Acreage Allotment | Acreage Reduction, Set-Aside, and Diversion | Bioenergy Program | Buyout Programs | Commodity Purchase Program | Cost-Sharing Assessment Programs | Cross-Compliance, Limited Cross-Compliance | Counter-Cyclical Payments (CCPs) | Counter-Cyclical Revenue Payments | Dairy Buyout, Termination Program | Dairy Diversion Program | Direct Payments, AMTA Payments, Decoupled Payments | Farmer-Owned Reserve (FOR) | Generic Payment in Kind (GPIK) | Long-Term Land Retirement, Soil Bank, Conservation Reserve Program (CRP) | Market Loss Assistance (MLA) Payments | Marketing Loan | Marketing Quotas | Non-recourse Loan | Offsetting Compliance | Payment in Kind (PIK) | Payment Limits | Planting Flexibility (Flex Acres) | Step 1, 2, 3 Cotton Programs | Target Price | Two-Tier Milk Pricing | 0/92 and 50/92 | Catastrophic Coverage (CAT) | Disaster Programs | Livestock Revenue Protection | Multi-Peril Crop Insurance (MPCI) | Revenue Insurance | Agricultural Water Quality Protection Program (AWQPP) | Agriculture Conservation Program (ACP), Conservation Technical Assistance (CTA), Great Plains Conservation Program (GPCP) | Best Management Practices

(BMP) | POLICY TOOLS FOR US AGRICULTURE 4th EDITION | Conservation Compliance and Sodbuster | Conservation Reserve Program (CRP) | Conservation Security Program (CSP) | Environmental Quality Incentives Program (EQIP) | Grassland Reserve Program (GRP) | No Net Loss | Wildlife Habitat Incentives Program (WHIP) | Antidumping/Countervailing Duties Investigations (AD/CVD) | Barter/Counter Trade | Blended Credit | Cargo Preference | Contract Sanctity | Countervailing Duties | Direct Export Credit | Export Credit Guarantees | Export Embargoes | Export Enhancement Program (EEP) | Export Payment-in-Kind (PIK), Bonus Incentive Commodity Export Program (BICEP) | Free Trade Agreement (FTA) | General Agreement on Tariffs and Trade (GATT) | Generalized System of Preferences (GSP) | Import License | Import Quotas | Import Tariffs | International Commodity Agreements | Market Access Program (MAP) | Monetary Export Subsidies | Nontariff Trade Barrier | Normal Trade Relations (NTR), formerly Most Favored Nation (MFN) | Preferential Trading Arrangements (PTA) | Price Bands and Reference Prices | Public Health Security and Bioterrorism Preparedness and Response Act of 2002 (Bioterrorism Act 2002 or BTA) | Public Law (PL) 480, Food for Peace | Section 22, Agricultural Adjustment Act of 1933, Amended in 1935 | Tariff-Rate Quota (TRQ) | Trade Agreements | Two-Price Plan | Variable Levy | Voluntary Export Restraint | World Trade Organization (WTO) | Aggie Bonds | Beginning Farmer Programs | Borrower Training Requirements | Chapter 12 Bankruptcy | Debt Writedown | Direct Government Loans | Economic Emergency Loan Program | Emergency Disaster Loan Program | Farm Credit System Capital Corporation | Farm Credit System Insurance Corporation | Foreclosure Moratorium | Guaranteed Loans | Interest Assistance for Guaranteed Loans | Loan Mediation | Mandatory Debt Restructuring | Principal and Interest Deferrals | Principal and Interest Waivers | Secondary Markets for Agricultural Loans | Two-Tier Debt Restructuring | USDA Rural Development | Warehousing Farm Assets, Agriculture Conservation Corporation | Checkoff Programs | Cooperatives, Capper-Volstead Act | Country of Origin Labeling (COOL) | Crop and Livestock Production Reports | Direct Marketing | Export Verification (EV) Programs | Federal Milk Marketing Orders (FMMOs) | Fruit and Vegetable Marketing Orders | Grades and Standards | Interstate Compacts | Market News Price Reporting | Organic Labeling | Packers and Stockyards Regulations | Perishable Agricultural Commodities Act (PACA) | Process Verification | Cashing Out, Welfare Reform | Commodity Distribution | Dietary Guidelines for Americans | Food Assistance and Nutrition | Food Guide Pyramid | Food Stamps | Nutrition Education Programs | Nutrition Labeling | Senior Nutrition Programs | The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) | Codex Alimentarius Commission | Food Irradiation | Food Recall | Food Safety Education | Food Safety Performance Standards and Information | Foodborne Disease Active Surveillance Network (FoodNet) | Hazard Analysis Critical Control Point (HACCP) | Level of Tolerance, Zero Tolerance, No Significant Risk | National Animal Identification System (NAIS) | Pesticides Regulation, Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), Food Quality Protection Act (FQPA) | Product Labeling | Risk Assessment | Traceability, Product Tracing, Prod-

uct Traceback | JOE L. OUTLAW | JAMES W. RICHARDSON | C. PARR ROSSON III | DANNY A. KLINEFELTER | DAVID P. ANDERSON | RONALD D. KNUTSON

POLICY TOOLS FOR US AGRICULTURE

4th Edition

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Foreword	
Introduction	
	/
Domestic Farm Programs	
Introduction	1
Acreage Allotment	
Acreage Reduction, Set-Aside, and Diversion	
Bioenergy Program	
Buyout Programs	
Commodity Purchase Program	
Cost-Sharing Assessment Programs	7
Cross-Compliance, Limited Cross-Compliance	8
Counter-Cyclical Payments (CCPs)	Ç
Counter-Cyclical Revenue Payments	
Dairy Buyout, Termination Program	
Dairy Diversion Program	
Direct Payments, AMTA Payments, Decoupled Payments	
Farmer-Owned Reserve (FOR)	
Generic Payment in Kind (GPIK) (See also PIK)	
Long-Term Land Retirement, Soil Bank, Conservation Reserve Program (CRP)	
Market Loss Assistance (MLA) Payments	
Marketing Coats	
Marketing Quotas	
Offsetting Compliance	
Payment in Kind (PIK)	
Payment Limits	
Planting Flexibility (Flex Acres)	
Step 1, 2, 3 Cotton Programs	
Target Price	
Two-Tier Milk Pricing	
0/92 and 50/92	
Risk Management Programs	
Introduction	29
Catastrophic Coverage (CAT)	30
Disaster Programs	
Livestock Revenue Protection	
Multi-Peril Crop Insurance (MPCI)	
Revenue Insurance	
Risk Management Accounts	35

Conservation and Environmental Programs

Introduction	36
Agricultural Water Quality Protection Program (AWQPP)	
Agriculture Conservation Program (ACP), Conservation Technical Assistance (CTA),	
Great Plains Conservation Program (GPCP)	38
Best Management Practices (BMP)	39
Conservation Compliance and Sodbuster	40
Conservation Reserve Program (CRP)	41
Conservation Security Program (CSP)	42
Environmental Quality Incentives Program (EQIP)	43
Grassland Reserve Program (GRP)	45
No Net Loss	
Swampbuster	47
Wetland Reserve Program (WRP)	
Wildlife Habitat Incentives Program (WHIP)	49
International Trade Programs	
Introduction	50
Antidumping/Countervailing Duties Investigations (AD/CVD)	51
Barter/Counter Trade	
Blended Credit	53
Cargo Preference	54
Contract Sanctity	55
Countervailing Duties	56
Direct Export Credit	57
Export Credit Guarantees	58
Export Embargoes	59
Export Enhancement Program (EEP)	60
Export Payment-in-Kind (PIK), Bonus Incentive Commodity Export Program (BICEP)	61
Free Trade Agreement (FTA)	
General Agreement on Tariffs and Trade (GATT)	63
Generalized System of Preferences (GSP)	64
Import License	
Import Quotas	
Import Tariffs	
International Commodity Agreements	
Market Access Program (MAP)	69
Monetary Export Subsidies	
Nontariff Trade Barrier	
Normal Trade Relations (NTR), formerly Most Favored Nation (MFN)	
Preferential Trading Arrangements (PTA)	
Price Bands and Reference Prices	
Public Health Security and Bioterrorism Preparedness and Response Act of 2002	•
(Bioterrorism Act 2002 or BTA)	75
Public Law (PL) 480, Food for Peace	
•	

Section 22, Agricultural Adjustment Act of 1933, Amended in 1935	77
Tariff-Rate Quota (TRQ)	
Trade Agreements	
Two-Price Plan	
Variable Levy	
Voluntary Export Restraint	
World Trade Organization (WTO)	
Marketing Programs	
Introduction	
Checkoff Programs	
Cooperatives, Capper-Volstead Act	
Country of Origin Labeling (COOL)	
Crop and Livestock Production Reports	
Direct Marketing	
Export Verification (EV) Programs	
Federal Milk Marketing Orders (FMMOs)	
Fruit and Vegetable Marketing Orders	
Grades and Standards	
Interstate Compacts	
Market News Price Reporting	
Organic Labeling	
Packers and Stockyards Regulations	
Perishable Agricultural Commodities Act (PACA)	
Process Verification	100
Credit Programs	
Introduction	
Aggie Bonds	
Beginning Farmer Programs	
Borrower Training Requirements	
Chapter 12 Bankruptcy	
Debt Writedown	
Direct Government Loans	
Economic Emergency Loan Program	
Emergency Disaster Loan Program	
Farm Credit System Capital Corporation	
Farm Credit System Insurance Corporation	
Foreclosure Moratorium	
Guaranteed Loans	
Interest Assistance for Guaranteed Loans	
Loan Mediation	
Mandatory Debt Restructuring	
Principal and Interest Deferrals	
Principal and Interest Waivers	120

Secondary Markets for Agricultural Loans	121
Two-Tier Debt Restructuring	
USDA Rural Development	
Warehousing Farm Assets, Agriculture Conservation Corporation	
Food Assistance and Nutrition Programs	
Introduction	125
Cashing Out, Welfare Reform	
Commodity Distribution	
Dietary Guidelines for Americans	
Food Assistance and Nutrition	
Food Guide Pyramid	
Food Stamps	
Nutrition Education Programs	
Nutrition Labeling	
Senior Nutrition Programs	
The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)	
Food Safety Programs	
Introduction	
Codex Alimentarius Commission	
Food Irradiation	
Food Recall	
Food Safety Education	
Food Safety Performance Standards and Information	
Foodborne Disease Active Surveillance Network (FoodNet)	
Hazard Analysis Critical Control Point (HACCP)	
Level of Tolerance, Zero Tolerance, No Significant Risk	
National Animal Identification System (NAIS)	145
Pesticides Regulation, Federal Insecticide, Fungicide and Rodenticide Act (FIFRA),	1.40
Food Quality Protection Act (FQPA)	
Product Labeling	
Risk Assessment	
Traceability, Product Tracing, Product Traceback	150

Foreword

This document summarizes what has been learned from more than 60 years of experience dealing with more than 130 agricultural and food policy tools. Contemporary federal policy regarding agriculture has its origin in the late 1920s. Since that time policy has evolved continuously as problems, conditions, goals and/or philosophies toward government involvement in agriculture have changed.

So many policies have been tried or evaluated that it is often said that few, if any, truly new policy options exist. It is also said that agricultural policies tend to cycle between various degrees of concern about the need for income support, conservation, food assistance, and export orientation. These realities make it possible to learn from our experience with policy tools that have been tried, as well as those that have been analyzed but for one reason or another not tried.

This is the fourth edition of agricultural and food policy tools. The first publication dated August 1984 had 41 tools. The second dated August 1986 had 69 tools. It was honored by the American Agricultural Economics Association with a Quality of Communication Award. The third edition, published in 1993, contained 101 tools. This edition contains 136 tools. The increased number of tools reflects the broadened scope of agricultural and food policy as well as its increased complexity. While every Congress and administration since 1980 has vowed to reduce the complexity of farm bills, they have not succeeded.

In addition to the new tools encompassed in the 1996 and 2002 farm bills, this edition has expanded the coverage of new sets of tools covering the much more important food safety and terrorism arenas. In contrast with past editions, relevant USDA agencies reviewed drafts developed for each set of tools and provided the authors with comments. This review has improved the description of the programs. In all cases, the authors considered the agencies comments but reserved the right to make the final content decisions. This was particularly the case for the consequences section, where agencies probably should not be expected to be completely objective for the programs they administer.

Perhaps most important, this publication has no axe to grind. There is no hidden agenda. Its purpose is to provide just enough objective and factual information about a tool to wet the appetite of a congressional staffer who is thirsty for knowledge, a farm organization director who needs to sharpen his/her policymaking tools, or a student who is involved in policy education. Because time is valuable, each tool is generally limited to a single page.

Keywords: Domestic farm policy, commodity programs, conservation, environment, international trade policy, marketing policy, demand expansion programs, food assistance, nutrition, food safety, credit policy.

Acknowledgements

This publication has benefited from the comments, suggestions, and work of many individuals. Primary among these are the professional staff of the USDA who administer the policy tools discussed herein. Initially, they provided input into the tools to be included. The agencies' web sites provided a substantial amount of material for the program description, and its history. Due to space limitations, there is no attribution for the sources of these materials. Perhaps most important and time consuming was the agency reviews where specific individuals were given the task of reviewing earlier drafts, in addition to their normal day's work. It is to these individuals that we are particularly grateful. Agricultural and Food Policy Center employees, particularly David Ernstes, Sandra Norman, George Knapek, Marc Raulston, and Elizabeth Marley, made a major contribution in getting the publication in form for publication and the interactive CD.

Since the original publication of *Tools*, we have received many suggestions, corrections, and additions from our friends in the Economic Research Service/USDA, farm organization leaders, and congressional staff for whom this publication was designed. Hopefully, these comments will continue to flow into AFPC's Co-Directors e-mail *joutlaw@tamu.edu*.

The authors accept full responsibility for any errors that appear in this publication.

Introduction

Agricultural policy is a broad term used to encompass government programs that directly affect the prices and incomes received by farmers. Producers and agribusiness leaders, agriculture related organizations, and government policymakers must sort through a myriad of potential policy tools in developing this nation's agricultural policy.

Each policy tool or government program is intended to deal with a specific farm problem in a specific way. For example, target prices raise farm income through direct payments from the government while support prices raise income by setting a floor on market prices. Some policy tools are more effective than others in accomplishing the objectives for which they are intended. For example, quotas that dictate the volume a producer can market are more efficient in controlling production than acreage reduction programs. Policy tools often have side effects that need to be considered before selections are made. For example, all programs that increase farm income or reduce risk result in increase land prices.

This publication provides brief descriptions of individual policy tools that are most directly related to agriculture and the US Department of Agriculture (USDA). The report is designed to be a comprehensive list of those policy tools that were used at the time of its publication, have been used in the past, are used in other countries, or have been proposed for use in the United States. These tools are divided into eight general categories:

- **Domestic Farm Programs** Designed to raise or stabilize farm prices and incomes.
- **Risk Management Programs** Designed to help producers better manage the inherent risks of agriculture.
- **Conservation and Environmental Programs** Designed to conserve natural agricultural resources and protect the environment.
- International Trade Policies Designed to create a more favorable trading environment for US farm products.
- Marketing and Demand Expansion Programs Designed to improve farmers' position in domestic and foreign markets.
- **Food Assistance and Nutrition Programs** Designed to improve the level of living for everyone who consumes food and natural fibers.
- **Food Safety Programs** Designed to protect the safety of the food supply from pests and diseases that may, in turn, affect the health of people at home and abroad.
- Credit Programs Designed to ensure agriculture an adequate supply of debt capital at a reasonable cost.



Introduction

Today's farm programs have evolved though three distinct periods, as follows:

- Price support era, 1930s-1960s. Farm policy began by overt government support of farm prices. When market prices for a given commodity fell to the support level, the government purchased and stored it. The monuments to this policy era are concrete grain storage silos, many of which were empty for years across the Corn Belt and the Great Plains before the ethanol boom called them out of retirement. In fact, government stocks became so large that prices were generally at the support level and production controls ranging from quotas to land retirement programs were prevalent. Since support prices were too high to be competitive in the export market, the international Food for Peace (PL 480) program and domestic food distribution programs were developed.
- **Income support era, 1970s-1996.** In the 1970s it was realized that we were missing an opportunity to sell US farm products for dollars in international markets. Correcting this, however, required a major change in farm policy from supporting farm prices to supporting farm income. The mechanism for supporting income involved the government setting a politically acceptable target price or loan rate and agreeing to pay the difference when the market price fell below the target price or loan rate. Under this program, farmers made their production decisions based on the government-guaranteed target price or loan rate rather than the generally lower market price. However, until 1996, farmers were restrained in their ability to receive payments on crops for which they had no production history.
- Market-oriented era, 1996-present. While the political rhetoric of the income support era frequently made reference to more market-oriented policies, it was not until the 1996 farm bill that farmers were free to make decisions on what to produce based on market prices as opposed to government-determined receipts. This was accomplished through the establishment of a system of government-predetermined direct payments that were not tied to either production or price. These payments were referred to as decoupled payments to reflect the fact that they were not tied to either price or production. Yet the safety net was not purely decoupled from price because the marketing loan remained in effect and the Congress added supplemental payments when prices fell during the late 1990s. The 2002 farm bill amounted to a further reversion from decoupling by adding payments that were tied to price but not to production, which raised serious questions as to how seriously committed US policymakers are to decoupled farm payments.

Acreage Allotment

What It Is: Acreage allotment is a mandatory mechanism to reduce the production of targeted

commodities. Acreage allotments require that producers plant within a specified number of acres. The number of acres allotted to each farm is based on the farm's production history. The allocated acres may be adjusted annually to meet supply objectives.

Objective: To reduce the quantity produced, and consequently, the supply of a given commodity.

When Used: Acreage allotments were used extensively during the 1950s and 1960s for the basic

commodities. Until the 2002 farm bill, allotments still existed for tobacco. Allotments were used as a means of allocating target price benefits (e.g., with rice from 1976-81).

This practice has since been abandoned.

Experience: The result was a tendency for production to return to pre-allotment levels, therefore

necessitating further restrictions on allotment size. In some commodities, such as tobacco and peanuts, marketing quotas were imposed to control production more effectively.

- Acreage allotments raise domestic prices by reducing production and supply. However, when acreage allotments were used in the absence of marketing quotas, farmers responded by farming the allotted acreage more intensely, thus increasing yields with the effect of offsetting a portion of the supply reduction.
- Benefits from acreage allotment programs are bid into the price of land and/or the allotments if they are allowed to be traded separately from the land.
- High cash outlays to purchase allotments act as a barrier to entry for many farmers, especially beginning farmers.
- Acreage allotments restrict the ability of farmers to change their crop mix in response to changes in relative crop prices and innovations in agriculture.
- When allotments are imposed on one crop, surpluses may arise in other crops as farmers use non-allotment acres to produce other crops. Thus, allotments often end up being imposed on additional crops.
- To the extent that allotments reduce supply and raise prices, they reduce exports.
- Costs of production increase because they raise rental rates and restrict the ability to expand and realize economies of size.

Acreage Reduction, Set-Aside, and Diversion

What It Is:

Acreage reduction consists of an annual acreage set-aside and/or diversion that is generally voluntary. Set-aside programs required that participating farmers idle and devote to conserving use a percentage of their crop base acres to be eligible for other program benefits such as the nonrecourse loan. Acreage diversion programs pay producers a given amount per acre to idle a percentage of their base acres. A farm's base acres are determined by the production history of the crop.

Objective:

To reduce the quantity produced and thus the supply of a given commodity.

When Used:

These programs have generally been used when loan rates or target prices, were high enough to encourage farmers to expand production. Acreage set-asides and diversions were used extensively during the 1960s and were used continuously from 1977 until 1996. These programs are generally used when prices are depressed due to a stock buildup. During the early 1980s, when supplies were in substantial excess, set-aside levels rose to the 20 to 35 percent range. The 1990 farm bill explicitly tied the Secretary's annual acreage reduction decision to the relationship between a commodity's ending stocks and its total use. By the early 1990s, commodity supplies had been reduced sufficiently by low loan rates, lower real target prices, expanded export subsidies, and increased Conservation Reserve Program (CRP) enrollment that annual acreage reduction requirements were reduced to relatively low levels. Authorization for these production control programs was eliminated by the 1996 farm bill.

- Program participation was normally a function of the level of producer benefits, which
 were particularly high for cotton, rice, and wheat during the 1980s. To encourage
 participation, diversion payments were added to other farm program benefits.
- To the extent that acreage reduction programs decrease production, they reduce supply and stocks, raise prices, and reduce exports.
- Slippage reduces the effectiveness of the program. (Slippage is that portion of reduced acreage that does not result in correspondingly lower production, e.g., due to removing the poorest land.)
- Diversion programs can result in significant treasury outlays.
- Payment limitations and offsetting compliance (when used) discourage participation by large-scale operators who farm large acreages for multiple landlords.
- Acreage reduction programs tend to restrict a farmer's ability to shift acreage in response to changes in relative crop prices.
- Costs of production increase as farmers operate at less than full capacity and rental rates rise with higher land values.
- To the extent that prices rise, costs increase for livestock, and prices rise for food and fiber.

Bioenergy Program

What It Is: The bioenergy program encourages production of biofuels using specified commodities

as feedstocks. Bioenergy producers are paid to increase their production from eligible commodities on a year-over-year basis. Eligible commodities include: barley, corn, grain sorghum, oats, rice, wheat, soybeans, cottonseed, sunflower seed, canola, crambe, rapeseed, safflower, sesame seed, flaxseed, mustard seed, cellulosic crops, and fats, silve and process. The proposer is a desirie to add to the HCDM's Former Commission Agency.

oils, and greases. The program is administered by USDA's Farm Service Agency.

Objective: To promote bioenergy production of ethanol and biodiesel from eligible commodities.

When Used: Initially authorized in the 1996 farm bill, the program was reauthorized in the 2002 farm

bill with \$150 million available each fiscal year from 2003 through 2006.

Consequences:

• Increases bioenergy production from specified commodities.

Increases demand for eligible commodities.

Buyout Programs

What It Is:

Relates to the compensation provided to asset holders (in agriculture, these would normally be quotas or allotments) for the loss or decline in value of the asset resulting from a program change. A buyout program has been used to compensate peanut quota and tobacco quota holders as quota was eliminated in each program. See Dairy Buyout for a description of a similar program utilized to reduce milk production.

Objective:

To provide compensation for the loss of asset value resulting from a policy change.

When Used:

Provisions for a peanut quota buyout and program redesign were in the 2002 farm bill. The *Tobacco Transition Act of 2004* terminated the federal tobacco program beginning with the 2005 crop year.

- Provides compensation for loss in asset values associated with a program change.
- Provided compensation to quota owners. Tenant farmers without quota received nothing.
- Quota owners could be better or worse off depending on whether the discounted returns from quota benefits (buyout payments) were higher or lower than what would have been realized.

Commodity Purchase Program

What It Is: Gives the Commodity Credit Corporation (CCC), acting on behalf of the Secretary, the

authority to purchase commodities for government storage and/or distribution.

Objective: To support the price of commodities.

When Used: Market purchases of commodities occur whenever they are offered to CCC at the support

price under the operation of the price support programs for butter, nonfat dry milk, and cheese. Regular purchases of commodities in surplus may also occur in association with commodity distribution and school lunch programs. However, government commodity distribution programs to needy individuals have largely been replaced by food stamps (see *Commodity Distribution*). Special purchases have been mandated in particular instances when market gluts exist and prices are unusually low. Such special purchases are used to alleviate temporary surplus conditions and/or to achieve specific political ends.

- Setting purchase or support prices too high encourages excess production and the accumulation of government stocks, which may have limited outlets.
- Storage costs for purchased commodities are high unless rapidly distributed.
- Related processing industries such as packers or milk processors are frequently important beneficiaries.
- Increased purchases temporarily raise market prices.
- When purchased commodities are distributed, commercial sales of the commodity are reduced.
- Government commodity give-aways are often plagued with inequities, fraud, and corruption.

Cost-Sharing Assessment Programs

What It Is:

A cost-sharing assessment program, not to be confused with a checkoff program, is a means by which the costs of farm programs are shared between producers and the government. The producers' share of the cost is covered through a per unit assessment of product marketed. The magnitude of the per unit assessment depends on the degree of cost-sharing (50 percent cost-sharing would involve a higher checkoff than if producers shared only 30 percent of the cost) and the size of the commodity surplus. The higher the assessment, the lower the effective level of price or income support for the commodity.

Objective:

To make the level of income support more responsive to the magnitude of the surplus, to reduce the level of production, to reduce Commodity Credit Corporation (CCC) stocks, and to help defray a portion of government farm program costs.

When Used:

Cost-sharing has been used in both tobacco and dairy. The 1982 No Net Cost Tobacco Program Act provided that as a condition for program participation, tobacco producers and buyers pay an assessment to cover program costs other than USDA's administrative costs. The 1982 Omnibus Budget Reconciliation Act placed an assessment of \$1.00 per hundredweight on milk production, of which \$0.50 per hundredweight was refunded to producers who did not increase production. For both tobacco and milk, cost-sharing programs were implemented after a serious political threat that the whole government price support program for these commodities might be discontinued. For both programs, producer resistance has been substantial. The dairy cost-sharing program was reinstated in the 1985 farm bill to pay for a portion of the costs of the dairy buyout program (see Dairy Buyout). In the case of the dairy buyout, producers who continued to produce milk were taxed to cover a portion of the costs for the buyout program. The 1990 farm bill established an assessment for nonfat dry milk, cheese, and butter purchases by the CCC in excess of 7 billion pounds, milk equivalent. Over the period 1983 to 1995 dairy assessments approached \$3 billion. The 1996 farm bill eliminated the dairy assessment program. However, the tobacco assessment has continued.

- The cost-sharing concept provides an automatic adjustment to the level of income support for farmers as government expenditures rise.
- The political hassle of adjusting income support levels downward when supports are initially set too high is avoided.
- The assessment reduces government costs and thereby increases the political acceptability of farm programs by urban congressmen and taxpayers.
- The assessment makes the level of income support more responsive to market forces.
- The assessment places the burden of program costs directly on producers, whereas a
 price support reduction places the burden on cooperatives, processors and exporters
 who traditionally hold inventories.

Cross-Compliance, Limited Cross-Compliance

What It Is:

Cross-compliance is a provision requiring a farm to be in compliance with the terms and conditions of all other commodity programs applicable to the farm as a condition of program eligibility for any single commodity. For example, if a farm produced cotton and wheat, the farm could not be in compliance and receive benefits from the wheat program without also meeting the program requirements for cotton. Limited cross-compliance differs from cross-compliance in that a producer does not have to abide by the acreage reduction requirements for other program crops on the farm, but the producer cannot plant in excess of the established crop acreage base for the other crops. Cross-compliance may also mean that program participants must engage in various conservation practices.

Objective:

Cross-compliance has multiple objectives including those of reducing production, reducing government program expenditures, reducing a commodity program's adverse impacts on other commodities, and conserving resources.

When Used:

While cross-compliance is theoretically essential to implementing an effective acreage reduction program for agriculture in general (across crops), farmers and their organizations have strongly resisted the implementation of cross-compliance. Strict cross-compliance provisions have not been enforced since the 1960s. Limited cross-compliance authority was implemented in the late 1970s and authorized in the 1985 farm bill. Cross-compliance requirements were eliminated in the 1990 farm bill and new flexibility provisions were incorporated to allow limited planting of alternative crops. Conservation cross-compliance still exists in specific instances (see *Conservation Compliance*).

- Improves effectiveness of production controls across program commodities.
- Prevents spillover of surplus acreages and resources to other program commodities.
- Cross-compliance has the potential for reducing government program cost.
- Implementation of the provision can result in less program participation, especially if payment limits are a constraint.
- Cross-compliance restricts a farmer's ability to shift acreage in response to changes in relative crop prices.
- To the extent that cross-compliance expands the scope and effectiveness of production control programs, it raises cost, increases land values, raises prices, and reduces exports.

Counter-Cyclical Payments (CCPs)

What It Is:

Income support that is provided when a covered commodity's marketing year average price plus the direct payment rate is less than its specified target price. Under this policy tool, payments are decoupled from production. Like direct payments, payments are based on historical program production (payment acres multiplied by CCP payment yields). CCP payments do depend on price levels, so payments are not decoupled from price. This program was initiated in the 2002 farm bill as a result of chronically low prices during the late 1990s and early 2000s that prompted Congress to provide market loss assistance payments. Supporters of this type of program cite that payments are truly counter-cyclical, as government support is only received when prices are low while support declines as prices rise. Prices above specified levels result in no government support from this policy tool.

Objective:

To provide income support that is counter-cyclical with regard to market prices.

When Used:

CCPs were authorized in the 2002 farm bill through 2007. Significant CCP payments were made due to low prices during the early to mid-2000s. As commodity prices increased near the end of its authority, very few CCP payments were made to commodities other than cotton.

- Provides for income support that is partially decoupled. That is, decoupled from actual production but not prices.
- Some commodities felt that the level of their target price was set too low to provide much of a safety net.
- Provides for income support in the event of low prices for covered commodities.
- Lenders could not typically use CCPs as part of a producer's repayment capacity due to counter-cyclical nature.

Counter-Cyclical Revenue Payments

What It Is: Income support that is provided when the combination of price and production fall below

a specified revenue level for each covered commodity. To date, the United States has utilized individual crop-based counter-cyclical payments (CCPs) and loan deficiency payments (LDPs) triggered by low prices. Supporters of the counter-cyclical revenue program cite that under the CCP program they receive very little government support

when they have a short crop because prices tend to be higher as a result.

Objective: To provide income support that is dependent on revenue (prices times production).

When Used: This type of program has been discussed periodically since 1990; however, it has not

been incorporated into the US producer safety net to date.

Consequences:

• Strengthens the connection between income support and commodity production.

Provides income support when widespread yield losses trigger higher market prices.

 May or may not provide increased income protection depending on the level of the trigger and the elasticity of demand.

Dairy Buyout, Termination Program

What It Is: The Dairy Buyout Program (termination program) paid dairy farmers to slaughter or export

their cows and discontinue milking operations for at least five years. Farmers submitted

competitive bids in a buyout program and USDA decided what bids to accept.

Objective: To reduce milk production, reduce government purchases, control stocks, and cut

government dairy program costs.

When Used: The buyout program was initiated as a one-time event in 1986 after the dairy diversion

program proved unsuccessful at reducing production. The maximum bid accepted in the Dairy Buyout Program (\$22.50 per hundredweight annually over 5 years) was more than

twice that of the dairy diversion program, discussed as a separate tool.

Experience: Branding of cows destined for slaughter or export was objected to by animal rights

advocates.

- Slippage proved to be at least as big a problem in dairy as in crops acres cannot
 move at night but cows can. Evidence of cow trading to circumvent the intent of the
 program was extensive.
- Participation was highest in those regions that have the lowest returns over variable costs.
- Farmers who were contemplating going out of business anyway were most likely to participate.
- Buyouts create strong incentives for nonparticipants to increase production. As a result, production declines tend to be temporary – there were no long-term incentives to reduce production.
- Increased dairy slaughter raises beef supply and depresses meat prices. Beef producers sought legal remedies to ensure that beef prices would not be unduly depressed. School lunch purchases of beef were increased.
- Animal rights activists became very concerned about branding requirements and conditions surrounding the resulting animal slaughter.
- After the buyout program, beef producer interests became actively involved in dairy policy debates, expressing strong opposition to any program that would mandate reduced milk production.

Dairy Diversion Program

What It Is: The Dairy Diversion Program paid farmers \$10 per hundredweight of reduced production

for an 18-month period from a historical base. Reduced production was accomplished by early culling of cows, reduced feeding, and modified breeding schedules. The origin of the name "diversion" is unclear since there is no diversion, just reduced production.

the name diversion is unclear since there is no diversion, just reduced production.

Objective: To reduce milk production, government purchases, government dairy program costs,

and government stocks of butter, nonfat dry milk and cheese.

When Used: The dairy diversion program was authorized in 1983 and implemented in 1984. Dairy

program purchase costs had exceeded \$2 billion annually and the government was

purchasing more than 10 percent of the milk supply.

- Slippage in dairy proved to be at least as large as in crops because of nonparticipant increases in production and the temporary nature of the program. Therefore, total production decreased by only 50 percent of what was anticipated.
- Participation was highest in regions that have the lowest returns over variable costs.
- The highest participation was in states that were already reducing production. Farmers
 who were reducing production and/or contemplating going out of business were the
 most likely to participate.
- Strong incentives for nonparticipants were created to increase production.
- There were no long-term incentives to reduce production. Participating farmers who stayed in production had their cows and heifers bred to go into full-production at the end of the program. Therefore, production increased sharply to record levels the subsequent year.

Direct Payments, AMTA Payments, Decoupled Payments

What It Is:

Income support provided as a fixed payment to producers based on their production history (payment acres and program yields), multiplied by a legislatively determined per unit payment rate. These payments are decoupled from current prices and production, so producers could choose to plant different crops or nothing and still receive payments. Although these payments go by many different names, they were initiated in the 1996 farm bill and referred to as production flexibility contract (PFC) or *Agricultural Market Transition Act* (AMTA) payments because they were defined in that section of Title I.

Objective:

To provide income support to producers that is not coupled to producer production decisions.

When Used:

Authorized in the 1996 farm bill for corn, wheat, grain sorghum, upland cotton, rice, barley, and oats. These payments were referred to in the bill as decoupled, AMTA, or PFC payments. They were reauthorized in the 2002 farm bill for covered commodities, which included peanuts and soybeans, but were referred to as direct payments in the legislation.

- Removes the connection between income support and commodity production.
- Producers plant for the market versus for the government.
- Provides lenders with additional certainty regarding government payment receipts on loan applications.
- Moves producer safety net payments closer to welfare.
- Least market distorting of tools used in producer safety net, therefore least offensive to export competitors.

Farmer-Owned Reserve (FOR)

What It Is:

FOR was a three year Commodity Credit Corporation (CCC) loan for wheat and feed grains designed to establish reserve stocks of grain and encourage on-farm storage of grain. Reserve stocks remained in the producers' hands until designated price triggers were reached, the Secretary of Agriculture authorizes release, or until the loan expired.

Objective:

To stabilize grain prices and provide producers a longer time period to sell their grain. To establish a food reserve of grains, thus stabilizing grain supplies and making the United States a more dependable supplier. To stabilize grain prices between the support price and the release price.

When Used:

FOR was authorized for use from 1978 through 1995 for wheat and feed grains. Initially, entry into the three year FOR loan was only from regular nonrecourse loan. In 1980, the program was modified to allow direct entry, thus avoiding the regular CCC loan. In addition, producers were given a direct entry loan price higher than the regular loan rate in 1980, 1981, and 1982. Stocks in the reserve were eligible for release when cash prices reach a level determined in advance by the Secretary of Agriculture. The 1985 farm bill established upper limits on wheat and feed grain FOR stocks as a percent of estimated total domestic and export use. Subsequently, FOR's role was deemphasized. The 1990 farm bill gave the Secretary authority to allow FOR entry within certain limits and subject to the stocks-to-use ratio and price conditions. The 1996 farm bill eliminated FOR.

- FOR provided farmers three years to market their grain out of the reserve.
- Large quantities of stocks were attracted to FOR when the entry price was set above the equilibrium market price.
- The quantity of stocks held by the private sector was reduced.
- Prices were at either the entry price or the release price depending on the supplydemand balance. Within that range and in times of relative supply-demand balance, prices would become more volatile because of the program pulling prices to either the entry or the release price.
- FOR often resulted in the accumulation of stocks which, in turn, result in substantial storage and interest costs.
- Setting the FOR entry price above equilibrium market price creates, in effect, an income support program.
- In the face of declining export demand, there were no provisions to reduce the FOR entry price.
- High loan levels and release prices encouraged US and foreign production and discourage US exports.
- FOR supported prices only when producer participation was high and adequate storage was available.

Generic Payment in Kind (GPIK) (See also PIK)

What It Is:

A negotiable commodity certificate that could be redeemed by the holder for his/her farmer-owned reserve loan, any uncommitted commodities in Commodity Credit Corporation (CCC) inventories, or cash. The certificates were issued to complying producers in lieu of cash payments for a variety of provisions in the 1985 farm bill. The certificate was issued for a dollar amount; therefore, the amount of commodity that could be redeemed was determined by the daily redemption price as determined by the CCC. The negotiability of the certificate allowed for the sale and resale of the certificate up to its stated expiration date.

Objective:

To improve on the economic and logistical problems encountered in earlier PIK programs that were applied to individual commodities available only in designated locations.

When Used:

First implemented in the 1986 farm program after the 1985 farm bill substantially expanded the authority for PIK. Negotiable commodity certificates were not tied to a specific location or CCC commodity. The program offered more flexibility than commodity-specific PIK programs. It could be used only when stocks are held in the CCC/Farmer-Owned Reserve (FOR) or are under price support loan. Once CCC stocks disappeared, FOR was eliminated and the loan no longer supported the price (1990 farm bill). The need for generic certificates also ended.

- The negotiable aspect of the generic certificate allows market forces to dictate the allocation of commodities currently in CCC inventories.
- Generic certificates may be used in lieu of cash for a variety of farm program provisions. Multiple expiration dates, however, can become confusing.
- Flexibility as to commodity and location allowed producers operating in traditional surplus-producing regions to receive price benefits at the expense of producers in deficit regions.
- Market prices tend to fall as commodities are released from government inventories and/or programs.
- Generic certificates offered considerable flexibility for the seller and buyer and thus may result in bids in excess of par value.
- Generic PIK provided an off-budget mechanism for the release of many CCC-held inventories, meaning that it does not appear in the budget, although it does affect the CCC balance sheet.
- Since certificates are generic, increased incentives to participate in one program (e.g., cotton) may have an adverse impact on the market prices for another commodity (e.g., dairy products) if market forces dictate the release of that commodity. This cross-commodity price impact did not receive much public attention.

Long-Term Land Retirement, Soil Bank, Conservation Reserve Program (CRP)

What It Is:

Long-term land retirement is a multiple year, voluntary program that removes cropland from the production of farm commodities. The program generally imposed requirements that a soil-conserving cover crop, including trees, be planted. The government pays the landowner an annual rental rate plus a portion of the cost of establishing the cover crop. (See also Conservation Reserve Program in the Conservation and Environment Section).

Objective:

To remove cropland from production that is resulting in surpluses or is subject to high levels of erosion and/or reduced water quality.

When Used:

The Soil Bank Program was first authorized in the 1956 farm bill. It was unpopular because landowners were paid the same per acre rental rate to retire lands with different productivity and because of the adverse effects on some agribusiness firms and rural communities. In 1965, Congress re-established a land retirement program as the Cropland Adjustment Program. The 1985 farm bill contained authorization to retire up to 45 million acres of highly erosive land from production under the Conservation Reserve Program (CRP). Farm organizations and environmentalists combined efforts to establish dual CRP objectives of surplus control and soil conservation. The 1985 farm bill established the maximum acreage that could be enrolled in the CRP within a single county at 25 percent of the total cropland acreage unless the Secretary determines that higher participation would not adversely affect the local economy. The 1996 farm bill capped the CRP at 36.4 million acres and began to put increased emphasis on water quality as a consideration for entry. The 2002 farm bill increased the cap to 39.2 million acres and established an entry criteria of a balance between erosion, water quality, and wildlife habitat.

- Long-term land retirement is a supply control and conservation strategy that may cost less than paying storage and interest on surplus commodities.
- Long-term land retirement programs can adversely affect local agribusinesses and rural communities.
- Increased prices for commodities raise production costs for livestock and food prices over time. Exports are reduced.
- Land retirement can be used to encourage conservation of cropland, promote reforestation, improve water quality, and enhance wildlife preservation practices.
- Long-term land retirement reduces farmers' flexibility.
- Retired land, properly cared for, may result in greater productivity when put back into use
- Slippage is generally high because the least productive land is removed from production.
 However, paying for land retirement based on productivity (bid basis) increases the
 efficiency of the program. Slippage may be reduced somewhat if whole farms are
 removed from production.

Market Loss Assistance (MLA) Payments

What It Is: Income support that was provided on an *ad hoc* basis by Congress during the late 1990s

and early 2000s due to low commodity prices. Payments were proportional to Agricultural Market Transition Act (AMTA)/production flexibility contract (PFC) payments initiated in

the 1996 farm bill.

Objective: To provide supplemental income support during periods of low prices.

When Used: Supplemental legislation was passed each year for the period 1998 to 2001 that provided

payment levels of \$2.857 billion in 1998, \$5.5 billion in 1999, \$5.465 billion in 2000,

and \$4.6 billion in 2001.

Consequences:

 Provides for income support that was decoupled from production but not market price levels.

- Provided income to producers during periods of low prices.
- Significant taxpayer expense regardless of individual producer need.
- Reinforced the notion among producers that Congress would provide financial support during difficult financial circumstances.
- Required annual authorization and appropriation by Congress.

Marketing Loan

What It Is:

Marketing loan is a nonrecourse loan with a repayment rate at the posted county price (PCP) for wheat, feed grains, and oilseeds, or at the world market price for upland cotton and rice, as determined by Farm Service Agency/USDA. The difference between the loan rate and the repayment rate is referred to as the loan deficiency payment (LDP). LDPs are subject to a \$75,000 per person payment limit.

Objective:

To remove the nonrecourse loan rate price floor, thereby reducing or eliminating government stocks and expanding exports.

When Used:

Marketing loans were first authorized by the 1985 farm bill. While authorized for all price supported commodities, marketing loans were only initially implemented in rice and cotton using a formula to calculate the world market price. The 1990 farm bill extended the marketing loan to wheat, feed grains, and oilseeds, but used the posted county price to determine the LDP. The 2002 farm bill expanded the marketing loan to include peanuts, chickpeas, lentils, dry beans, wool, mohair, and honey.

- The market floor price, which previously was the nonrecourse loan rate, was eliminated.
- The use of the nonrecourse loan as an alternative market or commodity storage instrument was eliminated.
- Commodities became available for export at competitive world prices, thus increasing exports when the Commodity Credit Corporation (CCC) is releasing stocks.
- Government storage costs were eliminated.
- Government program costs increased sharply as CCC stocks were released during times of slack world demand.
- Prices fell to world market levels and became more unstable. World market price levels
 were reduced, thus decreasing incentives for production in countries not providing
 income protection for their farmers.
- Farm program costs for competing exporting countries increase and/or their producer returns declined.
- Livestock feeders, processors, and consumers gained access to US commodities at generally lower world market prices. These benefits were realized throughout the world except in countries that prevented imports.
- Deficiency payments reduce income risk for producers, thus stimulating production, and increase their ability to obtain financing.
- Farmer returns, including LDPs, were higher than they would be without the marketing loan program.

Marketing Quotas

What It Is:

A marketing quota is a mandatory tool that specifies the quantity of a commodity that can be marketed. The national quota, set by the Secretary, is based on expected domestic and export demands and is usually lower than normal production levels. The national quota is allocated to each producer, based on past production. Marketing certificates may be issued to producers holding quotas that grant them the right to market a specified quantity of the commodity. The certificate, if allowed to be sold separate from farmland, will develop a value determined through market exchange.

Objective:

To restrict supply by controlling the quantity farmers are allowed to market.

When Used:

Marketing quotas were initially imposed after acreage allotments proved to be ineffective in controlling supply. Because marketing quotas are mandatory for all producers growing the quota crop, quotas must be approved by a referendum. Farmers historically approved a quota only when a crisis existed. Quotas have generally been used in conjunction with allotments and relatively high price supports. Marketing quotas have been used regularly for tobacco. The 1985 farm bill authorized the use of marketing quotas for wheat if proclaimed by the Secretary and approved in referendum by 60 percent of the eligible producers. These quotas would have been put into effect for the 1987-90 crop years, but they were never used. In the 2002 farm bill, quotas were discontinued for peanuts by using a buyout.

- Marketing quotas are the most effective means of controlling supply. However, once a quota is in place, there is pressure to increase the national quota, thus defeating its purpose.
- Like other supply control programs, marketing quotas usually reduce the volume of exports for the quota crop.
- Marketing quotas are more efficient in reducing supply and raising price than acreage reduction programs because there is little, if any, slippage.
- Marketing quotas are associated with low treasury costs unless the quota is so large that Commodity Credit Corporation (CCC) stocks accumulate.
- Marketing quotas tend to acquire a value that reflects the capitalized added net returns
 producers receive from the program. This value may either be directly associated with
 the quota or, if tied to a land base, capitalized into the value of the land resulting in
 increased land prices.
- Single crop marketing quotas for major crops (e.g., wheat) adversely affect prices of crops planted on the idled acres (e.g., corn and sorghum).
- Increased prices for quota commodities increase the costs of production for livestock and food prices over time.

Nonrecourse Loan

What It Is:

The Commodity Credit Corporation (CCC) makes nonrecourse loans at established loan rates for wheat, feed grains, rice, cotton, sugar, peanuts, tobacco, and oilseeds. The loan, plus interest and storage, can be repaid within the loan period (typically 9 months). If the loan was not repaid, the CCC has no recourse but to accept the commodity in full payment of the loan. Therefore, the nonrecourse loan was the major source of commodities in CCC government storage. Until 1990, when the marketing loan became available for the major program crops, nonrecourse loans were frequently referred to as a price support loan. Today the major function of the nonrecourse loan is that it sets the loan rate used to calculate the loan deficiency payment for the marketing loan.

Objective:

To add price stability to the market by releasing CCC stocks when prices were high and withdrawing stocks from the market when prices were low. The nonrecourse loan also encouraged orderly marketing of commodities throughout the marketing year by extending risk-free credit to producers for harvested crops thereby preventing a market glut at harvest.

When Used:

The nonrecourse loan program has existed continuously since 1938 for cotton, wheat, and feed grains. During World War II, the loan rates for basic commodities were set at 100 percent of parity to encourage production of crops. At various times, political pressure has caused loan rates to be set above equilibrium market prices; as a result, (a) the loan rates acted as a supply incentive for producers, (b) the CCC acquired large stocks of grain and cotton, and (c) the volume of exports declined as commodities were priced out of the world market. As a result, pressures developed to set loan rates lower to avoid encouraging surplus production. With the marketing loan, government expenditures, not CCC stocks, have become the primary consideration in setting loan rates.

- The nonrecourse loan was a price floor.
- The nonrecourse loan acted as a price stabilizing force in the market and thus reduced price risk for farmers and led to greater production.
- Excess resources are encouraged to remain in agriculture.
- The nonrecourse loan extended the marketing period for farmers.
- High nonrecourse loan rates priced US commodities out of the world market, encouraged foreign production, and necessitated subsidies to export surplus CCC stocks.
- Loan rates based on the cost of production tend to increase without regard to the market-clearing price and can become a production incentive as a result.

Offsetting Compliance

What It Is: A farm program provision requiring each producer to be in compliance with the program

for the same crop on all farms as a condition of program eligibility. For example, if a farmer produced corn on three farms, he would have to meet the terms and conditions of the corn program on each farm before being eligible for any corn program benefits.

Objective: To aid in production control and reduce government program expenditures.

When Used: While offsetting compliance is essential, theoretically, to implementing effective acreage

reduction programs, it is not attractive politically or pragmatically. Politically, farmers and their organizations have strongly resisted offsetting compliance. Pragmatically, the multiple landlord-tenant relationships that exist throughout commercial agriculture make equitable implementation of this provision virtually impossible. Offsetting compliance provisions were used as recently as the late 1970s. The 1985 farm bill granted the Secretary, at least implicitly, the authority to require offsetting compliance for wheat and feed grains. The bill explicitly prohibited offsetting compliance provisions from being used for cotton and rice. The 1990 farm bill eliminated the Secretary's authority to

require offsetting compliance.

- The provision improves effectiveness of production controls within a commodity.
- Offsetting compliance has the potential for reducing government program costs.
- Implementation can result in less program participation, especially if payment limits are a constraint.
- Offsetting compliance is strongly resisted by farmers and their organizations.
- Offsetting compliance restricts a farmer's ability to shift acreage in response to changes in relative crop prices.
- The provision is difficult to implement with the existence of multiple landlord-tenant relationships.

Payment in Kind (PIK)

What It Is: PIK is an acreage diversion program with the diversion payment in the form of a commodity

rather than cash.

Objective: To reduce production, stocks, and/or direct treasury outlays (government program

costs).

When Used: PIK was used in the early 1960s for one year. In 1983 it was used for wheat, cotton,

corn, sorghum, and rice; in 1984 it was used again for wheat. The program was active when government-owned stocks reached unacceptably high levels. Problems occur when the government is required to pay out more PIK commodity than it owns, as was the case for cotton and rice in 1983. An attempt was made to resolve many of the logistical problems incurred in early PIK programs by issuing generic PIK certificates under the 1985 farm program (see *Generic PIK*). A decision that PIK commodities were not subject to the payment limit encouraged participation of large-volume producers. In addition, PIK certificates were not subject to budget cuts under the *Balanced Budget and Emergency Deficit Control Act* (Gramm-Rudman-Hollings). When Commodity Credit Corporation (CCC) stocks largely disappeared and the authority for diversions was eliminated in the 1996 farm bill, the potential for using PIK disappeared.

- PIK provided an off-budget method for paying producers to divert cropland.
- PIK reduced government-owned stocks.
- Program effectiveness in increasing prices depends on farmer participation, slippage, and initial level of stocks.
- Marketable supplies were increased when released from CCC stocks or the nonrecourse loan while curtailing production.
- Local communities and many agribusiness firms were adversely affected by PIK production control programs. For livestock producers it was a mixed bag with stocks being released but production still being controlled.
- Instead of adjusting excess resources out of crop production in any given year, PIK's artificially high prices may have discouraged production reductions.

Payment Limits

What It Is:

Payment limits set a maximum on the amount of payments that a person can receive from the government. While payment limits apply generally to income support payments, they have also been used to limit disaster payments and various conservation and environment program payments.

Objective:

To limit the level of government benefits received by a single person and to minimize the image of farmers becoming wealthy from farm programs and to reduce government spending.

When Used:

With the establishment of direct payments to farmers in the 1960s, questions arose as to the magnitude of benefits received by large-scale farms, particularly rice, wheat, and cotton farms. As a result of this controversy, the 1970 farm bill set the payment limit at \$55,000. In 1973, the limit was reduced to \$20,000. It was then raised to \$40,000 in 1977 and subsequently raised to \$50,000. The 1990 farm bill payment limit was \$50,000. Benefits from the marketing loan (LDPs) were subject to a separate \$75,000 payment limit. The 1996 farm bill set the payment limit on production flexibility contracts at \$40,000, while retaining the \$75,000 limit on marketing loan payments (LDPs), although in the lower price years from 1999-2001 the LDP limit was raised to \$150,000. The 2002 farm bill retained the \$40,000 direct payment limit and the \$75,000 LDP limit but established a separate \$65,000 limit on counter-cyclical payments. The 2002 farm bill also authorized the creation of a Commission on the Application of Payment Limits for Agriculture, which did not recommend any substantive changes in the limits until the next farm bill is debated.

- As farm operations grow in size, more farms become subject to the effects of payment limits.
- Higher program benefits increase the number of farmers affected by payment limits.
- Effective payment limits are difficult to establish and administer.
- Payment limits encourage larger farms to divide their operations and/or convert to cash rental arrangements that reduce the effectiveness of the limit, create extra costs, and thereby make payment limits ineffective and US agriculture less efficient and less competitive internationally.
- Strict enforcement of payment limits reduce large-scale farmers' incentives to participate in programs. Strict enforcement, therefore, limits the achievement of the objectives of the program.

Planting Flexibility (Flex Acres)

What It Is: Planting flexibility allows producers to participate in the farm commodity program while

planting their crop acreage base to permitted alternative crops. Participating producers

retain their crop acreage base while flexing their acreage to alternative crops.

Objective: To provide farmers an opportunity to adjust cropping patterns in response to price

changes.

When Used: Mandated in the 1990 budget act, a companion piece of legislation to the 1990 farm

bill. When first adopted, farmers were allowed to flex to alternative crops only 25 percent of their crop acreage base and no deficiency payments were received on flex acres, although these crops were still eligible for the price support loan. These provisions were removed by the 1996 farm bill, thus providing virtually complete flexibility. A limitation on

flexing to fruit and vegetable has always existed.

- Increased the ability of farmers to respond to price signals in areas where viable alternative crops existed.
- Provided opportunities to switch cropping patterns in light of technological changes, particularly variety improvements.
- Favored farmers who had alternative crops which, at the time, were more profitable.
- Provided opportunities to implement conservation practices because farmers were not locked into specified cropping patterns on which they had acreage base.

Step 1, 2, 3 Cotton Programs

What It Is:

Special provisions for upland cotton aimed at keeping it competitive on the world market. These provisions are known as Step 1, Step 2, and Step 3. Step 1 adjusted loan repayment rates downward when the adjusted world price for cotton is less than 115 percent of the loan rate. Step 2 provided user marketing certificates or cash payments to exporters and domestic mill users of US cotton when pricing criteria were triggered. This effectively provided an export subsidy to exporters and/or US domestic mill users. The Step 2 program was terminated effective August 1, 2006, as a result of Brazilian WTO cotton complaint. Step 3 provides for special import quotas for upland cotton to lower US cotton prices and bring US prices more in line with world prices. Step 3 mandates the opening of a special import quota if certain price benchmarks are met.

Objective:

To provide the financial support necessary to maintain US upland cotton's competitiveness on the world market.

When Used:

The Step 1, 2, and 3 provisions for upland cotton were established in the 1990 farm bill and have been amended several times since.

- Promotes competitiveness of US upland cotton on the world market.
- The elimination of Step 2 has reduced producer returns.
- To the extent the program is effective, US producers receive a higher price for upland cotton.

Domestic Farm Programs

Target Price

What It Is:

A target price is designed to achieve a politically acceptable level of farm income. It was used from 1973 to 1995 to establish deficiency payments, which were paid to farmers to make up the difference between the target price and the higher of the average market price or the nonrecourse loan rate. Deficiency payments are made on each participating farm's payment acres and farm program yield. The farm program yield is based on each farm's yield history.

Objective:

Target prices were initiated to raise and stabilize farmer incomes to the level of the nonfarm population, while allowing farm prices to be more competitive in the export market.

When Used:

Target prices were authorized for cotton in 1970 and for cotton, wheat, corn, sorghum, and oats in the 1973 farm bill. Initially, target prices were set to reflect changes in the cost of production and yield. Much debate ensued over what constituted the cost of production and which costs should be included. A 1977 change in the target price formula removed the possibility of reducing target prices to reflect yield increases. The 1981 farm program set target prices for cotton, wheat, and corn politically, without considering inflation, crop yields, or production costs. Excess production and high government program costs resulted. The 1985 farm bill specified about a 10 percent sequential reduction in target prices by 1990. The 1990 farm bill froze target prices at 1990 levels through 1995. The 1996 farm bill eliminated the target price. However, the terminology reappeared in the 2002 farm bill as a basis for calculating the counter-cyclical payment, which is discussed as a separate policy tool.

- Deficiency payments reduce income risk for producers, thus stimulating production; increasing their ability to obtain financing.
- Target prices set above market clearing levels stimulate production and reduce market prices, thereby reducing food and feed costs.
- By reducing market prices, target prices allowed US farm products to be more competitive in the world market while supporting farm income. This is a significant advantage over using support prices for raising producer income.
- Setting target prices above the expected market price can result in large treasury outlays.
- Deficiency payments provide more income support to large-scale farmers than to smaller-scale farmers because they are paid on eligible farm program yield and payment acres.

Domestic Farm Programs

Two-Tier Milk Pricing

What It Is: Two-tier milk pricing plans establish a producer base or quota with a lower price for

excess production. How much lower the excess price is determines the effectiveness of the plan in controlling production. For effective production control, excess production

must be priced below variable cost.

Objective: To control milk production, raise producer returns, and lower government dairy program

costs.

When Used: Two-tier pricing plans for milk were proposed and debated throughout most of the

1980s as a means of bringing milk production in line with consumption, but were never authorized or implemented, largely because of a disagreement within the industry over the desirability of mandatory controls. Beef producer interests were opposed because they realized that cutbacks in production meant more cow slaughter and lower beef

prices.

- The pricing plan would require close monitoring to control production because the milk price could increase if the excess price exceeds variable costs.
- The pricing plan would require strong import controls to be effective.
- The enhanced returns from the program would be capitalized into the price of the quota or the value of the dairy.
- Barriers to entry for new producers would be created by the cost of the quota.

Domestic Farm Programs

0/92 and 50/92

What It Is:

Participating wheat, feed grain, cotton, and rice producers were allowed to plant less than their program payment acreage while continuing to receive deficiency payments on 92 percent of their maximum program payment acreage. If wheat and feed grain producers planted between zero and 92 percent of their maximum payment acreage to the crop and devoted the remaining payment acreage to a conserving use, they were eligible to receive deficiency payments on 92 percent of their maximum payment acreage. To be eligible for the 92 percent deficiency payment provision, upland cotton and rice producers were required to plant between 50 and 92 percent of their maximum payment acreage to the crop and devote the remainder to a conserving use. Minimum deficiency payment guarantees were announced for all eligible crops.

Objective:

To reduce the quantity produced and thus the supply of a given commodity while protecting farm income. Environmental objectives were achieved through conservation compliance that established conserving use requirements on land enrolled in the program.

When Used:

The 0/92 and 50/92 programs were established for wheat, feed grains, cotton, and rice in the 1985 farm bill. Initially, all eligible crops were subject to the 50/92 provisions. Beginning with the 1988 crop, however, wheat and feed grain producers were allowed to reduce their planted acreage to zero (0/92). The program was originally designed to reduce the substantial stocks that had built up in the mid-1980s. The 0/92 and 50/92 programs idled approximately 6.4 percent of the effective base over the 1989-1991 period. These provisions were eliminated by the 1996 farm bill.

- Removes land from production and thus reduces supply and raises prices.
- Removes land from production that, without government support, would otherwise be unprofitable.
- Stabilizes farm income, especially with the guaranteed minimum deficiency payment.
- Reduces lender risk as operating credit needs decline relative to expected revenue.
- Allows producers to save resources through implementation of conserving use practices on idled land.
- There was considerable debate on the effectiveness of the 0/92 and 50/92 programs.
 As annual acreage reduction requirements declined in the late 1980s and early 1990s, producers utilized the 0/92 and 50/92 programs more than they had previously. This suggests to some that land in the 0/92 and 50/92 programs would not be farmed even without the programs.

Introduction

Risk management programs in the United States were born out of the inherent risky nature of agricultural production. Natural disasters have probably occurred as frequently as bumper crop years over the past 50 years. Congress has enacted federally subsidized crop insurance programs to reduce the need to pass *ad hoc* disaster assistance. Crop insurance programs have grown in participation and cost, however requests for *ad hoc* disaster assistance remain. Over time, there have been new insurance products or tools developed to provide even greater risk protection. In recent years, risk management tools for livestock producers have been added to the portfolio of risk management tools.

Catastrophic Coverage (CAT)

What It Is: CAT is the lowest level or catastrophic level of multi-peril crop insurance (MPCI) coverage for

farmers. It is sold to farmers through private sector agents. CAT coverage compensates farmers for crop yield losses exceeding 50 percent of their Actual Production History (APH) at a payment rate of 55 percent of the projected season average market price. There is no premium for CAT coverage, however, farmers pay an administrative fee that

has increased over time to \$100 per crop per county.

Objective: To provide a minimum level of protection for a producer's crop from unavoidable losses

due to adverse weather and weather-related plant diseases and insect infestations. To make ad hoc disaster programs unnecessary by making insurance programs available to

all crop producers.

When Used: CAT was authorized by the Federal Crop Insurance Reform Act of 1994. It has been

used since that time by producers who do not feel their level of yield risk necessitates

purchasing a higher level of "buy-up" coverage.

Experience: Federal crop insurance has not eliminated the requests for *ad hoc* disaster payments.

CAT has worked well for producers who have very low yield risk and are seeking a low

cost insurance product that protects against catastrophic losses.

- The program costs very little and protects against major/catastrophic losses.
- Participation has been the highest in crops with very low yield risk such as rice.
- CAT has not eliminated ad hoc disaster requests.

Disaster Programs

What It Is: Low yield and prevented plantings payments are paid to producers who, through no fault

of their own, are unable to plant their crop or harvest a normal yield.

Objective: To reduce producers' yield and planting risks by providing them a relatively free (program compliance may be necessary) crop insurance program. In recent years, livestock

assistance has been provided due to losses from severe droughts and floods.

When Used: Disaster payments were first authorized on a continuing basis in the 1973 farm bill

and disaster payment benefits were available from 1973-81 to producers who were in compliance with other program provisions. Low-yield payments were made to producers who harvested less than 65 percent (75 percent for cotton) of their normal yield. In 1982, the provisions of the disaster program were dropped, except for extreme emergencies, to reduce government costs and encourage participation in the federal multi-peril crop insurance (MPCI) program. Whenever widespread disasters strike, however, Congress has been inclined to provide disaster payments to uninsured farmers, particularly when the disaster covers major crops in several states. In virtually every year from 1988-2003, disaster payments were made to uninsured farmers. Many of the changes in crop insurance since 1994 have been designed to avoid *ad hoc* disaster payments. Disaster payments in livestock have been less common than in crops, although, in 2001 and 2002, payments

Consequences:

High treasury costs are associated with disaster programs.

• Disaster programs provide producers income assistance when they need it the most; namely, after a natural disaster.

were made to livestock producers experiencing severe feed and pasture losses.

- Disaster programs can encourage production of high risk crops in low rainfall and floodplain areas. Payments tend to be concentrated in the Great Plains and the Delta states.
- In recent years, disaster payments have tended to be subject to a payment limitation, thus discouraging program participation by large-scale operators.
- Benefits from disaster programs are bid into the market value of marginally productive, high-risk cropland.
- Ad hoc disaster payments undermine the crop insurance program when they tend to occur with regularity.

Livestock Revenue Protection

What It Is:

There are two products, livestock gross margin and livestock risk protection available to help livestock owners manage their revenue risk. Each are offered, on a pilot basis, to livestock producers in selected states. Livestock gross margin (LGM) insurance is available to cattle and swine producers. Under this product, a producer can elect to guarantee 80, 85, 90, 95, or 100 percent of their expected gross margin. If the actual gross margin (calculated using futures prices) is less than the guaranteed value, the producer will receive an indemnity payment. A higher level of protection requires a higher premium. Livestock risk protection (LRP) is available for finished hogs, feeder cattle, and fed cattle in 19 states. LRP protects against price declines only. Coverage levels from 70 to 95 percent of the Chicago Mercantile Exchange (CME) futures contract prices can be guaranteed for up to 26 weeks in the future for hogs and 52 weeks for cattle. Premiums are subsidized 13 percent by USDA. LRP for lamb producers began in September 2007 and is offered in 27 states. Coverage levels can be purchased from 80 to 95 percent of the expected ending price coverage level. The LRP-lamb can be purchased for 13, 26, or 39 weeks out. LRP-lamb has one major difference from cattle in that there are no futures contracts to set coverage levels. In this case, an expected lamb price is projected that determines the coverage level price.

Objective:

To reduce livestock producers' risk through either price or revenue risk management.

When Used:

LGM insurance was first offered in January 2006 to cattle and swine producers in 20 states (Montana, Nevada, Utah, Wyoming, Colorado, North Dakota, South Dakota, Nebraska, Kansas, Oklahoma, Texas, Minnesota, Iowa, Missouri, Wisconsin, Illinois, Michigan, Indiana, Ohio, and West Virginia). LRP was offered beginning in 2002 to cattle and hog producers in 19 states (the same list above without Montana). Lamb LRP began in September 2007.

- Price risk (LRP) and revenue risk (LGM) are abated.
- Programs are not intended to cope with losses resulting from catastrophic disease outbreaks such as Bovine Spongiform Encephalopathy (BSE) or foot and mouth disease. The program can be terminated as a result of one of these major events. This happened in December 2003 after the first BSE cow was discovered in the United States.

Multi-Peril Crop Insurance (MPCI)

What It Is:

MPCI is a subsidized low-yield insurance program for farmers with several options for the type and level of coverage. It is sold to farmers through private sector agents. A reduced cost version of yield insurance, Catastrophic (CAT) coverage, is discussed earlier as a separate option.

Objective:

To protect crop producers from unavoidable losses due to adverse weather, weatherrelated plant diseases, insect infestations, and fire. To make disaster programs unnecessary by making insurance programs available to all producers of crops.

When Used:

MPCI for wheat was first authorized under the 1938 Federal Crop Insurance Act. Federal crop insurance was available only for wheat from 1939 through 1941 when it was expanded to cotton. The program was suspended in 1943 because of low producer participation but revived in 1945 with a reduction in counties insured. After 1948, the program was extended to more counties and crops, including vegetables and fruits. Because federal crop insurance failed to garner high levels of producer participation, the program was substantially modified in the 1981 farm bill to provide a 30 percent federal cost subsidy. It was modified again in 1994 and 2000 to make the program even more attractive to farmers, enhance farmer participation, expand coverage beyond the major crops, and preclude the need for *ad hoc* disaster payments. The propensity of the Congress to enact *ad hoc* disaster payments in times of weather adversity has led to very high levels of insurance subsidies, made it impossible to establish an actuarially sound rate structure, and undermined the effectiveness of the crop insurance program.

Experience:

Federal crop insurance has not eliminated the requests for *ad hoc* disaster payments. Problems have been encountered in developing an actuarially sound premium structure and in adequately marketing the program to producers. Experience indicates MPCI has a high administration cost relative to commercial insurance.

- The program provides more extensive coverage than commercial hail insurance.
- Participation has been the highest in high-risk, nonirrigated, low-rainfall areas.
- Limited acceptance by farmers has led to high levels of subsidies, to adverse loss experience, and to political pressure for disaster payments.
- Loss ratios and treasury costs have been high and increasing. Aggregate premium subsidies now run about 60 percent of the total premium.

Revenue Insurance

What It Is:

Revenue insurance involves an expansion of the MPCI all-risk crop insurance to include both yield and price risk, *i.e.*, total receipts. While revenue insurance typically applies to an individual crop or enterprise, it could be applied to the whole farm.

Objective:

To stabilize farm incomes from the adverse effects of natural disasters and low prices. A broader whole farm revenue insurance program could have the objective of replacing all price and income support programs.

When Used:

Revenue insurance program first appeared in the federal crop insurance portfolio in 1996. In 2004, three primary revenue insurance products were offered for specific individual crops. These include:

- Crop revenue coverage (CRC) guarantees a certain amount of a crop's revenue. CRC covers losses due to low price, low yield, or the combination of the two.
- Income protection (IP) protects against reductions in gross income from a crop when yield or price falls. It protects the percentage of gross income received from a crop.
- Revenue assurance (RA) protects producer's crop revenue whenever low prices, low yield or the combination of both cause the crop's revenue from falling below the guaranteed level.

The Agriculture Risk Protection Act of 2000 required that the revenue insurance premiums be subsidized at the same rate as MPCI.

A whole farm revenue insurance product has never been authorized, although an investigation into its feasibility was authorized by the 1981 farm bill, it has been tested in Canada, and its application was studied by the Agricultural and Food Policy Center (AFPC) in 2001.

- Existing revenue insurance programs are popular. Ultimately farmers are interested in dollars, not yield, and because revenue insurance facilitates hedging on the futures market.
- When the revenue insured prices are above the pricing options in yield-based coverage, producer interest in revenue insurance increases.
- An actuarially sound whole farm revenue insurance program may reduce current treasury outlays but would be difficult to develop.
- High insurance subsidies expand output because risk is reduced without increased cost.

Risk Management Accounts

What It Is: Risk management accounts offer farmers an opportunity to save a portion of net income

during good years to be used when incomes are low.

Objective: To reduce income risk for farmers at a reduced cost to the federal government.

When Used: Risk management accounts have been proposed several times as amendments to farm

bills but have not been passed. Canada implemented risk accounts as a replacement for

income supports.

Experience: In Canada, farmers readily deposited a portion of their income in risk accounts while prices

and yields were favorable, but when incomes were below normal, farmers requested income supports from the government because they did not want to use their "savings" accounts. The risk accounts were considered by farmers as retirement accounts and not

risk management accounts.

Issues with risk management accounts that must be resolved are: conditions when income is deposited in a risk account, the maximum fraction of farm income to deposit, the trigger for withdrawal of risk account funds, amount of a risk account that can be withdrawn, whether USDA matches any or all of the farmers' deposits in risk accounts, treatment of interest earnings on risk accounts, income tax implications, (are deposits from pre-tax dollars), taxes on interest earnings – immediately or upon withdrawal, and who will hold the deposits – USDA or a commercial bank.

- There is some potential for stabilizing farm income.
- Benefits for farm income risk reduction only occur if farmers have had several years
 of above normal income before the release trigger is experienced.
- Farmers are forced to withdraw funds when the release trigger is reached.
- Potential for very high administrative costs because trigger conditions are farmer specific.
- If the federal government provides matching deposits, there is the potential for inequitable transfers of funds. Greater deposits will be observed in lower risk regions while lower deposits will be made by farmers in high risk areas.
- Payment limitation issues will be different from current program payments, and this is an issue if the government matches farmers deposits.
- There will be a windfall for commercial financial institutions if they handle the deposits or the program.

Introduction

Conservation and environmental programs related to agriculture trace their origin to programs designed to conserve the soil and maintain the nutritive capacity of the soil. Initial programs were designed to deal with soil erosion that originated during the Dust Bowl conditions of the 1930s.

Over time, issues such as water contamination and quality have become more important. The policy tools used have evolved and varied from long-term land retirement programs like the Conservation Reserve Program (CRP) to payments for what some may call best management practices in programs like the Environmental Quality Incentives Program (EQIP) and the Conversation Security Program (CSP). Regardless of the tools used, maintaining the productive capacity of the soil has been one of their many objectives.

Agricultural Water Quality Protection Program (AWQPP)

What It Is:

Three to five year voluntary incentive agreement with landowners to implement plans to protect water quality. Lands eligible for the program are those associated with public water sources, shallow groundwater, and cropland with the potential for nonpoint source pollution affecting endangered species habitats and other sensitive areas. Participants are paid up to \$3,500 per person, per year to implement water quality protection plans. Participants may continue to farm the enrolled land, but they must report nutrient and pesticide use to the Natural Resources Conservation Service. The 1990 farm bill, which created the AWQPP under the Agricultural Resources Conservation Program (ARCP), calls for enrolling one million acres in the AWOPP by 1995.

Objective: To enhance water quality in agricultural areas.

When Used: First authorized in the 1990 farm bill.

Experience: Program was not funded in 1991. It was pilot tested in selected counties in the United

States during 1992.

Consequences:

Preserves/improves water quality.

Provides incentives to farmers for nutrient record keeping.

• Does not reduce crop production.

Agriculture Conservation Program (ACP), Conservation Technical Assistance (CTA), Great Plains Conservation Program (GPCP)

What It Is:

ACP payments up to \$3500/year are made to farmers to offset a portion of the costs associated with specific farming practices designed, for example, to conserve the soil or improve water quality. Related to the ACP program is the Conservation Technical Assistance program (CTA), which provides technical assistance to farmers in designing conservation and environmental practices such as terracing or contour farming. The Great Plains Conservation Program (GPCP) has similar objectives and provisions to ACP and CTA.

Objective:

To reduce soil erosion and enhance water quality.

When Used:

ACP and CTA have their origin in the Dust Bowl days of the early 1930s, specifically in the *Agricultural Adjustment Act of 1936*. While originally enacted to support and expand conservation practices, the ACP program was subsequently broadened to encompass output enhancing practices such as the application of lime, construction of water tanks, and subsidization of pothole drainage programs. This expansion came under fire in the 1970s as being regarded as unneeded subsidies, and in the 1990s, as being contrary to environmental interests such as maintaining wetlands and even reducing erosion. These factors, combined with budget cuts, resulted in a reorientation of the ACP program back to its original soil conservation objectives.

- · Reduces soil erosion.
- Enhances farmland productivity and acreage in crops.
- Reduces waterfowl and wildlife habitats under the old program.
- Enhances farm income.
- Preserves water supplies.

Best Management Practices (BMP)

What It Is: Farming method, measure, or practice that a producer could be required to implement

as a matter of regulation or as a condition for receiving farm program benefits. (See

Conservation Compliance.)

Objective: To improve the environment by improving water and air quality and reducing soil erosion,

pesticide use, and animal waste runoff.

When Used: First authorized by implication in the 1985 farm bill when farmers were required to

implement conservation compliance plans with a goal of reducing the level of erosion to T (the level at which the productivity of the soil is indefinitely maintained). More recently, best management practices are proposed to be required under the *Clean Water Act* and

the Coastal Zone Management Act (see Conservation Compliance).

Experience: While BMPs may serve to achieve their desired objectives, farmers and ranchers feel that

they represent an infringement on their right to farm. Considerable difficulty is encountered in specifying best management practices that apply to individual farming conditions.

- · Reduces soil erosion.
- Improves water quality.
- Reduces farmer/rancher freedom of choice in production.
- Increases cost of production.
- Increases food prices.
- Reduces conflict with environmental interests once they are accepted and practiced.
- Reduces incentive to participate in farm programs if required as a condition for eligibility.

Conservation Compliance and Sodbuster

What It Is:

Conservation compliance required that farmers develop and file with USDA's Soil Conservation Service (SCS), now Natural Resources Conservation Service (NRCS), a conservation plan for farming on all highly erodible land by January 1, 1990, and have fully implemented that plan by January 1, 1995. Farmers who did not file and/or did not implement satisfactory conservation plans were ineligible for farm program benefits, including deficiency payments, price support loan provisions, and disaster payments. In addition, they were potentially not be eligible for new loans from Farmers Home Administration, now Farm Service Agency, or for participation in federal crop insurance, and they may have potentially lost their Conservation Reserve Program (CRP) payments. Sodbuster discourages bringing highly erodible land into production. If this land is brought into production, it must be covered by an approved conservation plan, or be subject to penalty.

Objective:

To farm highly erodible cropland and reduce the level of soil erosion to T through appropriate conservation measures approved by SCS. T is a soil loss tolerance value indicating the maximum level of soil erosion that will permit crop productivity to be sustained indefinitely. The T requirement can be relaxed whenever local SCS/ASCS officials judge that it would cause severe economic hardship or be pragmatically impossible to achieve.

When Used:

Enacted as a provision of the 1985 farm bill with the support of environmentalists and as a condition for enactment of the bill.

Experience:

Conservation plans were developed in considerable haste after the enactment of the 1985 farm bill and delayed announcement of complex regulatory procedures. Conflict arose in some areas over the farming practices under which T could reasonably be achieved, and resulted in some relaxation of conservation plan provisions. Since the conservation plans were often developed with considerable haste, questions exist over whether their provisions are realistic. The 1990 farm bill provided for graduated losses in farm program benefits up to \$5,000 for producers who violated the conservation compliance and sodbuster provisions but acted in good faith and had no prior violations.

- Reduces soil erosion.
- Reduces water runoff.
- Improves water quality.
- Increases costs of production.
- Lowers producer returns.
- Encourages producers to consider long-term land retirement in the CRP.
- Reduces participation in farm programs. If price and income supports are eliminated, conservation compliance provisions could be implemented only with the assistance of Agriculture Conservation Program payments or overt regulation.
- Eliminates economic incentives for new highly erosive land being brought into production.

Conservation Reserve Program (CRP)

What It Is:

Long-term land retirement program specifically targeted to remove highly erodible cropland from production. The government pays farmers an annual rental rate and shares a portion of the cost of establishing a cover crop, including trees. (See Long-Term Land Retirement, Soil Bank in Domestic Farm Programs section.)

Objective:

To reduce erosion, improve water quality, and reduce surplus production.

Experience:

The 1985 farm bill authorized the retirement of 40-45 million acres of highly erodible cropland. Highly erodible lands are defined as having three times the level of erosion that is considered necessary to sustain production (3T) or a minimum of about 15 tons per acre annually. By 1992, 35.4 million acres had been enrolled in the program at an average annual rental rate of about \$49 per acre. The 1990 farm bill extended the CRP program to place greater emphasis on retiring land having direct impacts on water quality. The CRP is included in the Environmental Conservation Acreage Reserve Program (ECARP), which is under the Agricultural Resources Conservation Program (ARCP) in the 1990 farm bill. The 1990 farm bill provided protection to CRP payments from sequestration by the *Balanced Budget and Emergency Deficit Control Act* (Gramm-Rudman-Hollings). The 1996 farm bill capped acres at 36.4 million. Maximum acres in CRP were increased in the 2002 farm bill to 39.2 million. The CRP is jointly supported by environmentalists, conservationists, hunters, and farmers.

CRP acres can not be hayed or grazed unless allowed by the Secretary. This has been allowed in times of extreme drought. Recent high commodity prices have spurred calls for CRP acreage release and increased rental rates to keep acres in the program.

- Reduces soil erosion.
- Improves water quality.
- Increases wildlife habitat.
- Reduces crop production.
- Increases commodity prices.
- Lowers commodity stocks.
- Increases commodity price variability.
- Increases tree acreage.
- Reduces economic activity in rural communities.

Conservation Security Program (CSP)

What It Is:

A voluntary working lands program that encourages a higher level of stewardship than the Environmental Quality Incentives Program (EQIP). Stewardship payments are provided for maintaining and enhancing natural resources. CSP is administered by Natural Resources Conservation Service (NRCS). All crop and grazing land is eligible. Cropland had to be in production four of the six years prior to 2002. The law specifies, but does not limit the program to 19 allowable conservation practices. Producers can participate at 1 of 3 tiers. Higher tiers or levels of participation require greater conservation effort and offer greater payments. The lowest cost practices that meet conservation standards must be used.

CSP requires a substantial level of environmental stewardship before producers become eligible for enrollment and encourages whole-farm conservation effort. CSP also funds "enhancements" which are directed, in part, toward encouraging producers to go beyond basic conservation effort. While many livestock-related practices can be eligible for CSP, the focus is on land-based practices; livestock waste management structures and handling equipment are specifically excluded.

Objective:

To encourage conservation activities on working lands.

When Used:

CSP was enacted in the 2002 farm bill. In response to the limited funding, NRCS makes the program available to a small number of specified watersheds each year. The strategy is to make all 2,119 US watersheds eligible for enrollment at least once over an 8 year period.

Experience:

CSP was approved as an entitlement program, meaning that eligible producers who meet program requirements can be enrolled at the producers' option, as in ongoing commodity programs. Before CSP was implemented, however, Congress limited CSP funding, making limitations on enrollment necessary. For FY 2004, \$41 million was available for CSP, and \$202 million more is available in FY 2005. The limited funds have necessitated sign-ups being offered to a relatively small number of watersheds each year. The application process is burdensome for landowners and operators especially when they are not funded.

- Financial incentives encourage producers to adopt conservation practices and technologies they would not otherwise undertake. Producers receiving assistance for practices already undertaken receive a windfall.
- The program's lack of popularity is primarily due to the limited funding which reduces the number of contracts awarded nationwide.
- Payments that exceed the cost of the practice can provide income support to landowners and operators who participate.
- Agreements providing for less than 100 percent of practice costs will be effective only to the extent that targeted practices provide private economic benefits.
- Given over 300 million acres of cropland in the United States, the dollars available in the program would seem to limit the programs effectiveness.

Environmental Quality Incentives Program (EQIP)

What It Is:

Administered through Natural Resources Conservation Service (NRCS), EQIP is a voluntary program that provides primarily cost share assistance, but also technical and educational assistance aimed at promoting production and environmental quality. Cost sharing may pay up to 75 percent of the costs of conservation practices. NRCS established the following National EQIP priorities:

- Reduction of nonpoint source pollution, such as nutrients, sediment, pesticides, or excess salinity in impaired watersheds consistent with Total Maximum Daily Loads (TMDL's), where available, as well as the reduction of groundwater contamination and reduction of point sources such as contamination from confined animal feeding operations;
- The conservation of ground and surface water resources;
- Reduction of emissions, such as particulate matter, nitrogen oxides (NOx), volatile organic compounds, and ozone precursors and depleters that contribute to air quality impairment violations of National Ambient Air Quality Standards;
- Reduction in soil erosion and sedimentation from unacceptable high levels on agricultural land; and
- Promotion of at-risk species habitat conservation.

In addition, energy conservation is considered a component of all national priorities and is an appropriate use of EQIP funds.

Objective:

To encourage environmental stewardship on working lands.

When Used:

EQIP was authorized at \$1.3 billion over 7 years in the 1996 farm bill and subsequently reauthorized in the 2002 farm bill increasing annually from \$400 million per year in fiscal 2002 to \$1.3 million per year in fiscal 2007. The 2002 farm bill required 60 percent of the funding to be targeted at livestock related practices with 40 percent targeted toward crop related practices.

Experience:

The program replaced the Agricultural Conservation Program, the Water Quality Incentives Program, the Great Plains Conservation Program, and the Colorado River Basin Salinity Control Program. Even with increased funding levels, contract requests exceed available funding by almost six to one. Since 1997, 51.5 million acres have been enrolled under 117,625 contracts with NRCS spending nearly \$1.08 billion. Efforts to date have concentrated on improving water quality, conserving both ground and surface water, reducing soil erosion, and improving rangeland.

(continued on the next page)

Environmental Quality Incentives Program (EQIP) (continued)

- Financial incentives encourage producers to adopt conservation practices and technologies they would not otherwise undertake.
- The program's popularity indicates that producers perceive their share of the cost worth the money.
- Payments that exceed the cost of the practice can provide income support to landowners and operators who participate.
- Agreements providing for less than 100 percent of restoration costs will be effective only to the extent that targeted practices provide private economic benefits.

Grassland Reserve Program (GRP)

What It Is:

A voluntary program that encourages landowners to restore and protect grassland, including rangeland, pastureland, shrub land, while maintaining the areas as grazing lands. Administered through the Natural Resources Conservation Service (NRCS), GRP offers payments for permanent easements, thirty year easements, and 10, 15, 20, or 30 year rental agreements. Easement payments may be in a lump sum or spread over 10 years. Annual payments under a rental agreement can be for no more than 75 percent of the grazing value of the land. Restoration activities can be incorporated with an easement or rental agreement for up to 90 percent of the restoration costs on lands that have never been cultivated, and up to 75 percent of the cost on restored grasslands and shrub lands that were previously cropped. Tracts must be at least 40 contiguous acres. No more than 60 percent of funds can be used for 30 year contracts or 30 year and permanent easements. No more than 40 percent are available for 10, 15, and 20 year rental agreements.

Objective:

To restore and/or protect grassland including rangeland, pastureland, and shrub land.

When Used:

GRP was originally authorized in the 1985 farm bill and subsequently reauthorized for up to 2 million acres in the 2002 farm bill. GRP was funded for fiscal years 2003-2007 up to \$254 million.

Experience:

Through fiscal year 2005, GRP made available \$180 million in financial assistance to 3,005 landowners and operators, who enrolled 909,100 acres under GRP easements and rental agreements.

- Restores and enhances grasslands.
- Enhances grazing in the long-run as restored grassland, rangeland, pastureland, and shrub land are more productive.
- Payments that exceed the cost of restoration can provide income support to landowners who participate.
- Agreements providing for less than 100 percent of restoration costs will be effective only to the extent that targeted practices provide private economic benefits.

No Net Loss

What It Is: No net loss specifies that if an individual decides to convert wetlands to farming or

development, the same acreage must be replaced as wetlands elsewhere. (See

Swampbuster.)

Objective: To discourage the reduction of wetland areas and acreages.

When Used: First established as a national goal by President George H.W. Bush in the 1990 budget

message to the Congress. Implemented in the swampbuster provisions of the 1990 farm

bill.

Experience: Reduced wetland conversion. Questions have arisen from environmental interests whether

the quality of restored wetlands is the same as originally existed.

Consequences:

Discourages wetlands from being brought into production.

- Conserves land and water resources.
- Retards increases in production.
- Restricts increases in the supply of cropland, thus supporting prices of land in production.
- Reduces current values of affected land that could be brought into crop production.
- Improves water quality and habitat for fish, shellfish, and wildlife.
- Allows farmers some opportunity to adjust operation by draining one area and restoring another.

Swampbuster

What It Is:

Swampbuster denies farm program benefits for wetlands brought into production. Converting a wetland to make production possible invokes loss of farm program benefits that cannot be restored until the converted wetland is restored. Conversion of a wetland can occur by draining, tilling, or simply planting an agricultural crop in a designated wetland. A minimal effect clause exempts conversions when minimal effects are determined on the hydrological or biological properties of the wetland. This clause also allows wetland restoration to mitigate a wetland loss – applying the no net loss concept. Graduated penalties in the form of lost program benefits of up to \$10,000 exist for violations, with a good faith restoration allowed on the first violation. (See No Net Loss.)

Objective: To discourage the conversion of wetlands and implement a no net loss policy.

When Used:

Enacted originally as a provision of the 1985 farm bill with the support of both environmentalists and farm organizations. The 1985 farm bill contained a so-called "drop dead" provision which meant a loss of all farm program benefits on the whole farm for a small wetland conversion. The 1990 farm bill instead implemented the graduated penalty structure with the good faith restoration clause.

Experience:

Appears to have brought a halt to clearing and draining of fragile lands by producers who currently participate in the farm program.

- Discourages wetlands from being brought into production.
- Conserves land and water resources.
- Retards increases in production.
- Restricts increases in the supply of cropland, thus supporting prices of land in production.
- Reduces current values of affected land that could be brought into crop production through drainage.
- Improves water quality and habitat for fish, shellfish, and wildlife.
- Allows farmers some opportunity to adjust operation by draining one area and restoring another.

Wetland Reserve Program (WRP)

What It Is: Permanent or 30 year easement for lands restored by farmers and ranchers to wetland

status or to prevent the conversion of existing wetlands. Like the Conservation Reserve Program (CRP), participants are paid an annual rental rate per acre over a period of 5 to 20 years. The goal of the program was to enroll one million acres by 1995. The WRP is a title under the Environmental Conservation Acreage Reserve Program (ECARP), which is part of the Agricultural Resources Conservation Program (ARCP) in the 1990 farm bill. Land enrolled in the WRP forfeited its existing cropland base and allotment history.

Objective: To expand and preserve wetland acreage.

When Used: First authorized in the 1990 farm bill. The 1996 farm bill capped total acreage at 1.075

million acres. WRP was reauthorized in the 2002 farm bill up to a total of 2,275,000

acres.

Experience: Enrolled acreage has increased over time. Currently there are 7,831 projects on

1,470,998 acres enrolled in the program.

Consequences:

• Preserves wetlands.

- Improves water quality.
- Retains farmer's freedom to enter the program.
- Increases habitat for fish, wildlife, and waterfowl.
- Reduces production to the extent that existing cropland is enrolled in the program.

Wildlife Habitat Incentives Program (WHIP)

What It Is:

A voluntary program that encourages landowners to create and/or enhance wildlife habitats on upland, wetland, riparian, aquatic, and other areas. Administered through the Natural Resources Conservation Service (NRCS), WHIP provides cost-share payments to landowners under 5 to 10 year agreements up to 75 percent. There are also 15 year agreements that provide a higher cost-share for landowners who undertake habitat development practices on essential plant and animal habitat.

Objective:

To create and/or enhance wildlife habitats.

When Used:

Authorized in section 387 of the 1996 farm bill and was first offered in 1998. WHIP was reauthorized in the 2002 farm bill through 2007. Program expenditures increase from \$15 million per year in 2002 to \$85 million per year by 2007.

Experience:

About 90 percent of projects approved are for improvements to upland habitat, with the balance in riparian, wetland, and aquatic improvements. To date, nearly 14,700 participants have enrolled more than 2.3 million acres into the program. Specific species that have benefited from WHIP activities include the grasshopper sparrow, bobwhite quail, swift fox, short-eared owl, Karner-blue butterfly, gopher tortoise, Louisiana black bear, Eastern collared lizard, Bachman's sparrow, ovenbird, acorn woodpecker, greater sage grouse, and salmon.

- Restores and enhances wildlife habitats.
- Increases habitat for fish, wildlife, and waterfowl.
- Reduces production to the extent that existing cropland is enrolled in the program.
- Payments that exceed the cost of adoption can provide income support to landowners who participate.
- Policies providing for less than 100 percent of adoption costs will be effective only to the extent that targeted practices provide private economic benefits.

Introduction

International trade has become increasingly important to agriculture as interdependence among nations has increased. Farm incomes are linked directly to international markets through trade, thereby making them subject to policy decisions from foreign governments as well as our own. Over time, nearly all countries have utilized policy tools that either:

- Restrict access to their domestic markets.
- Subsidize the price of domestic products to make them more competitive internationally.
- Provide subsidized credit and/or other favorable terms to developing countries in hopes of growing a future commercial market for their countries' goods.

There have been a number of significant developments in trade policy, but none more important than the General Agreement on Tariffs and Trade (GATT). The GATT agreement was negotiated in 1947 to reduce tariffs and nontariff barriers to trade. GATT is a multilateral United Nations treaty among governments, including the United States. GATT contains a code of principles and provides a forum for consultation and dispute settlement. It was superseded by the World Trade Organization (WTO) in 1995.

Antidumping/Countervailing Duties Investigations (AD/CVD)

What It Is:

AD/CVD investigations determine if foreign products are being sold at less than fair value in the United States or if those products are subsidized by a foreign government. Less than fair value means that a product is being sold below its price in country of origin or below its cost of production. Most petitions are filed under authority of the *Tariff Act of 1930*, the *Trade Act of 1974*, or the *Trade Agreements Act of 1979*. The World Trade Organization has provisions allowing the use of AD/CVD.

Objective:

An antidumping duty protects an industry from foreign imports sold at less than fair value and a countervailing duty offsets an export subsidy used by another country.

When Used:

The US Department of Commerce (DOC) determines if dumping is occurring or if subsidies are being used and, if so, at what levels. These are called the 'dumping margin' and subsidy, respectively. The US International Trade Commission determines if the industry is materially injured by dumping or by subsidies. If the final determinations of both agencies are affirmative, DOC issues an order to US Customs and Border Protection to impose duties on the product. As tariff and nontariff barriers have been lowered beginning in the mid-1990s, the use of AD/CVD petitions worldwide has increased. In the United States, 32 AD/CVD orders have been issued for agricultural products since 1999. The World Trade Organization has reported 301 cases over the last nine years, compared to 300 heard by the General Agreement on Tariffs and Trade over fifty years.

- Imports are reduced from the dutied country, but may increase from other supplying countries.
- Duties raise the price of goods entering the United States and reduce the competitiveness of foreign goods.
- Prices of domestically produced substitutes rise.
- US producers in the protected industry are shielded from competition.
- US consumers pay higher prices, so their disposable incomes are reduced.
- If imposed by large importers such as the United States, the European Union, or Japan, world prices fall.
- Trading partners may retaliate with high duties or other trade restrictions.

Barter/Counter Trade

What It Is: Barter is trade among two or more countries or firms involving the exchange of goods

and/or services of equal value instead of currency or credit transactions as payment for

a commodity.

Objective: To facilitate trade with developing countries experiencing short-run financial difficulties

and to obtain sources of strategic raw materials that might not otherwise be available.

When Used: Barter has a limited ability to expand exports. Rather, it is more of a temporary measure to

maintain an existing market during periods of adverse economic conditions. Its greatest potential appears to be as a market development tool for developing countries with minerals or strategic metals of importance to the US defense and industrial sectors. The biggest problem in barter is matching needs with products. The exchange of powdered milk to Jamaica for bauxite in I982 was the first US barter negotiation in 15 years. The 1985 farm bill required the Secretary of Agriculture to establish and carry out at least two pilot barter programs by 1987. Agricultural commodities were bartered for designated strategic materials. The 1990 farm bill specifies certain Commodity Credit Corporation (CCC) commodities eligible for barter transactions. In the 2002 farm bill, barter was limited

to the McGovern-Dole International Food for Education and Child Nutrition Program.

- Barter helps maintain export levels.
- Barter provides increased potential for developing commercial markets for agricultural products.
- Barter has limited applicability because of the required coincidence of needs.
- Barter may displace commercial sales.
- Barter value generally approximates relative world market value of the commodities being traded.

Blended Credit

What It Is: Blended credit is a non-price form of export subsidy that combines direct government

export credit and credit guarantees in a single package to reduce the effective interest

rate. The credit guarantee program is known as GSM-102 or GSM-103.

Objective: To make US credit terms competitive with those offered by other exporting countries.

When Used: Blended credit is available only when appropriations are provided by the US Congress.

Tight budgets have made blended credit available only to a limited number of countries and commodities. Countries were selected based on size of US surpluses and competitive need, as well as diplomatic and domestic political considerations. Blended credit was particularly useful for markets in developing countries where credit and credit guarantees are critical. The blended credit program was most recently initiated in October 1982, but has not been used since 1985 because of budget considerations and complaints in the World Trade Organization/General Agreement on Tariffs and Trade (WTO/GATT). Under the WTO Doha Round framework agreement reached in July 2004, all export subsidies including government sponsored credit programs would be severely curtailed.

- The United States is made more competitive in the face of other countries' subsidized export credit programs.
- A basis is provided for penetrating new export markets, particularly in developing country markets.
- Compared to other forms of export subsidies, blended credit runs less risk of creating retaliatory trade war conditions.
- Expansion of subsidized credit encourages other exporting countries to expand their export subsidy programs, thus creating the potential for increased treasury cost over time.
- If successful in expanding exports, blended credit raises prices in the United States, thus raising domestic food costs and, in the case of feed grains and soybeans, production costs for livestock producers.

Cargo Preference

What It Is:

Cargo preference refers to the provision of the *Merchant Marine Act of 1936* which requires that a portion of cargoes procured, furnished, or financed by the United States be transported in US ships. Under previous law, 75 percent of government-sponsored exports had to be shipped on US flag vessels. The 1990 farm bill requires that 50 percent of PL 480 commodities be shipped on a lowest-landed cost basis, regardless of country of registry of the vessels. Other provisions allow shipments on specifically designated American Great Lakes vessels to be counted toward cargo preference requirements. Further, Great Lakes ports may be allocated a maximum of PL 480 shipments made in 1984. If shipments to Great Lakes ports must be shifted to non-Great Lakes ports to comply with cargo preference, the Commodity Credit Corporation (CCC) must compensate the Great Lakes ports for the loss of business.

Objective: To assure a minimum volume of business to the US maritime industry.

When Used: Cargo preference requirements have been an important factor in US agricultural exports since the enactment of PL 480 in 1954.

- Cargo preference has had a major impact on agricultural food aid programs of PL 480. Transporting commodities aboard US vessels costs between 1.5 to 2.5 times more than for foreign vessels. This increased cost is paid for out of USDA funding for PL 480. In 1985, a federal court ruled that cargo preference also applied to USDA blended credit programs, which resulted in suspension of the program because increased transport costs made the program no longer cost effective.
- US agricultural exports have been less competitive in some markets due to curtailment of certain credit programs as a result of increased transport costs.
- US maritime industry and selected US ports receive subsidies and compensation, thereby increasing the costs of administering food aid programs.

Contract Sanctity

What It Is:

Sanctity of contracts provides that exporters will be able to fulfill their contract obligations for a period of 270 days after the imposition of any embargo. Sanctity of contract provisions was included as an amendment to the *Commodity Futures Trading Commission Bill* in 1983.

Objective:

To assure importing countries the United States is a dependable supplier and to reduce the impact of export embargoes on exporting firms and producers.

When Used:

The abrupt imposition of the Soviet grain embargo in January 1980 left US producers and exporters with delivery commitments that were disallowed. While the US government provided compensation to exporters for losses incurred, long-term injury ensued to the reputation of the United States as a reliable agricultural exporter. This was one of several factors leading to a decline in the US share of total world trade in the early 1980s. After lifting the Soviet grain embargo in April 1981, producer organizations and exporting firms applied increasing pressure on the Reagan administration for sanctity of contracts. In 1982, President Reagan provided assurance that he would allow increased purchases by the Soviets with sanctity of contracts. This principle was written into law in early 1983 and applies to all agricultural export sales. This assurance is continued in the 1985 and 1990 farm bills. It was incorporated into the US Code of Federal Regulations in 2002.

- The United States is viewed as a more reliable supplier of agricultural exports.
- Importers know that when they sign a contract for delivery of US agricultural products, there will not be governmental interference with performance on it.
- Exporters are assured their sales will be allowed.
- Producers are shielded from the immediate effects of embargoes.
- Producers should receive higher prices because exporters do not have to discount for the uncertainty posed by a potential embargo.

Countervailing Duties

What It Is: A countervailing duty is a tariff that offsets an export subsidy of another country. The size

of the countervailing duty is designed to offset exactly the size of the export subsidy of

a competing country.

Objective: To restrict imports of certain commodities.

When Used: The authority exists for the imposition of countervailing duties equal to the amount of

export subsidies provided by other countries. Such countervailing duties are generally limited to those instances in which there is a reasonable indication that an industry in the United States is being materially injured or threatened with injury because of subsidized imports. Antidumping duties may also be imposed if a commodity is sold in the United States at less than fair value in the event of a finding of material injury. Countervailing duty and antidumping duty actions involve determinations by both the US International Trade Commission and the US Department of Commerce. There has been a hesitancy to utilize

countervailing duties because of the potential for precipitating trade wars.

- Countervailing or antidumping duties offset export subsidy practices of other countries and thereby protect US producers.
- Because countervailing duties are a tariff, they have generally the same consequences as tariffs.
- While producers are protected on commodities where countervailing duties are imposed, consumers in the importing country pay higher prices than in the absence of duties.

Direct Export Credit

What It Is: Direct export credit refers to the Commodity Credit Corporation (CCC) GSM-5 program

subsidies that provided financing for US agricultural exports with terms up to 36

months.

Objective: To provide financing to countries and/or foreign buyers who would otherwise be unable

to secure the necessary credit to purchase US agricultural commodities.

When Used: The GSM-5 program was used extensively through the period 1956-1979. Since the

beginning of the GSM-102 credit guarantee program in 1980, less focus has been placed on the direct credit program. In the 1985 farm bill and beyond, no funds were authorized for the GSM-5 program. The 2002 farm bill continued authorization for the GSM-102 program with credit terms up to 3 years. It further provides funding for an intermediate credit program, GSM-103, which offers credit terms of 3 to 10 years and includes financing for infrastructure development. Under the World Trade Organization (WTO) Doha Round framework agreement reached in July 2004, all export subsidies

including government sponsored credit programs would be severely curtailed.

- Government costs are higher than they would be without program funding.
- Direct credit programs are needed to compete when similar programs are offered by other exporting countries.
- Direct credit programs encourage other exporting countries to offer similar credit subsidies with the potential for developing into more widely used trade barriers.
- Direct credit programs provide a basis for expanding markets in developing countries.
- If credit sales expand total exports, domestic food costs and livestock production costs are greater than they would be without the programs.

Export Credit Guarantees

What It Is:

Export credit guarantees are US government assurances for US banks that provide financing for foreign buyers to purchase US agricultural products. The Commodity Credit Corporation (CCC) insures up to 98 percent of the free on board (f.o.b.) value of an export sale in the event that a foreign bank or government fails, for any reason, to make payment under a letter of credit agreement. Under the World Trade Organization (WTO) Doha Round framework agreement reached in July 2004, all forms of export subsidies including government sponsored credit programs would be severely curtailed.

Objective:

To assist US exporters in making sales they would not make otherwise and to compete with export promotion programs provided by other exporters.

When Used:

Export credit guarantees were introduced in 1979 and have been an integral part of US agricultural trade policy ever since. Supplier credit was initiated in the 1996 farm bill and extends export credit guarantees up to six months. Defaults under these programs have been minimal, with Iraq and Russia being the most recent examples. About \$5.5 billion in export credit guarantees are authorized annually by the US Congress, but slightly more than half is typically used by exporters. In a recent WTO ruling, the US credit guarantee program was charged with having a subsidy component that violates international trade rules. The case could be resolved by the WTO Doha Round framework agreement reached in July 2004, indicating that all export subsidies including government sponsored credit programs would be severely curtailed.

- Export guarantees have been successful in maintaining US sales to countries with severe debt problems.
- Export credit guarantees promote long-term development of markets.
- US exporters are more competitive with programs of other exporters.
- Export credit guarantees are less obvious than other export subsidies and less likely to produce retaliation from other exporters.
- Export credit guarantees decrease government direct credit budget exposure.
- Export credit guarantees allow US banks to make loans that would not be financially prudent under ordinary circumstances.
- Export credit guarantees may expose the US government to large liabilities in the event of major defaults by foreign purchasers. However, there is no actual government expenditure unless a default occurs.
- Extensive use of export credit invites retaliation by other major exporters.

Export Embargoes

What It Is: Export embargoes set absolute limits on quantities that can be exported. Partial

embargoes may allow only a certain quantity to be exported, after which permission

must be obtained from the exporting country.

Objective: To hold down commodity prices in the exporting country, prevent domestic shortages of

commodities, and achieve a foreign policy objective.

When Used: Export embargoes have been imposed five times since 1962:

• In 1962 the US embargoed all trade with Cuba.

- In 1973 an embargo was placed on the export of soybeans to provide assurance that poultry and hog producers would have a sufficient low cost supply of soybean meal.
- In 1975 an embargo was placed on exports of grain sales to the Soviet Union after concern about increasing food prices.
- In 1980 an embargo was placed on all exports to the Soviet Union after the Soviet invasion of Afghanistan and the subsequent tensions in Poland. This embargo was not lifted until April 1981.
- In 1991 an embargo was placed on Iraq, which was lifted following the US invasion in 2003. Provisions of the 1990 farm bill continued protection for agricultural producers against the imposition of export embargoes by assuring the sanctity of export contracts negotiated prior to any embargo.

- Embargoes reduce US export sales and lower prices.
- Embargoes reduce confidence in the United States as a dependable supplier, thus encouraging foreign buyers to cultivate other sources of supply.
- Embargoes encourage other countries to increase production as a means of achieving self-sufficiency.
- Embargoes encourage competing exporting countries to increase production.
- It is difficult to prevent the intended embargoed country from importing the commodity from another source.
- The mere potential for embargoes is reflected in the market place as exporters and importers adjust for this uncertainty.
- Embargoes may have contributed to the decline in the US share of world agricultural trade.
- Serious questions also exist concerning the effectiveness of embargoes as a policy tool.

Export Enhancement Program (EEP)

What It Is: EEP is an export incentive program created by the 1985 farm bill and extended by the

1990-2002 farm bills to permit USDA to use surplus commodities or cash as export bonuses to make US products more competitive on the world market or to offset the

effects of unfair trade practices and subsidies used by other countries.

Objective: To make US farm products price competitive on the world market and counter unfair

trading practices.

When Used: The authority to implement EEP sales is granted to the Secretary of Agriculture. EEP was

established to counter the high export subsidies used by the European Community (EC) now European Community to capture wheat markets in Algeria and Egypt. EEP was first used in 1985 to regain North African wheat markets lost to unfair EC competition. Since then, EEP has been used to ship more than 130 million tons of agricultural products valued over \$13.9 billion. Use of EEP has expanded to include countries in Eastern Europe, Algeria, China, Egypt, Norway, Venezuela, Israel, Poland, the Philippines, Finland, and the Dominican Republic. EEP as a share of all wheat exports increased over the 1989-91 period, reaching over 60 percent in 1992. Although wheat sales have represented over 70 percent of total EEP shipments, EEP has been used to sell poultry, flour, barley, sorghum, rice, cattle, animal feeds, vegetable oil, and eggs. EEP spending has been negligible since 1996. Under the World Trade Organization (WTO) Doha Round framework agreement reached in July 2004, all export subsidies would be severely curtailed.

- Helped restore US competitiveness in world markets despite unfair or subsidized competition.
- Invites complaints from trading partners and allies.
- Reduces government stocks of commodities and increases price variability.
- Violates the spirit of WTO/General Agreements on Tariffs and Trade (GATT).
- Invites public image problems and undermines US efforts toward freer trade in WTO/ GATT.
- Displaces a portion of US commercial sales.
- Places upward price pressure on domestic consumers and livestock producers.

Export Payment-in-Kind (PIK), Bonus Incentive Commodity Export Program (BICEP)

What It Is:

Under export PIK, the government provides an in-kind export commodity bonus for each regular commercial purchase of a specified amount. For example, if a country purchases 1 million metric tons of wheat, it might receive an additional 100,000 metric tons of PIK wheat from Commodity Credit Corporation (CCC) stocks. The 100,000 metric ton bonus is the export PIK.

Objective:

To make the United States commodity price competitive in the world market and thus expand export markets.

When Used:

Export PIK was first used in a 1983 flour sale to Egypt. Export PIK was used to capture the 1983 Egyptian flour market for the United States. Other flour exporting countries, such as France, were upset, although no overt retaliatory steps were taken against the United States. The 1985 farm bill was the last to contain provisions for export PIK. In general, the use of export PIK has been limited to surplus commodities held in CCC inventories, which generally do not exist any more because of the effective elimination of the price support program except in dairy products, sugar, and tobacco. Under the World Trade Organization (WTO) Doha Round framework agreement reached in July 2004, all export subsidies would be severely curtailed.

- Improved the US competitive position in the world market.
- In-kind export PIK was less overt than direct monetary export subsidies and thus not as likely to invite either retaliation or WTO/General Agreement on Tariffs and Trade (GATT) sanction.
- Government stocks of commodities can be lowered.
- An export alternative is provided by export PIK as long as the CCC owns sufficient stocks.
- Widespread use of export PIK invited public scrutiny of many export promotion programs.
- Commercial sales may be displaced by bonus commodities.
- Increased demand for export PIK subsidized commodities places upward price pressure on domestic consumers and livestock producers.

Free Trade Agreement (FTA)

What It Is:

An agreement among an association of member nations to overcome impediments to trade by reducing or eliminating both tariff and nontariff barriers to trade in goods and services. Free trade agreements do not provide for a common external tariff for other nonmember countries or the free movement of labor and capital among members (see *Preferential Trading Arrangements*). FTAs are negotiated by the US Trade Representative under Trade Promotion Authority granted by the US Congress to the President.

Objective:

To facilitate the free movement of goods and services among member nations of the agreement. A free trade agreement is the least complete form of economic integration, followed by a customs union, common market, and economic union.

When Used:

Unsuccessful or slow attempts to reduce or eliminate nontariff trade barriers in World Trade Organization)/General Agreements on Tariffs and Trade (WTO/GATT) have led to pursuit of mutual interests among nations by forming FTAs or more complete forms of economic or political integration, such as the European Union. WTO rules apply to the negotiation of FTAs, and they must operate within the provisions of WTO and other international treaties. The Canada-United States Free Trade Agreement became effective January 1, 1989, while the trade agreement with Israel was signed in 1985. The North American Free Trade Agreement (NAFTA) was implemented on January 1, 1994. The United States has negotiated trade agreements with Australia, Bahrain, Canada, Chile, Israel, Mexico, Costa Rica, the Dominican Republic, El Salvador, Guatemala, Honduras, Nicaragua, Jordan, Morocco, and Singapore. FTAs are being negotiated with Panama, the Southern African Customs Union, Thailand, and the Andean countries.

- Contributes to economic efficiency gained from specialization in production of goods for which a comparative advantage exists.
- Encourages free flow of goods and services among member countries.
- Results in gains in employment and income for member participants.
- May reduce trade with nonmember countries.
- Allows for greater commonality of purpose in trade policies, thereby providing political and economic leverage in trade negotiations with nonmember nations.
- Undermines the purpose and effectiveness of multilateral trade forums such as WTO/ GATT.
- Secures gains to trade already achieved such as economic reform made by Mexico prior to NAFTA.

General Agreement on Tariffs and Trade (GATT)

What It Is:

GATT was superseded by the World Trade Organization (WTO) in 1995. GATT is a multilateral United Nations treaty among governments, including the United States. GATT remains the umbrella treaty of WTO for the trade in goods. GATT contains a code of principles and provides a forum for consultation and dispute settlement.

Five principles govern GATT:

- Trade must be nondiscriminatory.
- Domestic industries should be protected by tariffs as opposed to nontariff barriers (quotas).
- Tariffs agreed upon are binding, with provision for compensation if violated.
- Consultations are provided to settle disputes.
- GATT procedures may be waived on agreement of the members with provision for compensation. Barriers in existence when GATT was established in 1947 are legal until negotiated away.

Objective:

To increase international trade among nations through negotiated reductions in tariffs and other trade barriers. These actions are designed to prevent the development of rounds of retaliatory trade barriers.

When Used:

GATT came into existence October 30, 1947. Trade barrier reductions have been accomplished in four rounds of negotiation: the Dillon Round (1960-1961), which provided for European Economic Community (EEC) duty-free entrance for soybeans and cotton; the Kennedy Round (1963-1967), which resulted in tariff reductions on a wide range of farm products; the Tokyo Round (1973-1979), which reduced nontariff barriers on a limited number of commodities; and the Uruguay Round (1986-1993), which created the WTO. The Doha Round, which emphasized an increased role for developing countries, was initiated in 2001.

- GATT has increased world trade and expanded export opportunities, especially in manufactured goods trade.
- GATT provided a forum for settling disputes, although it is a lengthy process.
- GATT restricts the latitude of participating countries in subsidizing exports and engaging in other trade restricting practices.
- GATT contained no authority for enforcement of principles against the major country members, often leading to retaliatory tariffs.
- GATT was more effective at reducing trade barriers in industrial products than in agriculture due to the problems created by domestic farm programs.

Generalized System of Preferences (GSP)

What It Is: The GSP is a program permitting duty-free entry of certain imports from designated

developing countries.

Objective: To assist in economic development, encourage diversification, and expand production of

certain developing countries.

When Used: Title V of the Trade Act of 1974 sets forth criteria for country and product eligibility as

well as for limitations on preferential treatment. Developing countries not eligible for GSP include communist countries, a developing country that extends preferential treatment to the products of a competing developed country, most OPEC countries, countries that nationalize US property without compensation, countries that do not cooperate in narcotics control, or countries that have aided international terrorism. Import-sensitive

articles or commodities such as textiles are excluded from GSP.

- Expands developing country exports to the United States. Developing countries
 purchase over one-third of all agricultural exports and have been the fastest growing
 market for farm products.
- Increases economic growth in developing countries.
- Has helped developing countries to buy US products by increasing export earnings for developing countries so they can import more.
- Helps in maintaining favorable foreign relations with free world developing countries.
- Is a low-cost means of providing aid to developing countries.
- Adversely impacts US farmers who produce the commodities extended preferential import treatment.

Import License

What It Is: A government-issued right to import a specified quantity of a product or commodity.

Objective: Since import quotas limit the amount of a good imported, licenses may be used to

allocate the limited supply of imports among domestic importers, as well as to limit the

total quantity that can be imported.

When Used: Even though tariffs have been lowered through the World Trade Organization/General

Agreement on Tariffs and Trade (WTO/GATT), quantitative restrictions such as quotas have become more prevalent methods of limiting agricultural trade. Import licenses are used by some countries to allocate the rights to import certain goods and to limit the quantity imported. The United States has issued import licenses for a stipulated quantity of imports to domestic importers of dairy products, sugar, and beef based on their historical share of the market. Mexico, for example, has implemented licensing systems for corn, barley, milk powder, and cheese. Import licenses were utilized for approximately 25 percent of all US agricultural exports to Mexico in 1991. When the North American Free Trade Agreement was implemented, import licenses were converted to tariff-rate

quotas (see Tariff-Rate Quotas).

- Can limit the quantity available within the import market, raising consumer and producer prices.
- Creates additional market instability because of the often arbitrary nature of issuing licenses.
- Discriminates at times against new importers since no historical basis for importing exists, making access to markets difficult or virtually impossible.
- Eliminates imported supplies if the importing government fails to allocate licenses.
- Invites possible retaliation by foreign trading partners wishing to export larger volumes to the protected import market.

Import Quotas

What It Is:

Import quotas limit the quantity of a specific commodity that can be imported. Limits are generally allocated among potential exporting countries. Specific limits are frequently negotiated to avoid more restrictive voluntary or mandatory limits. The specific size of quotas may be legislated, negotiated, or determined by executive action. Import quotas determined by executive action under Section 22, which imposed quotas or fees on imports that interfere with operation of a price support program, were recommended by the US International Trade Commission and imposed by the President. (See Section 22.)

Objective:

To protect US producers and/or price support programs from foreign competition by establishing a maximum quantity of specific commodities that can be imported.

When Used:

Beef import quotas have been mandated by the US Congress. Cheese import quotas, which were imposed to protect the price support program, have been the subject of negotiation and agreement under the World Trade Organization/General Agreement on Tariffs and Trade (WTO/GATT). Under the Uruguay Round, GATT quotas were replaced by tariff-rate quotas. The imposition of import quotas is highly political. Even though the US International Trade Commission recommendations to the President are based on objective criteria, the ultimate Presidential decision is highly political. When used, US import quotas make it difficult to get other countries to reduce trade barriers.

- Import quotas restrict available supplies and raise domestic prices.
- Without import quotas on price-supported commodities, the Commodity Credit Corporation (CCC) would acquire a larger quantity of commodities under the price support program.
- Import quotas result in windfall profits to licensed importers.
- Supply control aspects of import quotas result in greater price fluctuations than might occur in a free market.
- Efficiency of production plays no role in determining competitiveness under a system of quotas.
- Retaliation for non-agricultural commodity quotas can lead to reduction in agricultural exports from the United States.

Import Tariffs

What It Is:

Import tariffs are a tax or duty on commodities entering the United States. A tariff may be either a fixed charge per unit of product imported (specific tariff) or a percentage of the value of the product imported (ad valorem tariff). The specific size of the tariff may be legislated, negotiated, or determined by executive action.

Objective:

To restrict imports of certain commodities.

When Used:

Because of the emphasis of the World Trade Organization/General Agreement on Tariffs and Trade (WTO/GATT) on reducing tariff trade barriers, the importance of tariffs has gradually decreased. Substantial tariffs still exist, however, on a number of specialty commodities.

- The visibility of tariffs and WTO/GATT emphasis on reducing tariff trade barriers have fostered the use of nontariff barriers to trade. Tariff barriers are less effective in reducing trade because they do not constitute an absolute limit on quantities that can be imported. That is, while efficiency plays no role in import quotas, tariffs potentially continue to reward efficiency.
- Tariffs raise the effective price of goods entering the United States and thereby reduce the comparative advantage of foreign-produced goods.
- Tariffs reduce the volume of commodities imported at all price levels.
- Economists regard tariffs as a lesser evil than quotas or other nontariff barriers because efficient producers may still be able to obtain access to the market with a tariff.
- The US Treasury receives the revenue from a tariff.
- The absolute level of price fluctuation is the same, or nearly the same, with a tariff as in the free market. Price changes are reflected to consumers.
- Import tariffs may result in retaliation by trading partners.
- On tariff-regulated commodities, consumers in the importing country pay higher prices than in the absence of tariffs.
- Import tariffs established by large importing countries (European Union, United States, Japan) tend to depress world prices.

International Commodity Agreements

What It Is:

An international commodity agreement is a multilateral agreement among countries to affect the terms of trade. The terms of trade affected by an international commodity agreement may include the price level, quantity sold, quantity produced, or quantity held in reserve. Legally, commodity agreements are treaties among the participating nations.

Objective:

To raise the world price above equilibrium levels, to stabilize price, and to provide increased supply assurance.

When Used:

Commodity agreements, which were first established in 1949, have been used most extensively on wheat, cocoa, coffee, tea, and sugar. Currently, they are used mostly among developing countries. OPEC might be looked upon as an international commodity agreement. Commodity agreements have had a reasonably good history of stabilizing prices as long as burdensome surpluses or shortages do not exist. Commodity agreements designed to raise prices have had a tendency to fall apart because of a lack of control over production. Recent years have witnessed the demise of agreements in tin and coffee, due mainly to oversupply and low prices. To be effective, commodity agreements require close coordination of domestic farm programs to coordinate closely with the activities of international commodity agreements.

- Commodity agreements provide increased price stability.
- Domestic prices are raised by commodity agreements.
- Exchange of information among countries on market conditions is increased.
- When prices are raised, excess supplies frequently accumulate unless effective supply control mechanisms are included.
- Unless commodity agreements are well coordinated with the domestic farm programs of the participating countries, they tend to break down.
- As with any international trade agreement, enforcement is virtually impossible.

Market Access Program (MAP)

What It Is:

MAP provides assistance in cash or commodities to trade promotion organizations to partially fund foreign market development activities in export markets. MAP targets the promotion of value-added products. MAP replaced the Market Promotion Program. First authorized by the *Agriculture Trade Act of 1978*, MAP funding has gradually increased to \$200 million annually for FY 2006 and FY 2007.

Objective:

MAP was created to encourage the development, maintenance, and expansion of commercial export markets for US agricultural products through cost-share assistance.

When Used:

MAP is administered by USDA's Foreign Agricultural Service (FAS). Under MAP, funds may be used to partially reimburse agricultural organizations conducting foreign market development activities in specified countries. About 40 percent of MAP funds are used for branded promotion, while 60 percent are used for generic programs. Funds are allocated to organizations on a cost-share basis.

Experience:

MAP has been used in most countries of the world to promote a wide variety of commodities and products, including apples, pears, canned peaches, poultry, wood products, almonds, red meat, ginseng, dates, processed tomato products, mink pelts, confectionery and other processed food products. Activities partially financed by MAP range from market research, consumer promotion, and trade promotion to construction of a model feed-mill and a three-story wood demonstration building. From time to time, these programs have been controversial because they were interpreted as being subsidies to several large US agribusiness firms that were perceived as not really needing such subsidies.

- Helps to maintain US market share by putting US private sector trade promoters on a more even basis with those of other countries.
- Expands demand for agricultural products in markets where they otherwise would not be sold, resulting in higher domestic prices and greater returns to producers.
- Achieves trade policy goals of the United States.
- May encourage similar programs by competitors.

Monetary Export Subsidies

What It Is: Monetary subsidies to exporters in dollars per unit of commodity sold. Export subsidies

are overt methods of subsidizing exports.

Objective: To make commodity prices competitive in the world market and thus expand markets.

When Used: Export subsidies have been used to export agricultural commodities when a country's

price supports are above world prices. Overt monetary subsidies of exports are seldom made because they clearly violate the provisions of the World Trade Organization/General Agreement on Tariffs and Trade (WTO/GATT). Under those provisions, the exporting country could be required to pay damages to the countries injured by such subsidies. European Union (EU) subsidies have been exempt from WTO/GATT discipline because they were in place as a part of Common Agricultural Policy (CAP) at the time Uruguay Round was negotiated. EU export subsidies could not be increased, however. Under the WTO Doha Round framework agreement reached in July 2004, all export subsidies, including those of the European Union, would be severely curtailed.

Consequences:

• The effective export price is lowered to make commodity prices competitive in the world market. The result is to expand exports.

• Domestic farm prices may be increased.

• Monetary subsidies run a high risk of inviting retaliation.

Monetary subsidies violate WTO/GATT.

• Stocks are reduced as a result of increased exports and price variability increases.

• Long-run price relief is provided for producers in the face of low world prices.

Monetary subsidies can be expensive in terms of both money and image.

Nontariff Trade Barrier

What It Is:

Nontariff trade barriers, strictly speaking, cover all restrictions on imports other than tariffs. Thus, quotas are nontariff trade barriers. Likewise, the variable levy (tariff), which had been employed by the European Union in the Common Agricultural Policy (CAP), is a nontariff trade barrier. (For a discussion of these policy tools (see *Import Quotas* and *Variable Levy*.) The nontariff barriers discussed here include a wide array of devices such as health and sanitation, packaging, and labeling regulations, as well as foreign exchange restrictions.

Objective:

To restrict imports of individual commodities.

When Used:

The use of nontariff trade barriers has increased, in part, because of the WTO/GATT emphasis on reducing tariff trade barriers. Common US nontariff restrictions relate to health and sanitation restrictions on animal and plant products such as the prohibition of meat imports from countries having foot and mouth disease. Sometimes such restrictions are justified while, at other times, they are purely protectionist. Nontariff barriers have had a tendency to proliferate in recent years. Nontariff barriers have been used to reduce the competitiveness of foreign producers who are able to use pesticides and other products that are banned in the United States.

- Generally more restrictive than tariff barriers because they may constitute absolute barriers to trade.
- Restrict available supplies and raise domestic prices.
- May be an absolute barrier to trade with efficiency playing no role in determining competitiveness.
- The imposition of a nontariff barrier may increase the degree of price variability.
- Increase the risk faced by importing firms.
- May result in retaliation by trading partners.
- May assure standardization and product quality of imported goods.
- Tend to depress world prices when used by large importing countries.
- Health regulators restrict trade as a side effect of the major objective of protecting public health (e.g., ban on imports of beef from countries with hoof and mouth disease). However, such health regulations can be used to explicitly restrict trade (e.g., European Union ban on beef with hormones).

Normal Trade Relations (NTR), formerly Most Favored Nation (MFN)

What It Is: Preferential trade terms granted to a nation to have customs duties levied on its products

at the lowest rate offered to any other nation and making the nation eligible for export

credit. NTR/MFN is a foundation of the WTO.

Objective: To assure fair and equitable treatment for all WTO members.

When Used: Access to the US market has been used to entice other countries to comply with certain

human rights beliefs, political goals, and economic principles acceptable to the United States government. The Jackson-Vanik amendment to the 1974 *Trade Act* required that MFN status be granted only on the basis of compliance with basic human rights considerations. NTR is also used to encourage other countries to adopt trade reforms.

Consequences:

Assists in achieving foreign policy goals of the United States.

• Fosters economic and political restructuring in other countries.

 Results in increased US exports as other countries are able to export more to the United States because of lower duties and increased foreign exchange earnings.

Preferential Trading Arrangements (PTA)

What It Is:

Formal arrangements between two or more nations to eliminate restrictions on international trade, payments, and factor mobility for the purposes of more complete economic integration. The major types of preferential trading arrangements include free trade area, customs union, common market, and economic union. A customs union removes all tariff and nontariff barriers to trade among members, but imposes identical trade restrictions against nonmembers. A common market is a group of trading nations that allow free movement of goods and services, common external trade restrictions against nonmembers, and the free movement of factors of production. An economic union represents the most complete form of economic integration whereby nations agree to the unification of all national social, agricultural, taxation, fiscal, and monetary policies, along with the acceptance of a common currency.

Objective:

To stimulate economic growth by allowing the free movement of goods, services, labor, and capital and by providing for the coordination of member-nation monetary and fiscal policies.

When Used:

PTAs often represent an acceptable alternative to the slow and ineffective efforts to achieve increased market access and trade liberalization in World Trade Organization (WTO). Although PTAs open markets within the member-nation group, they are often structured to discriminate against nonmembers, while in full compliance with General Agreement on Tariffs and Trade (GATT) and WTO rules. The United States, Mexico, and Canada negotiated the North American Free Trade Agreement (NAFTA), the least complete form of economic integration, a free trade area (see Free Trade Agreement). MERCOSUR, the Southern Common Market, employs a customs union. The European Community had a common market prior to ascending to its current economic union structure.

- Provides for free trade among members, but may limit trade with nonmembers.
- Transfers a certain degree of economic sovereignty to a supranational authority.
- Allows specialization in production resulting in gains in trade from economies of scale, greater competition, and more investment.
- Results in the formation of a trading block that may be more effective in competing in international markets outside the block.
- May both divert trade with nonmembers and create trade among member countries.

Price Bands and Reference Prices

What It Is:

Price bands and reference prices are used to slow the flow of imported grains and oilseeds into a country. Most price band systems employ both a floor price and a ceiling price used in conjunction with a reference price. The Andean Community Price Band System (ACPBS) is among the most used schemes affecting US exports. Bolivia, Colombia, Ecuador, Peru, and Venezuela participate in the system to varying degrees. Chile also uses price bands to control imports of wheat. In 2003, for example, Chile established a floor price of \$128/ton and a price ceiling of \$148/ton for wheat imports. The 'price band' for wheat was effectively \$20/ton, meaning that import prices could fluctuate within that range, but imports could not enter Chile for less than \$128/ton.

Objective:

A price band and reference price system is used to limit the amount of imports entering a market, thereby restricting supplies and raising domestic market prices.

When Used:

Price bands are used when countries desire to restrict the flow of imports into a market. The ACPBS is used each season to limit the volume of imported grains and oilseeds entering member countries, especially during harvest periods.

- Although some price bands may be eliminated due to free trade negotiations, it is anticipated that they will affect US market access to these countries for many years to come.
- Restricts flow of imports and US access to markets.
- Raises the price of imported goods.
- Prices of domestically produced substitutes rise.
- If imposed by a large importer, causes downward pressure on US farm prices.
- Trade irritant and negotiating issue for many US grain and oilseed organizations.

Public Health Security and Bioterrorism Preparedness and Response Act of 2002 (Bioterrorism Act of 2002 or BTA)

What It Is:

Title III of the BTA, Protecting Safety and Security of Food and Drug Supply, requires any facility, foreign or domestic, that manufactures, processes, packs, or holds food for consumption in the United States to register with the US Food and Drug Administration (FDA). BTA also requires prior notice of arrival of all foods imported into the United States. Farms, restaurants, other retail facilities, and facilities handling products regulated exclusively by USDA, such as meats, egg products, and poultry, are exempt from registration and prior notice requirements.

Objective:

BTA was enacted in 2002 to protect the US food supply from an intended or actual terrorist attack. BTA is designed to prevent, prepare for, and respond to bioterrorism and other public health emergencies.

When Used:

BTA became effective on December 12, 2003. Section 305 of BTA requires registration of all food facilities noted above. Foreign facilities are also required to specify a US agent. Section 306 requires that records be maintained for not more than two years. Section 307 requires importers to provide FDA with prior notice of the arrival of food products. Prior notice must be received and confirmed electronically by FDA not more than five days before arrival and not less than two hours if arriving by land or road, four hours if arriving by air or rail, or eight hours if arriving by water.

- Strengthens US food security and prioritizes cargo inspections.
- Enhances scrutiny and regulation of food supply chain.
- May disrupt just-in-time delivery of foods, especially perishables.
- Could disrupt trade, causing backlogs at ports.
- Since the United States is a large importer, short-term disruptions of food chain may cause lower prices on the world market and higher prices for US consumers.

Public Law (PL) 480, Food for Peace

What It Is:

PL 480 provides for concessional sales of commodities that contain substantial US subsidies. Exports are made under three PL 480 programs:

- Title I involves sales for dollars under low interest rates with 10-30 years repayment.
- Title II involves emergency food relief directed to nutritionally vulnerable nations.
- Title III involves commodity aid as part of a development package.

Multivear commitments are tied to specific development actions.

Objective:

To dispose of surplus commodities, develop markets, provide emergency food aid, and assist friendly nations in development.

When Used:

Authorized by the *Agricultural Trade Development Act of 1954*, PL 480 was used to export as much as one-third of the export sales during the 1950s and 1960s when loan rates effectively supported the price and were maintained above world prices. Since then, annual PL 480 sales have generally been in the \$1 to \$2 billion range. Countries are selected for assistance based on diplomatic and political considerations as well as on need. Commodities selected are influenced by the magnitude of surplus stocks. The US Secretary of State makes the final decision regarding who gets PL 480 aid. The need to get commodities moving through PL 480 is frequently frustrated by foreign policy considerations.

- Provides assistance in alleviating hunger and starvation.
- PL 480 is credited with having built such important commercial markets for farm products as Japan, South Korea, Taiwan, Brazil, and Spain.
- Has provided a government alternative to exports when the United States is not price competitive in the world market.
- Combines commodity aid with development assistance and, thus, becomes more politically acceptable.
- Reduced government stocks of commodities when they existed.
- Promotes long-term development of markets.
- Provides the State Department with a diplomatic tool that can be used in foreign policy negotiations.
- May displace commercial sales.
- May become a disincentive for production in developing countries by providing too much commodity aid making the countries overly dependent on imports.

Section 22, Agricultural Adjustment Act of 1933, Amended in 1935

What It Is:

Section 22 authorized the president of the United States to impose import quotas or fees if it is determined that imports will interfere with federal price support programs or substantially reduce US production of products processed from farm commodities (see *Import Ouotas*).

Objective:

To protect the integrity of domestic price support programs and domestic markets for farm commodities.

When Used:

In the Uruguay Round and subsequent trade agreements, the United States exempted member countries from Section 22, effectively curtailing its use as a domestic policy tool. Section 22 required the US International Trade Commission, on direction by the President, to investigate the potential for imports to render ineffective or interfere with the operation of US farm support programs. The President could impose import fees not to exceed five percent *ad valorem* or implement an import quota to reduce imports of a particular commodity to no less than 50 percent that of a representative time period. Special emergency authority allowed the President to take immediate action to restrict imports of perishable commodities without waiting for a ruling by the US International Trade Commission. Action under Section 22 was initiated by USDA's Foreign Agricultural Service. The US was granted a waiver of the World Trade Organization/General Agreement on Tariffs and Trade (WTO/GATT) prohibition against import restrictions in 1955. From 1935 through 1994, Section 22 was imposed on 12 commodity groups: wheat and flour; rye, rye flour and meal; barley; oats; cotton; dairy products; almonds; filberts; peanuts and oil; flaxseed and linseed oil; and sugars and syrups.

- Import restrictions reduced available supplies on the market and raised domestic prices of protected commodities.
- Consumer prices for some food and fiber products were increased because of import controls imposed under Section 22.
- World prices for protected commodities were lower than they would have been without Section 22.
- Resource allocation and use were distorted due to import controls.
- Price instability was increased due to the imposition of import quotas and tariff restrictions.
- Large profits accrued to holders of import quotas.
- Provided more market stability than arbitrarily imposed import quotas or licenses.

Tariff-Rate Quota (TRQ)

What It Is:

Tariff-rate quotas apply a higher tariff rate to imported goods after a certain quantitative limit has been achieved during a specified period. A negotiated rate is applied to imports up to a quota limit. Subsequently, a much higher duty is applied. The TRQ is the "tariffication" method used in the World Trade Organization/General Agreement on Tariffs and Trade (WTO/GATT) and North American Free Trade Agreement (NAFTA) to convert nontariff barriers, such as quotas or licenses, to tariffs.

Objective:

To protect domestic producers and US farm program integrity from import competition during transition periods from a protected market to more open market conditions. TRQs do not limit the quantity of goods that may be imported.

When Used:

When converting a restrictive quota to a tariff for purposes of transition to freer trade. TRQs are the primary means of converting US quotas imposed under Section 22 to tariffs as a transition mechanism in GATT, WTO, and regional trade agreements. Their main use is on price-supported commodities such as dairy products and sugar. For example, the US sugar quota system was replaced by a TRQ in 1990. The previous quota, in place since 1929, was found in violation of GATT rules after a complaint by Australia. The TRQ imposes a zero or nominal duty on raw sugar imports up to a given amount and a higher duty on imports above the quota, 1.256 million short tons.

- Raises domestic prices over free trade but does not restrict available supplies.
- Reduces export demand and lowers world prices if the importing country is large.
- Allows market forces to more efficiently allocate resources since TRQs are less restrictive than a quota.
- Requires lower Commodity Credit Corporation (CCC) costs of acquiring price supported commodities and storage than under free market, since imports are somewhat lower.

Trade Agreements

What It Is:

A long-term bilateral trading agreement is a contract between two countries specifying the quantity of a commodity to be traded over a certain time period. Bilateral trading agreements normally run for a period of three to five years, although they may be simple one year agreements that are renewed annually. The agreements normally specify the minimum quantity to be purchased and the maximum quantity to be supplied. Generally, no provisions exist with regard to the price to be paid.

Objective:

To assure the importing country a minimum supply and the exporting country a market for its production; to normalize trade, develop markets, and retain markets for farm products.

When Used:

Long term trading agreements have become increasingly common following incidents of world food shortages, such as that experienced in the early 1970s. The most publicized agreement was the five year contract negotiated with the Soviets in 1975. It contained provisions that the Soviets would purchase a minimum of 6 million metric tons of grain, with the option for an additional 2 million tons. In the early 1980s, the United States became cool to the trade agreement concept while Australia and Canada signed agreements with several countries including the Soviet Union and China. Trade agreements are a means of opening a new market and maintaining a competitive position. The quantities specified in the agreement have generally been less than the normal trading levels. Enforcement of minimum purchases also has been a problem under previous agreements due to increased production, high world supplies, and retaliation for non-agricultural trade related disputes. Most of these have been replaced with bilateral or regional trade agreements that reduce barriers to trade.

- The total annual volume of trade tends to be increased and stabilized between the parties to the agreement.
- Importing countries outside the agreement may be denied a source of the commodity if supplies become short.
- Exporting countries outside the agreement may be denied market outlets when supplies are plentiful.
- Trading agreements are, in essence, barriers to trade in that they tie up markets over long time periods.
- Trading agreements cause greater fluctuations in world prices because they effectively reduce the world supply that can be traded competitively.
- Trading agreements are difficult, if not impossible, to enforce and may lead to false market expectations.

Two-Price Plan

What It Is: A two-price plan discriminates between the domestic and the foreign market by supporting

a higher price for domestic sales than for foreign sales. Exports are, therefore, indirectly subsidized because domestic marketing is reduced with the residual sold for exports.

Objective: To raise the level of producer returns while preventing the accumulation of surplus

commodity stocks.

When Used: Before World War II and the negotiation of the General Agreement on Tariffs and Trade

(GATT), two-price plans were used extensively to support farm income. Since the negotiation of GATT, the operation of two-price plans in the United States has been restricted largely to marketing orders. Advocating reduced trade barriers and operating two-price plans are obviously inconsistent. Import restrictions are necessary to prevent the reimportation of the lower-priced foreign sales or processed products made from the

sales.

Consequences:

• Two-price plans, in essence, make the world market a residual market.

- Producer income increases if the demand in the domestic market is more price responsive than in the export market.
- Surplus stocks would not accumulate in the face of high domestic price supports.
- Lower export market prices create the potential for trade war conditions.
- The world market tends to become unprofitable when two-price plans are used extensively.
- Controversial methods of being competitive would draw public media attention.
- Domestic market is placed at a disadvantage relative to the foreign buyers.

Variable Levy

What It Is:

A minimum price is set at which a commodity can be imported. If the import price falls below that minimum price, a levy or import tax is imposed equal to the difference between the world price and the import price. A variable levy is classified as a nontariff trade barrier because the size of the levy (or tariff) is not fixed in either absolute or percentage terms. The variable levy is an effective barrier to trade because it eliminates the economic (price) advantage of the imported commodity.

Objective:

To limit importation of specific commodities.

When Used:

The variable levy was the principal mechanism used by the European Community/European Union (EU) to restrict agricultural imports. Under the Common Agricultural Policy (CAP), EU farmers were guaranteed grain prices greater than the world price. An import levy equal to the difference between the EU producer price and the price of grain landed in Rotterdam was paid on imported grain. The variable levy on grains changed daily. Efforts to negotiate a less restrictive EU agricultural policy were difficult because the variable levy was the very basis of CAP. Due to Uruguay Round reforms, the EU variable levy was abolished in 1995 and replaced with a fixed duty that is adjusted biweekly.

- Getting rid of the variable levy meant that the EU had to develop a new agricultural policy approach, using fixed tariffs.
- A variable levy effectively reduces imports, thus raising domestic prices to a predetermined level.
- Efficiency plays no role in determining competitiveness under a variable levy policy.
- When the world price is below the predetermined minimum price, the variable levy constitutes a source of revenue to the importing country.
- The variable levy ensured a stable internal price while increasing instability in world markets.
- The variable levy, along with high internal support prices, transformed the EU from a net grain importer into a net grain exporter.

Voluntary Export Restraint

What It Is: An agreement whereby foreign governments are asked to limit exports of specific

commodities to a given quantity. The agreements are often negotiated under duress

because of the potential enactment of formal import restrictions.

Objective: To control the importation of certain commodities and thereby protect domestic

producers.

When Used: In the United States, voluntary export restraints are used in conjunction with the Meat

Import Act of 1979. The voluntary export restraint mechanism has served as a useful adjunct to formal import quotas authorized by the *Meat Import Act*. Whenever USDA estimates of meat imports appear likely to exceed 110 percent of the adjusted base quantity, the US government has negotiated voluntary restraints rather than impose and administer formal import quotas. In 1995, quotas were replaced with tariff-rate quotas.

Consequences:

• Voluntary export restraints restrict available supplies and raise domestic prices.

- As a result of voluntary export restraints, price fluctuations are greater in world markets than they would be in a free market environment.
- Voluntary export restraints erode the importance of efficiency of production in determining competitiveness.
- Income derived from holding import license or quota is transferred to the exporting country.
- Some countries may be left out of the market because they refuse to limit their imports.

World Trade Organization (WTO)

What It Is:

Permanent institution of the United Nations established on January 1, 1995, as a result of the Uruguay Round of the General Agreement on Tariffs and Trade (GATT, 1986-1993) and successor to GATT. GATT remains the umbrella treaty of WTO for the trade in goods. WTO provides the legal and institutional framework for the world's multilateral trading system of goods, services, intellectual property, and trade in textiles and apparel. With 151 members as of July 2007, WTO provides a forum for trade negotiations and dispute settlement, administers trade agreements, monitors national trade policies, and provides technical assistance for developing countries. WTO is headquartered in Geneva, Switzerland.

Objective:

WTO establishes the rules of trade between nations and strives to liberalize trade.

When Used:

WTO is a permanent institution and as such has an ongoing role within the United Nations. Periodic multilateral trade negotiations occur as needed; the most recent is the Doha Development Agenda which was started in November 2001. The WTO Ministerial Conference meets at least every other year.

- Works to resolve trade disputes leading to more open markets.
- Liberalizes trade and leads to increases in exports and imports.
- Increased exports result in higher producer prices and incomes.
- Increased imports lead to lower prices and higher disposable incomes for consumers.
- Provides a unique forum to resolve disputes in services trade, intellectual property, and some investment issues.

Introduction

Marketing programs include a variety of voluntary and regulatory activities designed to facilitate marketing functions, make markets more competitive, make markets more transparent, and aid in balancing the market position of producers and other market participants. Like other programs, they have evolved over time:

- While USDA's initial marketing programs date back to 1915, production estimates were first made after the founding of USDA in 1862. Production estimates and marketing programs were designed primarily to improve the quality and quantity of information available to market participants and policy makers. This was done through regular, unbiased, and reliable reports on production, market volumes, and prices. To standardize and make the resulting reports more meaningful and reliable, systems of grades and standards were developed. These reports, ever increasing in statistical reliability, became a domestic and international standard for reliability. With few exceptions, data have been collected through the voluntary participation of farmers and other market participants, who, along with market and policy analysts, are primary users.
- The 1920s and 1930s saw an increased concern about the market power of handlers and buyers of farm products. The result was encouragement of farmer cooperative organizations and regulatory tools that allowed producers to work together on common marketing issues e.g., the Capper-Volstead Act and marketing orders. While some of the fruit and vegetable marketing orders initially had provisions designed to control marketings, these provisions were largely eliminated in the 1970s.
- With tighter federal budgets, marketing programs began their transition to industry financing in the 1970s, reflecting their voluntary nature and the increased ability of the beneficiaries to pay for these services.
- Since the 1990s marketing services have been characterized by the emergence of audit-based, thirdparty verification of production and marketing processes. This type of marketing service has been increasingly demanded by both domestic and international markets as indicated by organic certification and export verification programs.

Checkoff Programs

What It Is:

Checkoff programs deduct a given dollar amount per unit of product marketed by farmers and, in some cases, importers to finance consumer and industry information, market development, advertising, and/or research programs. Such programs exist under either specific individual commodity legislation or general authorizing legislation. Several states have enacted checkoff programs to fund specified market development activities such as education, research, and advertising. Funds collected under federal programs must be spent in accordance with federal legislation. Refunds are generally not permitted under federal legislation, although they may be included in programs authorized under general legislative authority. State legislation may allow for refunds.

Objective:

To finance programs designed to strengthen an industry's position in the marketplace by maintaining and expanding domestic and foreign uses and demand for specified commodities.

When Used:

Checkoff programs are industry initiated and funded. They are designed to increase overall demand for a specified commodity. Referendum are required to determine whether those who will pay assessments favor initiation and, in many cases, continuation of these programs. Refund provisions may be included in some of these programs, although in most cases refunds are not permitted. The authorizing legislation for these programs is specific regarding the market development activities that can be funded; lobbying or influencing governmental policy or action is not permitted. Oversight rests with USDA on federal programs and with the state departments of agriculture on state programs. The largest national programs are for milk and cotton.

Voluntary checkoff programs with refund provisions have sometimes encountered problems with relatively high redemption or nonparticipation experience. Nonparticipation may be authorized in two alternative ways: (1) requesting a refund of checked off monies and (2) opting out of the program at the beginning or annually. Opting out has a higher redemption rate than the refund option. The tendency has been to opt for mandatory programs without a refund option.

Checkoff programs have faced numerous legal challenges. After a series of cases that ruled against checkoff programs, the Supreme Court ruled in May 2005 that the beef checkoff sponsored advertisements were a form of government speech and therefore were constitutional. A challenge to the pork checkoff was sent back to a lower court in light of the beef ruling. Legal challenges are likely to continue on other grounds.

(continued on the next page)

Checkoff Programs (continued)

- Well-managed programs increase the demand for particular products, although overall demand for food probably does not change. Thus, the demand for one commodity may expand at the expense of another. Yet, if products such as milk and cotton are not promoted, they are at a disadvantage competing against soft drinks or synthetic fibers.
- Federally-authorized checkoff programs are required to conduct evaluations at least every five years to demonstrate effectiveness.
- Although checkoff monies cannot be used for lobbying activities and must be handled separately, commodity organizations with related checkoff programs appear to be more potent politically in lobbying activities. That may be the end result of a more organized, effective industry rather than the effect of a checkoff program.
- These programs provide an equitable means of financing market development programs while refunds introduce free rider inequities and reduced effectiveness.

Cooperatives, Capper-Volstead Act

What It Is:

The *Capper-Volstead Act* gives producers the right to act together in marketing their products, therefore providing cooperatives limited exemption from antitrust laws. However, it prohibits cooperatives from unduly enhancing price. The Secretary of Agriculture is responsible for enforcing the provisions regarding undue price enhancement.

Objective:

To assist producers in jointly marketing their products by providing a means for improving terms of trade, lowering costs, stabilizing market flows, expanding markets, and/or improving communication.

When Used:

The Capper-Volstead exemption is limited to producers of agricultural products (termed farmers, ranchers, or growers) and to marketing functions. Producers are those involved in actual growing functions; therefore, agribusiness corporate integrators are not producers (farmers). Also, joint activities between cooperatives and noncooperatives are not covered by the Capper-Volstead exemption. Marketing functions are interpreted broadly to include bargaining, information, pricing, processing, and so forth. Cooperatives appear to have virtually unlimited rights to merge with one another. They cannot, however, engage in predatory or coercive practices with regard to either members or nonmembers. Cooperatives have been the most effective in organizing to market milk where they have a firm producer commitment to market through them. They have lost ground in most other products and farm supplies.

- Without the Capper-Volstead Act, pricing activities among farmers would be a violation of the Sherman Antitrust Act and the Federal Trade Commission Act.
- Cooperatives have the potential for raising farmer returns if they fit into current and
 evolving supply chains, are well-organized, are well-managed, and have a commitment
 from farmers to market through the cooperative.
- A cooperative's influence frequently is eroded by "free riders" who obtain the benefits of the cooperative but pay none of the costs.
- Substantial producer investment is required for successful cooperative activity.
- Substantial producer commitment to do business with the cooperative is required for successful cooperative activity.
- Cooperatives have been important to the functioning of marketing orders because cooperative members have been allowed to vote as a bloc. Marketing orders augment cooperative market power. This is one of the main reasons dairy cooperatives have been successful.

Country of Origin Labeling (COOL)

What It Is:

COOL, authorized as part of the 2002 farm bill, requires retailers to inform their customers of the country of origin of covered commodities. Covered commodities include muscle cuts of beef (including veal), pork, and lamb; ground beef, pork, and lamb; farm-raised and wild-caught fish and shellfish; perishable agricultural commodities; and peanuts. Poultry was not a covered commodity for COOL. (As of this writing poultry is included in the House and Senate farm bills, but a 2008 farm bill has not been signed into law yet.)

Objective:

To identify, by labeling at retail, the country of origin of designated products to aid consumers in their buying decisions and to promote US origin products.

When Used:

Country of origin notification may be on the product itself or on placards, signs, or other product displays, provided it is conspicuous to the consumer. Country of origin labeling became effective for fish and shellfish in April, 2005. The US Congress delayed implementation for all other covered commodities until September 30, 2008. To be eligible to bear a "product of the USA" label, a meat product must be derived from an animal that was born, raised, and slaughtered in the United States. In a departure from other labeling regulations, retailers are responsible for the labeling. Food service, or the hotel, restaurant, and institutional (HRI) trade, exports, small retailers, and processed products are exempt from COOL. There have been legislative bills introduced to change COOL to a voluntary system.

- Consumers would be better informed on the country of origin of the products they consume.
- Preliminary estimates indicate that for the cattle and beef sector there would be a
 cost of approximately \$1.9 billion to implement COOL. Research also indicates that it
 would require about a 1.2 percent increase in consumer demand for beef to pay for
 the costs imposed on the industry by mandatory COOL.
- Research results are mixed on whether consumers would be willing to pay higher prices to know the country of origin for meat products if they had a choice.
- COOL has been a highly contentious issue in the livestock and other industries, resulting in delays in its implementation. In the meantime, many manufacturers and retailer have taken the initiative to voluntarily label certain products as to their origin.

Crop and Livestock Production Reports

What It Is:

Crop and livestock production reports provide detailed estimates (predictions) of crop production from before planting (intentions) through harvest. National Agricultural Statistics Service (NASS) reports are the official USDA estimates prepared under unbiased, objective, nonpartisan, statistically sound procedures. They have their origin in a series of laws enacted between World War I and the late 1940s.

Objective:

To improve the quality and quantity of available information on production prospects to all industry interests at the same time and thereby make markets more competitive.

When Used:

These reports are developed from statistically reliable data gathered from farmers though the cooperation of NASS and their state counterparts. The data are compiled, reviewed internally, and released with the final approval of the Agricultural Statistics Board. The USDA's goal is to provide estimates within one or two percent of actual production or prices. Its record in achieving this degree of accuracy has been outstanding. Neither the members of the board nor the NASS administrator are politically appointed. Prior to release of a report from lockup conditions, the Secretary of Agriculture or a designated representative signs the report. The Secretary is then briefed on the details in the report. However, the report is not changed as a result of this briefing. Crop and livestock production reports are used by the private sector as an aid to production and marketing decisions, by economists to prepare forecasts, and by government officials to develop policy and aid in program decisions.

- Markets are made more competitive by providing accurate and unbiased information to market participants.
- Without these reports, this information would be available only to those firms that could afford this service from private information sources. This would be mainly agribusiness firms and large-scale farmers.
- The accuracy of both public and private sector economic outlook and situation analyses is improved.
- The data base is provided for conducting economic impact analyses.
- Information is provided for informed policy decisions.

Direct Marketing

What It Is: Direct marketing can improve market access for producers by allowing them to market

their products directly to consumers and outside the conventional supermarket and away-

from-home food marketing system.

Objective: To aid producers in developing direct-to-consumers markets for their products. The

program is designed to improve the ability of small- and medium-sized farms to compete

with conventional mass market outlets.

When Used: Direct marketing, also known as direct-to-consumer marketing, is closely related to farmers' markets. USDA's Agricultural Marketing Service (AMS) encourages and promotes the development and operation of markets, including farmers' markets, pick-your-own

farms, internet sales, and other small niche markets.

AMS facilitates direct marketing by identifying issues and opportunities, conducting research on markets, disseminating that research through workshops and other training media, and collaborating with other state and federal agencies. AMS partners closely with state departments of agriculture and other organizations that promote direct marketing. USDA also promotes direct marketing by implementing food program provisions of the farm bills providing for the issuing of food coupons that can be used by the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) and the Seniors' Farmers' Market Nutrition Programs to buy produce from farmers' markets.

- 19,000 farmers report selling produce at farmers' markets.
- 82 percent of farmers' markets are self-sustaining, but grants and other forms of support are important.
- Specified food program recipients are provided direct market access to fresh produce.
- Past research indicates that income from direct selling is relatively small and limited to towns near or in urban areas.
- Internet sales are increasingly being utilized to expand direct farmer marketing.
- The 2002 Census of Agriculture reported a 37 percent increase in direct marketing sales since 1997.

Export Verification (EV) Programs

What It Is:

EV Programs provide the framework which allows firms supplying meat or meat products to a specific country to meet technical requirements established by that country. USDA's Agricultural Marketing Service is responsible for ensuring the technical requirements are met.

Objective:

EV Programs facilitate exports by ensuring that product requirements established by importing countries are met by US suppliers.

When Used:

EV Programs are developed at the request of the importing country. Suppliers must comply with the EV Program requirements and successfully pass AMS audits to be eligible to export. Each EV Program specifies product requirements that must be met for each importing country.

For example, the EV Program for Canada includes specified product requirements that only beef, beef products, and offal, excluding livers, must be derived from cattle younger than 30 months old. Slaughter procedures must be incorporated into the facilities' Hazard Analysis Critical Control Point (HACCP) program and verified by USDA's Food Safety Inspection Service as meeting its requirements. Process verification is included, in that knives, saws, and other equipment must be used exclusively on cattle under 30 months of age.

- Provides the importing country assurance that product requirements are met.
- · Identifies what products can be shipped.
- Facilitates marketing by defining requirements.
- Provides the information necessary for companies wishing to participate to become eligible suppliers.
- Provides third-party review of production processes.

Federal Milk Marketing Orders (FMMOs)

What It Is:

A FMMO is a regulation, enforceable in court, issued by the US Secretary of Agriculture specifying the minimum terms of trade (e.g., prices) between farmers and the first buyer (handlers/processors). Two of the key provisions of FMMOs include: (1) a classified price plan that sets minimum milk price paid by regulated milk handlers based on milk's use with fluid products being the highest valued use class and (2) a system for the pooling of revenues from all classified sales so that all producers in an order are paid approximately the same price. FMMO's are authorized by the *Agricultural Marketing Agreement Act of* 1937.

Objective:

To stabilize the marketing relationship between farmers and handlers which benefits producers and consumers by establishing and maintaining orderly marketing conditions and assures consumers of adequate supplies of pure and wholesome milk.

When Used:

Ten FMMOs blanket much of the United States, excluding California. Typically an order is proposed by a farmer cooperative that represents a substantial share of the available milk supply. Order modifications are usually recommended by industry parties affected by the order provisions. The terms of an order are developed through public participation in hearings held by USDA prior to the issuance of the order. During these hearings, producers, handlers, and consumers may present information or proposals regarding the need for an order, what its provisions should include, and what its impacts would be if implemented. The Dairy Programs Division of USDA's Agricultural Marketing Service (AMS) analyzes the hearing records, recommends the terms and provisions of milk marketing orders, and describes their intent and purpose. If two-thirds of the voting dairy farmers approve a market order, the Secretary then approves and issues the milk marketing order. An order would typically be discontinued upon petition to the Secretary if it loses the support of the majority of the dairy farmers whose milk is marketed under the order. Using this procedure, an order was discontinued in the Western Intermountain Region in 2004.

- Marketing orders have been effective in stabilizing marketing conditions where they have been used.
- Assures dairy farmers a higher and more uniform minimum regulated price for their milk than would exist in the absence of FMMOs.
- Higher and more stable producer prices increase production, which could result in increased purchases of manufactured commodities under the dairy price support program.
- Assures consumers of an adequate supply of milk to meet their needs throughout the year.
- Tends to shift some market power from processors to farmer cooperatives.
- Although FMMOs have modified provisions to address changing marketing conditions as a result of technological changes in milk transportation, processing, and manufacturing to maintain the integrity of the system, technological changes continue to present challenges to maintaining the integrity of the FMMO system.

Fruit and Vegetable Marketing Orders

What It Is:

Fruit and vegetable marketing orders assist fresh fruit, vegetable, and nut farmers by allowing them to collectively work to solve marketing problems. Industries voluntarily enter into these programs and choose to have federal oversight of certain aspects of their operations. Marketing orders are binding on all individuals and businesses that are classified as "handlers" in a geographic area covered by the order. Marketing orders may (1) maintain the high quality of produce that is on the market; (2) standardize packages and containers; (3) regulate the flow of product to market; (4) establish reserve pools for storable commodities; and (5) authorize production research, marketing research and development, and advertising. Marketing orders are authorized for specific commodities under the *Agricultural Marketing Agreement Act of 1937* (AMAA).

Objective:

To stabilize market conditions and create more orderly marketing conditions by enabling the fresh fruit, vegetable, and nut industries to realize their full economic potential and respond to the ever-changing market conditions.

When Used:

Marketing orders are available only for commodities designated in AMAA. These include specific fruits, vegetables, and nuts. If there is general industry support for a program, a preliminary proposal is prepared by a steering committee of key industry participants. Growers and shippers are included in discussions of the proposal. A request for a hearing on the proposal, which includes the degree of industry support and the problems the program would address, is sent to the Administrator of USDA's Agricultural Marketing Service. A public hearing is held to receive the testimony of opponents, proponents, and others. A recommended decision is issued by USDA based on the hearing evidence. This is USDA's formal recommendation on the proposal. Persons are allowed to file exceptions to the decision for a set time period. After consideration of all exceptions to the recommended decision, USDA prepares a final decision. If at least two-thirds of the growers, voting by number or by volume, approve the proposal, the Secretary of Agriculture issues the marketing order. Over time, however, the Secretary has been less inclined to utilize orders as supply management tools. Emphasis has been placed on orderly marketing and price stabilization.

- Producers' influence in the market increases.
- Marketing issues and problems are addressed in an orderly and uniform manner.
- Prices are more stable throughout the marketing season.
- Commodities available for sale have a more uniform quality and packaging.
- Commodities are more readily available throughout the year.
- Producer returns increase.
- Incentives for increased production exist.

Grades and Standards

What It Is:

Grades are nationally uniform standards developed by USDA experts in cooperation with industry representatives. Grades and standards classify units of a commodity according to product characteristics, so the variation or range in quality is smaller within groups than it is over the whole range of the commodity. Grades are established under several different pieces of legislation, including the *Agricultural Marketing Act of 1946* and the *US Grain Standards Act*.

Objective:

To develop homogeneous quality groups to facilitate orderly marketing of a commodity.

When Used:

Grades and standards exist for virtually all agricultural commodities. Grading is paid for by user fees and is voluntary except for commodities that are regulated by a marketing order or marketing agreement, subject to import requirements, or purchased by USDA or certain other government agencies. Grades and standards are primarily designed to facilitate trading at producer, wholesale and international market levels, although grades such as those on beef have a definite consumer orientation. Sellers can request grading services to assure that products meet specific grade or contract requirements and have good keeping quality properties. Buyers can request grading services to assure that products meet their expectations as evaluated by a neutral third-party.

- Provides buyers and sellers with an impartial appraisal of product quality.
- Stimulates the production of uniform, high-quality, stable products.
- Assures the quality of products so consumers, processors, and retailers can buy with confidence.
- Increases the quantity of information available to buyers and sellers.
- Increases the accuracy of pricing within different quality classes of the commodity.
- Reduces the opportunity for abuse and misunderstanding between buyers and sellers.
- While grades are intended to be dynamic marketing tools and are modified when marketing conditions change, once they are established, producers, processors, and buyers and sellers adjust to them with the effect of making them difficult to change.
- May provide incentives for the quality marketed to be the lowest acceptable level for each grade.
- May reduce the opportunity for product differentiation and the incentive for product development.

Interstate Compacts

What It Is:

Interstate compacts are specifically authorized by the US Congress and are agreements between two or more states to regulate commerce or to solve some area of dispute.

Objective:

To coordinate and/or regulate commerce between states that otherwise could violate the Commerce Clause of the US Constitution if there was no compact, or to provide some agreement between states on rules or uses of joint resources such as rivers and ports.

When Used:

Perhaps the most well-known interstate compacts in the past have been those that allocate surface water supplies among states, such as the Colorado River Compact that divides up the water of the Colorado River between the states through which the river flows. Compacts also have been authorized to manage the transportation systems of major metropolitan areas, such as the Port Authority of New York and New Jersey.

The Northeast Interstate Dairy Compact was authorized in the 1996 farm bill. The Northeast Compact was a mechanism to raise farm incomes in the six New England states through higher pay prices to farmers for milk. The Northeast Compact imposed a minimum Class I price floor in the northeastern region that at times was higher than the Federal Milk Marketing Order (FMMO) Class I minimum price. Similar to FMMOs, the Northeast Compact pooled the revenues – the positive difference between the Northeast Compact Class I price and the FMMO Class I price times the amount of fluid milk sales by regulated handlers in the six New England states – and paid a weighted average (blend) price on all milk that was delivered by farmers to Northeast Compact regulated handlers. The Northeast Compact had the authority to regulate prices paid by processors located within the area and those who shipped milk into the area. This enabled the Northeast Compact to keep outside raw milk from undercutting the Compact price. Compact regulations were formulated by a Northeast Compact Commission that included representatives from each New England state. Congressional authorization for the Northeast Interstate Dairy Compact expired on September 30, 2001.

- At times, the Northeast Compact regulated minimum Class I price was higher than the FMMO price to handlers with fluid sales in the Compact area, as was the average price to farmers.
- Milk production was higher in the Compact area as a result of the Compact pay prices.
 Provisions were made to reimburse the CCC for any increased outlays due to the Compact. In addition, higher production brought about discussion of supply control measures.
- In the long run, higher prices could be capitalized into asset values.
- Higher raw milk prices could result in higher wholesale and retail prices, decrease the amount of fluid milk sold, and make more milk available for manufactured products.
- Some revenue stability occurred due to the higher minimum price floor.
- There were allegations of regional impacts as producers tried to sell to handlers with sales in the Compact area to gain some of the higher revenues.

Market News Price Reporting

What It Is:

Market news provides current, timely, and unbiased price and sales information. Reports include information on prices, volume, quality, condition, and other relevant information on farm products in specific markets and marketing areas. Reports cover both domestic and international markets. Data are disseminated within hours of collection via the web and email, news media (radio, newspaper, etc.), and telephone recorders.

Objective:

To improve the quality and quantity of information on market activity available to farmers and other industry interests, thereby assisting in orderly marketing and in making market conditions more competitive.

When Used:

Market news provides daily information on market activity in spot or cash markets for virtually all farm products, primarily through voluntary reporting with two notable exceptions. The Livestock Mandatory Reporting Act of 1999 mandated the reporting of information on the prices and quantities of cattle, swine, lambs, and products of such livestock for all purchase types, including contract and formula transactions. Mandatory reporting for some manufactured dairy products in terms of cold storage holdings and wholesale prices received are required to be reported to USDA's National Agricultural Statistics Service (NASS). The weekly wholesale prices for butter, cheese, nonfat dry milk and dry whey as published by NASS are used in setting the minimum class prices in Federal Milk Marketing Orders. For other commodities, limited information is provided for contract markets in situations where contract integration exists. The information published by market news is used by a variety of industry stakeholders to make marketing decisions or to analyze market conditions. USDA's Agricultural Marketing Service (AMS) Market News competes to some extent with private information sources, such as Urner-Barry and Yellow Sheet, which have been the subject of debate over comparative accuracy and timeliness. AMS Market News reports are considered prima fascia evidence in many courts, meaning that information must be proven to not be an accurate reflection of the market.

- Reliable, unbiased, and timely information makes markets more competitive.
- Provides equally accessible price information among all market participants.
- The greatest benefit accrues to small-and middle-size farm firms because they are less able to afford private sources of information.
- Market news acts as a public check on private sources of market information.
- Market news is more important with increasing vertical integration and formula pricing arrangements.

Organic Labeling

What It Is: A process verification, truth-in-labeling program which certifies that organic products

labeled as such have been grown and processed according to USDA's organic standards.

US organic policies focus on facilitating market development.

Objective: To provide assurance that the product labeled as organic has been raised and processed

in compliance with standards.

portion of the costs of certification.

When Used: The Organic Foods Production Act was passed in 1990 to set national standards for

organic products. All operations that produce or handle commodities to be sold or advertised as "organic," "100 percent organic," or "made with organic ingredients" must certify that production and/or handling practices meet national standards. The standards address the methods, practices, and substances used in producing and processing the products, not the properties of the product. The use of genetic engineering, sewage sludge, and ionizing radiation is prohibited. For a crop to be considered organic, the land from which it is harvested must have no prohibited substances applied to it for three years. Crop nutrients are managed through tillage, cover crops, and manure. For meat to be labeled organic, the animals for slaughter must be raised under organic management for the last third of gestation (prior to their birth). Poultry must be raised organically beginning the second day of life; dairy cows must be managed organically for at least 12 months before milk may be represented as organic. Organic livestock must be fed organic feed, but can be given vitamins and mineral supplements. Hormones and antibiotics may not be fed. Annual on-site inspections allow direct observation of production practices may be unannounced. A national list of allowed synthetics and prohibited substances must be complied with for all organic products labeled as such

Consequences:

Organic food sales have grown to \$16.9 billion in 2006, with sales growing around 20 percent per year. Organic milk and meat are becoming increasingly popular.

under the national standards. Federal assistance is available to help producers defray a

- Premium prices have been observed for organic produce reflecting their higher unit costs of production.
- Fresh fruits and vegetables, the largest selling category of organic food, represent about 80 percent of sales.
- There are costs to maintain records in order to remain certified.
- The evidence of increased profit for producers is mixed. While costs and applications
 of commercial fertilizer and other chemicals are reduced, labor is typically greater and
 evidence on yields is mixed, which may result in higher unit costs.
- As technological change continues and the gap between organic and commercial products widens, there will continue to be conflict over how "organic" products are defined.

Marketing & Demand Expansion

Packers and Stockyards Regulations

What It Is:

The Packers and Stockyards program (P&S) of USDA's Grain Inspection, Packers and Stockyards Administration (GIPSA) implements the provisions of the *Packers and Stockyards Act*, which is designed to protect the integrity of the livestock, meat, and poultry markets. The major P&S enforcement areas are payment protection, unfair, deceptive, and fraudulent practices; and competition.

Objective:

To protect members of the livestock, meat, and poultry industries from unfair, deceptive, unjustly discriminatory and monopolistic practices, assure fair competition and fair trade practices, and to safeguard and protect farmers and ranchers and consumers.

When Used:

Those engaged in the business of marketing livestock, meat, and poultry in commerce are subject to the *Packers and Stockyards Act*. Regulated entities include stockyard owners, market agencies, dealers, packers, swine contractors, and live poultry dealers. Farmers and ranchers are not subject to the Act when buying livestock for their own stocking or feeding purposes or when marketing their own livestock. Major investigations are conducted involving fraud, unfair competition, and deceptive practices. Accurate scales and weighing of livestock, meat, and poultry are ensured. Payment protection is provided for livestock and poultry through bonding, trust, and surveillance of custodial accounts. Stockyard services, handling practices, and facilities are reviewed. The performance of markets is monitored.

- Rapid structural change in the livestock and poultry industry has resulted in increased demands for evaluations of the impacts on competition and the existence of monopolistic practices.
- Farmers, ranchers, and consumers are protected against unfair and fraudulent practices.
- Increased assurance is provided that farmers and ranchers are paid.
- Markets are made more competitive by constant monitoring and study.

Marketing & Demand Expansion

Perishable Agricultural Commodities Act (PACA)

What It Is:

The *Perishable Agricultural Commodities Act* (PACA) facilitates fair trading practices in marketing fresh and frozen fruits and vegetables in interstate and foreign commerce. The law protects produce firms, many of which are small businesses, against financial losses stemming from other traders who engage in unfair business practices.

Objective:

To help ensure that dealers of fresh and frozen fruits and vegetables get what they pay for and get paid for what they sell, including when their customers go out of business, declare bankruptcy, or simply refuse to pay for the fruits and vegetables received.

When Used:

Buyers and sellers of fruits and vegetables have access to a formal neutral third-party settlement process for resolving commercial disputes. This is particularly important for perishable products where sales are frequently across geographical areas, substantial transportation is involved, refrigeration is generally required, prompt payments are important, and bankruptcies may be encountered that adversely affect many producers. Most frequently, disputes arise over product quality and payments. When a PACA-licensed firm fails to pay an award, USDA automatically suspends its license, and the firm is prohibited from operating in the produce industry until the award is paid. While the firm's license is suspended, the firm's officers are also restricted and cannot be employed or affiliated with any other PACA licensee without the consent of the Secretary of Agriculture. USDA monitors the activities of these firms and individuals and may pursue further civil court actions if they operate in violation of the PACA restrictions. Transportation issues are not covered by PACA.

- Both buyers and sellers are protected by an expert neutral USDA dispute resolution process.
- USDA maintains a buyer and seller assessable history of complaints regarding licensees as an aid to informed business decisions.
- Consumers benefit, in terms of better product quality, from a fairly competitive market.
- Dispute resolution costs are reduced.

Marketing & Demand Expansion

Process Verification

What It Is: The USDA's Process Verified Program (PVP) provides suppliers of agricultural products or

services the opportunity to assure customers of their ability to provide consistent quality products or services. It is limited to programs or portions of programs where specified process verified points are supported by a documented quality management system. The

specified process verified points are identified by the supplier.

Objective: To facilitate trade and marketing by developing a standard that can be relied on for a

specific production process which was actually followed.

When Used: USDA PVPs are used when companies want unbiased, third-party verification of a specific

marketing claim or service. Suppliers with approved USDA PVPs are able to make marketing claims associated with their process verified points – such as age, source, feeding practices, or other production and processing claims – and market their program as "USDA Process Verified." The USDA PVP does not relieve the supplier of meeting regulatory requirements mandated by other federal agencies. User fees are assessed for

verification or certification.

PVPs use the International Organization for Standardization's ISO 9000 series standards for documented quality management systems as a format for evaluating program documentation to ensure consistent auditing practices and promote international recognition of audit results. ISO 9000 fulfills customer quality and regulatory requirements, customer satisfaction, and management improvement. The management system is the organization structure for managing the business processes to meet ISO requirements.

- Buyers are provided information on the process used to produce the product.
- Producers/processors pay a fee to verify the process and so can determine the associated benefits and costs.
- The process is a consistent standard across all businesses who comply.
- Process verification can reduce technical barriers to trade.

Introduction

Credit programs, like domestic farm programs, get the most attention when there is an income crisis in agriculture. These policy options provide a logical base for establishing a historical timeline for credit policy changes:

- The Great Depression brought a plethora of USDA direct lending programs and the enabling legislation that resulted in the formation of the *Farm Credit Act of 1933*.
- USDA's Farm Service Agency (FSA) was initially a direct lender and over time shifted to a lender of last resort. At the same time, FSA placed increased emphasis on lending for rural housing and improving infrastructure in rural communities. Now it primarily serves as a loan guarantee agency.
- With the farm financial crisis of the early 1980s, institutions were developed to prop up the US farm credit system through assistance in writing off loans, replenishing capital of agricultural lenders, and providing improved access to money markets.
- Following this crisis, land values recovered rapidly as a result of unprecedented expenditures on domestic direct payment and insurance programs. The fact that agriculture was accounting for a reduced share of economic activity, combined with an unprecedented consolidation of the banking system, and expansion of agribusiness lending (by firms such as John Deere) led to greater public policy attention being focused on government's role in facilitating private sector lending to agriculture. If program benefits were significantly reduced there could be a pervasive impact on all farmers, particularly those located in the Great Plains and South, where over half of net farm income is typically derived from government supports. Because any revenue subsidy or risk mitigation benefit of government farm programs is eventually capitalized into land or quota values, both landowners and lenders would also be significantly impacted by any resulting negative effect on personal wealth and collateral values. A revisiting of lending programs would undoubtedly result.

Aggie Bonds

What It Is: State-based beginning farmer and/or agricultural development bonding program that can

issue bonds to private investors.

Objective: To help beginning farmers or rural businesses get started by offering lower interest rates

and/or more favorable terms than would otherwise be available from private lenders.

When Used: Through the Aggie Bond program, the state coordinates the creation of a bond program that allows private lenders to earn federal-tax-exempt interest on loans to eligible

borrowers. The tax-savings and the maturities of the bonds allow lenders to provide loans at a reduced interest rate and a term better matched to the repayment ability of a start-up farm or business operation. Neither the state financing agency nor the federal government may assume any liability for the loan. Credit risk lies entirely with the private

lender.

programs or capabilities.

Agricultural loan programs based on the use of tax-exempt bonds began in 1980 with the passage of legislation to create pilot Aggie Bond programs in Alabama, Georgia, and lowa. The legislation was expanded on August 20, 1998, to allow state loan programs to finance beginning farmer purchases of agricultural property from their grandparents, parents, and/or siblings. At their peak in 1984, 24 states had tax-exempt bond loan

- Subsidized interest rates and more favorable loan terms can help people get started in farming or start up new businesses to help generate increased economic activity in rural areas.
- Although the program can help overcome entrance barriers and reduce start-up costs, program loan limits may result in the size of units created being smaller than what will be required to be economically viable as a full-time business.
- Because the private lender assumes the full credit risk, there is less encouragement to make loans with higher business risks than may occur with incentive programs, which also include loan guarantees.

Beginning Farmer Programs

What It Is: Direct government loans and/or government agency guarantees of loans made by private

lenders to beginning farmers.

Objective: To help beginning farmers with limited resources get started in business by offering more favorable terms and loan amounts than would be available from private lenders, in the

case of direct loans, or by encouraging private lenders to make loans they would not

make without a loan guarantee.

When Used: Beginning farmer loan programs are offered by USDA's Farm Service Agency (FSA) and

by several states. Interest rates and equity requirements on direct loans are usually lower than would be required by private lenders. Repayment periods are also often longer than normal market terms to reduce debt servicing requirements. Government guarantees of loans made by private lenders have generally also involved interest subsidies. Direct loan and guaranteed loan program eligibility requirements have usually been subject to farm

size and experience limits.

Such programs are politically popular because they are aimed at helping people with limited resources get started in business. They also address the entrance barrier created by increasing capital requirements, as well as the concern that the average age of the farm population continues to grow older.

- Subsidized interest rates and more liberal credit terms can encourage new entrants into agriculture sectors that already suffer from over-supply and low returns to resources.
- Although beginning farmer programs can help overcome entrance barriers, the size
 of farm units created may be smaller than what will be required to be economically
 viable.
- In some cases, eligibility requirements have discriminated against young farmers with successful track records in favor of new entrants without demonstrated management ability.

Borrower Training Requirements

What It Is: USDA's Farm Service Agency (FSA) direct farm loan program borrowers are required

to participate in approved farm and financial management training until they reach a

specified level of demonstrated knowledge of the subject matter.

Objective: To improve borrowers' management skills and business performance and to reduce

related credit problems.

When Used: FSA was directed to start a borrower education program in the 1990 farm bill. The

programs are offered by existing organizations such as the agricultural extension service or community colleges with borrowers being loaned the funds for tuition. Programs are required to cover specified subject matter and be approved by FSA. Participation could be waived if the borrower was certified by FSA to have demonstrated some minimum

level of competence and knowledge regarding the required subject matter.

Until 1996, the training requirement also applied to guaranteed loans unless waived by the lender. Since 1996, the requirement no longer applies to guaranteed loans.

- The program could remove the excuse that borrowers do not know how to keep good records, complete financial statements, or develop business plans.
- By combining classroom education with actual experience, the transfer of knowledge could be much greater than with traditional education programs.
- The quality of borrower loan information provided as the basis for credit monitoring and decisions should be significantly improved, thus leading to better borrower counseling and credit decisions. This should help reduce FSA's loan-loss experience.
- The improvement of borrower management skills should improve business performance and FSA's graduation rate.
- This program should complement beginning farmer programs.

Chapter 12 Bankruptcy

What It Is: A business reorganization chapter of the federal bankruptcy code designed exclusively

for family farmers.

Objective: To provide a streamlined procedure for farm business reorganization that would allow

financially distressed family farms to remain in business if they can present a plan that would demonstrate how they could service their debts if the debts were written down to the value of the underlying collateral and if creditors were stayed from pursuing legal

action to collect their loans.

When Used: The Family Farm Bankruptcy Act went into effect on November 27, 1986, and was set

to expire on October 1, 1993, but has been repeatedly extended. On August 6, 1993, just under 2 months before its sunset date, Chapter 12 was renewed to October 1, 1998. From that point forward there have been many additional extensions of Chapter 12. It expired once again on January 1, 2004. Effective October 17, 2005, Chapter 12 was made a permanent part of the bankruptcy code with the passage of the *Bankruptcy*

Abuse Prevention and Consumer Protection Act of 2005.

Chapter 12 is available only to family-held agricultural operations, including family-held corporations, with the stipulation that at least 50 percent of the operation must be family held and stock or securities cannot be publicly traded. Protection under the Act is available to agricultural operations with up to \$1.5 million in secured debt, provided the families who hold controlling interest in the operation receive at least 50 percent of their gross income from the operation and at least 80 percent of the family secured debt is involved in the operation, exclusive of debt related to family residences. A debtor seeking Chapter 12 protection has 90 days from filing to submit a reorganization plan to the bankruptcy court, and the judge is required to act on the plan within 45 days after receiving it. The judge may approve a reorganization plan, even if some creditors do not agree to it, provided the plan appears to be in the best interest of all concerned. If the plan is approved, the debtor will be under court supervision for three to five years. The debtor remains in charge of the agricultural operation, and a court-appointed trustee ensures that payments are made according to the plan and that no fraud or mismanagement occurs.

Chapter 12 has resulted in a significant amount of farm debt being discharged and has allowed many farmers to remain in business who would have otherwise been forced to liquidate as a result of lender collection action. It has also served as a bargaining lever for farm debtors by encouraging lenders to agree to debt restructuring rather than face the additional costs that would result from bankruptcy.

(continued on the next page)

Chapter 12 Bankruptcy (continued)

- Loan write-downs on secured debt and the discharge of unsecured debts may make it possible for borrowers to service their remaining debt obligations.
- Reorganization bankruptcy can support asset values by reducing the amount of assets on the market.
- Chapter 12 can result in lenders being more willing to negotiate debt restructuring alternatives.
- Chapter 12 can result in reduced credit being available to farmers who represent higher credit risks as lenders seek to avoid situations where they would be legally prohibited from collecting loans or be forced to write down loans if collateral values deteriorate.
- Property sold during the plan may generate an income tax obligation that could make restructuring plans unworkable for debtors.
- Secured creditors whose loans are written down to the value of their underlying collateral are precluded from benefiting from any improvement in collateral values that occurs after the plan is approved.

Debt Writedown

What It Is: A debt writedown is a forgiveness of part of a borrower's debt.

Objective: To reduce loan levels in line with lower asset values and to reduce farmers' debt servicing

requirements.

When Used:

Used when economic conditions are such that a reduction in total debt is the only way a farm can remain solvent and the farm's liquidation would have a politically unacceptable impact on asset markets. Since September 1984, USDA's Farm Service Agency (FSA) has been allowed to issue guarantees of up to 90 percent of loans classified as substandard by a private sector lender's supervising agency. To be eligible for the program, the lender is required to writedown at least 10 percent of the loan principal or a present value equivalent interest rate writedown. The borrower also has to be able to project the ability to cash flow the restructured loan.

In a case in which the potential losses are reduced, private lenders have been willing, in some instances, to writedown part of the outstanding principal and restructure a borrower's payments in exchange for a FSA guarantee on the remaining debt. Because the principal must be reduced to the point that the loan will cash flow and the guarantee can be for no more than 90 percent of the reduced principal, the program has not been widely used.

- Principal writedowns may make it possible for borrowers to service their remaining debt obligations.
- Principal writedowns can support asset values by reducing the number of farm liquidations.
- Although a government guarantee on the remaining debt can protect against further losses, private lenders still suffer an equity loss equal to the writedown.
- Principal writedowns can result in large public costs if economic conditions fail to recover and the government must pay private lenders for losses on guaranteed loans.
- Principal writedowns can create a great deal of ill will on the part of producers who are paying their debts under their original loan terms.

Direct Government Loans

What It Is:

Direct government loans involve a government agency lending money to specified categories of borrowers for specific purposes. Frequently, such loans are subsidized and made at an interest rate that is less than either the cost to the government or the market rate of interest for comparable loans from private lenders.

Objective:

To provide loan funds for purposes deemed to be in the public interest to borrowers who cannot obtain financing either in adequate amounts or at reasonable terms from private lenders.

When Used:

USDA's Farm Service Agency (FSA) has been the federal government's agricultural lending agency. Several states have also initiated agricultural loan programs. FSA makes both farm operating and farm ownership loans. Interest rates on these loans are tied to the government's cost of borrowing and are thus lower than comparable conventional loans. A special limited resource loan program exists for farmers whose financial condition is such that they cannot afford to pay the normal interest rate. These loans are made primarily to farmers and ranchers who cannot qualify for adequate financing from other lenders and are not intended to supplant or compete with credit available from conventional lending sources. They are intended to bear the financial and market risk that conventional lenders are unwilling or unable to bear.

In the early 1980s, the government's share of total producer loans increased to the point that there was concern regarding government credit becoming the major source of agricultural credit. Concerns still exist concerning the effect of political influence on loans made by government agencies. Yet, the US Congress favors the government credit option because the loan is an asset as opposed to a direct government outlay. Foreclosure on government loans has been difficult and subject to strong political resistance.

- Subsidized interest rates and more liberal credit terms can encourage new entrants and provide continued financing for segments of agriculture that suffer from oversupply and low returns to resources.
- Direct loan programs can be used to guide resources into or out of agriculture.
- Direct loan programs can be used to manage the rate at which asset markets adjust to changing economic conditions.
- Direct loans can be used to encourage the adoption of new technologies and new enterprises.
- Direct loans can be used to encourage adoption of alternative farming systems.
- Interest subsidies and the cost of administering direct loan programs can be very costly to taxpayers.

Economic Emergency Loan Program

What It Is: Economic emergency loans are government loans intended for farmers who are suffering

economic hardships due to national or regional economic stress, or from general

tightening of credit, high costs of production, or low farm product prices.

Objective: To make credit available to farmers suffering financial hardship as a result of the negative

impact of economic forces beyond their control.

When Used: The program was created in 1978 and administered by USDA's Farm Service Agency (FSA) primarily to refinance debts and provide operating expenses to continue farming.

Loans were made regardless of whether financing could be obtained elsewhere.

The program made billions of dollars of subsidized credit available at a time when real interest rates were low to negative. In many respects, it exacerbated the problem by deferring normal market adjustments, holding excess resources in agriculture, and artificially supporting asset values. When farm income began to turn down in the mid-1970s, farmers who were only marginally successful (even in good times) and farmers who had inadequate repayment capacity found credit markets tightening up. At the same time, the land market was relatively tight, and there were successful operators who would have purchased assets if the market had been allowed to force unsuccessful operators out of farming. Instead, the economic emergency loan program was created on the basis that the problem was short run. The result was that asset values were artificially supported and the eventual market collapse was more severe and disruptive than it would have been otherwise. Loans have not been made under this program since 1984.

- While credit is a liquidity management tool that can be used to bridge short-term cash flow deficiencies and to structure capital debt in line with the repayment ability of the assets financed, it will not correct long-term profitability or liquidity problems.
- Interest rates serve to ration available credit. Subsidized interest rates and loans based on other than repayment ability tend to distort the allocation process.
- The program made subsidized loans available to borrowers who were much larger than the FSA's traditional family-size farm requirements.
- The definition of economic emergency was so broad that the program led to many widely documented abuses.
- Subsidizing interest rates and holding excess resources in agriculture can result in asset values being bid up to higher levels than would occur under normal market conditions.
- Additional credit cannot correct an income problem.

Emergency Disaster Loan Program

What It Is: The emergency disaster loan program is a government loan program that makes credit

available to farmers in areas devastated by natural disasters.

Objective: To help farmers recover from the effects of natural disasters.

When Used: USDA's Farm Service Agency (FSA) makes disaster loans in locations designated as

disaster areas by the President or by the Secretary of Agriculture. These loans can be made to compensate for (1) actual physical losses directly related to the disaster, (2) annual production expenses and other needs arising from natural disasters if the borrower has, when available, at least catastrophic crop insurance coverage (CAT), and

(3) major adjustments in the farming operation necessitated by a disaster.

Emergency disaster loans have been used to help farmers recover from losses experienced as the result of natural disasters. Interest rates on disaster loans are based on the government's cost of borrowing for those able to qualify for credit elsewhere and subsidized to farmers who are unable to obtain credit elsewhere.

- Credit assistance is provided at times when it is needed most.
- Subsidized interest rates pass part of the recovery cost on to the taxpayers.
- Crop production is encouraged in high production risk areas.

Farm Credit System Capital Corporation

What It Is:

The Farm Credit Corporation was a separate entity of the Farm Credit System rechartered to: (1) direct the pooling and allocation of System risk capital, (2) purchase, restructure and/or dispose of distressed System assets, and (3) manage the use and repayment of any eventual federal assistance.

Objective:

The Capital Corporation was intended to serve as the mechanism for allocating risk funds and federal assistance as needed to maintain the System's integrity.

When Used:

The Capital Corporation was chartered originally to facilitate movement of the System's capital assistance to, and management of, distressed assets in the Spokane and Omaha Farm Credit Districts. With the passage of the 1985 Farm Credit Amendment Act, its role was expanded to ensure that the System's own capital would be fully utilized before any federal assistance would be provided.

In its implementation, the Capital Corporation experienced considerable delays and resistance in establishing guidelines for withdrawing capital from contributing districts and in developing uniform credit standards and control procedures. The *Agricultural Credit Act of 1987* replaced the Capital Corporation with the Farm Credit System Assistance Corporation. The precedent for assistance to the System was established at its inception when government funds were used to capitalize the System.

- The Capital Corporation and the 1985 Farm Credit Amendment Act helped reduce System borrowers and investors' fears that their investments would be lost.
- The initial effect on investors was to lower the risk premium the System was paying for its funds.
- The Capital Corporation created a source of liquidity for institutions with large portfolios of nonperforming loans.
- If the distressed assets were conservatively valued and purchased at a discount, the Capital Corporation would have increased flexibility in restructuring distressed credit.
- Increased liquidity, lower cost of funds, and capital assistance can contribute to the stabilization of farm asset values by reducing pressure on System institutions to acquire and liquidate collateral.
- The increased centralization of regulatory authority tends to reduce local autonomy and control over the System.
- One of the key issues is the cost of any government assistance. If the funds are free
 or subsidized, the System can benefit tremendously in terms of rebuilding capital, but
 the cost is passed on to the public.
- Centralization of administering distressed assets can increase the visibility and political sensitivity to such a level that the System is unable to manage these assets in a businesslike manner. This would reduce many of the benefits afforded by the Capital Corporation concept.

Farm Credit System Insurance Corporation

What It Is:

The Farm Credit System Insurance Corporation is a separate entity of the Farm Credit System and was chartered to develop and administer a pool of risk capital to ensure the timely payment of principal and interest on notes, bonds, debentures, and other obligations of participating Farm Credit System institutions.

Objective:

To ensure the financial integrity of financial instruments issued by the Farm Credit System Funding Corporation and to guard against the need for future federal financial assistance.

When Used:

The Farm Credit System Insurance Corporation was mandated by the *Agricultural Credit Act of 1987* in conjunction with a financial assistance package establishing federal aid to prevent the System from collapsing.

The Insurance Corporation was established on January 6, 1988, and was initially capitalized by the Farm Credit Administration revolving fund. Beginning in 1989 each System bank was insured and subject to the law governing the Insurance Corporation and its powers. The initial premium payments began in 1990 with payments based on the accruing and nonaccruing loan volume of each bank for the previous year.

- The insurance fund helps ensure the safety of the investors in Farm Credit System financial instruments and helps maintain the System's low cost of funding.
- Because the fund is self-funded by the premiums assessed on the System's institutions, it can help avoid the need for public assistance in the event of future financial problems.
- As a policy tool, the level of premiums and size of the fund deemed necessary by the Insurance Corporation to ensure actuarial soundness can influence the credit policies and lending philosophy of the System's lending institutions.

Foreclosure Moratorium

What It Is: Foreclosure moratoria forces lenders to stop foreclosures on agriculture-related loans.

Objective: To temporarily relieve the financial obligations of financially pressed borrowers with

excessive debt.

When Used: Moratoria were applied under the *Frazier-Lemke Act* in the 1930s to delay bankruptcy proceedings. The moratorium was applied to real estate mortgage loans. In recent years, various states have also instituted temporary moratoria on farm foreclosures. USDA's Farm Service Agency (FSA) was prohibited from foreclosing on borrowers from May

1983 through November 1985 as a result of the Coleman v Block lawsuit.

During the *Frazier-Lemke Farm Bankruptcy Act* moratorium in the 1930s, a farm was appraised and the courts granted a stay of proceedings for three years, during which time the farmer retained possession of the property and paid rent for its use. Within three years, the farmer could pay the appraised value and redeem the property. If the property was not redeemed, it would be sold to satisfy the debt against it and the farmer would not be held liable for loan amounts greater than the appraised value of the property or its sale price. The various moratoria imposed on or by the FSA have simply been stays of foreclosure. The farmer was given time to restructure debt and service the loan obligations.

- Conditional or limited moratoria can be used to encourage reluctant lenders to use public sector assistance programs or accept forbearance and other restructuring approaches.
- A moratorium can be successful only if the financial conditions of the firm and/or the industry improve during the period so the borrower can pay the debts or if the asset markets can absorb the assets at more favorable prices.
- A moratorium can help temporarily stabilize asset values because fewer assets are forced on the market.
- Security interest in farm collateral is materially reduced.
- A moratorium tends to make credit less available and raise interest rates for those borrowers not subject to foreclosures to compensate lenders for the higher credit risks.
- Costs to lenders resulting from the nonpayment of interest, collateral depreciation, and additional borrower operating losses during a moratorium can be substantial.
- A moratorium serves to hold resources in agriculture.

Guaranteed Loans

What It Is: Guaranteed loans involve a government agency agreeing to protect a private lender

against some or all potential losses resulting from borrower default.

Objective: To encourage private lenders to make and service loans they would not make without a

loan guarantee.

When Used: Guaranteed loans are used to encourage private lenders to make, service, or restructure

loans to borrowers who exceed the lender's risk requirements. They also have been used to encourage lenders to make loans to start-up businesses and minorities. USDA's Farm Service Agency (FSA) and Rural Development can guarantee both short-term and long-term loans made by private lenders. The loans are funded and serviced by the private lender subject to FSA or Rural Development approval. Guarantees can generally be extended for up to 90 percent of the loan amount. Loan guarantees have political appeal because they are low cost in the short-run and because the funds flow through the

private sector.

Guarantees have been moderately effective in encouraging lenders to make new loans. Many lenders feel the return from this type of loan is not worth the time and red tape involved in meeting the terms of the guarantee provisions. There is also some concern about how the terms of the guarantee would be interpreted in the event of borrower default. The greatest use of loan guarantees has been to restructure existing loans to avoid or reduce potential losses. Lenders also have used loan guarantees when financing ventures or enterprises with which they have limited experience or when the size of the loan involved puts a significant portion of the institution's capital at risk. Some lenders use loan guarantees as a means of servicing borrowers who would otherwise exceed the institution's legal lending limit. Others use guaranteed loans to increase profits by discounting the guaranteed portion into secondary markets.

(continued on the next page)

Guaranteed Loans (continued)

- Loan guarantees can help financially strapped farmers who could recover with continued financing and restructured loan terms.
- They can encourage private lenders to finance new enterprises and technologies.
- Properly structured, a loan guarantee program may provide the time necessary to implement a more permanent solution, thus protecting farm asset markets from collapse.
- Loan guarantee programs can result in new entrants and continued financing for those segments that suffer from low returns to resources.
- They can positively influence job creation and retention by encouraging financing of business start-ups and expansion of existing businesses that would otherwise be perceived as too high risk for private lenders.
- They can make it possible for rural communities to finance infrastructure improvement and maintenance to enhance opportunities for economic growth and/or to stem economic decline.
- Rural communities may realize marginal benefits since losses that would otherwise be borne by firms in the local community would be borne by taxpayers.
- Loan guarantee programs essentially become lender bail outs when improperly structured or when no feasible long-term solution exists.
- If the guaranteed loans are not financially sound, the program can result in large, longer-run public outlays.

Interest Assistance for Guaranteed Loans

What It Is: Interest assistance involves an interest rate reduction on new or existing loans with the

government paying a portion of the cost.

Objective: To improve a producer's financial position by reducing interest cost.

When Used: Interest assistance provided for in the 1985 farm bill allowed USDA's Farm Service Agency

(FSA) to pay 50 percent of the total cost of reducing the interest rate to the qualified borrower, up to a maximum of four percentage points. The 1990 farm bill maintained the 4 percent rate reduction, but permitted FSA to pay the total cost. Interest assistance is available only if there is no alternative way to project a positive cash flow. The duration of the interest assistance may not exceed ten years. A number of states also have implemented interest programs to assist financially distressed farmers and ranchers.

Interest assistance can be used to restructure new or existing guaranteed debt held by private lenders when there is a reasonable chance the borrower can recover.

- Rural communities benefit directly if the interest assistance reduces borrowers' cash flow burdens and/or the number of farm liquidations.
- Because interest assistance is temporary, it benefits financially stressed borrowers only in the short run.
- Interest assistance can create a great deal of ill will on the part of producers who are paying their debts and bearing the full cost of debt servicing.
- Interest assistance can result in large public outlays.

Loan Mediation

What It Is:

Loan mediation is a process that brings borrowers and creditors together with a neutral third-party mediator to resolve loan problems before they reach the point that the only options are foreclosure or legal action.

Objective:

To resolve borrower/creditor disputes more quickly and with less cost than litigation. Because the mediation process is not adversarial, it is better suited to resolving disputes without destroying the relationship between the disputants.

When Used:

The *Agricultural Credit Act of 1987* provided funding to develop statewide mediation programs, subject to state approval, with the USDA and Farm Service Agency (FSA)/ USDA monitoring the programs. Several states already had established programs prior to the passage of the *Agricultural Credit Act*. Participation in non-binding mediation may be voluntary or mandatory depending upon individual state legislation. Eligibility for federal funding has been on a matching basis and requires that the programs be certified by FSA.

Because the mediation process, unlike arbitration, is non-binding on participants, the programs have been generally well accepted by both lenders and borrowers. An analysis by FSA indicated that mediation programs have saved the government from two to three times the amount spent to fund the programs.

- Rural communities can benefit if mediation results in a successful resolution that allows the farmer to continue in a successful business. Benefits accrue from reducing outmigration and avoiding increased demands for public welfare services.
- Voluntary resolutions to borrower/creditor disputes can be less costly and less time consuming than litigation.
- The resolution of disputes through mediation can help maintain a working relationship between the parties involved.
- Because the mediation process is non-binding and creditors maintain the right to pursue litigation if the dispute is not resolved to their satisfaction, mediation offers the opportunity to achieve a "least-loss" solution.
- Although participants may pay a nominal fee for mediation services, most program costs are born by the public.
- When a relatively large number of creditors are involved, it may not be possible to reach an effective solution without the agreement of all parties. Thus, the refusal of one party to participate in the mediation process can result in situations in which no agreement can be reached that provides the participating parties with a "win-win" solution.
- If lenders believe the mediation process is not impartial and that the mediator is acting as a borrower advocate, it can destroy the effectiveness of the program.

Mandatory Debt Restructuring

What It Is: Prior to foreclosing on a distressed loan, some lenders are required to evaluate possible

restructuring alternatives and to restructure those loans whenever restructuring would be

a less costly alternative than foreclosure.

Objective: To minimize the amount of loan losses and the number of displaced farmers from

foreclosure.

When Used: The Agricultural Credit Act of 1987 requires USDA's Farm Service Agency (FSA) and all

Farm Credit Associations and other financing institutions that discount with the Farm Credit Banks to restructure distressed loans if restructuring would be less costly than

foreclosure.

The debt restructuring requirement resulted in significant loan write-offs by FSA and the Cooperative Farm Credit System. However, these write-off losses also would have occurred in the event of a foreclosure, and the legal costs and borrower displacement that would have resulted from foreclosure were reduced.

- Restructuring can reduce borrower displacement.
- Restructuring can result in fewer distressed assets being forced on the market, thereby reducing the downward pressure on all farm asset values.
- Restructuring can reduce the legal costs and number of bankruptcies that would otherwise occur.
- The loan write-offs represent losses that lenders would incur if they foreclosed.
- Rural communities can benefit from a reduction in the number of farm liquidations and in the number of displaced farmers.
- Debt restructuring can create ill will on the part of producers in like circumstances who are financed by lenders not subject to the restructuring requirements.
- If borrowers with restructured debt continue to lose money, leaving them in control of the assets can increase the amount of lenders' future losses.
- There is nothing about restructuring that results in borrowers doing a better job of managing the business.
- Mandatory restructuring requirements may result in reduced credit being available to higher risk borrowers who are most likely to develop problems that would jeopardize the lender's security position.

Principal and Interest Deferrals

What It Is:

Principal deferrals – borrowers are not required to make principal payments on part or all of the debt for a designated time period but are required to pay interest.

Interest deferrals – borrowers are not required to make interest payments on part or all of the debt for a designated time period but interest would accrue and be added to the debt.

Objective:

To allow a borrower with cash flow problems time to restructure debt or recover from adverse economic pressure.

When Used:

Used when adverse economic conditions are expected to be temporary or time is needed to restructure the operation to alleviate cash flow problems. Most private lenders do not defer interest but roll it into the principal of the loan. This policy results from legal limitations on the collection of interest that is past due for longer than a specific period. USDA's Farm Service Agency (FSA) uses a combination of a principal deferral and interest waiver in its debt adjustment program. If it is necessary for the operation to meet cash flow requirements, a qualified FSA borrower may defer a portion of the principal for up to five years. Interest does accrue on the deferred portion.

Principal deferrals have tended to be used by private lenders in conjunction with disaster clauses tied to low production levels or commodity prices. They have provided a temporary solution to temporary financial problems. When problems are of a long-term nature, deferrals may simply be delaying the inevitable.

- Deferrals can temporarily reduce cash flow requirements of debt servicing.
- Deferrals may aid in keeping assets (land and machinery) off the market.
- If the financial stress is due to long-term economic pressures, deferrals of interest payments make matters worse and further weaken the borrower's financial position.
- At the end of the deferral period, either the debt will have to be reamortized over a longer period or it will be necessary to increase payments because of the larger outstanding balance.
- If financial stress persists and asset markets continue to soften, lenders will experience even greater losses and loan risks.
- High (low) interest rates can make the carrying cost of a principal deferral program very (moderately) expensive.
- If recovery does not occur, public cost could be high due to losses on direct government loans
- Principal and interest deferrals can create a great deal of ill will on the part of producers who are paying their debts under their original loan terms.

Principal and Interest Waivers

What It Is: Principal and interest waivers are a forgiveness of some portion of a borrower's debt

obligation.

Objective: To minimize losses and/or stabilize asset markets.

When Used: Private lenders have written down principal and accrued interest to minimize losses when

they feel the borrower can adequately service the remaining debt.

Principal and interest waivers have been used as a means of minimizing long-run losses when adverse economic pressures reduce borrowers' ability to service debt and widespread foreclosures would disrupt asset markets. The borrower must have a reasonable chance of financial solvency with debt waivers. There has been a hesitancy to utilize this option in anticipation that financial conditions might improve. Some lenders have attempted to provide for the possibility of recovering all or part of the principal waived by requiring the borrower to reaffirm the debt forgiven if their economic condition or collateral values recover sufficiently during some specified period of time following the writedown. For most lenders, waivers have only been used as a last resort option.

- Waivers may make it possible for borrowers to service their remaining debt obligations.
- Principal and interest waivers represent direct subsidies to the borrowers who receive them.
- Interest waivers are a more politically acceptable way to forgive debt than principal waivers, although the actual cost is the same.
- Waivers by public lenders result in substantial costs to taxpayers.
- Principal and interest waivers can create a great deal of ill will on the part of farmers who are paying their debts under their original loan terms.

Secondary Markets for Agricultural Loans

What It Is:

Secondary markets involve the originating lender selling loans or claims on agricultural loans to investors. In its most limited sense, the process involves a direct transaction between the original lender and an investor. A potential exists for greater liquidity when brokers act as middlemen to facilitate the sale of loans or loan participations to investors. An extension would be to establish an agricultural credit corporation to pool loans and sell negotiable pooled participations (or mortgage bonds) to investors.

Objective:

To add liquidity, spread lending risks, and broaden the market for agricultural loans.

When Used:

Existing secondary markets for agricultural loans include the sale of farm mortgage loans by originating lenders to life insurance companies. There is a highly developed secondary market for USDA's Farm Service Agency (FSA) guaranteed loans through brokers. Commercial banks have long used the sale of loan participations to correspondent banks as a means of funding agricultural loans. The Farm Credit Banks can also discount shortand intermediate-term agricultural loans from commercial banks and agricultural credit corporations. These are funded by the sale of consolidated Farm Credit System bonds and notes. Major banks have also used bankers' acceptances as a means of marketing agricultural loans in established secondary markets.

The Farm Credit Banks, correspondent banking relationships, and secondary markets for bankers acceptances and government guaranteed loans provide several alternatives for marketing short- and intermediate-term agricultural loans. Most farm mortgages sold by originating lenders to insurance companies are on a prearranged basis. The Federal Agricultural Mortgage Corporation was authorized by the *Agricultural Credit Act of 1987*. "Farmer Mac" provides a secondary market for farm real estate mortgages, rural housing loans, and the guaranteed portion of FSA loans. The program involves the creation of a government-backed agricultural credit corporation to pool farm mortgages and sell pooled participations or mortgage bonds in a manner similar to the Federal National Mortgage Corporation which buys residential mortgages.

- Secondary markets expand agriculture's access to capital markets.
- Secondary markets add liquidity to the farm real estate mortgage market.
- The sale of loans into the secondary market and the purchase of participations in loan pools allow agricultural lenders to diversify their portfolios.
- Secondary markets may enable lenders to service borrowers who would otherwise exceed their legal lending limit.
- The ability to offer fixed rate loans may help reduce the restrictions on credit availability during periods of high loan demand.
- The underwriting standards for secondary markets can help in upgrading and standardizing financial reporting requirements for farm borrowers.
- Extended periods in which loanable funds exceed effective loan demand may create problems in maintaining the viability of secondary markets.

Two-Tier Debt Restructuring

What It Is:

The program would involve classifying a borrower's debt into two tiers. Tier-one debt is the debt the borrower could reasonably repay over the next five years, under "normal" conditions, with payment made on principal and interest at the current market rate. Tier-two debt would be all remaining debt and would carry a minimum interest rate requiring no principal payments. The amount of tier-two debt equal to the principal payment on tier-one debt would shift to tier-one, each year, until all of the restructured debt was repaid.

Objective:

To restructure debt based on the repayment ability of the operation.

When Used:

The program was first proposed by the American Farm Bureau in 1985 to deal with the existing financial crisis in agriculture. Any new short-term operating debt would be scheduled for repayment within each production and/or marketing year or offset by a minimum inventory of 120 percent of the loan for crops and 130 percent of the loan for livestock. Approval for new debt would require demonstration of repayment capacity in addition to the repayment requirements of the two-tier program. If a financial analysis reveals that no reasonable solution exists for a farmer's financial problems and that profitability is not possible through the two-tier debt restructuring, then partial or total liquidation of the operation would occur.

This proposal has not been tried in agriculture. It is similar in philosophy to existing practices involving delinquent foreign debt.

- The program has the economic advantage of being tied to a repayment philosophy based on both projected cash flow and profitability.
- Because of the profitability requirements, structural adjustment would continue to take place in agriculture.
- The program could help avoid overreaction by agricultural lenders and asset markets.
- If the interest rate on tier-two debt were not subsidized, the potential cost to lenders would be substantial.
- If the interest rate on tier-two debt were subsidized, the program would involve significant public costs.

USDA Rural Development

What It Is: Rural Development involved the creation of a new federal lending agency by separating

the activities of the USDA's Farm Service Agency (FSA) into an agricultural agency and a rural development agency. Rural Development assumes responsibility for FSA's water

and sewer, community facility, and business and industrial loan programs.

Objective: To create a catalyst agency for directing federal assistance to rural areas from federal

agencies and for fostering cooperation with the states on rural development programs.

When Used: The creation of Rural Development in 1992 was authorized by the 1990 farm bill. Its

activities initially involved a transfer of existing programs and appropriations out of FSA.

Consequences:

Provides a focal point for coordinating federal rural development efforts.

- Serves as a clearinghouse for information and assistance on rural development programs.
- Reduces many of the frustrations and inefficiencies rural communities and rural economic
 - development organizations have experienced trying to work through the maze of federal programs.
- Creates the possibility of increasing and duplicating overhead and administrative costs.

Warehousing Farm Assets, Agriculture Conservation Corporation

What It Is: A proposal to form a government corporation to purchase assets (land and equipment)

from problem farm loans at a "fair" market value. Assets acquired under the program

would either be retired or later resold or leased back to farmers.

Objective: To stabilize the value of agricultural assets and to prevent further erosion of farmers'

equity and lenders' collateral values.

When Used: An Agricultural Conservation Corporation was proposed as a limited life program to be

used when adverse economic conditions result in large numbers of foreclosures and voluntary liquidations. The program would support asset values by taking surplus assets

off the market.

The program has not been implemented. The concept appeared to be rejected based on

the potential for extensive government ownership of farmland and equipment.

- To the extent assets, particularly land, are retired from production, the program would serve a double purpose in asset stabilization and supply control.
- By allowing lenders to sell acquired property and farmers to sell distressed assets, the program would reduce losses associated with foreclosures.
- Sale of assets would be very unpopular when they force down local land and equipment values.
- The release price for assets would serve to set a ceiling on asset values until all assets in the program are sold.
- The initial cost to the government of acquiring sufficient assets to stabilize farm asset markets would be substantial.
- Losses to lenders and farmers resulting from owning assets earning less than their carrying costs would be passed to taxpayers.
- Problems of establishing "fair" market value and targeting assistance would raise questions of equity and be difficult to administer.

Introduction

Food assistance and nutrition programs have evolved through three distinct eras:

- Prior to the development of the Great Society programs in the early 1960s, commodity distribution was
 the primary form of food assistance. The distributed foods tended to emphasize stable commodities
 that were in surplus. The distribution network was primarily school lunch and direct distribution by state
 social services programs to eligible families experiencing poverty conditions. Grocery stores were
 always opposed to commodity distribution because it displaced their retail sales. Logically, consumers
 would rather receive food stamps that substitute for cash in supermarket purchases. Even local school
 lunch administrator preferences switched to cash subsidies with the advent of food service convenience
 foods.
- From the 1960s through 1990, the food assistance system shifted to food stamps and cash subsidies to schools in lieu of commodities. Direct distribution to people experiencing poverty conditions largely disappeared. While schools have continued to receive some commodities, their preference is for cash. Technological innovations made it possible to substitute electronic benefits transfer cards for food stamps, with the effect of reducing abuses in the foods purchased with stamps and trafficking in food stamps. The biggest innovation during this period was the development of the Women, Infants and Children (WIC) Nutrition Program in 1972, which led the way to greater emphasis on nutrition and food assistance program targeting.
- While the nutrition era traces back to the publication of dietary goals by the US Senate's Select Committee on Nutrition in 1970, these goals, which were the subject of considerable political controversy, evolved into the Dietary Guidelines for Americans, which were required by the National Nutrition Monitoring and Related Research Act of 1990 to be jointly published by the Secretaries of Agriculture and Health and Human Services. Subsequently, the food pyramid and USDA's Center for Nutrition Policy and Promotion (CNPP) were created. In 1994, it was required that all food assistance programs utilize the dietary guidelines as the basis for their implementation. The 21st century ushered in the nutrition education goal of reducing obesity.

Cashing Out, Welfare Reform

What It Is:

"Cashing out" one or more nutrition assistance programs would entail converting programs to provide assistance in cash rather than commodities or food stamps. All food and income assistance programs would be consolidated into a single cash payment. It seems unlikely that such cash assistance would be administered by USDA, but would likely be transferred to the US Department of Health and Human Services (HHS).

Objective:

To provide income assistance to low-income households.

When Used:

While cash has not yet been substituted for food stamps, there has been a gradual but persistent movement in the direction of providing a larger proportion of food assistance program support through cash payments (to schools and other program partners).

- The total cost of delivering income supplements to the needy could be reduced by the elimination of administrative duplication. The cost of running several programs, each having different eligibility standards, has become increasingly high.
- Food consumption would fall if the current levels of food stamp and commodity distribution were provided in cash.
- Prices of surplus commodities would fluctuate more if government outlets for surplus commodities were reduced.
- Food assistance programs, if moved out of USDA, likely would not be part of the farm bill deliberations, thus reducing the potential for obtaining urban support for farm programs.
- The size of the USDA budget likely would be substantially reduced, thus decreasing its influence within the government.
- Cash donations could result in a greater recipient satisfaction due to the lack of restrictions on how benefits are used.
- Improvements in nutritional status could be reduced, as could related health benefits to mothers and children provided by programs such as the Women, Infants and Children (WIC) Nutrition Program.

Commodity Distribution

What It Is:

Commodity distribution provides food purchased by USDA for the following programs:

- Child nutrition programs, primarily the National School Lunch Program and to a smaller extent the Child and Adult Care Food Program, and the Summer Food Service Program (see Food Assistance and Nutrition).
- Food Distribution Program on Indian Reservations that provides commodity foods to low-income households, including the elderly, living on Indian reservations, and to Native American families residing in designated areas near reservations.
- Nutrition Services Incentive Program administered by the US Department of Health and Human Services (HHS) under the *Older Americans Act* to provide incentives to States and Tribes for the effective delivery of nutritious meals to older adults.
- Commodity Supplemental Food Program that works to promote the health of lowincome older Americans, mothers, and children in certain areas of the country.
- Temporary Emergency Food Assistance Program (TEFAP) that helps supplement the
 diets of low-income Americans, including elderly people, by providing commodity foods
 to states for distribution to households, emergency meal sites, and food banks.

Objective:

To expand the demand for farm products, utilize surplus commodities, and improve nutrition for low income Americans by utilizing surplus commodities.

When Used:

Commodity distribution was a forerunner of the food stamp program. After adoption and expansion of food stamp and school meals programs, commodity distribution was deemphasized in favor of cash subsidies. However, commodity distribution programs continue to exist to satisfy specific program needs, and periodically resurface as a means of relieving agricultural surpluses. For example, cheese, butter, beef, poultry, pork, and various fruit and vegetable distribution programs have operated at various times in the past three decades to deal with low price and surplus conditions in agriculture.

- Nutrition levels of recipients are improved.
- Commodity distribution programs are costly because of the necessary network of needs assessment, processing, storage, transportation, and distribution systems.
- Demand for commodities distributed is increased to the extent that the quantities given away exceed normal recipient consumption levels.
- Reduced expenditures by consumers on distributed products could increase their purchases of other foods and/or nonfood items.
- People given commodities will not buy them or their substitutes. Therefore, the commodities given away displace retail sales of the commodities and their substitutes. Food processors and retailers, therefore, oppose direct distribution programs.
- For surplus commodities (e.g., dairy products) that are acquired under price support programs, the government actually purchases more products to the extent that the recipients receiving the products buy less through commercial channels.
- Once started, these programs are politically difficult to discontinue.

Dietary Guidelines for Americans

What It Is:

Dietary Guidelines for Americans provide authoritative advice for people two years and older about how good dietary habits can promote health and reduce risk for major chronic diseases. They are published jointly every five years by the US Department of Health and Human Services (HHS) and the Department of Agriculture (USDA). The most recent version of the guidelines, published in 2005, serves as the basis for federal food, nutrition, and health education programs.

Objective:

To improve the health of Americans by providing advice about food choices that promote health and prevent disease.

When Used:

The origin of the development of science-based nutrition recommendations lies in the publication in 1970 of dietary goals by the US Senate's Select Committee on Nutrition. These goals, which were the subject of considerable political controversy, evolved into the Dietary Guidelines for Americans, which since 1980 have been developed by a Dietary Guidelines Advisory Committee of experts on nutrition and health. The *National Nutrition Monitoring and Related Research Act of 1990* requires the Secretaries of Agriculture and Health and Human Services to jointly publish the Dietary Guidelines for Americans based on the preponderance of scientific and medical knowledge, and that these guidelines be promoted by each federal agency in carrying out any federal food, nutrition, or health program. This includes all of the food and nutrition policy tools discussed in this section.

- Provides a uniform, standard set of science-based guidelines for nutrition education programs and federal food, nutrition, and health programs.
- Impacts foods utilized in food programs.
- Impacts food consumption.
- Creates interest and controversy within the agricultural community over where particular foods fit within the Guidelines.

Food Assistance and Nutrition

What It Is:

Child nutrition programs include school lunch, school breakfast, and related child-care food programs, summer food program, and special milk program. The National School Lunch Program is a federally assisted meal program that provides nutritionally balanced, low-cost or free lunches to more than 26 million children in public and non-profit private schools and residential child-care institutions each schoolday. Meals served are required to meet the Dietary Guidelines for Americans established by the US Department of Health and Human Services (HHS) and USDA. The school lunch program provides assistance to schools through cash subsidies and direct commodity distribution. This program has been expanded to include a school breakfast component which operates in the same manner as the National School Lunch Program. Free or subsidized meals are given to children from low-income households. While milk is included in the lunch and breakfast programs, schools that do not participate in these programs are eligible for a subsidized special milk program.

Objective:

To improve the nutritional levels of school-age children and ensure that they have at least one nutritionally balanced meal on schooldays.

When Used:

The National School Lunch Act of 1946 created the modern school lunch program. School districts and independent schools that choose to take part in the lunch program receive cash subsidies and donated commodities from USDA for each meal they serve. In return, they must serve lunches that meet federal requirements, and they must offer free or reduced price lunches to eligible children. The school breakfast program became permanent in 1975, although both programs existed as pilot programs prior to being made permanent. Over time, the school lunch program put increasing emphasis on cash subsidies as opposed to commodity distribution. In 1994, the US Congress passed the Healthy Meals for Healthy Americans Act, which required school lunches and breakfasts to meet the Dietary Guidelines for Americans. Since the implementation of these requirements there has been a marked improvement by schools in lowering the total fat and saturated fat of school meals. Schools have had increasing impact on the specific commodities obtained under the program.

- Increases the demand for food used in the school lunch program.
- Increases the nutritional levels of school-age children, particularly children from low-income households. School meals must meet federal nutrition requirements, but decisions about what specific foods to serve and how they are prepared are made by local school food authorities.
- Provides an outlet for surplus dairy products, meats, fruits, and vegetables.
- Has contributed to the development of a large institutional food service sector.
- There have been complaints about the quality of meals served.
- There have also been complaints about and efforts to eliminate soda machines from school premises, which is a local decision.

Food Guide Pyramid

What It Is:

The Food Guide Pyramid is an educational tool in graphical representation that interprets and helps Americans implement the Dietary Guidelines for Americans and other nutritional standards. The pyramid is the result of a collaborative effort of the US Department of Agriculture (USDA) and the US Department of Health and Human Services (HHS).

Objective:

To help Americans make food choices that are adequate in meeting nutritional standards but moderate in energy level and in food components often consumed in excess. The new pyramid presentation was designed to increase consumer awareness of the new guidelines, encourage consumers to make positive changes in food choices, and to educate them in food choices and amounts to eat. In other words, there is increased consideration of the problem of obesity, its causes, and its implications for diet and health.

When Used:

The pyramid was originally released in 1992 and revised in 1996 and 2005. Since its development, the pyramid has been a foundation for educational tools, replacing previous educational programs that emphasized eating a variety of foods from specified food groups.

- Provides buyers and sellers with an impartial appraisal of product quality.
- Stimulates the production of uniform, high-quality, and stable products.
- Increase the quantity of information available to buyers and sellers.
- Increases the accuracy of pricing within different quality classes of the commodity.
- Reduces the opportunity for abuse and misunderstanding between buyers and sellers.
- While grades are intended to be dynamic marketing tools and are modified when marketing conditions change, once they are established, producers, processors, and buyers and sellers adjust to them with the effect of making them difficult to change.
- May provide incentives for the quality marketed to be the lowest acceptable level for each grade.
- May reduce the opportunity for product differentiation and the incentive for product development.

Food Stamps

What It Is:

The Food Stamp Program enables low-income families to buy nutritious food with electronic benefits transfer (EBT) cards that have a cash value that can be used to buy eligible food in authorized retail food stores. Eligibility is determined on the basis of specified resource tests, income tests, work requirements, and US citizenship or legal immigrant status. The level of assistance is based on a USDA "Thrifty Food Plan" covering the cost of retail food purchases needed to achieve a balanced diet. Higher levels of assistance are provided for lower incomes and larger family sizes.

Objective:

To reduce hunger and malnutrition by providing targeted assistance for the purchase of food by low-income and needy households and thereby improve nutritional levels of recipients, as well as provide support to those making the transition from welfare to work.

When Used:

The Food Stamp Program, while first used in the 1930s, began in earnest as a long-term food assistance program in the early 1960s and increased to a peak of serving more than 27 million recipients in 1994, costing over \$24 billion annually. In 2003 there were over 21 million participants on average each month, and over \$24 billion in program costs. Food manufacturers and retailers actively supported the conversion from direct commodity distribution to food stamps because food stamps do not displace commercial sales (see Commodity Distribution). With some exceptions, able-bodied participants between 16 and 60 must register for work and take part in an employment and training program to which they are referred by the food stamp office, and accept or continue suitable employment. Able-bodied adults between 18 and 50 who do not have any dependent children can get food stamps for only three months in a 36-month period if they do not work or participate in a workfare or employment and training program other than job search. Other members of the household may continue to get food stamps even if this person is disqualified. The work requirement is waived in some locations. Legal immigrants must either have lived in the country for five years; must be receiving disability-related assistance or benefits, regardless of entry date; or must be children regardless of entry date.

- Nutritional levels of recipients improve, although not as much as under more targeted programs such as the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC).
- Provides between-job transition food assistance for needy households.
- Most estimates of food expenditure increases for additional food stamps range between 17 to 47 percent of the value of the additional food stamps. The program, therefore, releases income for spending on other goods and services. The largest consumption increases occur in the demand for meat, milk, and poultry.
- Helps farm-state congressmen get farm legislation through the US Congress because food program components attract urban interest.
- Food retailers, particularly those in low-income neighborhoods, realize direct benefits.
- Food stamp fraud, a persistent problem, has been reduced by the conversion in recent years to EBT.

Nutrition Education Programs

What It Is:

The focal point for nutrition education within USDA is the Center for Nutrition Policy and Promotion (CNPP). CNPP develops and promotes dietary guidance that links scientific research to the nutrition needs of consumers. Center staff help define and coordinate nutrition education policy within USDA and translate nutrition research into information and materials for consumers, policymakers, and professionals in health, education, industry, and media. Its major educational programs include the development of the Dietary Guidelines for Americans and related informational and promotional materials, such as the Food Guide Pyramid. These are developed jointly with the US Department of Health and Human Services (HHS).

The Food and Nutrition Service (FNS) provides nutrition education targeted primarily to participants or potential participants in federal nutrition assistance programs. Nutrition education expenditures constitute about one percent of the total nutrition assistance program budget. FNS manages a number of nutrition education campaigns designed to serve low-income Americans. It often develops and distributes educational materials that can be used by its state and local partners in specific program settings (schools, WIC clinics, etc.).

The other major USDA educational program is the Expanded Food and Nutrition Education Program (EFNEP), developed and implemented by the Extension Program within USDA's Cooperative State Research, Education, and Extension Service (CSREES). EFNEP is designed to assist limited resource audiences in acquiring the knowledge, skills, attitudes, and behavior changes necessary for nutritionally sound diets, and to contribute to their personal development and the improvement of the total family diet and nutritional well-being. Arguably, EFNEP, with its state cooperative extension delivery system, is the focal point for federal nutrition education for the general public.

Objective:

To improve the diets and health of Americans through nutrition education.

When Used:

CNPP was created in 1994 to develop and coordinate nutrition policy within USDA. However, nutrition education has been a long-time mission of USDA's extension program, implemented through cooperative extension programs operating in each state.

- Nutrition levels of recipients are improved.
- Reduces nutrition-related health problems and diseases.
- Provides a uniform, standard set of science-based guidelines for nutrition education programs.
- Provides a uniform set of science-based guidelines for federal food, nutrition, and health programs.
- Impacts foods utilized in food programs.
- Impacts food consumption.
- CNPP is a lightning rod for agribusiness and farm commodity interests adversely impacted by nutrition and health information.

Nutrition Labeling

What It Is:

The National Labeling and Education Act of 1990 required mandatory labeling for nutritional content of all foods including:

- A uniform readable format.
- Identification of the standard serving sizes.
- Information on the amount per serving of fats, saturated fats, trans fats, cholesterol, dietary fiber, and other nutrients of major health concern.
- Percent of daily nutrient values.
- Uniform definitions of terms that describe a food nutrient content such as "low fat" or "high fiber."
- Requirements for making health claims.
- Declaration of the total percent juice in juice drinks.

Similar labeling requirements exist for meats. The administrative responsibility for nutrition labeling lies with USDA's Food Safety and Nutrition Program.

Objective:

To provide consumers the information base needed to make improved nutrition decisions.

When Used:

Nutrition labeling in a standard format is required on virtually all foods. The *National Labeling* and *Education Act of 1990* replaced and updated the largely voluntary nutritional labeling policy implemented in 1975. The new compulsory labeling format and requirements were implemented in 1994. In 2003, a requirement for labeling trans fats separately from saturated fat was added. Processed food labeling regulations are administered by the US Food and Drug Administration, while meat labeling regulations are administered by USDA.

- Provides an improved basis for nutrition and food safety decisions.
- Potential for reducing consumption of fats, saturated fats, trans fats, cholesterol, and refined sugar.
- Provisions for standard nomenclature increase the ease of comparison of foods.
- Improved verification of and standardization of health claims.
- Controversy exists over the nutritional standards required to permit the use of nutrition terminology and health claims on food labels.

Food Assistance and Nutrition

Senior Nutrition Programs

What It Is:

Senior nutrition programs include the Child and Adult Care Food Program, the Commodity Supplemental Food Program, the Seniors Farmers' Market Nutrition Program, and the Nutrition Services Incentive Program. The last of these programs is administered jointly by USDA and the US Department of Health and Human Services (HHS). These programs include:

- The Child and Adult Care Food Program which provides nutrition assistance to nonresidential adults who are functionally impaired or aged 60 and older in either public or private nonprofit adult day care facilities. Meals served to adults receiving care are reimbursed at specified rates based on participants' eligibility for free, reduced price, or paid meals. Commodity foods are also provided.
- The Nutrition Services Incentive Program, which is administered by the HHS under the Older Americans Act and provides cash and commodity incentives to states and Tribes for the effective delivery of nutritious meals to older adults. This includes home-delivered meals, commonly known as Meals on Wheels, as well as congregate meals.
- The Commodity Supplemental Food Program which supplements the diets of lowincome elderly people at least 60 years of age with nutritious USDA commodity foods.
 It provides food and administrative funds to states to supplement the diets of these groups.
- The Temporary Emergency Food Assistance Program (TEFAP), which supplements the diets of low-income needy persons, including elderly people, by providing them with emergency food and nutrition assistance.
- The Senior Farmers' Market Nutrition Program (SFMNP), which provides low-income seniors with coupons that can be exchanged for eligible foods at farmers' markets, roadside stands, and community supported agriculture programs.

Objective:

To improve the nutrition of older Americans in a form and location that is most convenient and to provide coordination with other forms of assistance. The Senior Farmers' Market Nutrition Program has the additional objective of expanding farmers' markets. From a USDA perspective these programs are also designed to expand the demand for farm products and utilize surplus commodities.

When Used:

In 1987, the *Older Americans Act* authorized participation of eligible adult day care centers in food programs. In 1989, USDA's Child Care Food Program was renamed the Child and Adult Care Food Program and, therefore served the needs of the *Older Americans Act*.

- Provides food and nutrition assistance for older Americans.
- Costs of care for individuals in adult care centers are reduced.
- Food demand is increased, particularly for commodities in surplus.
- Increases food sales through farmers' markets.

Food Assistance and Nutrition

The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)

What It Is:

Nutrition education, supplemental foods, and referrals to health services are provided to low-income women, infants, and children under the Special Supplemental Nutrition Program for Women, Infants, and Children, commonly known as WIC. WIC provides federal grants to states for supplemental foods, health care referrals, and nutrition education for low-income pregnant, breast-feeding, and non-breast-feeding postpartum women, and to infants and children who are found to be at nutritional risk. Benefits from the WIC program include the encouragement of and support for breast-feeding, immunization screening and referral, and a food package. The food package specifies foods that can be purchased with coupons provided by the program. Associated with the WIC is the Farmers' Market Nutrition Program (FMNP), which provides coupons that participants can use to purchase a variety of fresh, nutritious, unprepared, locally-grown fruits, vegetables, and herbs from farmers' markets. Each state agency develops a list of fresh fruits, vegetables, and herbs that can be purchased with FMNP coupons.

Objectives:

To safeguard the health of low-income women, infants, and children up to age five who are at nutritional risk by providing nutritious foods to supplement diets, information on healthy eating, and referrals to health care.

When Used:

WIC was established as a pilot program in 1972 and made permanent in 1974. It is not an entitlement program. Funding is dependent on annual appropriations from the US Congress. Pregnant or postpartum women, infants, and children up to five years old are eligible. They must meet income guidelines (fall at or below 185 percent of the US poverty income guidelines), meet state residency requirements, and be determined to be at nutritional risk by a health professional. Program participation has a tendency to increase in times of recession and increased unemployment.

Consequences: WIC is one of the most evaluated social programs in the federal government. The results of these studies indicate that WIC is one of the nation's most successful and cost-effective nutrition intervention programs. The collective findings of studies, reviews, and reports demonstrate that the WIC Program is associated with:

- Reduced fetal deaths and infant mortality.
- Reduced low birth-weight rates and increased duration of pregnancy.
- Improved growth of nutritionally at-risk infants and children.
- Decreased incidence of iron deficiency anemia in children.
- Improved dietary intake of pregnant and postpartum women and improved weight gain in pregnant women.
- Earlier prenatal care for pregnant women.
- Children receiving more regular medical care and up-to-date immunizations.
- Improved intellectual development in children.
- Savings in health care costs for participants.
- Provides indirect market support for the foods included in the program's benefit packages.

Introduction

While food safety regulation has been a feature of US food policy since the turn of the 20th century, the history of its regulation can be rather neatly divided into three distinct periods:

- Prior to the mid-1990s, regulation specified command and control procedures and an inspection system to see that they were followed. For meat and poultry, USDA Food Safety and Inspection Service (FSIS) inspectors utilized their senses of sight, touch, and smell to determine safety. Tolerances were common for contaminants, impurities, and residues, with the exception of carcinogens, for which there was zero tolerance, although it was not enforceable. Despite what, in retrospect, appears to have been a rather unsafe command and control system, the US food supply was widely viewed as being the safest in the world.
- E. coli foodborne illness outbreaks and deaths in 1993 were a wake-up call for needed science-based improvements in the regulatory system for ensuring the safety of the US food system. Since then, the potential for agricultural and food terrorism greatly elevated the level of concern. In 1995, the US Congress required risk assessments, cost-benefit analyses, and evaluations of alternative risk-management strategies and major regulations in USDA, the US Food and Drug Administration (FDA), and the US Environmental Protection Agency (EPA).
- In 1996, FSIS adopted Hazard Analysis Critical Control Point (HACCP) procedures, which emphasized performance standards for the control of microbiological contaminants and inspection systems based on verification of sanitation procedures and process control identified in a meat and poultry establishments HACCP plan. Risk assessments became a standard for establishing regulatory requirements for meat and poultry processing and handling. In 2004, requirements for being able to identify and trace the origins of meat and poultry to the farm on which they were raised were being put in place. These risk-and science-based systems of food safety regulation are being applied to food and animals produced domestically and imported.

Codex Alimentarius Commission

What It Is:

Codex Alimentarius is an internationally agreed upon food code established under the auspices of the United Nation's Food and Agriculture Organization (FAO) and the World Health Organization (WHO). Codex Alimentarius contains internationally agreed upon standards for individual foods or groups of foods, labeling of prepackaged foods, nutrition labeling, maximum residue limits for pesticides and veterinary drugs, and maximum limits for food additives and contaminants.

Objective:

To harmonize and bring national food regulations into line with international standards and recommendations in the interest of improving food quality and safety and facilitating international trade.

When Used:

In the mid-1950s, a European Codex Alimentarius was created as a regional food code. Codex was created as a world body in 1962 by FAO and WHO. Codex develops food standards, guidelines, and codes of practice in order to protect the health of consumers, ensure fair practices in the food trade, and promote coordination of food standards undertaken by international governmental and non-governmental organizations. While food safety has always been an important dimension of the Codex program, it has also been an important contributor to reducing barriers to trade and providing consumers with a more uniform basis on which to make purchasing decisions.

- Fosters a more uniform set of food standards across countries to facilitate trade.
- Reduces barriers to trade, particularly sanitary and phytosanitary barriers.
- Fosters the use of more uniform food nomenclature.
- Provides the basis for more uniform nutrition labeling.
- Facilitates the use of science in establishing food standards.
- Enhances food safety nationally and internationally.

Food Irradiation

What It Is:

Food irradiation is the process of exposing food to radiant energy in order to reduce or eliminate bacteria, therefore making it safer and more resistant to spoilage. Ionizing radiation penetrates deeply into food, which kills microorganisms without raising the temperature of the food significantly. Other forms of radiant energy include microwave and infrared radiation, which heat food during cooking, and visible light or ultraviolet light, which are used to dry food or kill surface microorganisms. Irradiation is recognized as critical control point (CCP) procedure in HACCP for fresh food products such as fruit, vegetables, meat, and poultry.

Objective:

Irradiation is a technology designed to help ensure food safety. Food is irradiated commercially to reduce the numbers of pathogenic microorganisms, to extend shelf-life, or to eliminate insect pests.

When Used:

Pathogenic microorganisms are the most significant cause of foodborne illness. Ionizing radiation will reduce, and in some cases eliminate, pathogenic microorganisms in or on meat and poultry. Food irradiation is practiced in many countries and food has been safely irradiated in the United States for over 30 years. The US Food and Drug Administration (FDA), which approves food additives such as irradiation, has permitted the use of irradiation for such purposes as curbing insects and microorganisms in spices and retarding spoilage in fruits and vegetables since 1963. In 1985, FDA approved irradiation for the control of *Trichinella spiralis* (which causes trichinosis) in pork. In 1992, the USDA Food Safety and Inspection Service (FSIS) approved guidelines for use of irradiation in raw packaged poultry. FDA determined in 1997 that use of irradiation on raw meat is safe. FDA and USDA require that irradiated foods be labeled as such since 1966. In 1986, a symbol, the radura, was added to this labeling requirement.

- Increases food safety.
- Significantly reduces or eliminates certain pathogens.
- While irradiation reduces the level of pathogens, it does not make meat or poultry products sterile. Therefore, irradiation does not replace proper cooking or handling practices by producers, retailers, and consumers.
- Irradiation is not a substitute for good sanitation and food manufacturing process control such as HAACP.
- Consumer acceptance of irradiated foods is dependent on education.
- Increases private sector costs.

Food Recall

What It Is: A food recall is a voluntary action by a manufacturer or distributor to protect the public

from products that may cause health problems or possible death.

Objective: The purpose of a recall is to remove food products from commerce when there is reason to believe it may be adulterated (injurious to health or unfit for human consumption) or

misbranded (false or misleading labeling and/or packaging).

When Used: All recalls are voluntary. A recall may be initiated by a manufacturer or distributor of the

food products or at the request of the USDA Food Safety Inspection Service (FSIS) for meat or poultry or the US Food and Drug Administration (FDA). As soon as FDA or FSIS learn that a possibly unsafe or mislabeled food is in commerce, it conducts a preliminary investigation to determine whether a recall of the meat or poultry is necessary. If a company refuses to recall its product, then FDA and FSIS have the legal authority to detain and/or seize food product(s) in commerce when there is reason to believe they are hazardous to public health or if other consumer protection requirements are not met. During a recall, the government protects the public health by ensuring that potentially hazardous foods are removed from commerce as quickly as possible. The primary role of the government is to closely monitor the effectiveness of the firm's recall procedures

and to provide scientific and technical advice.

- Increases the safety of the food supply.
- Reduces the incidence of foodborne illness.
- Adversely affects the reputation of the firm whose product is being recalled.
- The firm whose product is recalled bears the substantial cost of recalling the product and forgoing the revenue from its sale.

Food Safety Education

What It Is: The food safety education program of USDA's Food Safety and Inspection Service (FSIS)

provides information and educational materials designed to foster safe consumer food handling practices. The safe handling advice provided to consumers from the Food Safety Education (FSE) campaigns and the USDA Meat and Poultry Hotline is based on the latest

scientific information available.

Objective: To reduce foodborne illness by providing consumers with the information they need to

safely handle meat, poultry, and egg products.

When Used: FSIS has been producing consumer education programs for more than two decades.

FSE education campaigns are based on a variety of scientific sources, including new epidemiological information drawn from foodborne disease surveillance conducted by the US Centers for Disease Control and Prevention (CDC). Data sources such as this help identify types of foods associated with illness, behaviors that can contribute to disease, and populations that are more susceptible to illness. Partnerships are key to the delivery of the food safety education programs. These partnerships are varied and can include federal partners, industry groups and organizations, food producers, consumer groups,

public health officials, and State and local offices.

- Provides an improved basis for consumer food handling decisions.
- Reduces foodborne illness.
- Reduces potential legal transaction costs for the food industry.

Food Safety Performance Standards and Information

What It Is:

Food safety performance standards for meat and poultry are results-oriented microbiological and sanitation standards determined by science-based methods. They indicate the performance to be achieved for pathogen control and sanitation. However, the means or methods to be used by official meat and poultry establishments/handlers are not specified. This flexibility allows new ways of achieving the specified performance results. Performance standards are not subject to multiple interpretations. Although establishments can use different and varying means to meet the performance standards, the required results are always the same – establishments must operate in a manner that ensures that a product is not adulterated, and that does not interfere with USDA's Food Safety and Inspection Service (FSIS) inspection and its enforcement of such standards.

Objective:

To set specific standards for sanitation and pathogen control that establishments must meet to sell meat and poultry products.

When Used:

Prior to the introduction of HAACP procedures in 1996, meat and poultry regulation relied on command and control requirements for plant operation and design and on an inspection system dependent on the inspectors' senses of sight, touch, and smell. Foodborne pathogens cannot be detected or effectively controlled using these methods. The switch to HAACP signaled an implementation of a science-based approach based on risk assessment performance results that must be met for meat sold in the United States from either domestic sources or imported. This regulatory reform eliminated the use of command and control process-oriented regulations and introduced food safety performance standards and inspection practices that verify process controls identified in an establishment's HACCP plan. Performance standards, while requiring the use of HAACP-based process controls, enables establishments who want to change processes to do so once they have demonstrated the resulting process produces food with a level of safety equivalent to the current procedures.

- Provides objective science- and risk-based quantitative performance standards that must be met.
- Allows establishments to adjust meat and poultry slaughter and processing practices as needed from a management perspective while mandating food safety standards.
- Improves the safety of the food supply.
- Improves industry efficiency in handling and processing meat and poultry.

Foodborne Disease Active Surveillance Network (FoodNet)

What It Is:

FoodNet is the foodborne disease surveillance system for the US Centers for Disease Control and Prevention (CDC)'s Emerging Infections Program (EIP). FoodNet provides a network for responding to new and emerging foodborne diseases of national importance, monitoring the burden of foodborne diseases, and identifying the sources of specific foodborne diseases. The project consists of active surveillance for foodborne diseases and related epidemiologic studies designed to help public health officials better understand the epidemiology of foodborne diseases in the United States. Foodborne diseases include infections caused by bacteria such as Salmonella, Shigella, Campylobacter, E. coli O157, Listeria monocytogenes, Yersinia enterocolitica, and Vibrio parahaemolyticus, and parasites such as Cryptosporidium and Cyclospora.

Objective:

- Determine the burden of foodborne diseases in the United States.
- Monitor foodborne disease trends in the United States.
- Determine the proportion of foodborne diseases attributable to specific foods and settings in the United States.

When Used:

FoodNet is an "active" surveillance system, meaning public health officials frequently contact laboratory directors to find new cases of foodborne diseases and report these cases electronically to CDC. FoodNet is a collaborative project of the CDC, ten EIP sites (California, Colorado, Connecticut, Georgia, New York, Maryland, Minnesota, Oregon, Tennessee, and New Mexico), USDA, and the US Food and Drug Administration (FDA). In 1995, FoodNet surveillance began in five locations: California, Connecticut, Georgia, Minnesota, and Oregon. Each year the surveillance area, or catchment, has expanded, with the inclusion of additional counties or additional sites (New York and Maryland in 1998, Tennessee in 2000, Colorado in 2001, and New Mexico in 2004). The total population of the 2006 bacterial catchment is 44.9 million persons, or 15 percent of the United States population.

- Enhances the coverage and accuracy of detection of the incidence of foodborne diseases compared with systems that rely on clinical laboratory reports to state departments of health.
- Allows for more accurate and precise estimates and interpretation of the burden of foodborne diseases over time by monitoring each event that occurs.
- Determines the precise sources of foodborne illness and thereby enhances the prospects for prevention.
- Increases the accuracy of pricing within different quality classes of the commodity.

Hazard Analysis Critical Control Point (HACCP)

What It Is:

HACCP involves seven principles:

- Identify hazards. Potential hazards associated with a food and measures to control biological, chemical, or physical hazards are identified.
- Identify critical control points. These are points from farm to table at which the potential hazard can be controlled or eliminated.
- Establish preventive measures with critical limits for each control point.
- Establish procedures to monitor the critical control points.
- Establish corrective actions to be taken when monitoring shows that a critical limit has not been met.
- Establish procedures to verify that the system is working properly.
- Establish effective record keeping to document the HACCP system. This would include records of hazards and their control methods, the monitoring of safety requirements, and action taken to correct potential problems.

Objective:

To protect the safety of the food supply by applying sound scientific knowledge. This means that HACCP principles and prescribed procedures must be backed, for example, by microbiological research for effectiveness in control.

When Used:

Many of the HACCP principles were mandated as good manufacturing practices in the 1960s for the low-acid canned food industry, which was regulated by the US Food and Drug Administration (FDA). FDA began requiring HACCP be used by the seafood industry in 1997, and for the juice industry in 2002. In 1996, the USDA started requiring HACCP for meat and poultry processing plants. FDA now is considering developing regulations that would establish HACCP as the food safety standard throughout other areas of the food industry, including both domestic and imported food products. Prior to the adoption of HACCPs, inspection procedures were much less scientific. For example, USDA meat inspectors used their senses of sight, touch, and smell to determine if meat and poultry were fit for consumption. Current issues relate to the extent to which HACCP should be applied to on-farm animal production practices.

- A more consistently safe and dependable food supply.
- Application of more science to food production and processing.
- Increased food costs more than offset by the reduction in public and private costs of foodborne illness and death.
- Greater flexibility for food manufacturers to produce safe food.

Level of Tolerance, Zero Tolerance, No Significant Risk

What It Is: Zero tolerance means no measurable amount of a harmful substance/additive is allowed

in the food supply. In other words, the food product must be completely devoid of the

harmful food additive. It is the highest possible standard for food safety.

Objective: To completely eliminate harmful additives from entering the food supply.

When Used: The Delaney Clause of the Food Additive Amendment to the Food, Drug and Cosmetic

Act was enacted in 1958. The clause stated that there shall be no cancer-causing substances added to the food supply. (However, in the case of chemicals these can only be measured in terms of the sensitivity of the instrument used to detect specific chemicals). As the scientific instruments have become increasingly sensitive, more potentially harmful substances (residues) have been discovered in the food supply. Zero tolerance was ostensively applied as a standard for carcinogenic food additives by using a de minimus tolerance, meaning that extremely small risks (levels) could be ignored. A 1995 legal opinion issued by the US Department of Justice (DOJ), Office of Legal Counsel, concluded that this operational definition of "no residue" was not legally supportable. However, the DOJ stated that FDA may use the "no significant risk" level as a benchmark for rejecting analytical methods. However, due to the dangers imposed by biological contaminants such as E. coli, FSIS applies a zero tolerance requirement for no visible feces on either livestock or poultry carcasses as food safety performance standards. This obliges companies to include in their HACCP plans critical control points (CCPs) designed to assure the zero tolerance standard for visible feces is met. Microbiological standards establish a zero tolerance for the presence of E. coli 0157:H7 and Listeria monocytogenes in meat and poultry products because of their adverse health effects.

- A lower level of tolerance reduces the risk.
- A lower level of tolerance enhances the safety of the food supply.
- A lower level of tolerance means higher costs.
- Strict application of zero tolerance could reduce the number of products available on the market if there is no effective substitute for the additive being used to produce the product.

National Animal Identification System (NAIS)

What It Is:

NAIS is a national program to identify all agricultural animals and track them as they come into contact with, or are inter-mixed with, animals other than herdmates from their premises of origin. When fully operational, the system will be capable of tracing a sick animal or group of animals back to the herd or premises that is the most likely source of infection. It will also be able to trace potentially exposed animals that were moved out from that herd or premises. The sooner animal health officials can identify infected and exposed animals and premises, the sooner they can contain the disease and stop its spread.

Objective:

NAIS was designed to help protect American animal agriculture from foreign or domestic disease threats. Finding potentially sick or exposed animals early in a disease outbreak is essential to containing or eradicating the disease quickly. It will enhance US efforts to respond to intentionally or unintentionally introduced animal disease outbreaks more quickly and effectively. USDA's long-term goal is to establish a system that can identify all premises and animals that have had direct contact with a foreign animal disease or a domestic disease of concern within 48 hours of discovery.

When Used:

Before NAIS was established in 2004, a partnership of more than 100 animal and livestock professionals from 70 associations, organizations, and government developed the US Animal Identification Plan (USAIP). The plan laid out a framework and defined suggested data standards for implementing and maintaining a phased-in national animal identification system for the United States. In designing NAIS, USDA drew from some of the data standards first established in the USAIP. NAIS would allow for rapid tracing of animals in the event of an outbreak, helping to limit the scope and expense of the outbreak and minimizing impact on domestic and foreign markets. NAIS will be critical as USDA, states, and industry work to complete the disease eradication programs.

- Secure the health of the national herd from invasive diseases that might also affect human health, such as Bovine Spongiform Encephalopathy (BSE).
- Provide animal owners and animal health officials with the infrastructure to improve current disease eradication and control efforts.
- Protect against widespread foreign and domestic animal disease outbreaks.
- Address threats of deliberate introduction of disease.
- May provide incentives for the quality marketed to be the lowest acceptable level for each grade.

Pesticides Regulation, Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), Food Quality Protection Act (FQPA)

What It Is:

FIFRA requires that each manufacturer register and maintain each pesticide and its label with the US Environmental Protection Agency (EPA) before it can be manufactured for commercial use. FIFRA registration is evaluated based on risk to human health and the environment from use of a pesticide. Under FIFRA, pesticide manufacturers are required to submit a registration application to EPA along with a proposed label, a statement of all claims to be made for the pesticide, directions for its use, a confidential statement of the formula, and a description of the tests, which provide the basis for the manufacturer's claims. Distribution of any pesticide that is not registered or that is improperly labeled is prohibited. FQPA requires existing registered and proposed new pesticides be evaluated based specifically on dietary risk from consumption of pesticide residues: a process called "reregistration." Under both laws, the manufacturer must not make false or misleading statements. The FIFRA standard of review involves balancing risks and benefits. FQPA's standard of review is based on dietary residue tolerance and requires that use of a pesticide ensure reasonable certainty of no harm.

Objective:

To protect the public from hazardous chemicals and chemical residues that may create health or environmental problems.

When Used:

Pesticide regulations were first adopted in 1910, regulating only the sale of adulterated or misbranded pesticides. FIFRA was enacted in 1947 to require the registration of pesticides. The requirements for registration include minimum efficacy standards and stringent safety standards. While the responsibility for proof rested initially on the government, it was shifted to the manufacturer in 1954. In implementing FIFRA, USDA's State National Agricultural Pesticide Impact Assessment Program (NAPIAP) provides EPA with data for defining and evaluating the benefits and risks of selected pesticides having agricultural and/or forestry uses. This information is necessary to evaluate the effects of pesticide regulation and use on agricultural productivity as well as the quality and use of soil and water resources. Some important aspects of NAPIAP include conducting research on exposure to pesticides and environmental fate as well as collecting accurate pesticide use information. Registrations are for a five year period. Reregistration is considered by EPA in light of current data regarding the pesticide. The Agriculture Committees of the US Congress, along with the House Energy and Commerce Committee, have jurisdiction over FIFRA and FQPA.

(continued on the next page)

Pesticides Regulation, FIFRA, FQPA (continued)

- Ensures food safety and environmental protection.
- Obtaining and maintaining approval for the use of pesticides is expensive and slow for the chemical companies; these costs are ultimately passed along to farmers and other users.
- The number of pesticides and uses has steadily declined.
- US producers can be disadvantaged when growers in other countries can use chemicals not allowed domestically.
- Manufacturers of minor-use chemicals may decide that they cannot bear the cost of registration.

Product Labeling

What It Is:

Information appearing on almost all foods that includes:

- Labels providing information on how the food fits into an overall daily diet.
- Labels providing information on the amount per serving of saturated fat, cholesterol, trans fats, dietary fiber, and other nutrients of health concern to today's consumers.
- A standard and uniform definition of terms used to describe a food's nutrient content –
 "light," "fat-free," and "low-calorie," for example that mean the same for any product
 on which they appear.
- Health claims about the relationship between a nutrient or food and a disease that are supported by scientific evidence.
- Serving sizes that are more consistent across product lines to make comparison shopping easier, are expressed in common household and metric measures, and better reflect the amounts people really eat.
- A standard and uniform definition of terms used in meat such as fresh, frozen, and natural.

Objective:

To provide consumers the information base needed to make improved food purchasing decisions and to achieve nutrition.

When Used:

The changes made in 1993 marked the first extensive renovation of the food label since 1974, when the US Food and Drug Administration and USDA established voluntary nutrition labeling and began requiring nutrition information on labels of products that contain added nutrients or that carry nutrition claims. Other than adding sodium as a mandatory and potassium as a voluntary component to the list of nutrients allowed in voluntary nutrition labeling in 1984, the nutrition label has remained essentially the same throughout. In the late 1980s, the Surgeon General of the US Public Health Service and the National Academy of Sciences' National Research Council released two reports that lent strong support to development of a new food label. These reports – the 1988 Surgeon General's Report on Nutrition and Health, and the 1989 National Research Council's Diet and Health: Implications for Reducing Chronic Disease Risk – concluded that evidence substantiates an association between diet and risk of chronic disease and recommended similar dietary changes. These new regulations, which apply to essentially all foods, now appear to be constantly monitored for needed updates.

- Provides an improved basis for nutrition and food safety decisions.
- Potential for reducing consumption of fats, saturated fats, trans fats, cholesterol, and refined sugar.
- Provisions for standard nomenclature increases the ease of comparison of foods.
- Improved verification and standardization of health claims.

Risk Assessment

What It Is:

Risk assessment is a scientifically based process of evaluating hazards and the likelihood of exposure to those hazards, and then estimating the resulting public health impact. Each risk assessment has five parts that are widely recognized in the international scientific and regulatory risk assessment communities by such authoritative bodies as the National Academy of Sciences and the Codex Alimentarius Commission:

- Clarify the public health hazard that is the subject of the assessment and any possible policy options that are under consideration.
- Evaluate the adverse health effects caused by the public health hazard.
- Conduct an exposure assessment to estimate the likelihood that the hazard will be present in food, and, if present, at what level.
- Construct a dose-response model to determine in what dose or concentration the hazard will cause illness or death.
- Integrate the information gathered to show who is at greatest risk, which variables
 contribute most to the risk of the malady being investigated, and which intervention
 strategies would lead to the greatest reduction of risk.

Objective:

To provide an objective quantitative basis for regulatory decisions that have the potential for adversely affecting public health and to evaluate alternative strategies for managing risk.

When Used:

Risk assessments, cost-benefit analyses, and evaluations of alternative risk-management strategies are required for all major regulations in USDA, a requirement imposed by the *Federal Crop Insurance Reform and Reorganization Act of 1994* (PL 103-354). EPA has developed methods for required risk assessments under the Safe Drinking Water Amendments of 1996, including both microbial and chemical hazards. Sound risk assessments are important in various aspects of international trade, including the provisions of Codex Alimentarius and the World Trade Organization, the international bodies that govern standards for food safety, among other issues. Risk assessment provides essential information for estimating and analyzing the costs and benefits of policy alternatives. Risk estimates are used to characterize the state of the world in the baseline and the alternative states expected to occur after taking action.

- Provides an objective quantitative basis for making policy and program decisions involving risk.
- Allows an objective quantitative basis for balancing costs and benefits for regulatory decisions.
- Improves the safety of the food supply and environment.

Traceability, Product Tracing, Product Traceback

What It Is: The ability to trace and to follow a food, feed, food-producing animal, or substance used

or intended to be used in a food or feed through all stages of production, processing, and distribution, recognizing that different supply chains require different levels of traceability

for both food safety and assurance.

Objective: To determine the origin of a food safety problem and to provide ex post assurance that

food products are as specified.

When Used: Public health agencies conduct traceback activities to determine the source and

distribution of the implicated product associated with an outbreak of foodborne illness and to subsequently identify potential points where contamination could have occurred. This action helps prevent additional illnesses by providing a foundation for recalls of contaminated food remaining in the marketplace and identifying hazardous practices or violations. Tracebacks are not a new activity within food safety program models. Reports of tracebacks of shellfish began in the late 1800s; more recently, there have been tracebacks of canned mushrooms in the early 1970s, eggs throughout the 1980s and 1990s, and ground beef and produce in the 1990s. Produce tracebacks have involved the Hepatitis A virus in sliced, frozen, and sugared strawberries, *Shigella* in parsley, *Cyclospora* in raspberries, and *E. coli* 0157:H7 in lettuce and spinach. Contemporaneously, the most significant drivers for product tracing are Bovine Spongiform Encephalopathy (BSE) in cattle, foodborne pathogens in meat and poultry products, and genetically modified organisms (GMOs) in grain. Consideration is being given to the adoption of a mandatory national animal identification system (NAIS) in cattle, which would be useful in tracing the origins of animal health problems such as BSE and *E. coli* contaminations.

- Increased coordination within the food system, including the potential for increased concentration and vertical integration.
- Increased food safety.
- Reduced food contamination.
- Increased biosecurity.
- Greater assurance of product and quality specifications.
- Increased ability to identify product characteristics.
- Improved animal and plant health.
- Increased costs.

0/92 and 50/92 28 Air quality 39, 43 1933 farm bill. See Agricultural Adjustment Act of Alabama 102 Algeria 60 1956 farm bill. See Agricultural Act of 1956 Almonds 69, 77 1970 farm bill. See Agricultural Act of 1970 American Farm Bureau 122 1973 farm bill. See Agricultural and Consumer American Great Lakes vessels 54 Protection Act of 1973 AMS. See Agricultural Marketing Service 1981 farm bill. See Agriculture and Food Act of Andean Community Price Band System 74 Antidumping 51 1985 farm bill. See Food Security Act of 1985 Antidumping/Countervailing Duties Investigations 1990 budget act 24 1990 farm bill. See Food, Agriculture, Conserva-Antidumping duty 56 tion, and Trade Act of 1990 Apples 69 1996 farm bill. See Federal Agriculture Improve-Australia 62, 78, 79 ment and Reform Act of 1996 2002 farm bill. See Farm Security and Rural Invest-B ment Act of 2002 Bahrain 62 Α Balanced Budget and Emergency Deficit Control Act 22, 41 Acreage allotment 2 Bankruptcy 105, 106 Acreage reduction 3 Bankruptcy Abuse Prevention and Consumer Pro-Ad valorem tariff 67 tection Act of 2005 105 Afghanistan 59 Barley 4, 13, 60, 65, 77 Aggie Bond Program 102 Barter 52 Agricultural Act of 1956 16 Barter/counter trade 52 Agricultural Act of 1970 23 Beans 18 Agricultural Adjustment Act of 1933 77 Beef 88, 91, 127, 150. See Cattle Agricultural and Consumer Protection Act of 1973 Beginning farmer programs 103 26, 31 Best management practices 39. See also Conser-Agricultural Credit Act of 1987 111, 112, 117, vation compliance 118, 121 Biodiesel 4 Agricultural Marketing Act of 1946 94 Bioenergy program 4 Agricultural Marketing Agreement Act of 1937 92, Biofuels 4 Bioterrorism Act of 2002. See Public Health Agricultural Marketing Service 90, 91, 92, 93, 96 Security and Bioterrorism Preparedness and Agricultural Market Transition Act payments 13, Response Act of 2002 Blended credit 53 Agricultural Resources Conservation Program 37, Bolivia 74 41, 48 Bonus Incentive Commodity Export Program 61 Agricultural Statistics Board 89 Borrower training requirements 104 Agricultural Trade Development Act of 1954 76 Bovine Spongiform Encephalopathy 32, 145, 150 Agricultural Water Quality Protection Program 37 Brazil 76 Agriculture and Food Act of 1981 33, 34 Agriculture Conservation Corporation 124 Brazil cotton complaint 25 Agriculture Conservation Program 38, 40, 43 Bush, President George H.W. 46 Agriculture Risk Protection Act of 2000 34 Butter 6, 7, 127 Agriculture Trade Act of 1978 69 Buyout programs 5. See also Dairy buyout

C	Common Agricultural Policy (European Union) 70, 71, 81
California 92, 142	Compacts 95
Campylobacter 142	Connecticut 142
Canada 62, 73, 79, 91	Conservation compliance 40
Canada-United States Free Trade Agreement 62	Conservation Reserve Program 3, 16, 36, 40, 41,
Canola 4	48
Capper-Volstead Act 84, 87	Conservation Security Program 36, 42
Cargo preference 54	Conservation Technical Assistance 38
Cashing out 126	Contract sanctity 55
Catastrophic crop insurance coverage 30, 33, 110	Cooperative Farm Credit System 118 Cooperatives 87
Cattle 32, 60, 65, 66, 91, 96, 97, 150	Cooperative State Research, Education, and Exten-
CCC. See Commodity Credit Corporation	sion Service 132
Cellulosic crops 4	Corn 4, 13, 19, 22, 26, 65
Chapter 12 Bankruptcy 105, 106	Corn Belt 1
Checkoff programs 85, 86	Costa Rica 62
Cheese 6, 7, 65, 66, 127	Cost-sharing assessment programs 7
Chicago Mercantile Exchange 32	Cotton 3, 8, 13, 15, 18, 20, 22, 25, 26, 28, 33,
Chickpeas 18	63, 77, 86
Child and Adult Care Food Program 127, 134	Cottonseed 4
Child Care Food Program 134	Counter-cyclical payments 9, 10
Child nutrition programs 129	Counter-cyclical revenue payments 10
Chile 62, 74, 79 China 60	Countervailing duty 56
Classified price plan 92	Country of origin labeling 88
Clean Water Act 39	Crambe 4
Coastal Zone Management Act 39	Credit guarantee 53
Codex Alimentarius 137	Crop and livestock production reports 89 Cropland Adjustment Program 16
Codex Alimentarius Commission 137, 149	Crop revenue coverage 34
Coleman v Block lawsuit 113	Cross-compliance 8. See also Conservation com-
Colombia 74	pliance
Colorado 32, 142	Cryptosporidium 142
Colorado River Basin Salinity Control Program 43	Cuba 59
Colorado River Compact 95	Cyclospora 142, 150
Commission on the Application of Payment Limits	
for Agriculture 23	D
Commodity Credit Corporation 6, 7, 14, 15, 18,	
19, 20, 22, 52, 54, 57, 58, 61, 66, 78	Dairy 5, 7, 15, 61, 65, 77, 78, 97, 127
Commodity distribution 6, 127. See also Com-	Dairy buyout 11
modity purchase program; See also Food assistance and nutrition	Dairy diversion program 11 Dates 69
Commodity Futures Trading Commission Bill of	Debt restructuring 118
1983 55	Debt writedown 107
Commodity purchase. See	Decoupled payments 13
Commodity purchase program 6	Decoupling 1, 9
Commodity Supplemental Food Program 127,	Deficiency payments 26. See Loan deficiency pay-
134	ments

Delaney Clause. See Food, Drug and Cosmetic Act Export embargo 59 Delta states 31 Export Enhancement Program 60 Diet and Health: Implications for Reducing Chronic Export payment-in-Kind 61 Disease Risk 148 Export subsidy 53, 56, 58 Dietary Guidelines Advisory Committee 128 Export verification programs 91 Dietary Guidelines for Americans 125, 128, 129, 130, 132 Direct export credit 57 Family Farm Bankruptcy Act 105 Direct government loans 108 Farm Credit Act of 1933 101 Direct marketing 90 Farm Credit Amendment Act of 1985 111, 116 Direct payments 9, 13 Farm Credit Associations 118 Disaster programs 31 Farm Credit Banks 118, 121 Diversion 3 Farm Credit Corporation 111 Doha Round. See World Trade Organization Doha Farm Credit System 111, 112, 121 Round Farm Credit System Capital Corporation 111 Dominican Republic 60, 62 Farm Credit System Insurance Corporation 112 Dust Bowl 36, 38 Farmer Mac 121 Duty 56 Farmer-owned reserve 14 Farmers Home Administration 40 Ε Farmers' Market Nutrition Program 135 Farm Security and Rural Investment Act of 2002 Easements 45, 48 Eastern Europe 60 1, 2, 4, 5, 9, 16, 18, 19, 26, 41, 42, 43, E. coli 136, 144, 150 45, 48, 49, 52, 57, 88 strain 0157:H7 142, 144, 150 Farm Service Agency 40, 101, 103, 104, 107, 108, 109, 110, 113, 114, 116, 117, 118, Economic emergency loan program 109 119, 121, 123 Ecuador 74 Federal Agricultural Mortgage Corporation 121 Eggs 60, 75, 140, 150 Federal Agriculture Improvement and Reform Act Egypt 60, 61 of 1996 1, 3, 4, 7, 13, 14, 16, 17, 22, 23, Electronic benefits transfer cards 131 El Salvador 62 24, 26, 28, 41, 43, 48, 49, 58, 95 Embargo 59 Federal Crop Insurance Act of 1938 33 Emergency disaster loan program 110 Federal Crop Insurance Reform Act of 1994 30 Emerging Infections Program 142 Federal Crop Insurance Reform and Reorganization Endangered species 37 Act of 1994 149 **Environmental Conservation Acreage Reserve** Federal Insecticide, Fungicide and Rodenticide Act Program 41, 48 146, 147 Environmental Quality Incentives Program 36, 42, Federal Milk Marketing Orders 92, 95, 96 43, 44 Federal National Mortgage Corporation 121 Erosion. See Soil erosion Federal Trade Commission Act 87 Ethanol 1, 4 Feed grains 14, 18, 20, 28 European Codex Alimentarius 137 Filberts 77 European Community. See European Union Finland 60 European Union 51, 60, 62, 63, 70, 71, 73, 81 Fish 88 **Expanded Food and Nutrition Education Program** Flaxseed 4, 77 Flex acres. See Planting flexibility 132 Export credit 53 Flour 60, 61, 77 Export credit guarantees 58 Food, Agriculture, Conservation, and Trade Act of

1990 3, 7, 8, 14, 15, 18, 21, 23, 24, 25, Uruguay Round 63, 66, 70, 77, 81, 83 26, 37, 40, 41, 46, 47, 48, 52, 54, 59, Generalized system of preferences 64 104, 116, 123 Generic payment in kind 15. See also Payment in Food and Agriculture Organization 137 kind Food and Nutrition Service 132 Genetically modified organisms 150 Food assistance and nutrition 129 Georgia 102, 142 Ginseng 69 Foodborne Disease Active Surveillance Network GIPSA. See Grain Inspection, Packers and Stock-Food Distribution Program on Indian Reservations yards Administration 127 Grades 94 Food, Drug and Cosmetic Act 144 Grades and standards 94 Delaney Clause of the Food Additive Amendment Grain embargo 55 Grain Inspection, Packers and Stockyards Adminis-Food for Peace. See Public Law 480 tration 98 Food Guide Pyramid 130, 132 Grain sorghum 4, 13, 19, 22, 26, 60 Food irradiation 138 Gramm-Rudman-Hollings. See Balanced Budget and FoodNet 142 Emergency Deficit Control Act Food Quality Protection Act 146, 147 Grassland Reserve Program 45 Food recall 139 Great Lakes 54 Food safety education 140 Great Plains 1, 31, 101 Food Safety Inspection Service 91, 136, 138, Great Plains Conservation Program 38, 43 139, 140, 141 GSM-5 program subsidies 57 Food safety performance standards 141 GSM-102 credit guarantee 57 Food Security Act of 1985 7, 8, 14, 15, 16, 18, GSM-102 or GSM-103 53 21, 26, 28, 39, 40, 41, 45, 47, 55, 57, 60, GSM-103 program 57 61 Guaranteed loans 114, 115 Food Stamp Program 131. See also Commodity Guatemala 62 distribution Foreclosure moratorium 113 Н Foreign Agricultural Service 69, 77 HAACP. See Hazard Analysis Critical Control Point France 61 Hazard Analysis Critical Control Point 91, 136, Frazier-Lemke Farm Bankruptcy Act 113 138, 141, 143, 144 Free trade agreement 62. See also Preferential Healthy Meals for Healthy Americans Act 129 trading arrangement Hepatitis A virus 150 Fruit and vegetable marketing orders 93 Hogs 32, 59, 88, 96, 127 Fruits and vegetables 33, 84, 93, 99, 127, 129, Honduras 62 135, 138 FSA. See Farm Service Agency Honey 18 G GATT. See General Agreement on Tariffs and Trade Illinois 32 Import license 65. See also Tariff-rate quota General Agreement on Tariffs and Trade 50, 51, 53, 60, 61, 62, 63, 65, 66, 67, 70, 71, 77, Import quotas 66 78.80 Import tariffs 67 Dillion Round 63 Income protection 34 Kennedy Round 63 Indiana 32 Tokyo Round 63 Interest assistance for guaranteed loans 116

Interest deferrals 119
Interest waivers 120
International commodity agreement 68
International Organization for Standardization 100
Interstate compacts 95
Iowa 32, 102
Iraq 58, 59
Irradiation 138
ISO 9000 series standards 100
Israel 60, 62

J

Jackson-Vanik Amendment 72 Jamaica 52 Japan 51, 76 Jordan 62

K

Kansas 32

L

Labeling 148 Lambs. See Sheep Land retirement 16 Lentils 18 Lettuce 150 Level of tolerance 144 Limited cross-compliance 8 Linseed oil 77 Listeria monocytogenes 142, 144 Liver 91 Livestock 3, 16, 18, 19, 22, 29, 32, 98 Livestock gross margin insurance 32 Livestock Mandatory Reporting Act of 1999 96 Livestock revenue protection 32 Livestock risk protection 32 Loan deficiency payments 10, 18, 23, 28, 40 Loan mediation 117

M

Mandatory debt restructuring 118 Market Access Program 69 Marketing loan 18, 23 Marketing orders 92, 93 Marketing quotas 19 Market loss assistance payments 17 Market News 96 Market news price reporting 96 Market Promotion Program 69 Maryland 142 McGovern-Dole International Food for Education and Child Nutrition Program 52 Meals on Wheels 134 Meat 69, 71, 75, 82, 140, 143, 150 Meat and Poultry Hotline 140 Meat Import Act of 1979 82 Merchant Marine Act of 1936 54 MERCOSUR 73 Mexico 62, 65, 73 Michigan 32 Milk 11, 12, 27, 86, 92, 97, 129, 131. See also Dairy Mink pelts 69 Minnesota 32, 142 Missouri 32 Mohair 18 Monetary export subsidies 70 Montana 32 Morocco 62 Most favored nation 72 Multi-peril crop insurance 30, 31, 33 Mushrooms 150 Mustard seed 4

N

NAFTA. See North American Free Trade Agreement NASS. See National Agricultural Statistics Service National Academy of Sciences 148, 149 National Agricultural Statistics Service 89, 96 National Ambient Air Quality Standards 43 National Animal Identification System 145, 150 National Labeling and Education Act of 1990 133 National Nutrition Monitoring and Related Research Act of 1990 125, 128 National Research Council 148 National School Lunch Act of 1946 129 National School Lunch Program 127, 129 Natural Resources Conservation Service 37, 40, 42, 43, 45, 49 Nebraska 32 Nevada 32 New England 95

Payment limits 23

New Mexico 142 Peaches 69 New York 142 Peanuts 5, 13, 18, 20, 77, 88 Pears 69 Nicaragua 62 No Net Cost Tobacco Program Act of 1982 7 Perishable Agricultural Commodities Act 99 No net loss 46. See also Swampbuster Peru 62, 74 Nonfat dry milk 6, 7, 65 Pesticides regulation 146, 147 Nonpoint source pollution 37, 43 Philippines 60 Nonrecourse loan 14, 18, 20, 22, 26 Planting flexibility 24 Nontariff trade barrier 71. See also Import quotas; Point source pollution 43 See also Variable levy Poland 59, 60 Normal trade relations 72 Pork. See Hogs Port Authority of New York and New Jersey 95 North Africa 60 North American Free Trade Agreement 62, 65, Poultry 59, 60, 69, 75, 88, 97, 98, 127, 131, 138, 139, 140, 143, 150 73, 78 North Dakota 32 Preferential trading arrangement 73. See Northeast Compact Commission 95 also Free trade agreement Northeast Interstate Dairy Compact 95 Price band 74 Norway 60 Principal and interest deferrals 119 Principal and interest waivers 120 No significant risk 144 Nutrition education programs 132 Process verification 97, 100 Nutrition labeling 133 Production flexibility contract payment 13, 17, 23 Nutrition Services Incentive Program 127, 134 Product labeling 148 Product traceback 150 0 Product tracing 150 Public Health Security and Bioterrorism Prepared-Oats 4, 13, 26, 77 ness and Response Act of 2002 75 Offal 91 Public Law 480 1, 54, 76 Offsetting compliance 3, 21 Ohio 32 Q Oilseeds 18, 20, 74 Oklahoma 32 Quota 5, 19, 25, 27, 65, 66, 77, 78, 82 Older Americans Act 127, 134 Omnibus Budget Reconciliation Act of 1982 7 R Oregon 142 Radura 138 Organic Foods Production Act of 1990 97 Rapeseed 4 Organic labeling 97 Raspberries 150 Organization of the Petroleum Exporting Countries Reagan, President Ronald 55 64, 68 Red meat 69 Reference price 74 P Revenue assurance 34 Packers and Stockyards Act 98 Revenue insurance 34 Packers and stockyards regulations 98 Rice 2, 3, 4, 13, 18, 20, 22, 28, 60 Panama 62 Risk assessment 149 Parsley 150 Risk management accounts 35 Payment in kind 15, 22 Rural Development (USDA agency). See USDA Payment limitations 3 Rural Development

Russia 55, 58

Rye 77	Strawberries 150
C	Sugar 20, 61, 65, 77, 78, 133
\$	Summer Food Service Program 127, 129
Safe Drinking Water Amendments of 1996 149 Safflower 4	Sunflower seed 4 Surgeon General's Report on Nutrition and Health 148
Salmonella 142	Surplus 6, 7
Sancity of contracts. See Contract sanctity	Swampbuster 47. See also No net loss
School breakfast 129	Swine. See Hogs
School lunch. See National School Lunch Program	_
School lunch program 6	Т
Seasame seed 4	- T : 70
Secondary markets for agricultural loans 121	Taiwan 76
Section 22, Agricultural Adjustment Act of 1933,	Target price 2, 26
Amended in 1935 66, 77, 78. See also Import guetas	Tariff 56, 62, 63, 67, 73, 77, 78
port quotas	Tariff Act of 1930 51
Senior nutrition programs 134 Seniors' Farmers' Market Nutrition Programs 90	Tariffication 78
134	Tariff-rate quota 65, 66, 78
Set-aside 3	Temporary Emergency Food Assistance Program 127, 134
Sheep 32, 88, 96	Tenancy 5
Shellfish 88	Tennessee 142
Sherman Antitrust Act 87	Termination program 11
Shigella 142, 150	Texas 32
Singapore 62	Thailand 62
Slippage 3, 11, 12, 16	Thrifty Food Plan 131
Sodbuster 40	Tier-one debt 122
Soil Bank Program 16	Tier-two debt 122
Soil conservation 38, 40	Tobacco 2, 5, 7, 20, 61
Soil Conservation Service 40	Tobacco Transition Act of 2004 5
Soil erosion 16, 38, 39, 40, 41, 43	Tolerance 144
Sorghum. See Grain sorghum	Tomato products 69
South Dakota 32	Total maximum daily loads 43
Southern African Customs Union 62	Traceability 150
South Korea 76	Trade Act of 1974 51, 64, 72
Soviet Union 55, 59, 79 Soybean meal 59	Jackson-Vanik Amendment 72
Soybeans 4, 13, 63	Trade agreement 79
Spain 76	Trade Agreements Act of 1979 51
Special milk program 129	Trade promotion authority 62
Special Supplemental Nutrition Program for	Trichinella spiralis 138
Women, Infants, and Children 90, 125, 126,	Tung nuts and oil 77 Two-price plan 80
131, 135	Two-tier debt restructuring 122
Spices 138	Two-tier milk pricing 27
Spinach 150	TWO GOT THIIN PHOTING 27
State National Agricultural Pesticide Impact As-	U
sessment Program 146	•
Step 1, 2, 3 cotton programs 25	United Nations 50

Upland cotton. See Cotton US Animal Identification Plan 145 US Centers for Disease Control and Prevention 140, 142 US Code of Federal Regulations 55 US Customs and Border Protection 51 USDA Center for Nutrition Policy and Promotion 125, 132 USDA Rural Development 114, 123 US Department of Commerce 51, 56 US Department of Health and Human Services 126, 127, 128, 129, 130, 132, 134 US Department of Justice 144 US Environmental Protection Agency 136, 146 US Food and Drug Administration 75, 133, 136, 138, 139, 142, 143, 148 US Grain Standards Act 94 US International Trade Commission 51, 56, 66, 77 US Public Health Service 148 US Senate Select Committee on Nutrition 125, 128 US Supreme Court 85 US Trade Representative 62 Utah 32

V

Variable levy 71, 81
Vegetable oil 60
Vegetables. See Fruits and vegetables
Venezuela 60, 74
Vibrio parahaemolyticus 142
Voluntary export restraint 82

W

Warehousing farm assets 124
Water quality 16, 37, 38, 39, 40, 41, 46, 47, 48
Water Quality Incentives Program 43
Welfare reform 126
Western Intermountain Region 92
West Virginia 32
Wetland Reserve Program 48
Wetlands 38, 46, 47, 48
Wheat 3, 4, 13, 14, 18, 19, 20, 22, 26, 28, 33, 60, 61, 74, 77
WIC. See Special Supplemental Nutrition Program for Women, Infants, and Children

Wildlife habitat 16, 41
Wildlife Habitat Incentives Program 49
Wisconsin 32
Wood products 69
Wool 18
World Health Organization 137
World Trade Organization 50, 51, 53, 57, 58, 60, 61, 62, 63, 65, 66, 67, 70, 71, 72, 73, 77, 78, 83, 149
Doha Round 53, 58, 60, 61, 63, 70, 83
WTO. See World Trade Organization
Wyoming 32

Y

Yellow Sheet 96 Yersinia enterocolitica 142

Z

Zero tolerance 144

Acreage Allotment | Acreage Reduction, Set-Aside, and Diversion | Bioenergy Program | Buyout Programs | Commodity Purchase Program | Cost-Sharing Assessment Programs | Cross-Compliance, Limited Cross-Compliance | Counter-Cyclical Payments (CCPs) | Counter-Cyclical Revenue Payments | Dairy Buyout, Termination Program | Dairy Diversion Program | Direct Payments, AMTA Payments, Decoupled Payments | Farmer-Owned Reserve (FOR) | Generic Payment in Kind (GPIK) | Long-Term Land Retirement, Soil Bank, Conservation Reserve Program (CRP) | Market Loss Assistance (MLA) Payments | Marketing Loan | Marketing Quotas | Nonrecourse Loan | Offsetting Compliance | Payment in Kind (PIK) | Payment Limits | Planting Flexibility (Flex Acres) | Step 1, 2, 3 Cotton Programs | Target Price | Two-Tier Milk Pricing | 0/92 and 50/92 | Catastrophic Coverage (CAT) | Disaster Programs | Livestock Revenue Protection | Multi-Peril Crop Insurance (MPCI) | Revenue Insurance | Agricultural Water Quality Protection Program (AWQPP) | Agriculture Conservation Program (ACP), Conservation Technical Assistance (CTA), Great Plains Conservation Program (GPCP) | Best Management Practices

(BMP) | POLICY TOOLS FOR US AGRICULTURE 4th EDITION | Conservation Compliance and Sodbuster | Conservation Reserve Program (CRP) | Conservation Security Program (CSP) | Environmental Quality Incentives Program (EQIP) | Grassland Reserve Program (GRP) | No Net Loss | Wildlife Habitat Incentives Program (WHIP) | Antidumping/Countervailing Duties Investigations (AD/CVD) | Barter/Counter Trade | Blended Credit | Cargo Preference | Contract Sanctity | Countervailing Duties | Direct Export Credit | Export Credit Guarantees | Export Embargoes | Export Enhancement Program (EEP) | Export Payment-in-Kind (PIK), Bonus Incentive Commodity Export Program (BICEP) | Free Trade Agreement (FTA) | General Agreement on Tariffs and Trade (GATT) | Generalized System of Preferences (GSP) | Import License | Import Quotas | Import Tariffs | International Commodity Agreements | Market Access Program (MAP) | Monetary Export Subsidies | Nontariff Trade Barrier | Normal Trade Relations (NTR), formerly Most Favored Nation (MFN) | Preferential Trading Arrangements (PTA) | Price Bands and Reference Prices | Public Health Security and Bioterrorism Preparedness and Response Act of 2002 (Bioterrorism Act 2002 or BTA) | Public Law (PL) 480, Food for Peace | Nutrition Education Programs | Nutrition Labeling | Senior Nutrition Programs | The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) | Codex Alimentarius Commission | Food Irradiation | Food Recall | Food Safety Education | Food Safety Performance Standards and Information | Foodborne Disease Active Surveillance Network (FoodNet) | Hazard Analysis Critical Control Point (HACCP) | Level of Tolerance, Zero Tolerance, No Significant Risk | National Animal Identification System (NAIS) | Pesticides Regulation, Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), Food Quality Protection Act (FQPA) | Product Labeling | Risk Assessment | Traceability, Product Tracing, Prod-

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