processing

Other cooperative efforts have included developing new, smaller cooperatives to compete in the profitable processing and value-added industries. Rather than being consumed by vertical integration, processing initiatives have empowered local organizations. For instance, instead of only growing durum wheat, soybeans, or corn, some communities have established locally owned, operated, and managed durum mills, soybean crushing, and ethanol facilities. Recently, a cooperative of North Dakota durum growers formed a twelve million dollar pasta plant.[126] As a result, the durum is locally milled and processed instead of being shipped to flour mills that are hundreds of miles away.

Farmers in South Dakota created a cooperative to crush soybeans.[127] Crushing soybeans generates oil. Soybean oil is used for a variety of consumer and industrial products. The remains of the soybean, referred to as soymeal, are used as a feed for cattle. Other more publicized processing endeavors are ethanol fuel facilities.
Ethanol facilities process corn to produce a high oxygen octane enhancer that is blended with fuel. [128] Besides consuming excess corn reserves, ethanol blended fuel reduces carbon monoxide levels by twenty-five to thirty percent.[129] As for vehicle performance,

a ten percent ethanol blend in fuel will increase the fuels octane by as much as three points.[130]

As successful as some processing ventures have been, challenges abound. Financing a high-fixed cost investment, like that of a durum mill, soybean processing, or ethanol facility requires initial member contribution and willing lending institutions. But in a depressed agriculture economy there is little disposable income in the hands of farmers and few banks are willing to help generate the required capital.[131] In response state and federal agencies have begun subsidizing a small portion of these loans.[132] The Unites States Department of Agriculture (USDA) has been active in financing a farmer owned pork-processing plant in Madison, South Dakota.[133] Loan initiatives like these need to continue and be expanded to enable local ownership of processing facilities to succeed.

D. Value-Added Products

Besides cooperative efforts to process farmer products, value-adding has also been successful. Value-adding is the marketing of processed goods in the retail sales arena. For instance, besides seeing Hormel and Jimmy Dean breakfast sausages in the freezer section of the local grocery store, informed consumers can opt for member-owned Farmland sausages. The trend toward more vertical integration may be a primary force in farmers breaking away from traditional government subsidized programs.[134] The integration of production agriculture into the marketing and retail phases of food production is expanding the industrialization of agriculture. Consider, for instance, that less than twenty-three cents of every dollar spent on food goes to America's farmers.[135] In the case of wheat, farmers only receive ten censt of every dollar spent on cereal and baking goods.[136]

The industrialization of agriculture will have a significant long-term effect on farm policy. The risk farmers share will depend on both their link to an industrialized system and to the federal farm programs.[137] Many customers support cooperative efforts at the checkout lanes. When given a choice between foods produced by an independent family farmer or a large conglomerate, most consumers choose farmer produced retail products.[138] Similar to the USDA's financing for processing facilities, the Agricultural Risk Protection Act makes $15 million available for competitive grants to independent producers of value-added agricultural commodities.[139] As with local processing initiatives, programs like these need to be further expanded to benefit rural communities.

E. Contract Farming

Traditional government support proponents argue that as long as markets are subject to price risk farmers must manage financial risk.[140] "Manage" is the key word. These same proponents suggest that the government should permanently implement

revenue insurance to farmers to accomplish this management. [141] Federally administered, revenue insurance would enable a farmer to choose a level of revenue protection for the crop year. The level of revenue protection would vary according to the farmer's choice of coverage. Lower premiums would result in lower levels of revenue insurance coverage. Proponents argue revenue insurance would not affect the value of the land because the price paid for insurance would be based on the amount of coverage purchased.[142] Revenue insurance would also provide financial stability for farmers, while being less expensive to administer than current programs.[143]

Rather than legislate government initiated, farmer managed. risk programs, the same advantages can be more fully achieved without long-term government support through contracting and individual marketing. Contract farming generates fixed revenue for farmers. Already used in over twenty-one percent of the value of goods produced and marketed, contracts are often viewed as unpopular because of the restrictions placed on farmers. However, informed contract farming can reduce these restrictive agreements and be implemented to secure a steady stream of revenue. An example of contracting is contract livestock feeding. A feedlot owner agrees to furnish facilities, labor to care, and feed the livestock in exchange for payment by the livestock owner.[144] The advantage is the economy of scale that mass production allows. The feedlot owner can charge less for care and feeding than an individual rancher. Contracts also ensure product quality and coordinate efficient supply channels, which ultimately benefit consumers. Finally, contracting allows farmers and ranchers to reduce price and production risks by shifting risk to the larger, better financed buyers.[145] That is because the contract buyer typically uses the product they are contracting. For instance, Green Giant regularly contracts with local farmers to grow green beans. The farmers benefit from the regular income stream the contracting offers, while the contractor secures adequate surplus for their canning factories.

By the farmer maintaining their bargaining power, contracts can be a positive means to control costs and lock in investment return without assuming the traditional risk farming entails. By optimizing, through vertical integration and contracting production, farmers can seize opportunities, balance risk, and share in new profit endeavors.[146]

F. More Efficient Marketing

Besides integrating themselves in the industrialization of agriculture, farmers can balance risk by educating themselves in marketing. Marketing is the process by which farmers sell the products they produce. Instead of receiving revenue through federal aid, farmers must become more self-sufficient to realize profits when commodity prices offer them. For instance, most grain farmers are enticed to sell their fall-harvested crops during the fall and winter because local grain elevators charge a monthly rate to store crops. The longer crops are stored, the greater the storage fee will be when the grain is finally sold.

However, grain prices are traditionally higher in the spring and summer than they are in the fall and winter. During the spring and summer growing seasons, weather forecasts change resulting in fluctuating crop prices. As fall harvest approaches, analysts become less concerned about weather-related crop loss; therefore, prices decline. If farmers calculate their break-even, or price necessary to stay in business, they can contract with the elevator to lock in higher prices before they harvest when the opportunity presents itself, and thereby save on post-harvest storage costs. The 2000 growing season perfectly illustrates this point. During the summer the price for corn for fall delivery was over $2.60 per bushel.[147] At this level many farmers could have locked in a profitable price for their corn. However, few did and by the fall the price dropped $1.00.[148]

Traditionally, land-grant institutions and local extension offices offer an avenue for farmers to find education assistance. However, few utilize these services. To encourage further education in marketing, current pilot programs need to be expanded. Pilot programs are initial test programs focused at specific counties to test and develop new government programs.[149] The Dairy Options Pilot Program (DOPP) is an example. Under the DOPP, dairy farmers are given the opportunity to be educated and participate in marketing programs. To participate, farmers must attend a four-hour training session in dairy hedging. For one year after completion, the federal government will pay eighty percent of the cost for the dairy farmer to lock in prices.[150] Under the DOPP, dairy farmers are given the opportunity to lock in future income at a subsidized rate, with the objective that after one year they will develop the familiarity to lock in future prices for themselves.[151] Canada has a similar pilot program for cattle, called the Cattle Options Pilot Program (COPP).[152]

G. Stewardship

Besides the programs already mentioned, voluntary environmental initiatives need to take acres out of production and voluntary conditional support payments should be instituted. Conservation legislation has been a vital part of federal farm bills since the 1930s. Unlike direct government support, conservation aid provides a long-term alternative. By offering farmers the opportunity to set aside land for conservation, both the soil and the grain markets will benefit.

State legislatures have been actively supporting farmland preservation statues. For instance, Pennsylvania has been successful in preserving farmland through a wide variety of programs. Since beginning in 1989, over 156,289 acres of conservation easements have been purchased.[153] This accounts for about 2.2 percent of Pennsylvania's total agricultural land.[154] Conservation easements are easements purchased by the state to reduce land in crop production and prevent urban sprawl into agricultural land.

The federal government should selectively expand efforts to target farmers tilling the most erosive land. In 1998, a little over twenty-nine million acres was enrolled in the

Conservation Reserve Program (CRP). The CRP is a voluntary long-term cropland retirement program established to retire highly erodible cropland for ten years in exchange for annual per acre rent.[155] The CRP has, on average, saved fourteen tons of soil per acre per year from erosion.[156] Unfortunately, as a production control mechanism, the CRP is limited by the WTO. Therefore, either the CRP must be selectively offered or more funds should be allocated away from other price and production programs and shifted toward CRP funding.

H. Conditional Support Payments

Alternatively, considering the limitations production-based measures carry, like CRP, a conditional support payments program should be initiated. A conditional support payment is an income transfer to farmers. The payment is based on the net public benefits a farmer produces for which the market does not compensate him.[157] The payment would compensate for market imperfections and is intended to achieve environmental, food, fiber, and bioenergy policy objectives.[158] Payments would be based on factors not considered by current farm income support programs. Factors that would consider the value of the expected economic benefits to society discounted by economic gains producers might realize from the increased efficiencies.[159] The determination of payment rates would rest, as the current farm policy does, on political considerations of agricultural practices.[160] Considerations could include compliance with specific farming practices, preservation of wetlands, production of crops for which markets are not fully developed, adoption of alternative cropping systems, and promoting exportable commodity varieties foreign buyers demand.[161]

Recently foreign grain buyers have been reluctant to import specific varieties of U.S. commodities, primarily genetically modified (GMO) corn. As its name implies, this is genetically modified seed corn that can protect against corn bore, an insect that adversely alters the corn's development. Critics argue GMO corn causes allergic reactions in humans. In response, the U.S. has only approved GMO corn for feed and industrial uses only. Experts believe that animals that consume GMO corn and are later slaughtered do not pass the allergenic to humans. Because GMO corn is difficult to identify when commingled with other traditional corn, foreign buyers of U.S. corn have protested and threatened to limit purchases of all U.S. corn. For instance, as a significant buyer of nearly twenty-five percent of the world's imported corn, Japan opposes importation of GMO corn. In January, 2001, Japan's Ministry of Agriculture, Forestry and Fisheries (MAFF) announced that it had detected traces of GMO corn in twenty-six of forty-two imported feed corn samples.[162] However, the MAFF also announced that they have found no genetic traces in broilers consuming U.S. imported corn.[163] An example of a conditional support payment policy objective would be to promote farming practices to ease this tension by encouraging non-GMO corn. Under a conditional farm

support approach, foreign supported corn varieties could be encouraged by the federal government through income transfers and then allocated to foreign markets without the concern and threat of retaliatory embargoes.

As one supporter mentioned, conditional support payment programs would gap the education and research initiatives begun in the late 1800s with payments that are not perceived as welfare, as current opponents argue.[164] Already existent land-grant universities that concentrate on agricultural research and county extension offices that educate local farmers could cooperate. University research centers continue to be major contributors in farm technology, farm practices, and product development. County extension agents would educate and promote alternative methods that would receive the support payments.

Conditional support payments would also not be perceived as welfare, as many perceive current farm programs.[165] Instead, traditional programs offer public benefits derived from supporting farmers defined by farm size or financial need are significantly less than the public benefits derived from supporting a farmer who wanted to contribute public benefits through wetland preservation or farming practices that reduced pollution admittance.[166] Also, traditional target payment programs that define a class of farmers create more inequities than solutions.[167] Finally, some have criticized traditional target payments to financially distressed farmers. Because target payments are over-inclusive, they tend to reward farms with poor management, thereby penalizing more efficient farms. They are also under-inclusive, given the difficulty of devising criteria that maintains the solvency of some farms while inadvertently missing other equally deserving farms; and it encourages adjustments to more favored status on financial statements by using arbitrary debt.[168] Conditional support payments would not be either over or under-inclusive because farmers would subscribe to the program with the understanding of its requirements. In addition, farmers choosing to maintain a family farm can do so profitably with the program they subscribe to. Importantly, as an income-based program, the funding would most likely be exempt from WTO trade restrictions. Unlike traditional price and production-based programs, income based programs are not restricted by the WTO trade agreement. Therefore, conditional support payment can achieve further progress in reducing world agricultural protectionism without jeopardizing the farm economy.

I. Timing in a Cyclical Market

Many of the proposals suggested in this paper for improving the health of American agriculture can and would show immediate results. However, as the 1996 Farm Bill demonstrated, timing plays an enormous factor. Commodity prices are cyclical. They fluctuate as world supply and demand changes. By doing so prices rarely remain at historically low or high prices for an extended period of time. For instance, five years

ago a weaker U.S. dollar against world currencies encouraged exports by foreign countries; however, today a stronger U.S. dollar shuts the door on many of those same countries. Inevitably the U.S. dollar will weaken again, opening the door for further export demand. Possibly at the same time wet weather may hamper Brazil's soybean crop or dry conditions may persist in Australia to stress their wheat crop, thereby reducing supply and increasing world grain prices. However, until prices rebound, or in preparation of inevitable low prices in the next cycle, farmers will struggle. The temporary financial support, alternatives, and optimism of a return to better prices will measure the success of the U.S. farm policy.

VI. CONCLUSION

Freedom to Farm has taught the American farmer that in order to be financially strong he must be in a position to evolve with the modernization of farming. Historically, the American farmer has led the agricultural industrialization of the world. As we enter the twenty-first century, the American farmer must be optimistic that new opportunities will be created. Opportunities will depend as much on financial management skills and contract marketing as on production and agronomy. By increasing income through diversification and reducing risk through education, farmers of various sizes will, with the cooperation and support by the federal government, expand and flourish.

However, the federal government's cooperation and support is necessary to achieve these objectives – objectives that include easing export restrictions promised under the 1996 Farm Bill. Without federal assistance farmers will continue to face markets that put them in the inevitable position of being price takers in a U.S. farm economy that requires farm exports to be successful.

Notes

1. *See* Robert Scott, *Exported to Death: The Failure of Agriculture Deregulation*, 9 MINN. J. GLOBAL TRADE 87, 87 (2000).
2. *See* Neil D. Hamilton, *Agriculture Without Farmers? Is Industrialization Restructuring American Food Production and Threatening the Future of Sustainable Agriculture*, 14 N. ILL. U. L. REV. 613, 623 (Summer 1994).
3. *See id.*
4. *See* SIDNEY A. SHAPIRO & JOSEPH P. TOMAIN, REGULATORY LAW AND POLICY 382 (2d ed. 1998).
5. *See* Keith G. Meyer, The EC Common Agricultural Policy 9 (March 1991) (unpublished manuscript on file with author).
6. *See* KEITH G. MEYER, DONALD B. PEDERSON, NORMAN W. THORSON, & JOHN H. DAVIDSON, JR., AGRICULTURAL LAW: CASES AND MATERIALS 533 (1985).
7. *See The Issue: Trade Sanctions*, FARM BUREAU: Issues (last modified Sept. 21, 2000) <http://www.fb.org/ issues/ sanctions>.
8. *See id.*

9. *See A Review of U.S. Trade Restrictions and Grain Exports*, USDA, Foreign Agricultural Services (last modified June 24, 1998) <http://www.fas.usda.gov/grain/circular/ 1997/97-09/feature/trd_rstr.htm>.
10. *See* SHAPIRO & TOMAIN, *supra* note 4, at 382.
11. *See id.*
12. *See Foodfacts*, Farm Bureau: Newsroom (last modified May 9, 2000) <http://www.fb.org/news/fbn/00/ 02_21/html/foodfacts.html>.
13. *See id.* (France 14.5%; Germany 17.3%; South Africa 27.5%).
14. *See* ROBERT W. RUDD, THE END OF AGRARIANISM: FISSION OF THE POLITICAL ECONOMY OF AGRICULTURE: DISCUSSION, at 668.
15. *See* Meyer, *supra* note 5, at 9.
16. Demonstrated by commodity markets (e.g. the summer of 1915, resulting from World War I, saw wheat prices double in value; corn prices during World War II more than doubled as a result of increased demand for meat, which in turn required feed grains such as corn; and prices nearly tripled in the summer of 1972 when Russia decided to enter the world grain markets as a massive buyer).
17. Clifton B. Luttrell, *Down on the Farm with Uncle Sam*, International Institute for Economic Research, 3 (1983).
18. *See* SHAPIRO & TOMAIN, *supra* note 4, at 383 (summarizing J. ANTLE AND D. SUMNER, *The Economics of Agriculture: Selected Papers of D. Gale Johnson* (2 vols. 1996).
19. *See* SHAPIRO & TOMAIN, *supra* note 4, at 383 (summarizing Grassley, *The Federal Agricultural Improvement and Reform Act of 1996: Reflections on the 1996 Farm Bill.*) 1 DRAKE J. AGR. L. 1,6 (1996).
20. *See* Hamilton, *supra* note 2, at 615.
21. *See id.*
22. *See id.* at 630.
23. *See id.*
24. *See* Keith D. Haroldson, *Two Issues in Corporate Agriculture: Anticorporate Farming Statutes and Production Contracts*, 41 DRAKE L. REV. 393, 396 (1992).
25. *See* Jeffrey J. Steinle, *The Problem Child of World Trade: Reform School for Agriculture*, 4 MINN. J. GLOBAL TRADE 333, 338 (Spring 1995).
26. *See 1996 Share of World Export Subsidies,* FARM BUREAU: Newsroom (Source USDA Economic Research Data) (last modified Feb. 9, 2000) <http://www.fb.org/news/fbn/00/01_24>.
27. *See* SHAPIRO & TOMAIN, *supra* note 4, at 378.
28. *See* R. Douglas Hurt, *Prices, Payments, & Production*, KANSAS HISTORY, Vol. 23, N. 1-2, Spring/Summer 2000, at 74.
29. *See* Meyer, *supra* note 5, at 4 (later ruled unconstitutional by U.S. Supreme Court as a violation of the Commerce Clause).
30. *See* Hurt, *supra* note 28, at 75.
31. *See* Jon Lauck, *After Deregulation: Constructing Agricultural Policy in the Age of "Freedom to Farm"*, 5 DRAKE J. AGRIC. L. 3, 12 (2000).
32. *See* Hurt, *supra* note 28, at 80.
33. *See id.*
34. 297 U.S. 1 (1936).
35. *See* Hurt, *supra* note 28, at 83.
36. *See* Lauck, *supra* note 31, at 12.

37. *See* J.W. Looney, *The Changing Focus of Government Regulation of Agricultural in the United States*, 44 MERCER L. REV. 763, 765 (Spring 1993). The Court recognized the interstate nature of agriculture and the effect of local production on the total agricultural sector which thereby allowed Congress to legislate a farm policy.
38. *See id.* at 766.
39. *See* Meyer, *supra* note 5, at 5.
40. *See* Jon Lauck, *Against the Grain: The North Dakota Wheat Pooling Plan and the Liberalization Trend in World Agriculture Markets*, 8 MINN. J. GLOBAL TRADE 289, 302 (Summer 1999).
41. *See id.*
42. *See id.*
43. *See id.*
44. *See id.* at 309.
45. *See* Meyer, *supra* note 5, at 7.
46. Formula: Deficiency Payment = payment rate (target price – national average market price) * (established yield) * (acres).
47. Ronald Brownstein, *In Era of Record Deficits, Farm Price Supports Seem Likely Target for Cuts*, NATIONAL JOURNAL: Agricultural Report, Feb. 11, 1984, at 270.
48. *See* Christopher R. Kelley, *Rethinking the Equities of Federal Farm Programs*, 14 N. ILL. U. L. REV. 659, 684 (1994).
49. *See* SHAPIRO & TOMAIN, *supra* note 4, at 383.
50. *See id.*
51. *See* Kelley, *supra* note 48, at 684.
52. *See id.*
53. *See* Brownstein, *supra* note 47, at 273.
54. *See* THE PRACTICAL GRAIN ENCYCLOPEDIA 33 (1996).
55. Eastern Rim countries include: Japan, South Korea, China, Indonesia, Malaysia, and Thailand.
56. *See* USDA 1996 Farm Bill Fact Sheet (visited Oct. 12, 2000) <http://www.usda.gov/farmbill/comm.htm>.
57. *Id.*
58. *See* Wayne Watkinson & John Sheeley, *The Federal Agricultural Improvement and Reform Act of 1996*, AGRIC. L. UPDATE, July 1996, at 4 (in 1996 PFC payments will total $5.57 billion; in 1997 $5.385 billion; in 1998 $5.8 billion; in 1999 $5.603 billion; in 2000 $5.130 billion; in 2001 $4.130 billion; in 2002 $4.008 billion).
59. *See id.* at 6.
60. http://www.usda.gov/farmbill/almanac.htm.
61. http://www.usda.gov/farmbill/htm.
62. *See* Scott, *supra* note 1, at 97.
63. *See* Dale E. McNiel, *Furthering the Reforms of Agricultural Policies in the Millennium Round*, 9 MINN. J. GLOBAL TRADE 41, 43 (Winter 2000).
64. *See* Scott, *supra* note 1, at 97.
65. *Id.*
66. *See* Scott, *supra* note 1, at 92.
67. *See id.*
68. *See id.* at 92-93.
69. *See Green Acres: How Taxpayers are Subsidizing the Demise of the Family Farm* (visited Oct. 15, 2000) <http://www.ewg.org/pub/home/reports/greenacres/greenacres.pdf>, at 1.

70. *See id.*
71. *See* Christopher R. Kelley, *The Agricultural Risk Protection Act of 2000: the Non-Insured Crop Disaster Assistance Program and the Domestic Commodity and other Farm Programs*, AGRIC. L. UPDATE, 5 (September 2000).
72. *See* Dwight Aakre, *"Freedom to Farm" Still Paying More, But Larger Questions Looming,* NEWS for North Dakotans (visited August 26, 1999) <http://www.ext.nodak.edu/extnews/newsrelease/. 1999/082699/02freedo.htm>.
73. *See id.*
74. *See* Watkinson & Sheeley, *supra* note 58, at 6.
75. *See The Practical Grain Encyclopedia* (1996), at 105. As a result of enormous increases in productivity since World War II, parity levels would be $9.35 per bushel for wheat, $6.22 for corn, and $13.40 for soybeans, as of May 1996.
76. *See* Scott, *supra* note 1, at 93.
77. *See id.* at 94.
78. *See id.*
79. *See id.*
80. *See* Steinle, *supra* note 25, at 341.
81. *See* McNiel, *supra* note 63, at 45.
82. *See id.* at 43-44.
83. *See id.*
84. *See id.* at 55-56.
85. *See* Audrae Erickson, *WTO Scrutinizes U.S. Ag Spending*, FARM BUREAU: News (Nov. 20, 2000) <http://www.fb.org./fbn/html/wto.html>.
86. *See* McNiel, *supra* note 63, at 74 (authorized spending under the "amber" box).
87. *See id.*
88. See *id.* at 46 (the WTO devised a "colored box" approach to categorizing domestic support measures. "Red" programs were most restrictive and were to be eliminated; "yellow" (or "amber") programs were linked to current production or prices; "green" programs were least trade distorting; "blue" programs were not subject to spending limits).
89. *See EU Attacks US Plan for $7.1 billion of Farm Aid*, Reuters (June 21, 2000) < http://www.agriclick.com/search/found/0,1458,31312,00.html>.
90. *See* James Barnett, *Changes seen in Freedom to Farm, Trade Policy*, HIGH PLAINS JOURNAL (visited Nov. 26, 2000) <http://www.hpj.com/wsdocs/bridge/story68.htm>.
91. *See WTO Talks Likely to Impact 2002 Farm Bill*, FARM BUREAU: News (Nov. 6, 2000) < http://www.fb.org/news/fbn/00/11_06/html/wto.html>.
92. *See Id.*
93. *See Commission Backs Billions in New Aid to Farmers*, KANSAS CITY STAR (AP), Jan. 31, 2001, at C2.
94. *See id.*
95. *See id.*
96. *See id.*
97. *See* McNeil, *supra* note 81, at 46.
98. *See id.*
99. *See id.*
100. *See id.* at 47-8.

101. *See US Corn Export to China can Triple,* Reuters (March 5, 2000) <http://www.agriclick.com/search/ found/0,1458,19272,00.html>.
102. *See* ENCYCLOPEDIA, *supra* note 54, at 29.
103. *See US Corn, supra* note 101.
104. *See id.*
105. *See* McNeil, *supra* note 81, at 44, 50.
106. *See id.*
107. *See* Steinle, *supra* note 25, at 356.
108. *See* Lauck, *supra* note 31, at 312.
109. *See* Scott, *supra* note 1, at 95.
110. *See* ENCYCLOPEDIA, *supra* note 54, at 106.
111. Bob Bergland, *What I've Learned about... The Future of our Farm Exports*, FARM JOURNAL,12 (Mid-February 1984).
112. *See* SHAPIRO & TOMAIN, *supra* note 4, at 383.
113. *See* ENCYCLOPEDIA, *supra* note 54, at 41.
114. *See id.*
115. *See* Meyer, *supra* note 5, 626.
116. *See* Hamilton, *supra* note 2, at 626.
117. *See id.*
118. *See id.*
119. *See id.*
120. *See id.* at 652.
121. *See id.*
122. See <http://www. farmland.com/agoperat/beefpork.htm> (last visited Apr. 22, 2001).
123. See <http://www.sociastate.edu/sapp/soc415.h108.htm> (last visited Apr. 22, 2001).
124. *See* Meyer, *supra* note 5, at 49.
125. *See id.* at 626-27.
126. *See id.*
127. See <http://www.rurdev.usda.gov/rbs/pub/aug00/gener/htm> (last visited Apr. 22, 2001).
128. *See Ethanol Facts* (last modified Jan. 4, 2000) <http://www.ohiocorn.org/env/facts.htm>.
129. *Id.*
130. *See id.*
131. *See* Lauck, *supra* note 31, at 53.
132. *See* Jill Long Thompson, *Solving Rural Problems through Cooperatives*, RURAL COOP., 2 (Sep-Oct. 1999).
133. *See* Lauck, *supra* note 31, at 53.
134. *See* Kelley, *supra* note 48, at 667.
135. *See id.* at 668.
136. *See id.*
137. *See id.*
138. *See* Hamilton, *supra* note 2, at 641.
139. *See* Kelley, *supra* note 71, at 7.
140. *See* SHAPIRO & TOMAIN, *supra* note 4, at 392.
141. *See id.*
142. *See id.*
143. *See id.*

144. *See* Haroldson, *supra* note 23, at 413.
145. *See Contracting in Agriculture: An Overview of the Issues*, USDA Economic Research Service, (visited Oct. 23, 2000) <http://www.ers.usda.gov/whatsnew/issues/contracting>.
146. *See* Hamilton, *supra* note 2, at 625.
147. *See* <http://www.futures.tradingcharts/chart/CN/M.com>. (Price quoted is the December 2000 futures price during the summer of 2000; it does not consider local cash prices.)
148. *See id.*
149. *See* USDA Risk Management Agency (visited Nov. 12, 2000) <http://www.act.fcic.usda.gov/training.html>.
150. The government pays 80% of the premium for a put option below or within one strike price of the current market price. The government also pays the agreed brokerage fee to participating brokerage houses.
151. For example: December Class IV milk futures are trading at $12. The December Class IV milk $12 put options are trading at $1. A dairy farmer can lock in his December milk price at $11.80 under the DOPP. ($12 put strike – (($1)*(20%)) = $11.80.
152. *See* Canadian Farm Business Management Council (last modified Dec. 10, 1998) <http://www.agr.ca/ policy/risk/indexe.html>.
153. *See* Timothy W. Kelsey & Stanford M. Lembeck, *Purchase of Conservation Easements Program in Pennsylvania, Part I: History and Participants' Experience*, AGRICULTURAL LAW UPDATE 1 (September 2000).
154. *See id.*
155. *See* Agricultural Statistics 1999, United State Department of Agriculture, at XII-2.
156. *See id.* (to generate public opposition, critics characterize farm programs as "corporate welfare").
157. *See* SHAPIRO & TOMAIN, *supra* note 4, at 393 (*citing* Christopher Kelley, *Rethinking the Equities of Federal Farm Programs*, 14 N. ILL. L. REV. 659, 676-79, 684, 687 (1994)).
158. *See id.*
159. *See id.*
160. *See id.*
161. *See id.*
162. *See* Christian Mayer, Country Hedging (visited February 6, 2001) *<http://www.countryhedging.com/chonline/wire.asp?WireName=686.pdf&Header=Morning+Wire+2/5/01>*.
163. *See id.*
164. *See* SHAPIRO & TOMAIN, *supra* note 4, at 393 (*citing* Christopher Kelley, *Rethinking the Equities of Federal Farm Programs*, 14 N. ILL. L. REV. 659, 676-79, 684, 687 (1994)).
165. *See id.*
166. *See id.*
167. *See id.*
168. *See id.*