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Agriculture: A Glossary of Terms, Programs, and Laws

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Jasper Womach, Coordinator
Agricultural Policy Specialist
Environment and Natural Resources Policy Division

Principal CRS contributors to this glossary are: Geoffrey S. Becker; John Blodgett; Ralph Chite; Jean Yavis Jones; Paul Rockwell; and Jasper Womach. Other CRS contributors are: Eugene Boyd; Lynne Corn; Betsy Cody; Claudia Copeland; Diane Duffy; Bruce Foote; Ross Gorte; Charles Hanrahan; Remy Jurenas; Martin R. Lee; Donna Porter; Jean M. Rawson; Joe Richardson; Jack Taylor; Linda Schierow; Mary Tiemann; Donna Vogt; and Jeffrey Zinn. Jasper Womach is responsible for coordination and editing. Because the industry, federal programs, policy issues, and the law are continuously changing, this glossary will be updated in the future. Suggestions and comments can be sent to jwomach@crs.loc.gov.

Agriculture: A Glossary of Terms, Programs, and Laws

Summary

The complexities of federal farm and food programs have generated a unique vocabulary. Common understanding of these terms (new and old) is important to those involved in policymaking in this area. For this reason, the House Agriculture Committee requested that CRS prepare a glossary of agriculture and related terms (e.g., food programs, conservation, forestry, environmental protection, etc.). Besides defining terms and phrases with specialized meanings for agriculture, the glossary also identifies acronyms, agencies, programs, and laws related to agriculture that are of particular interest to the staff and Members of Congress. CRS is releasing it for general congressional use with the permission of the Committee.

The approximately 1,700 items selected for inclusion in this glossary were determined in large part by Committee instructions concerning their needs, and by the informed judgment of numerous CRS experts. Time and resource constraints influenced how much and what was included. Many of the glossary explanations have been drawn from other published sources, including previous CRS glossaries, those published by the U.S. Department of Agriculture and other federal agencies, and glossaries contained in the publications of various organizations, universities, and authors. In collecting these definitions, the compilers discovered that many terms have diverse specialized meanings in different professional settings. In this glossary, the definitions or explanations have been written to reflect their relevance to agriculture and recent changes in farm and food policies.

This glossary is in alphabetical order and contains an explanation for each term with appropriate cross references. The terms shown in **bold** in the text of narrative explanations are included elsewhere as individual glossary terms; additionally, there are cross references to related terms. Some of the acronyms, particularly those of organizations and associations, are not followed by an explanation.

The definitions and explanations are not legal in nature, but are explanatory. Hence, this document should not be used as a legal or administrative reference. For those purposes, the Statutes at Large, U.S. Code, and the Code of Federal Regulations are the more appropriate resources.

Agriculture: A Glossary of Terms, Programs, and Laws

AAEA — American Agricultural Economics Association

AAFCO — American Association of Feed Control Officials

AAM — American Agriculture Movement

AAMP — American Association of Meat Processors

AARCC — Alternative Agriculture Research and Commercialization Corporation

ABA — American Bakers Association; American Bankers Association; American Bar Association

Abandoned wells — Abandoned **drainage wells** and abandoned water wells on vacant farmsteads are of particular concern for agriculture. Abandoned wells can present both safety risks and a direct conduit by which groundwater can be contaminated by surface runoff. A number of states have incentive and/or regulatory programs to cap or seal abandoned wells.

AC — Area conservationist

ACA — Agricultural Credit Association

ACE — Agriculture in Concert with the Environment

Acid deposition / acid rain — Abnormally acidic (low **pH**) precipitation (or dry deposition) resulting from emissions of sulfur and **nitrogen** compounds that transform during chemical processes in the atmosphere. Acid deposition can affect the chemistry of soils and acidify lakes, adversely affecting forests and fish. It does not adversely affect cropland. The **Clean Air Act** includes a program focused on controlling precursor emissions of acid deposition—primarily sulfur oxides from coal-fired electric utilities.

ACP — Agricultural Conservation Program

ACPA — American Crop Protection Association

Acquired lands — Lands in federal ownership that were obtained by the federal government through purchase, condemnation, gift, or exchange. One category of **public lands**.

ACR — Acreage conservation reserve

Acre-foot — The volume of water that would cover one acre of land (43,560 square feet) to a depth of one foot, equivalent to 325,851 gallons of water. An acre-foot is the basic measure of agricultural water use. On average, irrigators apply almost 2 feet of water on each

acre through the crop growing season; the amount ranges from 4 feet in the Southwest to a half foot in some eastern states. **Irrigation** accounts for about 85 maf (million acre-feet) of water use annually.

Acreage allotment — Under provisions of permanent commodity **price support** law, a farm's acreage allotment is its share, based on its previous production, of the national acreage needed to produce sufficient supplies of a particular crop. Under the **FAIR Act of 1996**, acreage allotments are not applicable to the **contract commodities**, peanuts, or sugar. However, acreage allotments still apply to tobacco.

Acre — 1 acre=43,560 sq. ft.=208.7 ft.²=0.405 hectares; or 640 acres=1 sq. mile (called a section).

Acreage base (or base acres) — A farm's average planted acreage for a specific crop over the previous five years (for wheat or feed grains) or three years (for cotton or rice), plus land not planted because of certain **acreage reduction** or diversion programs. Commodity acreage bases were eliminated by the **FAIR Act of 1996**.

Acreage limitation — With respect to commodity policy, acreage limitation might refer to planting constraints under an **acreage reduction program, set-aside, or paid land diversion**. In relation to water policy, it is the maximum number of acres that may be irrigated with less than **full-cost water** from Bureau of Reclamation projects. Generally, the acreage limitation for individuals or legal entities representing 25 people or fewer is 960 acres; however, amounts vary depending on a landowner's legal status. Also referred to as ownership limitation, ownership entitlement, or non-full-cost entitlement.

Acreage Reduction Program (ARP) — A no longer authorized annual cropland retirement program for wheat, feed grains, cotton, or rice in which farmers participating in the **commodity programs** (in order to be eligible for **nonrecourse loans** and **deficiency payments**) were mandated to idle a crop-specific, nationally-set portion of their **base acreage** during years of surplus. The idled acreage (called the acreage conservation reserve) was devoted to a **conserving use**. The goal was to reduce supplies, thereby raising market prices. Additionally, idled acres did not earn **deficiency payments**, thus reducing commodity program costs. ARP was criticized for diminishing the U.S. competitive position in export markets. The **FAIR Act of 1996** did not reauthorize authority for ARPs. ARP differed from a **set-aside program** in that under a **set-aside program** reductions were based upon current year plantings, and did not require farmers to reduce their plantings of a specific crop.

ACS — Alternative conservation system

ACSH — American Council on Science and Health

Action levels — As opposed to **tolerances** (which are established for **pesticide** residues occurring as a direct result of proper usage), action levels are set for inadvertent residues resulting from previous legal use or accidental contamination. At the action level set by EPA, FDA and USDA are required to take enforcement action against the contaminated food or agricultural commodity. The term is also used in other regulatory programs.

Active ingredient — In any **pesticide** product, the component that kills, or otherwise controls, target pests. Pesticides are regulated by EPA primarily on the basis of active ingredients.

ACTPN — Advisory Committee for Trade Policy and Negotiations

Actuarially sound — The financial goal of any insurance program (including the **federal crop insurance program**) is to operate on an actuarially sound basis; that is, total premiums collected should more than offset total indemnities paid out.

Acute toxicity — The ability of a substance to cause harmful effects soon after a single exposure or dose. Also, any severe poisonous effect resulting from a single short-term exposure to a toxic substance. See also **chronic toxicity**.

AD — **Anti-dumping duty**

Ad valorem duty — A **tariff** expressed as a fixed percentage of the value of the imported commodity or product.

ADA — American Dairy Association; American Dietetic Association

ADC — **Animal Damage Control Program**

Additional peanuts — Peanuts sold from a farm in any marketing year in excess of the amount of quota peanuts (see **peanut poundage quota**) sold from that farm. Additional peanuts must be exported or crushed into oil and meal. Additional peanuts are eligible only for the lower of two **price support** levels available under the **peanut price support program**. The lower additional loan rate is set to ensure that the CCC does not incur losses on their sale and disposal. In setting this support level, USDA is also required to take into account the demand for peanut oil and meal, expected prices of other vegetable oils and protein meals, and the demand for peanuts in foreign markets. Under the **FAIR Act of 1996**, loans for additional peanuts remain available.

ADI — Acceptable daily intake

Adjusted world price (cotton) — As part of the upland cotton **marketing assistance loan** program, USDA calculates and publishes, on a weekly basis, what is known as the adjusted world price (AWP). The AWP is the prevailing **world price** for upland cotton, adjusted to account for U.S. quality and location. Producers who have taken out USDA marketing assistance loans may choose to repay them at either the lesser of the established loan rate for upland cotton, plus interest, or the announced AWP for that week. The AWP is also used for determining so-called **Step 2 payments**.

Administrative Procedure Act — P.L. 79-404 (July 11, 1946), as amended, establishes, among other things, minimum procedural requirements or models for federal agency rulemaking and certain types of hearings. For instance, the APA establishes procedures for informal rulemaking, which may include notice-and-comment requirements, or formal rulemaking, which includes trial-type hearings. Exemptions from rulemaking requirements are included in the Act. The APA provides standards for judicial review of final agency action. The provisions of the APA apply to USDA rulemaking, unless exempted under the provisions of another statute. For example, hearings conducted by the USDA's **National Appeals Division** (NAD) are not governed by the APA. The final determination of the NAD is reviewable and enforceable by a U.S. District Court in accordance with the judicial review provisions of the APA.

Adulterated food — Generally, impure, unsafe, or unwholesome; however, the **Federal Food, Drug, and Cosmetic Act**, the **Federal Meat Inspection Act**, and the **Poultry Products Inspection Act** contain separate language defining in very specific (and lengthy) terms how the term “adulterated” will be applied to the foods each of these laws regulates. Products that are adulterated under these laws’ definitions cannot enter into commerce for human food use.

Advance deficiency payments — Initial payments (ranging from 30 to 50% of the total payment) made to crop producers when they signed up for federal **commodity programs**. If the total deficiency payment was eventually calculated to be less than the advance deficiency payment, the producer was required to refund the difference. The **FAIR Act** of 1996 replaces the target price/deficiency payment subsidy mechanism with **production flexibility contract** payments.

AFBF — American Farm Bureau Federation (Farm Bureau)

AFDO — Association of Food and Drug Officials

AFFI — American Frozen Food Institute

AFIA — American Feed Industry Association

AFT — American Farmland Trust

Agency for International Development (AID or USAID) — An independent agency of the executive branch that administers U.S. international development and humanitarian assistance programs. USAID administers commodity donations for humanitarian or development purposes under **P.L. 480**, or **Food for Peace**, and **commodity import programs**. <http://www.info.usaid.gov/>

Aggregate measure of support (AMS) — An indicator of the amount of domestic support for agriculture. As used in the **Uruguay Round Agreement on Agriculture**, the AMS refers to a measure of the gap between domestic and world prices multiplied by the quantity supported, plus any other commodity-specific transfers. Internal or domestic support reduction commitments in the Uruguay Round Agreement on Agriculture are expressed in terms of reductions in a total AMS covering all trade-distorting internal support measures for agriculture.

Agribusiness — Agriculturally related businesses that supply farm inputs (such as fertilizer or equipment) or are involved in the marketing of farm products (such as warehouses, processors, wholesalers, transporters, and retailers). Farms are not usually included when the term agribusiness is used.

Agricultural Act of 1949 — P.L. 89-439 (October 31, 1949), along with the **Agricultural Adjustment Act of 1938**, makes up the major part of the **permanent law** that mandates commodity price and farm income support. The original 1949 Act designated mandatory support for **basic commodities** and the following **nonbasic commodities**: wool and mohair, tung nuts, honey, Irish potatoes (excluded in the **Agricultural Act of 1954**), and milk, butterfat, and their products. Periodic **farm bills** (most recently the **FAIR Act of 1996**) make temporary changes in the levels and design of **commodity programs**.

Agricultural Act of 1954 — P.L. 83-690 (August 28, 1954) established a flexible price support for basic commodities (excluding tobacco) at 82.5-90% of **parity** and authorized a **Commodity Credit Corporation** reserve for foreign and domestic relief. Title VII was designated the **National Wool Act of 1954** and provided for a new **price support** program for wool and mohair to encourage increased domestic production. Price support for wool and mohair continued through marketing year 1995, at which time it was phased down and terminated under the explicit mandate of P.L. 103-130 (November 1, 1993).

Agricultural Act of 1956 — P.L. 84-540 (May 28, 1956) created the **Soil Bank Program** (Title I of was called the **Soil Bank Act**) addressed the disposal of CCC inventories of surplus stocks, contained commodity support program provisions, and forestry provisions. The Soil Bank Act authorized short- and long-term removal of land from production with annual rental payments to participants (Acreage Reserve Program and Conservation Reserve Program, respectively). The Acreage Reserve Program, for wheat, corn, rice, cotton, peanuts, and several types of tobacco, allowed producers to retire land on an annual basis in crop years 1956 through 1959 in return for payments. The Conservation Reserve Program allowed producers to retire cropland under contracts of 3, 5, or 10 years in return for annual payments. The **Soil Bank Act** was repealed by Section 601 of the **Food and Agriculture Act of 1965**. The Conservation Reserve portion of the Soil Bank was a model for the subsequent **Conservation Reserve Program (CRP)**, enacted in 1985.

Agricultural Act of 1970 — P.L. 91-524 (November 30, 1970) initiated a significant change in commodity support policy. This 3-year **farm bill** replaced some of the more restrictive and mandatory features of acreage allotments, planting restrictions, and marketing quotas with voluntary annual cropland **set-asides** and marketing certificate payments to achieve **parity prices** (the precursor to **target prices** and **deficiency payments**). For the first time, the law adopted a **payment limitation** per producer (set at \$55,000 per crop). The Act also amended and extended the authority of the **Class I differential** in federal **milk marketing order** areas.

Agricultural Adjustment Act (AAA) of 1933 — P.L. 73-10 (May 12, 1933) was the New Deal initiative to assist the farm sector during the Great Depression. This was the first comprehensive effort to raise and stabilize farm prices and income. The law created and authorized the Agricultural Adjustment Administration to (1) enter into voluntary agreements to pay farmers to reduce production of designated “**basic**” **commodities** (cotton, wheat, corn, rice, tobacco, hogs, and milk), (2) to make advance payments to farmers who stored crops on the farm, (3) to create **marketing agreements** between farmers and middlemen, and (4) to levy processing taxes to pay for production adjustment and market development. The **Commodity Credit Corporation (CCC)** was incorporated under the laws of the state of Delaware on October 17, 1933, to carry out financial activities, including making **nonrecourse loans** on the basic crops. Support for other commodities was authorized upon recommendation by the Secretary with the President’s approval. Commodity loan programs carried out by the CCC for 1933-37 included cotton, corn, rosin, turpentine, tobacco, peanuts, dates, figs, and prunes. The provisions for production control and processing taxes in the Act were later declared unconstitutional in the Hoosac Mills decision of 1936. Congress responded by adopting the **Soil Conservation and Domestic Allotment Act of 1936**, the **Agricultural Marketing Act of 1937**, and the **Agricultural Adjustment Act of 1938**, all of which remain as **permanent law**.

Agricultural Adjustment Act Amendment of 1935 — P.L. 74-320 (August 24, 1935) made several important and lasting changes to the **Agricultural Adjustment Act of 1933**. **Section 22** of the law gave the President authority to impose quotas when imports interfered

with **commodity programs** designed to raise prices and farm income. **Section 32** was designed to widen market outlets for surplus agricultural commodities by permanently appropriating funds to purchase commodities for primarily **child nutrition programs**. Section 22 has been superseded, but Section 32 continues to operate.

Agricultural Adjustment Act of 1938 — P.L. 75-430 (February 16, 1938) was enacted as an alternative and replacement for the farm subsidy policies found unworkable in the AAA legislation of 1933. The 1938 Act was the first to make **price support** mandatory for corn, cotton, and wheat to help maintain a sufficient supply in low production periods along with **marketing quotas** to keep supply in line with market demand. It established permissive supports for butter, dates, figs, hops, turpentine, rosin, pecans, prunes, raisins, barley, rye, grain sorghum, wool, winter cover-crop seeds, mohair, peanuts, and tobacco for the 1938-40 period. Also, Title V of the Act established the **Federal Crop Insurance Corporation**. The 1938 Act is considered part of **permanent legislation** for **commodity programs** and farm income support (along with the **Commodity Credit Corporation Charter Act** and the **Agricultural Act of 1949**). Provisions of this law are often superseded by more current legislation (such as the **FAIR Act of 1996**). However, if the current legislation expires and new legislation is not enacted, the law reverts back to the permanent provisions of the 1938 Act.

Agricultural Attache, Counselor, or Trade Officer — An agricultural expert, employed by the Foreign Agricultural Service, on the staff of an embassy, consulate, or agricultural trade office.

Agricultural Conservation Program (ACP) — Administered by the Farm Service Agency, this largest and oldest conservation cost-sharing program paid farmers up to \$3,500 per year as an incentive to install approved conservation practices. It was terminated in the **FAIR Act of 1996** and replaced by a new **Environmental Quality Incentives Program (EQIP)**.

Agricultural diversification — A system of farming that encourages production of a variety of plant and animals and their products as opposed to monoculture or large-scale specialization. Advocates of diversification argue that it provides greater income stability. Specialized farms benefit from **economies of size**.

Agricultural Market Transition Act (AMTA) — Title I of the **FAIR Act of 1996**. It allows farmers who have participated in the wheat, feed grain, cotton, and rice programs in any one of the 5 years prior to 1996 to enter into 7-year **production flexibility contracts** for 1996-2002. Total national **production flexibility contract** payments (sometimes called AMTA payments, or **contract payments**) for each fiscal year are fixed in the law. The AMTA allows farmers to plant 100% of their total **contract acreage** to any crop except fruits and vegetables, and receive a full payment. Land must be maintained in agricultural uses. Unlimited **haying and grazing** and planting and harvesting alfalfa and other forage crops are permitted with no reduction in payments.

Agricultural Marketing Agreement Act of 1937 — This law reaffirmed the marketing agreements provisions of the **Agricultural Adjustment Act of 1933** and redefined the process for establishing **marketing orders**. Under the authority of this permanent law and subsequent amendments, marketing orders have been established for milk as well as numerous fruits and vegetables.

Agricultural Marketing Service (AMS) — A USDA agency that establishes standards for **grades** of cotton, tobacco, meat, dairy products, eggs, fruits, and vegetables. It also operates inspection and grading services and market news services, and provides supervisory administration for federal **marketing orders**. <http://www.ams.usda.gov/>

Agricultural pollution — Wastes, emissions, and discharges arising from farming activities. Causes include runoff and leaching of **pesticides** and **fertilizers**; pesticide drift and volatilization; **erosion** and dust from cultivation; and improper disposal of animal manure and carcasses. Some agricultural pollution is **point source**, e.g., large feedlots, which require permits under the **Clean Water Act**, but much is **nonpoint source**, meaning that it derives from dispersed origins, e.g., blowing dust or nutrients leaching from fields. As most pollution control programs have focused on particular categories of point sources, nonpoint and unregulated point sources account for an increasingly large proportion of remaining pollution. Based on state surveys, EPA concludes that agricultural sources account for over one-half the pollution impairing surface water quality in the U.S. The **Clean Water Act** mandates that states develop and implement management programs to control nonpoint sources of water pollution.

Agricultural Quarantine Inspection (AQI) — A program, administered by USDA's **Animal and Plant Health Inspection Service**, that inspects incoming passengers, luggage, and cargo at U.S. ports of entry in order to protect U.S. agriculture from foreign animal and plant pests and diseases.

Agricultural Research Service (ARS) — A USDA agency employing federal scientists to conduct basic, applied, and developmental research in the following fields: livestock; plants; soil, water and air quality; energy; food safety and quality; nutrition; food processing, storage, and distribution efficiency; non-food agricultural products; and international development. <http://www.ars.usda.gov/>

Agricultural Stabilization and Conservation Service (ASCS) — This was the USDA agency once primarily responsible for administering the farm commodity price and income support programs, and conservation cost-sharing programs. Its functions were folded into a new **Farm Service Agency** as a consequence of 1994 reorganization. A local **field service center** is maintained in nearly all farming localities.

Agricultural Trade Development and Assistance Act of 1954 — P.L. 83-480 (July 10, 1954) is commonly referred to as "**PL 480**" and "**Food for Peace**." The law established what continues to be the primary U.S. overseas food assistance program. The program made U.S. agricultural commodities available through long-term credit at low interest rates and provided food donations.

Agricultural trade office — The **Agricultural Trade Act of 1978** directed the establishment of trade offices in major centers of commerce throughout the world. Agricultural trade offices are operated by USDA's **Foreign Agricultural Service** to develop, maintain, and expand international markets for U.S. agricultural commodities and serve as centers for export sales promotion and contact points for importers seeking to buy U.S. farm products.

Agriculture and Consumer Protection Act of 1973 — P.L. 93-86 (August 10, 1973) was the 4-year **farm bill** that adopted **target prices** and **deficiency payments** as a tool that would support farm income but reduce forfeitures to the **Commodity Credit Corporation** of surplus stocks. It reduced **payment limitations** to \$20,000 (from

\$55,000 set in 1970) for all program crops. The Act might be considered the first omnibus farm bill because it went beyond simply authorizing farm commodity programs. It authorized disaster payments and disaster reserve inventories; created the Rural Environmental Conservation Program; amended the **Food Stamp Act of 1964**, authorized the use of commodities for feeding low income mothers and young children (the origin of the supplemental food program); and amended the **Rural Development Act of 1972**.

Agriculture and Food Act of 1981 — P.L. 97-98 (December 22, 1981) was the 4-year omnibus **farm bill** that continued and modified commodity programs through 1985. It set specific target prices for 4 years, eliminated rice allotments and marketing quotas, lowered dairy supports, and made other changes affecting a wide range of USDA activities. The next year this farm bill was amended to freeze the dairy price support level and mandate loan rates and acreage reserve provisions for the 1983 crops (Omnibus Budget Reconciliation Act of 1982, P.L. 97-253). Again in 1984, amendments were adopted to freeze target prices, authorize paid land diversion for feed grains, upland cotton, and rice, and provide a **wheat payment-in-kind** program for 1984 (Agricultural Programs Adjustment Act of 1984, P.L. 98-258).

Agriculture in Concert with the Environment (ACE) — An EPA program, administered cooperatively with USDA's **Sustainable Agriculture Research and Education (SARE)** program, to fund research projects that reduce the risk of pollution from pesticides and soluble fertilizers.

AHI — Animal Health Institute

AID — Agency for International Development

AIF — Animal Industry Foundation

Air pollution — Contamination of the atmosphere by substances that, directly or indirectly, adversely affect human health or welfare. Air pollution results from human activities, both deliberate releases (as from smokestacks) and fugitive emissions (as dust blown from streets or fields), and from natural sources, including sea spray, volcanic emissions, pollen, etc. The **Clean Air Act** authorizes EPA to regulate air pollution (see **National Ambient Air Quality Standards**).

Alar — Trade name for daminozide, a plant regulator and therefore classed as a pesticide, that makes apples redder, firmer, and less likely to drop off trees before harvest. It was also used to a lesser extent on peanuts, tart cherries, concord grapes, and other fruits. Alar was suspended by EPA in 1989 following a controversy over allegations of cancer risk to children from residues of Alar and its breakdown product UDMH on apples and in apple products.

Alcohol — The family name of a group of organic chemical compounds that includes methanol, **ethanol**, isopropyl alcohol, and others. Ethanol is produced from crops or residues with a high carbohydrate content. Alcoholic beverages contain ethanol, and ethanol is blended with gasoline to produce gasohol. Most industrial ethanol produced in the U.S. is from **wet-milling**.

Allotment — In conjunction with commodity support programs, **acreage allotments** and **marketing quotas** serve to limit a farm's output or volume marketed. For federal lands grazing, an allotment is an area designated and managed for grazing of livestock. The

Bureau of Land Management and the **Forest Service** stipulate the number of livestock and time period (season) of use for each allotment.

Allowable sale quantity (ASQ) — A forestry term defined in law as the maximum amount of timber that can be sold every year, forever, from a national forest; in **forest planning**, the annual timber sale target for a national forest.

Alternative Agricultural Research and Commercialization Corporation (AARCC) — Originally established by the **FACT Act 1990** as the Applied Agricultural Research Commercialization Center, the purpose of the AARCC is to assist in the research, development, and commercialization of new nonfood products from agricultural and forestry commodities. AARCC makes repayable equity investments, such as buying stock or taking a percentage of future sales (royalties), or both. The **FAIR Act of 1996** changed the Center from a government agency to a wholly-owned venture capital corporation of USDA.

Alternative agriculture — A systematic approach to farming intended to reduce agricultural pollution, enhance sustainability, and improve efficiency and profitability. Overall, alternative agriculture emphasizes management practices that take advantage of natural processes (such as nutrient cycles, nitrogen fixation, and pest-predator relationships), improve the match between cropping patterns and agronomic practices on the one hand and the productive potential and physical characteristics of the land on the other, and make selective use of commercial fertilizer and pesticides to ensure production efficiency and conservation of soil, water, energy, and biological resources. Examples of alternative agricultural practices include use of crop rotation, animal and green manures, soil and water conserving tillage systems, such as **no-till** planting methods, **integrated pest management**, and use of genetically improved crops and animals. Consonant with **sustainable agriculture**, alternative agriculture focuses on those farming practices that go beyond traditional or **conventional agriculture**, though it does not exclude conventional practices that are consistent with the overall system.

Alternative fuels — Substitutes for traditional liquid, oil-derived motor vehicle fuels like gasoline and diesel. Includes **methanol**, **ethanol**, compressed natural gas, and others. The alternatives are promoted for pollution reduction properties and/or to reduce U.S. dependence on imported oil. **Ethanol** can be produced from grain, agricultural wastes, and excess crops.

AMI — American Meat Institute

Ammonia — A pungent alkaline gas, a compound of **nitrogen** and hydrogen (NH₃). It is formed naturally when bacteria decompose nitrogen-containing compounds, such as manures. Emissions of ammonia can be a problem in enclosed livestock facilities, and in the ambient air they may contribute to very fine **particulate matter**. Synthetic ammonia is used as a nitrogen fertilizer. Also called anhydrous ammonia, it is the basic feed stock for the production of all nitrogen fertilizers as well as being a direct application material. Synthetic ammonia is made through a reaction between natural gas and nitrogen.

AMS — **Aggregate measure of support; Agricultural Marketing Service**

AMTA — **Agricultural Market Transition Act**

ANCOM — **Andean Common Market**

Andean Common Market (ANCOM or Andean Group) — Formed in May 1969 by Chile, Ecuador, Peru, and Bolivia under the Cartagena Agreement, which called for eliminating all barriers to trade by the end of 1980 and the establishment of a common external tariff. Venezuela joined in 1973. Chile withdrew in 1976.

Animal and Plant Health Inspection Service (APHIS) — A USDA agency established to conduct inspections and regulatory and control programs to protect animal and plant health. It utilizes border inspections to prevent international transmission of pests and disease, administers quarantine and eradication programs, and certifies that U.S. exports meet importing countries' animal and plant health standards. <http://www.aphis.usda.gov/>

Animal Damage Control (ADC) Program — An **Animal and Plant Health Inspection Service** program to protect agriculture, natural resources, property or **endangered species** from unwanted and potentially harmful effects of wildlife species, including predators. ADC also works to prevent wildlife/airplane collision hazards at civilian and military airports.

Animal drugs — Drugs intended for use in the diagnosis, cure, mitigation, treatment, or prevention of disease in animals. The **Food and Drug Administration (FDA)** has the broad mandate under the **Federal Food Drug and Cosmetic Act** to assure the safety and effectiveness of animal drugs and their use in all animals, including farm animals. Before FDA formally approves an animal drug, the sponsor or manufacturer of the drug must show in its premarket approval application that the drug is “safe and effective” in scientific testing. Such testing data, included with the application, must demonstrate a methodology to detect and measure any residue left in edible animal products and show that edible animal products when ready-to-eat are free from unsafe residues. Farmers and veterinarians treating farm animals must adhere to any restrictions about withdrawal times, or any warning or use constraints stated on the drug label.

Animal identification and traceback — Currently, the private marketing system, assisted by computerization of records, generally can trace the products back to their original suppliers, although not necessarily all the way to the farm. It has been suggested that a type of traceback program might be formalized to better monitor and contain outbreaks of foodborne illness. USDA has called “animal identification” an important element of any traceback system. Livestock producers already frequently identify their animals using back-tags, ear tags, tattoos, and other devices, so that incorporating animal identification into a traceback program might not be difficult. While few dispute the usefulness of animal identification and traceback systems in general, whether they should be made regulatory requirements, or remain voluntary, is a contentious issue.

Animal protein — Protein used in livestock feed that is derived from meatpacking or rendering plants, surplus milk or milk products, and marine sources.

Animal unit — A standard measure, based on feed requirements, used to combine various classes of livestock according to size, weight, age, and use. For federal lands, an animal unit represents one mature cow, bull, steer, heifer, horse, mule, or five sheep, or five goats, all over six months of age. An animal unit month (AUM) is the amount of forage needed to sustain one animal unit, or its equivalent, for one month. **Grazing fees** for federal lands are charged by animal unit months or **head-months**.

Animal Welfare Act — P.L. 89-544 (August 24, 1966) was enacted to curb the theft and mistreatment of dogs and cats for experimental and research purposes. The principal federal animal protection law, it has been amended several times to address specific concerns such

as the shipping of pets on public transportation, dog fighting, and using other warm-blooded animals in biomedical experiments. Although administered by USDA's **Animal and Plant Health Inspection Service**, the law has always excluded farm animals from its coverage. Generally, USDA is authorized to "promulgate standards to govern the humane handling, care, treatment, and practices in experimental procedures to ensure that animal pain and distress are minimized..." The law excludes from the definition of animal "...horses not used for research purposes and other farm animals, such as, but not limited to livestock or poultry, used or intended for use as food or fiber, or livestock or poultry used or intended for use for improving animal nutrition, breeding, management, or production efficiency, or for improving the quality of food or fiber." Animal welfare has become more controversial in recent years as certain animal protection groups have argued for more extensive legal protections for animals. Some groups believe that any human uses of animals are inhumane, unethical and/or immoral, and should be prohibited. Among those who accept the premise that humans should and will use animals for food and other necessities, the debate over the meaning of animal welfare revolves around the most appropriate methods for taking care of animals, including farm animals. For example, legislation has been proposed (but not enacted) in recent years that would intervene in animal production operations by regulating confinement facilities; determining the diets of veal calves; specifying how poultry must be slaughtered; and prohibiting dealers from handling nonambulatory (**downer**) livestock unless they are humanely killed.

ANPR — Advance notice of proposed rulemaking

Antemortem — Before slaughter. As used in the meat and poultry inspection program, the term refers to the examination that USDA meat inspectors are required to conduct of all live animals just before they are killed.

Antidumping duty — A **duty** or **levy** imposed under authority of Title VII of the **U.S. Tariff Act of 1930**. Title VII states that if the U.S. Department of Commerce determines that an imported product is being sold at less than its fair value, and if the **U.S. International Trade Commission** determines that a U.S. producer is thereby being injured, the Commerce Department shall apply antidumping duties equivalent to the **dumping** margin.

APA — **Administrative Procedure Act**

APEC — Asian Pacific Economic Cooperation Forum

APHA — American Public Health Association

APHIS — **Animal and Plant Health Inspection Service**

Appraised stumpage price (or appraised rate) — On national forests, the **Forest Service** estimate of the market price for timber to be cut and removed. It cannot be less than the **base rates**. The appraised price is the advertised minimum for competitive bidding by purchasers.

APWA — American Public Welfare Association

AQI — Agricultural Quarantine Inspection

Aquaculture — The **National Aquaculture Act of 1980** defines aquaculture as “the propagation and rearing of aquatic species in controlled or selected environments, including ocean ranching.” The Act divides responsibility for most aquaculture research, regulatory and related activities among the Departments of Agriculture, Commerce, and Interior. Private aquaculture has grown rapidly and diversified in recent years; in the United States, aquaculture is dominated (80%) by catfish production.

Aquifer — An underground geological formation, or group of formations, containing usable amounts of groundwater that can supply wells or springs for domestic, industrial, and **irrigation** uses. Removing more groundwater from an aquifer than is naturally replenished is called overdrafting, and can result in a dropping water table, increased pumping costs, land subsidence (which reduces the future recharge capacity), saltwater intrusion, reduced streamflows in interconnected ground- and surface-water systems, and exhaustion of groundwater reserves. Overdrafting groundwater occurs primarily in the Plains States and the West.

Area yield options contract — A contract entitling the holder to receive a payment when the area yield is below (above) the **put (call)** option strike yield. The strike yield is the yield at which the holder of an **option contract** can exercise the option.

ARI — Aquifer risk index

Arid — A relatively dry climate in which annual precipitation is less than 10 inches, which generally is insufficient for crops to be grown without **irrigation**. Such areas usually are the focus of debate over federal water policies.

ARP — Acreage reduction program

ARS — Agricultural Research Service

ASA — American Society of Agronomy; American Soybean Association; American Sugar Alliance

ASAE — American Society of Agricultural Engineers

ASEAN — Association of Southeast Asian Nations

ASFSA — American School Food Service Association

ASIA — American Sheep Industry Association

Asia-Pacific Economic Cooperation (APEC) forum — Established in 1989, APEC is a formal institution with a permanent secretariat located in Singapore. Its original 12 members include Australia, New Zealand, the United States, Canada, Japan, South Korea, Thailand, Malaysia, Indonesia, the Philippines, Singapore, and Brunei. In 1991, APEC admitted China, Taiwan (admitted as Chinese Taipei), and Hong Kong. Mexico and Papua New Guinea joined in 1993 and Chile was admitted in 1994. APEC provides a forum for ministerial level discussion and cooperation on a range of economic issues including trade, investment, technology transfer, and transportation.

ASQ — Allowable sale quantity

Assessment — Generally an automatic or mandatory deduction from a producer's marketing receipts used to fund activities that promote or otherwise support a particular farm product. Under certain agricultural **marketing orders** or **commodity promotion programs**, assessments may be applied against receipts to help pay for generic advertising or research. The term **check-off** is often used interchangeably with assessment. Federal deficit reduction **marketing assessments** have also been connected to certain commodity **price support** programs (dairy, peanuts, sugar, tobacco, and soybeans) to help reduce the federal budget deficit, which arguably is higher because of the programs.

Assimilative capacity — The ability of a body of water to cleanse itself; its capacity to receive wastewaters or toxic materials without deleterious effects and without damage to aquatic life or humans who consume the water.

Association of Southeast Asian Nations (ASEAN) — A multilateral organization formed in 1967 by the governments of Indonesia, Malaysia, the Philippines, Singapore, and Thailand to promote economic, social, and cultural cooperation among nations in the Southeast Asian region. Brunei joined later.

ASTA — American Seed Trade Association

ATO — Agricultural Trade Office

Atrazine — A selective herbicide, widely used on corn. It is environmentally significant, since it was the second most commonly detected pesticide residue in an EPA survey of drinking water wells conducted during 1988-1990. Due to concerns about groundwater contamination and worker exposure, EPA is conducting a **special review** of atrazine registration.

Attainment area — An area considered to have air quality as good as or better than the **National Ambient Air Quality Standards** as defined in the **Clean Air Act**. An area may be an attainment area for one pollutant and a non-attainment area for others.

Attractant — A chemical or agent that lures insects or other pests by stimulating their sense of smell. Attractants are a nontoxic technique for luring insects into traps and are heavily used in orchard crops. Though distinct from toxic baits, attractants are regulated as pesticides.

AU — **Animal unit**

Australian Wheat Board (AWB) — A statutory marketing authority, which handles Australia's domestic marketing of wheat and export marketings of wheat and flour. Under the Australian system, farmers take their wheat to elevators designated as official handling agents for the AWB. Following delivery, farmers receive an initial payment, then over a period of time (which can be over a year) they receive additional payments until the full price has been paid.

AVMA — American Veterinary Medical Association

AWA — **Animal Welfare Act**

AWB — Australian Wheat Board

AWP — Adjusted world price

AWT — Advanced wastewater treatment

B&I — Business and Industry Guaranteed Loan Program

BACT — Best available control technology

Balance of payments — An accounting statement measuring the value of goods, services and capital exchanged between a country and all foreign countries. A nation is said to have either: (1) a balance of payments deficit if it sends abroad less in goods, services, and capital than it receives from foreigners; or (2) a balance of payments surplus if it sends abroad more in goods, services, and capital than it receives.

Balance of trade — The difference in value between a country's merchandise imports and exports in a specified period. A country's balance of trade is only one factor — though an important one — in its **balance of payments**.

Band application — The spreading of chemicals over, or next to, each row of plants in a field, as opposed to **broadcast application**.

Bankhead-Jones Farm Tenant Act of 1937 — P.L. 75-210 authorized acquisition by the federal government of damaged lands to rehabilitate and use them for various purposes. Some Bankhead-Jones land are managed by both the **Forest Service** and the **Bureau of Land Management**. Some Forest Service Bankhead Jones lands are **National Grasslands**.

Banks for Cooperatives (BC) — Lending institutions within the **Farm Credit System** that provide credit to agricultural cooperatives and rural utility cooperatives nationwide. Currently, there are two BCs with national charters — the St. Paul Bank for Cooperatives and CoBank Agricultural Bank (Denver). CoBank also has the authority to finance U.S. agricultural exports and to provide international banking services to farmer-owned cooperatives.

Bargaining association — A farmer cooperative intended primarily to influence farm prices or other terms of trade between the members and the buyers of the commodities they produce.

Barter — A form of **countertrade** in which goods having offsetting values are exchanged under a single contract, within a specified period of time, and without any flow of money taking place. The U.S. government ran a barter program from 1950 to 1973, exchanging surplus agricultural commodities for strategic materials and for goods and services it otherwise would have purchased. In addition, barter agreements between the United States and Jamaica were signed in 1982 and 1983.

Base (or contract) acreage — A farm's crop-specific acreage of wheat, feed grains, upland cotton, or rice eligible to enroll in **commodity programs** under previous legislation, and subsequently eligible for **production flexibility contracts** under the **FAIR Act of 1996**. Base acreage equaled land planted for harvest to the crop, plus any land enrolled in **Acreage Reduction Programs**, plus land considered planted to the crop in **zero, 50/85-92** or under permitted normal flex or optional **flex acreage** during a specified period of time. A farmer's crop acreage base was reduced by the portion of land placed in the

Conservation Reserve Program (CRP), but increased by CRP base acreage leaving the CRP.

Base period price — The average price for an item in a specified time period used as a base for an index — such as 1910-14, 1957-59, 1967, 1977, or 1982. Time series of data are often deflated to a base period price. Such deflated time series are referred to as constant dollar values (versus nominal dollar values).

Base property — For the **Bureau of Land Management**: land or water resources, owned or controlled by a holder of a **grazing permit** or lease, that are suitable to support livestock for a part of the year. For the **Forest Service**: lands and improvements owned and used by a permittee for a farm or ranch and designated by the permittee to qualify for a **grazing permit**. One must own or control base property to be eligible for permits or leases to graze private livestock on federal lands.

Base rates — The minimum cash price for **national forest** timber to be cut and removed.

Basic commodities — Six agricultural crops (corn, cotton, peanuts, rice, tobacco, and wheat) declared by **permanent law** as requiring federal **price support**.

Basic formula price (BFP) — Calculated monthly by USDA, the BFP is the base price for all milk regulated by federal **milk marketing orders**. Currently, the BFP is based on the preceding month's average price of Grade B milk paid by processors in Minnesota and Wisconsin, adjusted by current-month changes in the value of certain manufactured dairy products.

Basing point — A geographical site used to establish fixed rates and/or prices for federal **milk marketing orders**. Generally, rates or prices increase according to the distance from the basing point. The **FAIR Act of 1996** authorizes USDA to consider the use of **multiple basing points** for pricing milk under federal milk orders.

Basis — The difference between the current **spot price** (or **cash price**) of a commodity and the price of the nearest **futures contract** for the same or a related commodity. Basis is usually computed in relation to the futures contract next to expire and may reflect different time periods, product forms, qualities, or locations.

Basis risk — The possibility of unexpected variation in basis and a resulting loss of expected revenue when a **futures contract** is liquidated and the commodity sold on the cash market.

BAT — Best available technology

bbf — Billion board feet

BC — **Banks for Cooperatives**

BCS — Basic conservation systems

BCT — Best control technology

Beef (cattle) price index (BPI) — An index of the weighted average annual price for beef cattle, excluding calves, for an 11 western state area as compared with a specific base period equal to 100. This index is used in calculating federal **grazing fees**.

Below-cost timber sale — A timber sale from national forest lands in which the expected federal revenues are less than the estimated federal expenses to sell the timber.

Best management practices (BMP) — A **conservation practice** or combination of practices designed to maintain agricultural productivity while reducing **point-** and **nonpoint-** source water pollution. State water quality agencies (or their designees) determine BMPs to fit local conditions and to make the most efficient use of natural resources and purchased inputs.

BFP — **Basic formula price**

BFW — Bread for the World

BGH — Bovine growth hormone (See **bovine somatotropin.**)

Bilateral trade agreement — A trade agreement between any two countries. The agreement may be either preferential (the obligations and benefits apply only to the two countries involved) or **most-favored-nation** (the benefits and obligations negotiated between the two countries are extended to all or most other nations). The U.S.-Israel Free Trade Agreement is one example.

Bill Emerson Good Samaritan Act of 1996 — P.L. 104-210 (October 1, 1996) was named in honor of the late Congressman who was a champion of efforts to expand food donations to the poor and protect those who make donations. It converts the **Model Good Samaritan Food Donation Act** to permanent law and incorporates it into the **Child Nutrition Act of 1966** (section 22). Good samaritan laws are designed to encourage the donation of food and groceries to nonprofit charitable agencies by minimizing the risks of legal actions against donors and distributors of foods. The 1996 amendments exclude from civil or criminal liability a person or nonprofit food organization that, in good faith, donates or distributes donated foods for food relief. The new law does not supersede state or local health regulations and its protections do not apply to an injury or death due to gross neglect or intentional misconduct.

Bioaccumulation — The absorption and storage of toxic chemicals, heavy metals, and certain pesticides in plants and animals. For example, lead that is ingested by calves can bioaccumulate in their bones, interfering with calcium absorption and bone development. Stored chemicals may be released to the blood stream at a later time, for example, during gestation or weight loss. Bioconcentration is a synonym for bioaccumulation.

Biochemical oxygen demand (BOD) — A measure of the amount of oxygen consumed in 5 days due to natural, biological processes that break down **organic** matter, such as those that take place when manure or sawdust is put in water. High levels of oxygen-demanding wastes in waters deplete **dissolved oxygen** (DO), thereby endangering aquatic life. Sometimes referred to as "biological oxygen demand. Chemical oxygen demand (COD) is a measure of the oxygen consumed when organic matter is broken down chemically rather than naturally. COD can be determined much more quickly than BOD and more accurately reflects the amount of organic matter in a water sample.

Biodiversity (or biological diversity) — In general, the variety and variation among plants, animals, and microorganisms, and among their ecosystems. It has 3 levels: ecosystem diversity, **species** diversity, and genetic (within species) diversity. The concept of maintaining biodiversity holds that civilization should preserve the greatest possible number

of existing species so that a highly diverse genetic pool, which can be tapped for useful and beneficial characteristics, will be available into the future. Genetic diversity provides resources for genetic resistance to pests and diseases. In agriculture, biodiversity is a production system characterized by the presence of multiple plant and/or animal species, as contrasted with the genetic specialization of monoculture.

Biological control — The practice of using beneficial natural organisms to attack and control harmful plant and animal pests and weeds is called biological control, or biocontrol. This can include introducing predators, parasites, and disease organisms, or releasing sterilized individuals. Biocontrol methods may be an alternative or complement to chemical pest control methods. Biocontrol is part of the **Animal and Plant Health Inspection Service** program to control several economically important pests of food and fiber crops; it also is researched and used by other USDA agencies that promote **integrated pest management**.

Biological oxygen demand — See **biochemical oxygen demand**.

Biologics — Immunization vaccines, bactrians, antigens, and antitoxins and other preparations made from living organisms and their products, intended for use in diagnosing, immunizing, or treating humans or animals, or in related research. The **Animal and Plant Health Inspection Service** has responsibility for approving some animal biologics.

Biomagnification (or biological magnification) — The increase in the concentration of bioaccumulated toxic chemicals in organisms higher on the food chain due to preferential storage of the toxic chemical in edible body parts. For example, chlorinated pesticides concentrate in the fat and skin of fish in contaminated lakes and streams and are biomagnified when those fish are eaten by larger fish, and perhaps eventually by mammals or birds of prey.

Biomass — The generic term for any living matter that can be converted into usable energy through biological or chemical processes. It encompasses feedstocks such as agricultural crops and their residues, animal wastes, wood, wood residues and grasses, and municipal wastes.

Biopesticide — A pesticide that is biological in origin in contrast to synthetic chemicals (i.e., viruses, bacteria, pheromones, natural plant compounds).

Biotechnology — The use of micro-organisms, live plant or animal cells or their parts, to create new products or to carry out biological processes aimed at genetic improvement. See **genetic engineering**.

Blair House Agreement — The November 1992 agreement between the United States and the European Union on **export subsidy** and domestic subsidy reduction commitments in the **Uruguay Round** of multilateral trade negotiations. The agreement also dealt with some bilateral agricultural trade issues.

Blend price — Primarily used in the federal **milk marketing order** program. Represents the weighted average price of milk, per hundred pounds, paid to each farmer based on how Grade A (fluid grade) milk is allocated to different usage classes (e.g., fluid, manufacturing) by processors.

Blended credit — A federal export promotion program operated from 1983 to 1985 by the Foreign Agricultural Service of USDA. Federally guaranteed commercial loans at market

interest rates (**GSM-102**) were combined (blended) with direct **export credit** from the government at zero interest. This subsidized credit was made available to selected countries for a limited number of agricultural commodities. The program was terminated in 1985 when a federal judge determined that commodities shipped under blended credit were subject to cargo preference laws, which would have required that 50% of blended credit exports be shipped on higher-cost U.S. flag vessels.

Blending — In grain marketing, the combining of two different qualities of grain in order to change the total value of both lots. For example, it is common to blend grains of differing moisture or different foreign material content to achieve the requirements of a contract order.

BLM — Bureau of Land Management

BLS — Bureau of Labor Statistics

Blue box — Direct payments, under the definition of “production-limiting” measures as defined in Article 6 of the **Uruguay Round** Agreement on Agriculture, that are not subject to the commitment to reduce domestic support. To qualify for the exemption, payments must be based on fixed areas or yields, on a fixed number of livestock, or on 85% or less of the base level of production. See **green box**.

BMP — Best management practice(s)

Board foot — A measure for lumber, equal to a 1-inch thick board that is 1 foot long and 1 foot wide in nominal dimensions (a 2x4, for example, is less than 2 inches thick and 4 inches wide, but a 1-foot long 2x4 is still counted as 2/3 of a board foot); typically reported in thousands of board feet (mbf). Also used to estimate the volume of lumber that can be produced from logs and standing trees.

BOD — Biochemical oxygen demand; biological oxygen demand

Boll weevil — An insect pest of cotton that is the subject of an **Animal and Plant Health Inspection Service** eradication program cooperatively funded and managed by cotton producers.

Bonus commodities — From the agricultural perspective, these are commodities donated to domestic feeding programs that USDA acquires for unexpected surplus removal reasons or because **Commodity Credit Corporation** holdings are not needed for other purposes, or are in danger of waste or spoilage. For example, if meat prices fall, USDA may buy beef and donate it to the **National School Lunch Program**, or if the CCC is holding an excess of cornmeal that is in danger of spoiling, it might donate this to the lunch program. From the food program perspective, these commodities are those donated in addition to the commodities that must be provided under mandatory requirements in food program statutes.

BOR — Bureau of Reclamation

Botanical pesticide — A pesticide whose active ingredient is a plant-produced chemical such as nicotine or strychnine. Also called a plant-derived pesticide. Being “natural” pesticides, as distinct from synthetic ones, they are typically acceptable to **organic farmers**.

Bottom — Usually synonymous with “vessel” or “ship.” A ship of American registry may be referred to as a “U.S. bottom,” whereas if registry is other than U.S., the ship, in U.S. usage, may be called a “foreign bottom.”

Bound tariff rate — The **most-favored-nation** tariff rate resulting from negotiations under the **General Agreement on Tariffs and Trade (GATT)** and incorporated as an integral component of a country’s schedule of concessions. If a GATT contracting party raises a tariff to a higher level than its bound rate, the country or countries adversely affected have the right under GATT to retaliate against an equivalent value of the offending country’s exports or to receive compensation, usually in the form of reduced **tariffs** on other products they export to the offending country.

Bovine growth hormone(BGH) — See **bovine somatotropin (bST)**.

Bovine somatotropin (bST) — Also called bovine growth hormone, bST is a naturally occurring protein that has been genetically engineered as a synthetic compound (now manufactured in large quantities and commercially available to farmers) that causes cows to increase the efficiency of milk production per unit of feed consumed. Its use has caused public controversy, and some states require retail dairy product labels to identify the use of synthetic bST.

Bovine spongiform encephalopathy (BSE) — Commonly known as “mad cow disease,” BSE is a slowly progressive, incurable disease affecting the central nervous system of cattle, first diagnosed in Britain in 1986. Consumption by cattle of BSE-contaminated **ruminant** proteins has been cited as one possible means of transmission. Scientists have suggested that there might be a link between BSE in cattle and more than a dozen recent European cases of a human variant of the disease, **Creutzfeldt-Jacob disease**. To date, no BSE has been found in U.S. cattle or beef supplies, although other BSE-like animal diseases are found in the United States, including scrapie in sheep and goats.

Bovine tuberculosis — A highly contagious disease of cattle that causes severe economic losses, especially in dairy herds. The **Animal and Plant Health Inspection Service** quarantines infected herds and works with producers to eradicate the disease. The target date for total eradication has been pushed back from 1998 to after the year 2000.

Boxed beef — Beef that a **packer** cuts into relatively small pieces, seals in vacuum packs, and ships in cardboard boxes, often ready for retail sale. Prior to the 1970s, most beef left the packer as partial carcasses.

BPI — Beef (Cattle) Price Index

BPJ — Best professional judgment

BPT — Best practicable technology, best practicable treatment

Breastfeeding promotion — Relates to activities required to be carried out by state and local agencies using federal funds provided for nutrition education and administrative services under the **WIC** program. States are required to use a portion of funds they receive to promote breastfeeding by postpartum mothers participating in the program.

Broadcast application — The spreading of pesticides or fertilizers over an entire area (see **band application**).

Broiler — A young chicken, usually 6 to 8 weeks old and 3 to 5 pounds, raised primarily for its meat.

Brucellosis — A highly contagious disease of cattle, goats, sheep, and swine that can be transmitted to humans (undulant fever). The **Animal and Plant Health Inspection Service** conducts an eradication program that is expected to eliminate brucellosis from the U.S. cattle herds by the end of 1998 at the current funding level.

BSE — Bovine spongiform encephalopathy

bST — Bovine somatotropin

Bt — *Bacillus thuringiensis* is a bacterium commonly known as Bt. It is a biological pesticide (**biopesticide**) used in several genetically engineered plants (transgenic plants). The plants have a gene from Bt inserted into their own genetic material. This new gene produces a natural protein that kills insects after the protein is ingested. The toxins are specific to a small subset of insects. Cotton has been genetically altered to control the tobacco budworm, bollworm and pink bollworm. Potatoes have been altered to control the Colorado potato beetle. A new hybrid of corn, which will be resistant to the European corn borer, is available for the 1997 planting season. Bt degrades rapidly to non-toxic compounds, does not present any human or animal hazards, and does not harm beneficial insects. Pest resistance management (PRM) plans are required by EPA as part of the registration.

bu. — bushel

Buffer strips — Small areas of erosion-resistant vegetation planted on fields, usually along the contour or along the boundaries, to slow the flow of runoff and reduce **erosion**.

Bulgur — Wheat that has been parboiled, dried, and partially debranned for later use in cracked or whole grain form.

Bulk carrier — Refers to two types of cargo ships: the dry-bulk carrier and the liquid-bulk carrier, better known as a tanker. Bulk cargo is a shipment such as oil, grain, or ore, that is not packaged, baled, bottled, or otherwise packed and is loaded without counting or marking.

Bulk commodities — Generally, high volume, low value unprocessed agricultural commodities, which are treated as though they are homogeneous (**fungible**) in nature prior to processing. Grains, oilseeds, and cotton are considered bulk commodities. Contrasting categories are **high value** commodities, semiprocessed and processed commodities, and consumer ready commodities.

Bureau of Land Management — A bureau within the Department of the Interior that has exclusive jurisdiction over about 268 million acres of federally owned lands. Approximately one-third of this area is in Alaska. The majority of the remaining acreage is in the Western States. <http://www.blm.gov/>

Bureau of Reclamation — A bureau within the Department of the Interior, whose mission is to manage, develop, and protect water and related resources. The agency replaced the Reclamation Service, which was established pursuant to the **Reclamation Act of 1902**. The Bureau built, operates, and maintains more than 300 storage dams on rivers throughout the western United States. <http://www.usbr.gov/>

Burley tobacco — The main type of air-cured tobacco; a cigarette tobacco that together with flue-cured tobacco account for more than 90% of total U.S. production. Burley tobacco production is limited by national **marketing quotas** and eligible for nonrecourse **price support** loans. Its production centers in Kentucky.

Bushel — A dry volume measure of varying weight for grain, fruit, etc., equal to four pecks or eight gallons (2150.42 cubic inches). A bushel of wheat, soybeans, and white potatoes each weighs 60 pounds. A bushel of corn, rye, grain sorghum, and flaxseed each weighs 56 pounds. A bushel of barley, buckwheat, and apples each weighs 48 pounds.

Business incubator — A facility that supports the development and operation of a number of small start-up businesses. Tenants of the facility share a number of support services including computers, support staff, telecommunications equipment, and janitorial services. Occupants also may receive technical assistance, business planning, legal, financial, and marketing advice.

By-pass flow — Water required by a regulating or permitting entity to be retained in-stream to protect fish habitat and other water-based functions and values. For example, the **Forest Service** requires some operators to allow a certain amount of water to bypass their dams to preserve endangered fish habitat. The **FAIR Act of 1996** contains a provision (Section 389) that prohibits the Forest Service from placing limits on bypass flow across lands it manages as a condition when renewing permits while a task force studies five specified questions.

CAA — Clean Air Act

CACFP — Child and Adult Care Food Program

CAFO — Concentrated animal feeding operation

Call option — A contract that entitles the buyer the right, but not the obligation, to purchase an underlying **futures contract** at a stipulated **basis** or **strike price** at any time up to the expiration of the option. The buyer pays a premium to the seller for this contract. A call option is bought with the expectation of a rise in prices. See also **put option**.

Campylobacteriosis — A diarrheal disease often caused by the type of bacteria known as *Campylobacter jejuni* (*C. jejuni*) associated with poultry, raw milk, and water. There are an estimated 2.5 million cases annually in the United States with 200 to 730 deaths. Campylobacteriosis has been linked to Guillain-Barre syndrome (a disease which paralyzes limbs and breathing muscles) as well as Epstein-Barr, Cytomegalovirus, and other viruses. USDA has estimated that this disease costs the United States between \$1.2 to \$1.4 billion annually in medical costs, productivity losses, and residential care.

Canadian Wheat Board (CWB) — A quasi-governmental self-financed agency, established in 1935, that markets Canadian wheat, oats, and barley on behalf of producers. Commercial grain is put into annual marketing pools by grade, with the pool period lasting 12 months and ending July 31. The CWB markets the grain to domestic and foreign buyers, with unsold grain transferred to the pool established for the next year. The overall procedure ensures a uniform per-bushel return, excluding storage costs, to all producers for each grade, regardless of the time they deliver their grain to elevators. The flow of grain from farm to terminal is closely regulated. The CWB also works to develop new markets for Canadian wheat and has authority to enter into long-term supply contracts with foreign countries.

Cancellation — Refers to an action taken under Section 6(b) of the **Federal Insecticide, Fungicide and Rodenticide Act** (FIFRA) to cancel a **pesticide** registration for one or more specific uses when EPA finds the use results in unreasonable adverse effects to the environment or public health when a product is used according to widespread and commonly recognized practice, or if its labeling or other material required to be submitted does not comply with FIFRA provisions.

CAP — Common Agricultural Policy; Commodity Assistance Program

Capper-Volstead Act — P.L. 67-146 (February 18, 1922), with a bit of exaggeration, is sometimes called the Magna Carta of Cooperation. The law was passed in response to challenges made against **cooperatives** using the **Sherman Antitrust Act**, the **Clayton Antitrust Act**, and the **Federal Trade Commission Act**. It gave “associations” of persons producing agricultural products certain exemptions from antitrust laws. The law carries the names of its sponsors, Senator Arthur Capper of Kansas and Congressman Andrew Volstead of Minnesota.

Captive supply — Products that manufacturers or processors own or contract to purchase for future delivery so as to have a predictable source of raw materials for their plants. In agriculture, the term often is used, for example, to refer to the cattle that beef packers own or contract to purchase 2 weeks or more before slaughter. Examples of such contracts include an exclusive agreement with an individual feedlot in which the price is based on market prices at time of slaughter; or a contract in which the price is specified in advance or is based on some other formula. At issue is the effect that captive supplies have on prices paid to cattle producers.

Carcass weight — The weight of an animal after slaughter and removal of most internal organs, head, and skin. On average, a beef carcass is about 60% of the weight of the live animal, for hogs it is about 73%.

Carcass-by-carcass inspection — Usually refers to language in the federal **Meat Inspection Act** and the **Poultry Products Inspection Act**, respectively, that requires the Food Safety Inspection Service to inspect the carcass of each animal killed for human food, immediately after slaughter.

Carcinogen — Any substance that produces or promotes cancer. This is a key consideration in evaluating the safety of pesticides and other chemicals.

CARD — Center for Agricultural and Rural Development

Cargo preference — The **Cargo Preference Act** (P.L. 83-664) requires that whenever the federal government pays for equipment, material, or commodities shipped to other countries, a minimum percentage of the gross tonnage shipped by sea must go by U.S. flag vessels. Cargo preference requirements have been an issue in U.S. international food aid and **export subsidy** programs.

Cargo Preference Act — P.L. 83-644, as amended, contains permanent legislation concerning the transportation of waterborne cargoes in U.S.-flag vessels. The Act requires that 75% of the volume of U.S. agricultural commodities financed under **P.L. 480** and other concessional financing arrangements be shipped on privately owned U.S.-registered vessels. Maritime interests generally support cargo preference, but proponents of P.L. 480 argue that

it increases the costs of shipping U.S. commodities to poor countries and potentially reduces the volume of food aid that is provided.

Caribbean Basin Economic Recovery Act of 1983 (CBERA) — P.L. 98-67 (August 5, 1983), Title II, authorized unilateral preferential trade and tax benefits for eligible Caribbean countries, including duty-free treatment of eligible products. This law is commonly referred to as the **Caribbean Basin Initiative (CBI)**. Amended several times, the last substantive revisions were made in the **Caribbean Basin Economic Recovery Expansion Act of 1990** (P.L. 101-382, Title II, August 20, 1990). This made trade benefits permanent (repealing the September 30, 1995 termination date).

Caribbean Basin Initiative (CBI) — A permanent program designed to increase private investment, trade, and tourism in Caribbean countries, initially created by the **Caribbean Basin Economic Recovery Act of 1983** and amended several times. It gives preferential trade and tax benefits for eligible Caribbean countries, including duty-free entry of eligible products. To be eligible, an article must be a “product” of (as defined in the U.S. general rules of origin) a beneficiary country and imported directly from it, and at least 35% of its import value must have originated in one or more CBERA beneficiaries. Slightly different import value rules apply to articles entering from Puerto Rico and the Virgin Islands. The duty-free import of sugar and beef products is subject to a special eligibility requirement that a beneficiary country submit and carry out a stable food production plan ensuring that increased production of sugar and beef will not adversely affect overall food production. Preferential tariff treatment, though, does not extend to imports of: textiles and apparel subject to textile agreements, specified footwear, canned tuna, petroleum and its products, and watches and watch parts containing any material originating in countries denied **most-favored-nation** trade status. Special criteria apply to the duty-free import of ethanol through FY2000. Import-sensitive products, not accorded duty-free tariff treatment, are eligible to enter at lower than most-favored-nation tariff rates. These products include handbags, luggage, flat goods (such as wallets, change purses, and key and eyeglass cases), work gloves, and certain leather wearing apparel.

Carrier — An **inert** liquid or solid material added to an active ingredient in a pesticide.

Carrying capacity — The maximum **stocking rate** for livestock possible without damaging vegetation or related resources. Carrying capacity may vary from year to year on the same area, due to fluctuating **forage** production. Used by the government in decisions about how much livestock will be allowed on an **allotment** on public lands.

Carryover — The supply of a farm commodity not yet used at the end of a **marketing year** and carried over into the next year. An excessively large carryover is typically described as a surplus condition that causes prices to fall. When the carryover falls below normal, there may be concerns of a shortage contributing to price escalation.

Cartel — An alliance or arrangement among industrial or commercial enterprises or nations aimed at limiting competition or exercising monopoly power in a market.

Casein — The major portion of milk protein, manufactured from skim milk and used in processed foods (such as dessert toppings and coffee whiteners) and in industrial products such as glue, paint and plastics.

Cash commodity — The physical or actual commodity as distinguished from the **futures contract**. Sometimes called **spot commodity**, or actuals.

Cash forward sale — See **forward contracting**.

Cash grain farm — A farm where corn, grain sorghum, small grains, soybeans, or field peas and beans account for at least 50% of the value of farm products sold.

Cash in lieu of commodities — Refers to cash provided to food program operators (e.g., elderly nutrition programs, child care food programs, and some school food programs) in lieu of mandated commodity assistance. Recipients may use the cash to buy whatever foods they need to operate their meal service programs.

Cash market — The market for the **cash commodity** (as contrasted to a **futures contract**), taking the form of — (1) an organized, self-regulated central market (e.g., a commodity exchange); (2) a decentralized over-the-counter market; or (3) a local organization, such as a grain elevator or meat processor, which provides a market for a small region.

Cash price — The price in the marketplace for actual cash or **spot commodities** to be delivered via customary market channels.

Cash settlement — A method of settling certain **futures contracts** or **option contracts** whereby the seller (or **short** position) pays the buyer (or **long** position) the cash value of the commodity traded according to a procedure specified in the contract.

CAST — Council for Agricultural Science and Technology

CAT — **Catastrophic crop insurance**

Catastrophic (CAT) Crop Insurance — A component of the **federal crop insurance program**, authorized by the **Federal Crop Insurance Reform Act of 1994**, that compensates farmers for crop yield losses exceeding 50% of their average historical yield at a payment rate of 60% of the projected season average market price. CAT coverage requires that a farmer realize a yield loss of more than 50% and only makes payments on losses exceeding the 50-percent threshold. Producers pay no premium for CAT coverage, but except for cases of financial hardship must pay an administrative fee of \$50 per crop, up to a maximum of \$200 per county and \$600 in total (across all counties) for CAT protection. Under the **Federal Crop Insurance Reform Act of 1994** producers were required to obtain coverage at the CAT (or higher) level for crops of economic significance (accounting for 10% or more of their farm's crop production value) in order to be eligible for various other USDA program benefits. The **FAIR Act of 1996** relaxed this requirement. A producer has the ability to purchase additional insurance coverage beyond CAT coverage, but must pay a premium, partially subsidized by the government, for that additional coverage.

Cattle cycle — The approximately 10-year period in which the number of U.S. beef cattle is alternatively expanded and reduced over several consecutive years in response to perceived changes in profitability by producers. Generally, low prices occur when cattle numbers (or beef supplies) are high, precipitating several years of herd liquidation. As cattle numbers decline, prices gradually begin to rise, causing cattle producers to begin adding cattle to their herds. The cycle is relatively long due to the long period of time it takes between the time a cow-calf operator decides to expand a cow herd to breed more beef cattle and the time those animals reach slaughter weight.

CBI — **Caribbean Basin Initiative**

CBT — Chicago Board of Trade

CCC — **Commodity Credit Corporation**

CCI — Cotton Council International

CD — **Conservation district**

CDC — Centers for Disease Control and Prevention

CED — **County Executive Director**

Census of Agriculture — A comprehensive set of quantitative information on the agricultural sector of the U.S. economy, broken down to the state and county levels (i.e., number of farms, land in farms, crop acreage and production, livestock numbers and production, production expenses, farm facilities and equipment, farm tenure, value of farm products sold, **farm size**, type of farm, among other data). The Census, conducted every 5 years and last published for 1992, was the responsibility of the Commerce Department's Bureau of the Census. However, the FY1997 USDA appropriations act transferred funding for the Census of Agriculture to USDA's **National Agricultural Statistics Service (NASS)**, which intends to start data collection for the 1997 Census in January 1998.

Center for Food Safety and Applied Nutrition (CFSAN) — The agency within the **Food and Drug Administration** responsible for regulating the food processing industry. Legislation in this area normally is handled by the House Commerce Committee, except for seafood, which is under the jurisdiction of the House Agriculture Committee.

Center pivot irrigation — A self-propelled irrigation system in which a single pipeline supported on towers rotates around a central point. These systems are typically about one-quarter mile long and serve 128 to 132 acre circular fields.

Central and Eastern European Countries (CEEC) — A term for the group of countries including Albania, Bulgaria, the Czech Republic, Hungary, Poland, Romania, the Slovak Republic, and the three Baltic States (Estonia, Latvia, and Lithuania).

CEQ — Council on Environmental Quality

Certificates (commodity) — Legal instruments, entitling a qualified bearer to a specific dollar value of USDA surplus commodities. **Payment-in-kind (PIK)** "certs" either can specify the types of commodities or be generic. Certificates were heavily used during the 1980s as a means of meeting financial obligations and simultaneously disposing of CCC-owned commodities.

CFA — Consumer Federation of America

CFCs — Chlorofluorocarbons

CFO — Conservation farm option; Chief Financial Officer

CFR — Code of Federal Regulations

CFSCAN — Center for Food Safety and Applied Nutrition

CFTC — Commodity Futures Trading Commission

Channelization — Engineering watercourses by straightening, widening, or deepening them so water will move faster. While improving drainage, this process can interfere with waste assimilation capacity, disturb fish and wildlife habitats, and aggravate flooding.

Check-off program — Usually, a reference to the generic research and **commodity promotion programs** for farm products that are financed by **assessments** applied to sales of those products by producers, importers, or others in the industry.

Chemigation — The application of a pesticide and/or fertilizer through any irrigation system. This delivery technique raises some concern that it may cause increased pollution.

Chemosterilant — A chemical that controls pests by preventing reproduction, thereby causing the population to collapse. This contrasts with chemicals that directly kill pests.

Child and Adult Care Food Program (CACFP) — This **child nutrition program** provides cash and commodity assistance to support meal service programs in child care centers, headstart facilities, and family and group home day care homes for children, the elderly, and disabled. It is permanently authorized under Section 17 of the **National School Lunch Act**, administered by USDA, Food and Consumer Service, and funded annually by agricultural appropriations.

Child Nutrition Act of 1966 — P.L. 89-642 (October 11, 1966) was an anti-hunger initiative begun by the Johnson Administration as part of its “War on Poverty” and has been amended numerous times since then. It permanently authorizes the **special milk program** (which provides federal subsidies for milk served to children in eligible outlets) and the **school breakfast program** (which provides federal subsidies for breakfasts served in participating elementary and secondary schools). The **special supplemental nutrition program for women, infants, and children (WIC)**, which provides federal grant funds to states for monthly food packages and nutrition education for low-income mothers and young children, is authorized under this Act through FY1998, as is federal spending for state administrative expenses (SAE) associated with the operation of child nutrition meal service programs. The **nutrition education and training (NET) program**, which provides grants to states for educating and training school food personnel, teachers, and students about nutrition, is authorized through FY2002.

Child nutrition programs — A grouping of programs funded by the federal government to support meal and milk service programs for children in schools, residential and day care facilities, family and group day care homes, and summer day camps, and for low-income pregnant and postpartum women, infants, and children under age 5 in local WIC clinics. Programs include **school lunch, school breakfast, summer food service, special milk, commodity distribution and nutrition education and training programs, and the special supplemental nutrition program for women, infants and children (WIC)**. These programs are authorized under the **National School Lunch Act** and the **Child Nutrition Act of 1966**; are financed by annual agricultural appropriations laws; and are administered by the Food and Consumer Service of USDA. Changes to the authorizing statutes generally are made by the Agriculture Nutrition and Forestry Committee in the Senate. In the House, the Education and the Workforce Committee deals with most changes to child nutrition program authorizing statutes, although the Agriculture Committee usually is involved when proposed changes concern commodity distribution, food issues, and requirements affecting agricultural interests and the **farmers market nutrition program**.

Chlorinated hydrocarbons — Also known as organochlorines, these synthetic organic compounds contain chlorine. They tend to be persistent in the environment and to **biomagnify** in the food chain. Chlorinated hydrocarbons that are pesticides include DDT, aldrin, dieldrin, heptachlor, chlordane, lindane, endrin, mirex, hexachloride, and toxaphene. Most chlorinated hydrocarbon pesticide uses have been canceled because of their persistence, propensity to **bioaccumulate**, and toxicity to nontarget species.

Chlorophenoxy herbicides — A class of pesticides that includes 2,4-D. They mimic plant hormones. Uses of some have been canceled because of concerns about adverse health effects.

Cholinesterase inhibitors — A class of chemicals that includes numerous insecticides, such as parathion or carbaryl. They inhibit an enzyme found in animals that regulates nerve impulses. Cholinesterase inhibition is associated with a variety of acute symptoms such as nausea, vomiting, blurred vision, stomach cramps, and rapid heart rate.

Chronic toxicity — The capacity of a substance to cause long-term or delayed adverse health effects. For example, a cancer resulting from exposure to a carcinogen may not appear for years or decades.

C.I.F. (or c.i.f.) — **Cost, insurance, and freight**

CIPs — **Commodity import programs**

CIS — **Commonwealth of Independent States**

CJD — **Creutzfeldt-Jakob disease** (See **bovine spongiform encephalopathy**.)

Class I differential — Under federal **milk marketing orders**, the minimum price a processor must pay for milk used for fluid consumption (Class I milk) is the **basic formula price** plus the Class I differential. The Class I differential varies by about \$3.00 per hundredweight (cwt.) between the Upper Midwest and Southeast Florida. The Class I differential accounts for the costs of transporting milk, the added costs of marketing milk going into fluid milk products, and the higher cost of producing Grade A milk required for fluid products.

Class I equivalency — The amount of less productive land in a water district receiving Bureau of Reclamation water (Classes 2, 3, and 4) that would be necessary to be equivalent in productive potential to **Class I land**. This equivalency rating is made to adjust the number of acres that may be irrigated (see **acreage limitation**) so that less productive lands are equivalent in productive potential to 960 acres of Class I land.

Class I land — Under **reclamation law**, Class I land is defined as irrigable land within a particular agricultural economic setting that is productive enough to yield the highest level of suitability for continuous, successful irrigation farming, and has the highest relative productive potential as measured in net income per acre.

Classified pricing — The pricing system of federal **milk marketing orders**, under which milk processors pay into a pool for fluid grade (Grade A) milk; its value is based on how the milk ultimately is used. Milk used for fluid (Class I) consumption receives a higher price than milk for processed (Class II, Class III, Class IIIa) dairy products.

Clean Air Act — The primary federal law governing efforts to control air pollution. Federal legislation addressing air pollution was first adopted in 1955 (**Air Pollution Control Act**, P.L. 84-159) research and technical assistance. Subsequent amendments, most notably the **Clean Air Act Amendments of 1970** (P.L. 91-604), 1977 (P.L. 95-95), and 1990 (P.L. 101-549), strengthened the federal role. The **Clean Air Act** seeks to protect human health and the environment from emissions that pollute the air. EPA is required to establish minimum **National Standards Ambient Air Quality Standards (NAAQS)**, while states are assigned primary responsibility for developing compliance. Areas not meeting the standards (nonattainment areas) are required to implement specific control measures. There is no direct federal regulation of agriculture under the **Clean Air Act**. Two of the NAAQS (for particulates and **ozone**) could affect agriculture: particulates, because certain agricultural practices, such as prescribed burning and tilling, create airborne particles that might be targeted for control in State Implementation Plans; and ozone, because concentrations of ozone above the standard can adversely affect crop yields. Ozone is formed in the atmosphere when **nitrogen** oxides and volatile organic compounds (from manufacturing, transportation, and utilities) react in the presence of sunlight (agriculture rarely if ever represents significant sources of ozone precursors).

Clean Water Act — This is the principal law governing pollution of the nation's rivers, lakes, estuaries, and coastal waters. Originally enacted in 1948 as the **Federal Water Pollution Control Act** (P.L. 80-845), it was totally revised by amendments in 1972 that gave the Act its current name and shape (P.L. 92-500). The objective of the Act is the restoration and maintenance of the chemical, physical, and biological integrity of the nation's waters. The Act is implemented by the EPA in partnership with state and local governments. Programs in the Act have been primarily directed at managing **point source pollution** (wastes discharged from industrial facilities, sewage treatment plants, and municipal storm sewer systems). Agricultural activities have been less of a focus, but some may be affected by the **Clean Water Act**. Large confined animal feeding operations are treated like industrial sources and are subject to permit requirements. Programs to manage **nonpoint source pollution** (rainfall runoff from farms, rangelands, forests, etc.) may affect agriculture. A program in the Act that regulates discharges of dredged and fill material into wetlands (**Section 404**) requires permits for activities on agricultural **wetlands**.

CLOC — **Commodity letters of credit**

CMA — Chemical Manufacturers Association

CME — Chicago Mercantile Exchange

CMS — Conservation management system

CNP — **Child nutrition programs**

CNPP — Center for Nutrition Policy and Promotion

CO — Conservation operations

COAP — **Cottonseed Oil Assistance Program**

Coastal Zone Management Program — P.L. 92-583 (October 27, 1972) created the Coastal Zone Management Program in 1972 to provide grants to eligible states and territories as an incentive to prepare and implement plans guiding the use of coastal lands and resources.

Amendments in 1990 require participants to develop **nonpoint pollution** programs. These programs must specify and implement management measures to restore and protect coastal waters. For agriculture, management measures are specified for **erosion**, sediments, nutrients, pesticides, grazing, and animal waste. Participants must implement these management measures after they have been approved by whatever means necessary, including regulation. Federal approval of state proposals is pending.

CoBank — National Bank for Cooperatives

COC — County Office Committee

COD — **Chemical oxygen demand**

Codex Alimentarius Commission — A joint commission of the **Food and Agriculture Organization (FAO)** and the World Health Organization, comprised of some 146 member countries, created in 1962 to ensure consumer food safety, establish fair practices in food trade, and promote the development of international food standards. The Commission drafts nonbinding standards for food additives, veterinary drugs, pesticide residues, and other substances that affect consumer food safety. It publishes these standards in a listing called the “Codex Alimentarius.”

Coliform index — A rating of the purity of water based on a count of fecal coliform bacteria. The presence of fecal coliform bacteria, which are harmless bacteria that live in the intestines of humans and other vertebrate animals, indicates contamination by human or animal feces, and hence the potential presence of disease pathogens.

Colonia — A substandard housing area defined in the **Housing Act of 1949** as any identifiable community that: (1) is in the states of Arizona, California, New Mexico, or Texas; (2) is in an area that is within 150 miles of the border between the United States and Mexico (except for standard metropolitan statistical areas that have a population exceeding 1 million); (3) is designated by the state or county as a colonia; and (4) is determined to be a colonia based on criteria such as lack of potable water supply, lack of adequate sewage systems, and lack of decent, safe, and sanitary housing.

Colorado River Basin Salinity Control Act — P.L. 93-320 (June 24, 1974), and the laws authorizing three other conservation cost-sharing programs, were repealed in the **FAIR Act of 1996** and replaced by a new cost-sharing program, the **Environmental Quality Incentives Program (EQIP)**. Until it was replaced, the Colorado River Basin Salinity Control Program provided cost-sharing assistance to producers to install on-farm **irrigation** system improvements to prevent irrigation water heavily charged with salts and minerals from reentering the river. Participating farmers received up to 70% of total project costs and technical assistance. Participation was concentrated at sites where problems existed. This program was available to producers in the seven states of the Colorado River **watershed**. The law was administered by the Farm Service Agency until FY1996, when administration was transferred to the Natural Resources Conservation Service.

Colorado River Basin Salinity Control Program — This program was authorized in the **Colorado River Basin Salinity Control Act** and was repealed and replaced by the **Environmental Quality Incentives Program** in the **FAIR Act of 1996**. Administered by the Natural Resources Conservation Service, it is used to implement salinity control measures, primarily to manage irrigation water using financial and technical assistance to

landowners. This program supports U.S. efforts to meet international treaty obligations for downstream water quality in Mexico.

Combine — A self-propelled grain harvester. In one operation it combines cutting, threshing, separation, cleaning, and straw dispersal.

Commission on 21st Century Production Agriculture — Established by Title I of the **FAIR Act of 1996** to conduct a comprehensive review of changes to production agriculture in the United States. The Commission also will study the future of production agriculture in the United States and the appropriate role of the federal government in it.

Commodity Assistance Program — A title often used to refer to a variety of domestic programs receiving food in the form of USDA supplied commodities. It was formalized in FY1996 appropriations law for the first time to refer to the consolidation for funding purposes of three commodity donation programs that are authorized under two separate statutes: The **Emergency Food Assistance Program (EFAP)**, **soup kitchen-food bank program**, and the **Commodity Supplemental Food Program (CSFP)**.

Commodity certificates — Payments issued by the **Commodity Credit Corporation (CCC)** in lieu of cash payments to participants in farm subsidy or agricultural export programs. Holders of **certificates** are permitted to exchange them for commodities owned by the CCC. Certificates were used not only to compensate program beneficiaries but also to reduce the large, costly, and price-depressing commodity surpluses held by the CCC during the mid 1980s.

Commodity Credit Corporation (CCC) — A wholly owned government corporation created in 1933 to stabilize, support, and protect farm income and prices (federally chartered by the Commodity Credit Corporation Charter Act of 1948 (P.L. 80-806, June 29, 1948)). The CCC, which has no staff, is essentially a financing institution for USDA's farm price and income support **commodity programs**, and agricultural **export subsidies**. It is authorized to buy, sell, lend, make payments and engage in other activities for the purpose of increasing production, stabilizing prices, assuring adequate supplies, and facilitating the efficient marketing of agricultural commodities. The **FAIR Act of 1996** expanded the CCC mandate to include funding for several conservation programs (including the **Conservation Reserve Program**) and made conservation one of the purposes of the CCC. The programs funded through CCC are administered by employees of the **Farm Service Agency**. The CCC has the authority to borrow up to \$30 billion from the U.S. Treasury to carry out its obligations. Net losses on financial operations subsequently are restored through the congressional appropriations process.

Commodity distribution — Direct donation of food products by the federal government to needy persons, schools, and institutions. Commodities are either entitlement or **bonus**. Bonus commodities can be received when they are available from surplus stocks purchased by the **Commodity Credit Corporation** under its **price support** program or the **Agricultural Marketing Service** under its surplus removal program (Section 32 of the **Agricultural Adjustment Act of 1935**).

Commodity Distribution Program — This program supplies authority for the Secretary of Agriculture to use agricultural surplus removal (**Section 32**) and **Commodity Credit Corporation (CCC)** funds to buy commodities for **child and elderly nutrition programs**. The Secretary is directed to use Section 32 funds not needed for other purposes and CCC funds (if stocks are not available) to buy commodities for donation to maintain the

annually programmed level of commodity assistance for Child and Elderly Nutrition programs. The program is authorized through FY1998 under Section 14 of the **National School Lunch Act** (NSLA).

Commodity Distribution Reform Act and WIC Amendments of 1987 — P.L. 100-237 (January 8, 1988) established a free-standing law requiring the USDA to improve the distribution and quality of commodities donated to child nutrition programs. Also established a foodbank demonstration project making use of Section 32 agricultural surplus commodities, amended the **National School Lunch Act** to permit certain pilot projects receiving cash in lieu of commodities or commodity letters of credit to continue receiving them, and amended the **Child Nutrition Act of 1966** to make a variety of changes to the WIC program to expand coordination with other programs, conduct studies, and convert certain food funding to use for administrative costs.

Commodity exchange — An organization operating under a set of bylaws aimed at promoting trade in one or more commodities by providing services and rules for the conduct of trade.

Commodity Exchange Authority — A former regulatory agency of USDA established to administer the **Commodity Exchange Act** prior to 1975; the predecessor of the **Commodity Futures Trading Commission**.

Commodity Futures Trading Commission (CFTC) — The independent federal regulatory agency established by the **Commodity Futures Trading Commission Act of 1974** to administer the **Commodity Exchange Act**. It regulates trading on the futures exchanges in the United States. The CFTC also regulates the activities of numerous commodity exchange members, public brokerage houses, commodity trading advisors, and commodity pool operators.

Commodity Futures Trading Commission (CFTC) Act of 1974 — P.L. 93-463 (October 23, 1974) created the Commodity Futures Trading Commission, to replace USDA's Commodity Exchange Authority, as the independent federal agency responsible for regulating the futures trading industry. The Act made extensive changes in the basic authority of **Commodity Exchange Act of 1936**, which itself had made extensive changes in the original **Grain Futures Act of 1923**.

Commodity Import Programs (CIPs) — The U.S. **Agency for International Development** uses a small portion of U.S. foreign aid funds to make grants and loans to countries judged important to U.S. foreign policy objectives. These CIPs, by making dollars available, help these countries finance purchases of U.S. commodities (including agricultural commodities) or other inputs needed to meet their development objectives and also provide balance-of-payments support to countries with very limited foreign exchange.

Commodity letters of credit (CLOC) — Food instruments issued in lieu of commodities to certain designated schools participating in the **National School Lunch Program**. These letters of credit specify the types of foods that schools must buy, which are the same types of foods being donated to other schools by USDA under the commodity distribution program.

Commodity loan rates — Price per unit (pound, bushel, bale, or hundredweight) at which the CCC provides **nonrecourse loans** to farmers to enable them to hold **program crops** for later sale. Commodity loans under the **FAIR Act of 1996** are **recourse** for sugar in

years that imports are below 1.5 million short tons, and will become recourse for dairy in 2000.

Commodity programs — This term is usually meant to include the commodity price and income support programs administered by the **Farm Service Agency** and financed by the Commodity Credit Corporation. The commodities now receiving support are: (1) those included in the **production flexibility contract payments** program, specifically wheat, feed grains, cotton, and rice; those eligible for nonrecourse **marketing assistance loans**, soybeans and minor oilseeds; those under **marketing quota** limits, peanuts and tobacco; and, milk. A broader term that includes these programs and others is **farm programs**.

Commodity promotion programs — Programs that advertise and promote a commodity without reference to the specific farmer, brand name, or manufacturer. The programs are authorized by law and financed by **assessments** (also called **check-offs**) of industry members, such as producers, importers, and handlers. The **FAIR Act of 1996** explicitly authorizes new producer-funded research and promotion programs for canola and rapeseed, kiwifruit, and popcorn and also gives USDA general authority to create programs for other commodities at the request of producer groups.

Commodity Supplemental Food Program (CSFP) — The CSFP provides funding for monthly food packages consisting of USDA commodities (juice, egg mix, and canned fruits and vegetables), and administrative funding for local agencies serving low-income pregnant and postpartum women, infants, children up to age 6, and persons 60 years of age or older. The precursor of the **WIC** program, the CSFP now operates in 81 project areas located in 20 states, and over one-half of the beneficiaries are elderly. CSFP is authorized through FY2002 under the **Agriculture and Consumer Protection Act of 1973**, as amended by the **FAIR Act of 1996**.

Common Agricultural Policy (CAP) — The set of legislation and practices jointly adopted by the nations of the European Union (EU) in order to provide a common, unified policy framework for agriculture. Its stated purposes are to increase farm productivity, stabilize markets, ensure a fair standard of living for farmers, guarantee regular supplies, and ensure reasonable prices for consumers. The CAP rests upon four basic principles: common import restrictions, common financing, common pricing, and common treatment of surpluses.

Common external tariff (CXT) — A tariff rate applied by a regional grouping of countries as a unit. For example, the European Community allows free trade in most agricultural commodities among member countries, but applies common external tariffs against many farm products imported from non-member or “third” countries.

Commonwealth of Independent States (CIS) — A formal association of states comprising the republics formed out of the former Soviet Union, with the exception of Estonia, Latvia and Lithuania. Included are Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan.

Community Development Corporation (CDC) — Tax-exempt, non-profit organizations whose primary mission is the economic and social revitalization of distressed urban and rural areas. A CDC is a community-based organization carrying out its activities within a geographically defined area. CDCs may support or undertake such activities as housing development and rehabilitation, job training and counseling, and business development activities.

Community Facilities Program (CFP) — Administered by the **Rural Housing Service** of USDA, the CFP provides grants, loans, and loan guarantees to local governments, federally recognized native tribes, and nonprofit organizations. Funds are used to construct, expand, or rehabilitate such community facilities as hospitals, clinics, nursing homes, ambulatory care centers, police and fire stations, rescue and fire vehicles, communication centers, telecommunications, distant learning and telemedicine, child and adult care centers, jails, courthouses, airports, and schools.

Comparative advantage — Refers to the economic theory that in international trade it is more advantageous for a country to devote its resources not to all lines of production in which it may have superiority (least cost production), but to those in which its relative superiority is greatest. Two countries may find trade mutually profitable even if one of the countries could produce all goods at lower cost than the other.

Competitive advantage — A situation in which one country, region, or producer can produce a particular commodity more cheaply than another country, region or producer.

Competitive bidding (for WIC) — With respect to the **WIC** program, refers to the method for containing program costs, particularly for infant formula contained in food packages; requires state WIC agencies to solicit bids to infant formula companies for the sale of their product. This is recommended but not required for other products sold through the program.

Competitive foods (in lunch programs) — Foods that may be regulated for sale in competition with the school lunch and breakfast programs under provisions of the **National School Lunch Act**.

Competitive imports — A term used by USDA's Economic Research Service in its reporting of agricultural trade statistics to describe imports that are similar to and therefore competitive (in contrast to **non-competitive**) with those produced in the United States. Examples are beef, wheat, cotton, and sugar.

Composting — The controlled biological decomposition of organic material, such as sewage sludge, animal manures, or crop residues, in the presence of air to form a humus-like material. Controlled methods of composting include mechanical mixing and aerating, ventilating the materials by dropping them through a vertical series of aerated chambers, or placing the compost in piles out in the open air and mixing it or turning it periodically.

Con Act — Consolidated Farm and Rural Development Act

Concentrated animal feeding operation (CAFO) — Generally, a facility where large numbers of farm animals are confined, fed, and raised, such as dairy and beef cattle feedlots, hog production facilities, and closed poultry houses. EPA has developed a specific regulatory definition of CAFO for the purposes of enforcing the **Clean Water Act**. The Act requires individual places that are potential sources of water pollution to obtain **point source** discharge permits that specify the allowable levels of effluent from each of these places. The EPA regulations define "animal feeding operations" as those confining livestock or poultry for 45 days or more in a 12-month period in a facility that has no vegetative ground cover. Such places are further considered "concentrated," and therefore required to have an EPA permit, if they reach certain size limits or meet other criteria specified in the EPA regulations. Those size limits are 700 mature dairy cattle, 1,000 beef cattle, 100,000 chickens, 55,000 turkeys, 2,500 swine, or 10,000 sheep.

Concentration (economic) — A measure of the degree to which a few large firms dominate total sales, production, or capacity within an industry or market. The concern is that the more concentrated an industry, the greater the likelihood of price and market manipulation. For example, meat packer concentration has long been a concern of cattle producers. It is common to express concentration as a ratio, by stating the share (%) held by the top 4, 8, or 12 firms.

Concessional (export) sale — A sale in which a foreign buyer is allowed payment terms that are more favorable than those obtainable in the commercial market. Under **P.L. 480**, the concessional terms include the length of the credit period, the grace period for repayment, and the interest rate charged.

Conditional registration — Under special circumstances, the **Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)** permits **registration** of **pesticide** products that is “conditional” upon the submission of additional data. These special circumstances include a finding by EPA that a new product or use of an existing pesticide will not significantly increase the risk of unreasonable adverse effects. A product containing a new (previously unregistered) active ingredient may be conditionally registered only if the EPA finds that such conditional registration is in the public interest, that a reasonable time for conducting the additional studies has not elapsed, and the use of the pesticide for the period of conditional registration will not present an unreasonable risk.

Conjunctive use — Water management methods. Usually used to describe the practice of storing surface water in a groundwater basin in wet years and withdrawing it from the basin in dry years. Often used in discussing water supplies and water conservation.

Conservation — The management of human and natural resources to provide maximum benefits over a sustained period of time (see **sustainable agriculture**). In farming, conservation entails matching cropping patterns and the productive potential and physical limitations of agricultural lands to ensure long-term sustainability of profitable production. Conservation practices focus on conserving soil, water, energy, and biological resources. **Contour farming, no-till farming, and integrated pest management** are typical examples of conservation practices.

Conservation (cross) compliance — A provision originally authorized by the **Food Security Act of 1985** that requires farmers who operate on **highly erodible land** to manage this land under an approved conservation system in order to maintain eligibility in specified federal **farm programs**. The **FAIR Act of 1996** amended the conservation compliance provisions in several ways to provide greater planting flexibility to farmers.

Conservation districts — A legal subdivision of a state government, with an elected governing body, which develops and implements soil and water conservation programs within a certain area, usually coinciding with county lines. The nearly 3,000 districts in the United States have varying names — soil conservation district, soil and water conservation district, natural resources district, **resource conservation district**, resources district, or conservation district.

Conservation easement — Acquisition of rights and interest to a property to protect identified conservation or resource values, using a reserved interest deed. Since the mid 1970s, conservation easements have been purchased to protect nearly 420,000 acres of farmland in fifteen states, primarily in the Northeast.

Conservation Farm Option Program — A provision of the **FAIR Act of 1996** authorizes a pilot program for producers who receive production flexibility payments to enter into a contract to consolidate payments at rates that are equivalent to payments that would otherwise be received from the **Conservation Reserve Program, Wetlands Reserve Program,** and/or the **Environmental Quality Incentives Program** in exchange for implementing practices to protect soil, water, and wildlife.

Conservation plan — A combination of land uses and farming practices to protect and improve soil productivity and water quality, and to prevent deterioration of natural resources on all or part of a farm. Plans may be prepared by staff working in **conservation districts** and must meet technical standards. For some purposes, such as **conservation compliance,** the plan must be approved by the local **conservation district.** Under the **1996 FAIR Act,** conservation plans for conservation compliance must be both technically and economically feasible.

Conservation practice — Any technique or measure used to protect soil and water resources for which standards and specifications for installation, operation, or maintenance have been developed. Practices approved by USDA's Natural Resources Conservation Service are compiled at each **conservation district** in its **field office technical guide.**

Conservation Reserve Program (CRP) — A program, created in the **Food Security Act of 1985,** to retire from production up to 45 million acres of highly erodible and environmentally sensitive farmland. Landowners who sign contracts agree to keep retired lands in approved **conserving uses** for 10-15 years. In exchange, the landowner receives an annual rental payment, cost-share payments to establish permanent vegetative cover and technical assistance. The CRP reportedly has reduced **erosion** by up to 700 million tons per year. The **FAIR Act of 1996** extends authorization to enroll land through 2002 and caps maximum CRP acreage at 36.4 million acres, its 1995 level. The Act also makes the program spending mandatory and finances it through the **Commodity Credit Corporation.**

Conservation Technical Assistance (CTA) — CTA has been the central activity of the **Natural Resources Conservation Service** since it was established in 1936. NRCS field staff help landowners and farm operators plan and implement soil and water conservation and water quality practices. The most common use of this program in recent years has been preparing and updating **conservation compliance** plans. In FY1993, CTA assisted 1.2 million farmers and serviced 62 million acres.

Conservation tillage — Any tillage and planting system that leaves at least 30% of the soil surface covered by residue after planting. Conservation tillage maintains a ground cover with less soil disturbance than traditional cultivation, thereby reducing soil loss and energy use while maintaining crop yields and quality. Conservation tillage techniques include **minimum tillage, mulch tillage, ridge tillage,** and **no-till.**

Conserving use acreage — Farmland diverted from crop production to an approved cultural practice that prevents **erosion** or other degradation. Though crops are not produced, conserving use is considered an agricultural use of the land.

Considered planted — Refers to a provision of the **Agricultural Act of 1949** that was used to implement the **base acreage** and yield system for the 1991-95 crops, a provision that was suspended by the **FAIR Act of 1996.** Under previous law, crop acreage bases were, in general, calculated as a 5-year average of planted and considered planted acreage. Acreage considered planted includes acreage idled under **production adjustment programs** or for

weather-related reasons or natural disasters; acreage devoted to conservation purposes or planted to certain other allowed commodities; and acreage USDA determines is necessary for fair and equitable treatment.

Consolidated Farm and Rural Development Act of 1961 — P.L. 87-128 (August 8, 1961) authorized a major expansion of USDA lending activities, which at the time were administered by USDA’s Farmers Home Administration (FmHA), but now through USDA’s **Farm Service Agency**. The legislation was originally enacted as the **Consolidated Farmers Home Administration Act of 1961**. In 1972, this title was changed to the **Consolidated Farm and Rural Development Act**, and is often referred to as the Con Act. The Con Act, as amended, currently serves as the authorizing statute for USDA’s agricultural and rural development lending programs. Titles in the Act include current authority for the following three major FSA farm loan programs—farm ownership, farm operating and emergency disaster loans. Major amendments to the Con Act enacted in recent years that affect current USDA farm lending programs include the following: Title VI of the **Agricultural Credit Act of 1987** (P.L. 100-233, January 6, 1988) assists borrowers by requiring FSA to restructure or write down a delinquent loan if the government cost of restructuring is less than the cost of foreclosure. Title VI details the restructuring process and gives delinquent borrowers specific rights throughout the process. Title XVIII, Subtitle A of the **FACT Act of 1990** contained provisions designed to curb the perceived abuses of the borrower rights provisions of the 1987 Act. The 1990 farm bill allows FSA to consider the equity in non-essential assets in determining what portion of the loan can be written down and also gives FSA the authority to deny a borrower restructuring if these non-essential assets can be liquidated to make the borrower current on the delinquent loan. The **Agricultural Credit Improvement Act of 1992** (P.L. 102-554, October 28, 1992) established new USDA loan programs to assist beginning farmers and ranchers. The law established direct and guaranteed loan programs for beginning farmers and ranchers, and a program to provide 10-year loans for beginning farmers and ranchers to purchase their own farm or ranch in return for a down payment equivalent to 10% of the purchase price of the land. The law also limited the total number of years any borrower may participate in the agency’s farm ownership and operating loan programs. Title VI of the **FAIR Act of 1996** directly affects eligibility for FSA loans and the servicing of its delinquent loans. It tightens the borrower rights provisions of the 1987 Act by, e.g., prohibiting any borrower who has had debt forgiven on a delinquent loan from receiving a new loan, and expedites the sale of farmland acquired by USDA through foreclosure or other forms of debt settlement.

Consumer Price Index (CPI-U) — The Bureau of Labor Statistics’ general measure of retail prices (for goods and services) paid by urban wage earners and clerical workers. Includes prices of about 400 items, including food, clothing, housing, medical care, and transportation. The CPI-U is commonly used to deflate time series data and is the most widely accepted measure of inflation.

Consumer subsidy equivalent (CSE) — A measure of the value of monetary transfers to consumers resulting from agricultural policies in a given year. If negative, it measures the implicit tax imposed on consumers by agricultural policies. The main component of the CSE is market transfers due to market **price support** to producers. The CSE can be measured in money terms, in money terms per unit of production, or in percentage terms. See **producer subsidy equivalent (PSE)**.

Consumptive water use — Water removed from available supplies without return to a water resources system, e.g., water used in manufacturing, agriculture, and food preparation. Crop consumptive water use is the amount of water transpired during plant growth plus what evaporated from the soil surface and foliage in the crop area.

Continuous inspection — USDA's meat and poultry inspection system is often called "continuous" because no animal destined for human food may be slaughtered or dressed unless an inspector is continuously present to examine each one before slaughter (**antemortem inspection**), and its carcass and parts after slaughter (**postmortem inspection**). In processing plants (as opposed to slaughter plants), inspectors need not be present at all times, but they do visit at least once daily. Thus, processing inspection is also considered to be continuous.

Contour farming — Field operations (such as plowing, planting, cultivating, and harvesting) at right angles to the natural slope to reduce soil **erosion**, protect soil fertility, and limit water runoff. Contour strip farming is a kind of contour farming in which row crops are planted in strips, between alternating strips of close-growing, erosion-resistant forage crops.

Contract acreage — Enrolled 1996 commodity **base acreage** under the **FAIR Act of 1996** for wheat, feed grains, upland cotton, and rice (generally fixed for 1996 through 2002). A farmer may voluntarily choose to reduce contract acreage in subsequent years. Land leaving the CRP may be entered into a **production flexibility contract** if the land was previously commodity base acreage.

Contract commodity — The commodities previously eligible for **deficiency payments** and now eligible for **production flexibility contracts** under the **FAIR Act of 1996**: wheat, corn, sorghum, barley, oats, rice, and upland cotton.

Contract for future sale — A sales contract under which a farmer agrees to deliver products of specified quality and quantity to a buyer for a specified price within a prescribed time frame. Contract sales are a growing practice, recently accounting for 86% of poultry, more than 50% of fruits, and 43% of milk. The benefits to processors are greater uniformity and predictability resulting in lower costs of grading, processing, and packing. The benefits to farmers are more stable income from a guaranteed market and price, and possibly access to a wider range of production inputs and advanced technology.

Contract payments under AMTA — Some \$36 billion in payments to be made to farmers for **contract crops** for fiscal years 1996-2002 under Title I of the **FAIR Act of 1996**, known as the **Agricultural Market Transition Act (AMTA)**. The total amount made available for each fiscal year is specified in the Act and allocated to commodities each fiscal year using a set of percentages also specified in the Act. These percentages were based on the Congressional Budget Office's February 1995 baseline forecast of what **deficiency payments** would have been if provisions in effect for the 1995 crop had been extended. For example, for fiscal 1997, the total allocation for wheat is 26.26% of total annual payments of \$5.385 billion, or \$1.414 billion. The annual payment rate for wheat equals total spending (\$1.414 billion) divided by the sum of all individual wheat payment contract quantities for the year. As with other program commodities, an individual farm's **payment quantity** equals the farm's program payment yield multiplied by 85% of the farm's wheat contract acreage. **Program yields** under the 1996 Act are determined in the same manner as under the 1949 Act for 1995 crops. An individual farmer's transition payment is the payment quantity times the annual **payment rate**. The payment is made by September 30 of each of the fiscal years 1996 through 2002. Producers may also choose to receive 50% of the contract payment in December or January of the fiscal year. Farmers have near total planting flexibility on the contract acres (the exception being fruits and vegetables) as well as on the remainder of the farm.

Contract production — A form of **vertical integration** where a firm commits to purchase a commodity from a producer at a price formula set in advance of the purchase.

Contract sanctity — The concept that U.S. agricultural products already contracted to be exported should not be subject to government cancellation because of short supply, national security, and/or foreign policy reasons. The **FACT Act of 1990** provides for contract sanctity by prohibiting the President from restricting the export of any agricultural commodity already under contract to be delivered within 270 days from the date the **embargo** is imposed, except during national emergency or war.

Conventional agriculture — Generally used to contrast common or traditional agricultural practices featuring heavy reliance on chemical and energy inputs typical of large-scale, mechanized farms to **alternative agriculture** or **sustainable agriculture** practices. Mold-board plowing to cover stubble, routine pesticide spraying, and use of synthetic fertilizers are examples of conventional practices that contrast to alternative practices such as **no-till, integrated pest management**, and use of animal and green manures.

Conventional tillage — Tillage operations considered standard for a specific location and crop and that tend to bury the crop residues; usually considered as a base for determining the cost effectiveness of **erosion** control practices. See **no-till farming**.

Converted wetland — Under the **swampbuster program**, these are **wetlands** that were drained or altered to improve agricultural production after December 23, 1985, the date swampbuster was enacted. On lands with this designation, no drainage maintenance and no additional drainage are allowed.

Conveyance loss — Water loss in pipes, channels, conduits, ditches by leakage or evaporation.

Cooperative — An enterprise or organization owned by and operated for the benefit of those using its services. In agriculture, such an organization is owned and used by farmers mainly to handle the off-farm part of their businesses — buying farm supplies, marketing their products, furnishing electric and telephone service, and providing business services — at cost. Essential features are democratic control, limited return on capital, and operation at cost, with distribution of financial benefits to individuals in proportion to their use of the services made available by the cooperative (called patronage refunds). In 1997, there were 3,884 farmer cooperatives in the United States. As a variation from the traditional design, so-called “new generation cooperatives” are characterized by limited membership, require substantial investment, and include delivery contracts. Producers are increasingly using this model to create their own **value-added** business enterprises. The USDA's **Rural Business-Cooperative Service** (RBS) assists in forming new cooperative businesses and improving the operations of existing cooperatives through technical assistance, research, information products. Cooperatives are afforded certain antitrust exemptions by the **Capper-Volstead Act**.

Cooperative Extension System — A federal-state-local cooperative education system that provides continuing adult education based on the academic programs of the **land grant colleges of agriculture** and their affiliated **state agricultural experiment stations**. The system employs approximately 32,000 people located on land grant campuses and offices in virtually every county in the nation. About half of Extension's education programs focus on agriculture and natural resources, one-quarter on youth development (including the

vocational 4-H program), and the balance on home economics and community resource development work.

Cooperative State Research, Education, and Extension Service (CSREES) — The USDA agency that administers federal funds appropriated for agricultural and forestry research, extension, and education programs at eligible institutions, including the **land grant colleges of agriculture** in the states, selected veterinary schools, and other institutions with capabilities in the food and agricultural science arena. The agency administers **formula funds** to the **1862 land grant colleges** under the **Hatch Act of 1887**, the **Smith-Lever Act of 1914** and the **McIntire-Stennis Act of 1962**; **Evans-Allen funds** for research programs at the **1890 land grant colleges**; the **National Research Initiative (NRI) Competitive Grants** program; the **Special Grants** program; grants for higher education; and the research portion of the **Fund for Rural America**. <http://www.reeusda.gov/>

Cooperator program — Officially known as the **Foreign Market Development Program (FMDFP)**. One of several agricultural export promotion programs operated by the **Foreign Agricultural Service**. This program consists of joint government/agri-industry efforts to develop markets by acquainting potential foreign customers with U.S. farm products. Activities under this program include providing technical assistance to prospective foreign buyers, overseas food exhibits, product demonstrations and advertising aimed at foreign consumers. FAS shares the financing of these projects with the “cooperators,” which are nonprofit commodity trade associations primarily composed of producer-based farm groups.

Coordinated review effort (CRE) — **Food and Consumer Service** reviews of the **National School Lunch Program** conducted in cooperation with state agencies to improve the management of the programs, evaluate meal data accuracy, and provide training and technical support to schools to help improve local program accountability.

Corn Belt — That area of the United States where corn is a principal cash crop, including Iowa, Indiana, most of Illinois, and parts of Kansas, Missouri, Nebraska, South Dakota, Minnesota, Ohio and Wisconsin.

Corn gluten — A byproduct of wet milling of corn. Corn gluten is used as a medium-protein (20-24%), medium-fiber (10%) feedstuff. The European Union is the major market for U.S. corn gluten feeds.

Corn/hog ratio — See **hog/corn ratio**, and **feed ratio**.

Corporate farm — A form of farm ownership which is a separate legal entity from the owners of the farm. Changes in the tax law in the 1970s encouraged the incorporation of farms as corporate tax rates declined while individual tax rates rose, mainly because of inflation. The 1992 Census of Agriculture reports that less than 4%, or nearly 73,000, of the 1.925 million farms in the nation were corporate farms. By contrast, more than 1.653 million (86%) were individual or family-owned operations and 186,000 (10%) were partnerships.

Cosmetic appearance — Section 1351 of the **FACT Act of 1990** defines the term as “the exterior appearance of an agricultural commodity, including changes to that appearance resulting from superficial damage or other alterations that do not significantly affect yield, taste, or nutritional value.” The Agricultural Marketing Service sets **grades and standards** for many agricultural commodities. Some consumer and environmental groups have argued that some of these standards are harmful because they encourage excessive pesticide use

merely to make fruits and vegetables “attractive.” Agricultural interests disagree, countering that consumers prefer blemish-free produce and that cosmetic standards are no less important than other grading factors.

Cost/benefit analysis — A quantitative and sometimes qualitative evaluation of the costs which would be incurred by some action (such as implementing an environmental regulation) versus the overall benefits to society of the proposed action.

Cost-containment (for WIC) — Refers to statutory provisions in the **Child Nutrition Act of 1966** that require state agencies to contain WIC program costs, particularly with respect to the cost of infant formula sold through the program. See also **competitive bidding** and **sole source bids**.

Cost, insurance, and freight (C.I.F.) — In general, c.i.f. means that the seller’s price includes the cost of the goods, the marine insurance, and all transportation charges to the named point of destination. Similar terms include C.&F., cost and freight; C.F.I., cost, freight, and insurance; C.I.F. & C., cost, insurance, freight, and commission; C.I.F.C. & I., cost, insurance, freight, commission, and interest; and C.I.F.I. & E., cost, insurance, freight, interest, and exchange. C.A.F. is the French form of C.I.F.

Cost of production — The average unit cost (including purchased inputs and other expenses) of producing an agricultural commodity. The **Agricultural and Consumer Protection Act of 1973** requires USDA to make annual estimates of the average cost of producing selected commodities. These cost of production estimates have been used by Congress in considering farm policy options.

Cotton competitiveness provisions — A series of provisions in the cotton support program, including **step two payments** and import quotas, that are intended to encourage the consumption of U.S. cotton even when its price may be higher than foreign cotton.

Cottonseed Oil Assistance Program (COAP) — Along with the Sunflower Oil Assistance Program (SOAP), COAP is one of two programs under which bonuses were awarded to exporters to assist in exports of U.S. vegetable oil to targeted markets. Funds for the programs were authorized to be made available under **Section 32** of the **Agricultural Adjustment Act of 1935**. The provision in the **Disaster Assistance Act of 1988** that authorized the COAP to begin in fiscal year 1989 expired at the end of fiscal year 1995. However, the **Agriculture Appropriations Act of 1996** provided authority to operate the program in fiscal year 1996. COAP was not reauthorized by the **FAIR Act of 1996**, although **export subsidies** for cottonseed oil can be financed under the Export Enhancement Program (EEP).

Countertrade — A trade transaction of goods and services without the exchange of money. Forms of countertrade include **barter**, buy-back or compensation, counter-purchase, offset requirements, swap, or triangular trade.

Countervailing duty — A charge levied on an imported article to offset the unfair price advantage it holds due to a subsidy paid to producers or exporters by the government of the exporting country. Section 303 of the **U.S. Tariff Act of 1930**, as amended, provides for an assessment equal to the amount of the subsidy, in addition to other duties and fees normally paid on the imported article. Countervailing duties are permitted under Article 6 of the GATT.

Country-of-origin labeling — Under Section 304 of the **Tariff Act of 1930**, as amended, most products entering the United States must be clearly marked so that the “ultimate purchaser” can identify the country of origin. Imported meat products are subject to this requirement: imported carcasses and parts of carcasses must be labeled, and individual retail (consumer-ready) packages also must be labeled. Imported carcasses or parts generally go to U.S. plants for further processing. The labeling policy considers these plants as the “ultimate purchasers.” Therefore, any products these plants make from the imported meat (for example, ground beef patties made in the United States from beef that originated in Canada or elsewhere) do not have to bear country-of-origin labels. A number of other agricultural articles are exempt from the basic country-of-origin labeling requirements: eggs, livestock and other animals, live or dead; and other “natural products” such as fruits, vegetables, nuts and berries. (However, the outermost containers used to bring these articles into the United States must indicate the country of origin.) There is an interest among U.S. farmers to require more extensive labeling of agricultural products (especially meats and produce). At issue are whether consumers would be more likely to buy the U.S. alternative if such labeling is more prevalent and whether foreign countries might view such a change as a **nontariff trade barrier**.

County committees — Panels of three to five farmers, elected by other farmers, to oversee the local operation of **commodity programs**, credit, and other programs of the **Farm Service Agency**. County committees, established by the **Soil Conservation and Domestic Allotment Act of 1935**, are so named because they have overseen USDA field offices for farmers that once existed in most rural farm counties throughout the United States. Today, the committees often oversee activities in multi-county areas, due to USDA reorganization and consolidation of its field office structure into a network of about 2,500 **field service centers**. The committees are responsible for hiring and supervising the **County Executive Director (CED)**, who manages the day-to-day activities of the field service center and its employees. The director and most county office staff legally are employees of the farmer-elected committees rather than the federal government, although their salaries come from federal funds.

County Executive Director (CED) — The supervisor hired by the Farm Service Agency **county committee** to manage the day-to-day activities of a **field service center** (formerly called the **county office**).

County loan rate — Nonrecourse loan rates vary from county to county to account for transportation cost differences to the nearest terminal elevator. The weighted average for all county loan rates — the actual loan levels received by farmers — in the United States must equal the national average loan rate, established by USDA according to limits set by Congress.

County office — Usually refers to the local office of the **Farm Service Agency**, where farmers go to conduct business associated with federal farm commodity and credit programs, and some conservation programs. As a result of reorganization in 1994, local offices are increasingly shared with other USDA agencies having local representatives, such as the **Natural Resources Conservation Service**. Offices shared by several agencies are called **field service centers**.

County payments — **Forest Service** payments of 25% of gross revenues from each national forest to the states for use on road and school programs in the counties where the national forests are located. Technically known as Payments to States, because the states determine which road and school programs can be funded, but 100% of the payments are

allocated to the counties based on the national forest acreage in each county. Commonly confused with **Payments in lieu of taxes**.

Cover crop — A close-growing crop, planted primarily as a rotation between regularly planted crops, or between trees and vines in orchards and vineyards, to protect soil from erosion and improve it between periods of regular crops, or.

Cow-calf operator — A ranch or farm where cows are raised and bred mainly to produce calves usually destined for the beef market. The cows produce a calf crop each year, and the operation keeps some heifer calves from each calf crop for breeding herd replacements. The rest of the calf crop is sold between the ages of 6 and 12 months along with old or nonproductive cows and bulls. Such calves often are sold to producers who raise them as feeder cattle.

CP — Contracting party

CPI — **Consumer price index**

CRBSC — Colorado River Basin Salinity Control Program

CRC — Crop Revenue Coverage (See **Revenue insurance**.)

CRES — Conservation Reporting and Evaluation System

Creutzfeldt-Jacob Disease (CJD) — A sporadic and rare, but fatal human disease that usually strikes people over 65. It occurs worldwide at an estimated annual rate of one case per million population. About 10-15% of CJD cases are inherited. A small number of cases occurred as the result of various medical treatments or procedures which inadvertently transferred the CJD agent. In March 1996, the British government announced a possible link between **bovine spongiform encephalopathy (BSE)** and CJD. The announcement was prompted by the discovery of several atypical cases of CJD in Great Britain.

Critical control point — An operation (practice, procedure, process, or location) at or by which preventive or control measures can be exercised that will eliminate, prevent, or minimize one or more hazards. Critical control points are fundamental to **Hazard Analysis and Critical Control Point (HACCP)** systems, which are now being adopted by the food industry to prevent health hazards in the food supply.

Critical habitat — Under the **Endangered Species Act**, critical habitat is an area essential to the conservation of a listed **species**, though the area need not actually be occupied by the species at the time it is designated. Critical habitat must be designated for all threatened and endangered species under the Act (with certain specified exceptions). The areas may be federal or nonfederal land, but only the federal government is required to protect it. A federal agency with whom a landowner is dealing must ensure that its actions (which may include giving a loan, increasing irrigation flows, etc.) do not adversely modify these areas.

Crop acreage base — A crop-specific measure equal to the average number of acres planted (or considered planted) to a particular program crop for the previous five years. The sum of the crop acreage bases for all program crops on a farm may not exceed the farm acreage. The acreage base was used in determining the number of acres a farmer, under an acreage reduction program, had to remove from normal crop production and devote to

conserving uses in order to be eligible for USDA price and income supports. The **FAIR Act of 1996** suspends the **base acreage** provisions of the **permanent law**.

Crop insurance — A multiperil crop insurance program available for a fee (premium) to the producers of most crops as protection against significant yield losses from natural hazards. The present **Federal Crop Insurance Program** is a comprehensive, subsidized, all-risk program that provides different degrees of protection for different premium amounts.

Crop reports — Reports compiled by USDA's National Agricultural Statistics Service (NASS) on various commodities that are released throughout the year. Information in the reports includes estimates on planted acreage, yield, and expected production, as well as comparison of production from previous years.

Crop residue — That portion of a plant, such as a corn stalk, left in the field after harvest. Crop residues are measured for farmers who use **conservation tillage** to implement their **conservation plans** to meet **conservation compliance** requirements. These farmers are required to maintain a minimum level of crop residue to be in compliance. Under revisions to the conservation compliance program in the **FAIR Act of 1996**, farmers are allowed to use third parties, certified by USDA, to measure levels of crop residue.

Crop rotation — The growing of different crops, in recurring succession, on the same land in contrast to monoculture cropping. Rotation usually is done to replenish soil fertility and to reduce pest populations in order to increase the potential for high levels of production in future years.

Crop year — Generally refers to USDA-designated 12-month period for each crop that begins with that crop's typical month of harvest (see **marketing year**).

Cropland — Land used primarily for the production of row crops, close-growing crops, and fruit and nut crops. It includes cultivated and noncultivated acreage, but not land enrolled in the **Conservation Reserve Program**. Approximately 382 million acres of cropland, including 50 million acres of irrigated land, was in use in the United States during the most recent **national resources inventory**, conducted in 1992. Cropland is 30% of all non-federal rural lands. In 1996, the value of production from cropland was about \$108 billion.

Cross compliance — A no longer used requirement that a farmer who participates in a **price support** program for one crop must also participate in price support programs for other crops grown on the same farm.

CRP — Conservation Reserve Program

Crush spread — In the soybean futures market, the simultaneous purchase of soybean futures and the sale of soybean meal and soybean oil futures to establish a processing margin. See **gross processing margin**.

CSCE — Coffee, Sugar, and Cocoa Exchange

CSE — Consumer subsidy equivalent

CSFP — Commodity Supplemental Food Program

CSPI — Center for Science in the Public Interest

CSREES — Cooperative State Research, Education, and Extension Service

CSRS — Cooperative State Research Service (See **Cooperative State Research, Education, and Extension Service.**)

CU — Consumers' Union

Custom feeders — Producers who provide the service of feeding animals (e.g., cattle, hogs) they do not own, in return for a fee paid by someone else (such as a **packer**) who does own the animals. Custom feeding potentially provides packers with more control over supplies and prices of animals. Custom feeding is a form of **vertical integration**.

Customs union — An agreement between two or more countries to remove trade barriers between each other and to establish common tariff and nontariff policies with respect to other countries. The **European Community (EC)** of the **European Union (EU)** is the best known customs union.

CVD — Countervailing duty

CVM — Center for Veterinary Medicine

CWA — **Clean Water Act (Federal Water Pollution Control Act)**

CWB — **Canadian Wheat Board**

cwt. — Hundredweight, or one hundred pounds

CXT — **Common external tariff**

CY — **Crop year**; calendar year

CYFAR — Children, Youth and Families at Risk Program

CZMA — Coastal Zone Management Act

Dacthal (DCPA) — A selective **herbicide**, trade name Dacthal, used especially on vegetables. DCPA and its breakdown products are environmentally significant and became the most commonly detected pesticide residues in an EPA survey of drinking water wells conducted during 1988-1990.

Dairy and Tobacco Adjustment Act of 1983 — P.L. 98-180 (November 29, 1983) was designated the **Dairy And Tobacco Adjustment Act of 1983**. Title I authorized a voluntary **dairy diversion program**, which was operated between January 1984 and March 1985. Producers who elected to participate in the program and reduce their milk marketings by between 5 and 30% below their base production were paid \$10 per hundred pounds (cwt.) for these reductions. For a 16-month period (12/1/83- 3/31/85), all dairy farmers were assessed 50 cents per cwt. on all milk marketed to help defray the cost of the diversion program. The Act also authorized a national dairy **check-off program** for dairy product promotion, research and nutrition education. This self-help program is funded through a permanent 15-cent per cwt. **assessment** on all milk production, and is administered by a board of dairy farmers who are appointed by the Secretary of Agriculture. Title II was designated the **Tobacco Adjustment Act of 1983**. Title II provided for reduced levels of

price support for tobacco, the prohibition of lease and transfer of flue-cured quota, the mandatory sale of allotments and quotas by nonfarming entities, the required inspection of imported tobacco, and various other modifications to the tobacco programs.

Dairy Diversion Program — A voluntary supply control program authorized by the **Dairy Production Stabilization Act of 1983**, under which producers in 1984-85 received payments, of \$10 per cwt., for reducing their milk marketings by between 5 to 30% below an earlier base period.

Dairy Export Incentive Program (DEIP) — A program that offers subsidies to exporters of U.S. dairy products to help them compete with other nations. USDA pays cash to exporters as bonuses to help them sell certain U.S. dairy products at prices below the exporter's cost of acquiring them. The program was originally authorized by the **Food Security Act of 1985** and extended by the **FACT Act of 1990** and the **Uruguay Round Agreements Act of 1994**. The total tonnage and dollar amounts of these and other **export subsidies** have been limited by the recent Uruguay Round multilateral trade agreement. The **FAIR Act of 1996** extends the program through 2002, and permits its use for market development in addition to offsetting the subsidies of other countries.

Dairy Price Support Program — The federal program that maintains a minimum farm price for milk used in the manufacture of dairy products. The CCC indirectly assures a minimum price for milk by purchasing any cheddar cheese, nonfat dry milk, and butter offered to it by dairy processors at stated prices. These purchase prices are set high enough to enable dairy processors to pay farmers at least the support price for the milk they use in manufacturing these products. The support price is \$10.20 per hundred pounds of milk (cwt.) in 1997. It will decrease to \$10.05/cwt in 1998, and \$9.90/cwt in 1999. Under provisions of the **FAIR Act of 1996**, the dairy **price support** program is scheduled to terminate on December 31, 1999.

Dairy Promotion Program — The Dairy Production Stabilization Act of 1983 authorized a national producer program for dairy product promotion, research, and nutrition education as part of a comprehensive strategy to increase human consumption of milk and dairy products and to reduce dairy surpluses. Dairy farmers fund this self-help program through a mandatory 15-cent per hundredweight assessment on all milk produced in the 48 contiguous states and marketed commercially. Dairy farmers can direct up to 10 cents of this assessment for contributions to qualified regional, state or local dairy product promotion, research or nutrition education programs. The national program is administered by the National Dairy Promotion and Research Board (Dairy Board), a group of 36 dairy farmers appointed by the Secretary of Agriculture to staggered 3-year terms. This program should not be confused with the processor funded **Fluid Milk Promotion Program**.

Dairy Termination Program — Also called the **whole herd buyout**, this program was authorized by the **Food Security Act of 1985**. Under it, farmers received USDA payments for agreeing to remove their entire dairy herds from production for 5 years.

Data call-in — A part of the Office of Pesticide Programs (OPP) process of developing key required test data, especially on the long-term, chronic effects of existing pesticides, in advance of scheduled Registration Standard reviews. Data call-in from manufacturers is an adjunct of the registration standards program intended to expedite re-registration.

DC — District Conservationist

DDT — The abbreviated name of a **chlorinated hydrocarbon** insecticide, dichloro-diphenyl-trichloromethane. It is persistent in the environment and **biomagnifies** in birds of prey. EPA canceled U.S. registration of virtually all but emergency uses of DDT in 1972.

Debt-asset ratio — A financial ratio that measures the percentage of a farm operator's assets that are financed by debt. For example, a ratio of 0.4 means that for every \$100 of assets the operator has \$40 of debt. The ratio indicates to a lender the degree of security of a loan. Higher values indicate greater risk. Although a safe or acceptable level varies greatly by enterprise, a debt-asset ratio in excess of 0.4 may indicate financial stress. A ratio of 0 means that the operator owes no debt; a ratio greater than 1 means that the borrower's debts exceed the value of assets, indicating the insolvency of the farm business.

Decoupling — The concept of separating federal farm payments from the requirement that farmers produce specified **program crops** and/or divert land from production. A chief goal of decoupling is to remove a seemingly inherent contradiction in traditional policy: asking farmers to reduce production, while implicitly encouraging more output by tying their benefits to each unit produced. The decoupling concept was first introduced during debate over policy options in the 1985 omnibus **farm bill**, and was effectively implemented by policy changes made by the **FAIR Act of 1996**.

Deferred pricing — A **cash forward contract** that provides for determining price by formula at a later date. This also may be called "booking the **basis**," when the formula sets price relative to a futures price.

Deficiency payments — Direct government payments made to farmers who participated in an annual **commodity program** for wheat, feed grains, rice, or cotton, prior to 1996. The crop-specific deficiency payment rate was based on the difference between the legislatively set **target price** and the lower national average market price during a specified time. The total payment was equal to the **payment rate**, multiplied by a farm's eligible **payment acreage** and the program **payment yield** established for the particular farm. In the latter years of the program, farmers could receive up to one-half of their projected deficiency payments at program signup. If actual deficiency payments, which were determined after the crop year, were less than **advance deficiency payments**, the farmer was required to reimburse the government for the difference, except for **zero, 50/85-92 payments**. The **FAIR Act of 1996** eliminated deficiency payments and replaced them with **production flexibility contract** payments.

Defoliant — An **herbicide** that removes leaves from trees and growing plants.

DEIP — Dairy Export Incentive Program

Delaney Clause — The Delaney Clause in the **Federal Food, Drug, and Cosmetic Act (FFDCA)** states that no additive shall be deemed to be safe for human food if it is found to induce cancer in man or animals. It is an example of the **zero tolerance** concept in food safety policy. The Delaney prohibition appears in three separate parts of the FFDCA: Section 409 on food additives; Section 512, relating to animal drugs in meat and poultry; and Section 721 on color additives. The Section 409 prohibition applied to many pesticide residues until enactment of the **Food Quality Protection Act of 1996** (P.L. 104-170, August 3, 1996). This legislation removed pesticide residue tolerances from Delaney Clause constraints.

Delayed pricing — A type of deferred pricing that provides for transfer of title before the price is determined and final settlement made. Contracts including this feature are sometimes called “price-later” contracts.

Delivery — In settlement of a futures contract, the tender and receipt of the actual commodity, the cash value of the commodity, or of a delivery instrument covering the commodity (e.g., warehouse receipts or shipping certificates). Futures contracts may be settled by delivery, but more often they are settled by **offset** or cash. Each futures exchange has specific procedures for delivery of a commodity.

Delivery month — The specified month within which a **futures contract** matures and can be settled by **delivery**. Also referred to as contract month.

Delivery point — A location where a commodity can be delivered to fulfill a futures contract.

Dermal toxicity — The ability of a pesticide or other chemical to poison people or animals via skin contact. Many **organophosphate** pesticides exhibit high dermal toxicity.

Department of Agriculture (USDA) — USDA was originally established in 1862 and raised to cabinet status in 1889. In FY1997 it had an employment level equal to about 113,000 staff years, working in some 30 separate agencies, carrying out program activities valued at \$84 billion, with net federal budgetary outlays of \$57 billion. Forestry, natural resource, and farm activities utilized 58% of the staff time. However, about 70% of USDA expenditures went to domestic food assistance programs. Over 90% of the staff are located in local, state, and regional field offices away from the Washington, DC, headquarters. Approximately three-fourths of USDA spending is classified as mandatory spending, which by definition is not constrained by the annual appropriations process. Eligibility for mandatory programs is written into law; any individual or entity that meets the eligibility requirements is entitled to a payment as authorized by the law. The vast majority of mandatory spending is in the **Food Stamp Program** and certain other food and nutrition programs, the farm **commodity programs**, the **crop insurance** program, and the **Conservation Reserve Program**. The other roughly 25% of USDA budget is classified as discretionary and is subject to annual appropriations, including rural development, agricultural research and education, agricultural credit, international food aid, food marketing and inspection, forestry, and certain nutrition programs. All USDA discretionary programs are funded through an annual Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations Act (except the **Forest Service** is funded through the Department of Interior appropriations act). Annual appropriations are made to the food stamp and other mandatory nutrition programs based on estimated spending needs. However, supplemental appropriations are generally made if and when these estimates fall short of required spending. An annual appropriation is made to the **Commodity Credit Corporation**, which funds the commodity programs and the Conservation Reserve Program, in order to cover its past net realized losses. Most, but not all, USDA programs are under the congressional authorizing jurisdiction of the House Committee on Agriculture and the Senate Committee on Agriculture, Nutrition, and Forestry. <http://www.usda.gov/>

Department of Agriculture Reorganization Act of 1994 — Title II of P.L. 103-354 (October 13, 1994) was designated the Department of Agriculture Reorganization Act of 1994 and gave the Secretary of Agriculture broad authority to reorganize USDA to achieve greater efficiency, effectiveness, and economy. The law called for consolidation of agencies and offices, as well as a reduction in personnel of 7,500 by the end of FY1999.

DES — Diethylstilbesterol

Desiccant — A chemical agent that absorbs moisture; desiccants can be used to control insect pests or mildew, and also to dry foliage before harvest (as with potatoes). Desiccants are regulated as **pesticides** under the **Federal Insecticide, Fungicide, and Rodenticide Act**.

Designated uses of water — Water uses identified in state water quality standards that must be achieved and maintained as required under the **Clean Water Act**. Uses can include cold water fisheries, public water supply, irrigation, etc.

Desired future condition — Used to describe the future condition of federal **rangeland** resources that meet management objectives. Desired future condition is based on ecological, social, and economic considerations during the land and resource management planning process. Desired future condition is usually expressed as ecological status or management status of vegetation and desired soil qualities.

Desired plant community — The plant community that has been determined through a land use or management plan to best meet the plan's objectives for a site. A desired plant community is consistent with the site's capability to produce the required resource attributes through natural succession, management intervention, or a combination of both.

Development easement — A legal agreement by which a landowner surrenders the right to develop a designated parcel of property. Some local and state governments have programs to acquire development easements from private landowners to prevent conversion of farmland to other uses.

Diethylstilbestrol (DES) — A synthetic estrogen hormone. DES was used widely in the United States as a growth promoter in cattle and sheep and as a treatment for estrogen-deficiency disorders in veterinary medicine, and for postcoital contraception. However, because of its carcinogenic properties and other adverse effects, the **Food and Drug Administration** has revoked all use of it in food-producing animals.

Dioxin — Any of a group of toxic chlorinated compounds known chemically as dibenzo-p-dioxins (or the most toxic of these compounds, 2,3,7,8 tetrachloro dibenzo-p-dioxin). They are produced inadvertently as a by-product of chemical production or combustion and are widespread pollutants in the environment.

Direct export credit — A federal export promotion program (designated as GSM-5) operated by the **Foreign Agricultural Service**. Loans are made directly by the **Commodity Credit Corporation** at market interest rates to foreign buyers of agricultural commodities. Through FY1980, government credit for agricultural exports was made available through the GSM-5 program. For budget austerity reasons, the program was replaced with federal **export credit guarantees** in FY1981. A more limited **blended credit** program was used in FY1983-85 that combined direct credit with guaranteed credit.

Direct payments — Payments (usually in cash but sometimes in commodity **certificates**) made directly to producers in conjunction with participation in commodity support or other programs. Under the **FAIR Act of 1996**, participating producers receive **production flexibility contract** payments, which replace **deficiency payments**. Also, producers receive direct payments under **conservation reserve** contracts.

Disaster payments — Direct federal payments provided to crop producers when either planting is prevented or crop yields are abnormally low because of adverse weather and related conditions. The **Federal Crop Insurance Act of 1980** greatly expanded crop insurance coverage in an attempt to permanently replace disaster payments with government-subsidized insurance. However, between 1988 and 1994, ad-hoc disaster legislation was enacted in each year that provided a total of nearly \$10 billion in direct disaster payments to farmers. These large payments prompted the enactment of the **Federal Crop Insurance Reform Act of 1994**, which included provisions to broaden the federal subsidy of the **federal crop insurance program**, in an effort to increase farmer participation in the program and lessen the pressure for ad-hoc disaster payments. The 1994 Act also created a permanent **noninsured assistance program (NAP)** that makes payments to farmers who grow a crop that is ineligible for crop insurance. NAP pays eligible farmers 60% of the market price of the crop on losses in excess of 50%, but only when the farmer's area experiences a minimum crop loss of 35%.

Discharge — In water resources, the term refers to the flow of surface water in a stream or canal or the outflow of ground water from a flowing artisan well, ditch, or spring. In environmental protection, the term is used synonymously with effluent or emission as a term of **point source pollution** release.

Dispute Settlement Body (DSB) — An entity to which all **World Trade Organization** members belong that is responsible for adjudicating disputes arising under various trade agreements.

Dissolved oxygen (DO) — The oxygen freely available in water, vital to fish and other aquatic life and necessary for the prevention of odors in water. DO levels are a critical indicator of a waterbody's ability to support desirable aquatic life. Secondary and advanced wastewater treatments are generally designed to ensure adequate DO in waste-receiving waters by removing, digesting, or oxidizing oxygen-demanding wastes (see **biological oxygen demand**).

Distance Learning and Telemedicine Grant and Loan Program (DLT) — A program authorized by the **FACT Act of 1990** to provide grants to rural schools and health care providers to help them invest in telecommunications facilities and equipment to bring educational and medical resources to rural areas where the services otherwise might be unavailable. The **FAIR Act of 1996** reauthorized and streamlined the program. Funding is authorized at \$100 million annually. DLT is administered by the **Rural Utilities Service**.

Diversion payments — Payments once but no longer made to farmers who voluntarily reduced their planted acreage of a program crop and devoted the land to a **conservation use** when a **paid acreage diversion** was in effect. Also, payments made to dairy producers in the 1980s under the no longer operating **dairy termination program** who agreed to reduce their milk marketings below a prescribed level.

DNA — Deoxyribonucleic acid

DO — **Dissolved oxygen**

Dockage — A factor in the grading of grains and oilseeds; i.e., dockage in wheat is described as “weed seeds, weed stems, chaff, straw, or grain other than wheat, which can be readily removed from the wheat by the use of appropriate sieves and cleaning devices; also, underdeveloped, shriveled and small pieces of wheat kernels removed in properly separating,

properly rescreening, or recleaning.” The term is also used to describe the amount of reduction in price taken because of a deficiency in quality.

Doctrine of prior appropriation — Water rights doctrine adopted by most western states, giving the first person to use water from a stream the first right to such water. If the first user does not consume all of the water, then the second and later users can appropriate water for their needs. The water right is not necessarily tied to land ownership.

Domestic farm labor — Individuals (and the family) who receive a substantial portion of their income from the production or handling of agricultural or aquacultural products. Farmers owners and others may be eligible for **Section 514 loans** to make housing available for domestic farm labor. For purposes of housing loans, the farm laborers must be U.S. citizens or legally admitted for permanent residence in the United States. The term includes retired or disabled persons who were domestic farm labor at the time of retiring or becoming disabled.

Domestic price — The price at which a commodity trades within a country, in contrast to the **world price**. For those commodities not benefitting from some form of **price support**, the domestic price is determined by supply and demand. For commodities that receive price support, the domestic price is usually set by the **loan rate** or some comparable support level that serves as a price floor in the marketplace working in conjunction with any **import quota** that may be in effect.

Double cropping — The practice of consecutively producing two crops of either like or unlike commodities on the same land within the same year. An example of double cropping might be to harvest a wheat crop by early summer and then plant corn or soybeans on that acreage for harvest in the fall. This practice is only possible in regions with long growing seasons.

Downer (or downed animals) — Commonly used term for animals that are disabled due to illness or injury. A longstanding issue is whether these animals are treated humanely or inhumanely by shippers, stockyards, and **packers** while they are being moved or held for slaughter. Legislation periodically introduced in Congress would outlaw the sale or transfer of such animals, but livestock producer groups (who generally agree that livestock markets should not accept severely disabled animals) contend that their voluntary efforts to end harmful practices have already proven successful.

DPSP — Dairy price support program

Drainage — Improving the productivity of agricultural land by removing excess water from the soil by such means as ditches, **drainage wells**, or subsurface drainage tiles. See also **swampbuster** and **wetlands**.

Drainage basin — The area of land that drains water, sediment, and dissolved materials to a common outlet at some point along a stream channel.

Drainage wells — Wells drilled to carry excess water off agricultural fields. Because they act as a funnel from the surface to the groundwater below, drainage wells can contribute to groundwater pollution.

DRES — Dietary risk evaluation system

Dryland farming — A system of producing crops in semi-arid regions (usually with less than 20 inches of annual rainfall) without irrigation. Dryland farmers often try to rebuild soil moisture by leaving the land fallow (unplanted) or mulched in alternate years, called **summer fallowing**.

DSB — Dispute Settlement Body

DTP — Dairy Termination Program

Dumping — Selling commodities in a foreign market at a lower price than in the domestic market. Under **World Trade Organization** rules, dumping occurs when the price to the importer is less than the normal price of the product charged to the buyer in the country of origin. When considering the imposition of antidumping **duties**, the U.S. government examines the imported price of a product compared to its **domestic price**. In addition, before duties are imposed, proof of injury to a U.S. industry must be demonstrated.

Durum wheat — A species of wheat distinct from wheat used to make bread and other bakery products. The hard, flinty kernels of durum wheat are specially ground and refined to obtain semolina, a granular product used in making pasta items such as macaroni and spaghetti. Most durum wheats are grown in Mediterranean countries, the former Soviet Union countries, North America, and Argentina. U.S. durum production is centered in North Dakota with other producing states being South Dakota, Minnesota, Montana, California, and Arizona.

Duty, import — A customs duty is a charge assessed by a government on an imported item at its point of customs entry into the country, and paid for by the importer; the term is now used interchangeably with **tariff**. In terms of assessing duties there are two basic types: an **ad valorem duty** is assessed in proportion to the value of the imported item, whereas a “specific” duty is assessed on the basis of a measure other than value, such as the quantity of the product imported. In addition, a “compound” or “mixed” duty, which is a combination of an ad valorem and specific duty, is occasionally used in the **Harmonized Tariff Schedules of the United States (HTSUS)**. Special duties such as **anti-dumping duties** or **countervailing duties** may also be levied on imports to offset the unfair price advantage of an imported article that is sold below normal value or subsidized by an exporting country.

***E. coli* 0157:H7 (*Escherichia Coli* 0157:H7)** — A bacterium that lives harmlessly in the intestines of animals such as cattle, reptiles, and birds. However, in humans the bacterium, which can be transmitted through foods, can cause bloody diarrhea, and also lead to hemolytic uremic syndrome (HUS), a life threatening disease. Although other known strains of *E. coli* are thought to be harmless to humans, the 0157:H7 strain is particularly virulent and dangerous. It has been implicated in several major outbreaks of foodborne illness in recent years. After a 1993 outbreak in the West, caused by the consumption of undercooked hamburgers, resulted in hundreds of illnesses and several deaths, USDA began regularly testing samples of ground beef for the pathogen. USDA, as part of its new **hazard analysis and critical control point** (HACCP) rule, also now requires all meat and poultry slaughter plants to regularly test carcasses for generic *E. coli* (as opposed to the 0157:H7 strain) in order to verify that their sanitary systems are effectively controlling fecal contamination.

Easement — A landowner sells or surrenders the right to develop a portion of the property, usually in return for a payment or some other benefit. Some local and state governments, and land trusts, have programs to acquire development easements from landowners to prevent

conversion of farmland to other uses. Since the mid 1970s, **conservation easements** have been purchased to protect nearly 420,000 acres of farmland in 15 states, primarily in the Northeast.

EBT — Electronic benefit transfer

EC — European Community

ECARP — Environmental Conservation Acreage Reserve Program

Economic Research Service (ERS) — USDA's in-house agricultural economics analysis and research agency. It employs about 600 people and has an annual budget of about \$53 million. <http://www.econ.ag.gov/>

Economies of size — The concept that the average cost of production per unit declines as the size of the operation grows. One reason farms have been growing in size is to make more economical use of machines capable of covering more ground with less labor, to capture economies of size. Larger sized farms can typically get volume discounts on such inputs as chemicals and seed.

Ecosystem — A functioning community of nature that includes fauna and flora together with the chemical and physical environment with which they interact. Ecosystems vary greatly in size and characteristics; an ecosystem can be a mud puddle, a field or orchard, or a forest. An ecosystem provides a unit of biological study and can be a unit of management.

ECP — Emergency Conservation Program

EDF — Environmental Defense Fund

Edward R. Madigan U.S. Agricultural Export Excellence Award — An award established by the **FAIR Act of 1996** to recognize companies' and other entities' entrepreneurial efforts in the food and agricultural sector for advancing U.S. agricultural exports.

EEP — Export Enhancement Program

EFAP — Emergency Food Assistance Program (formerly **TEFAP**); Emergency Feed Assistance Program (See **emergency livestock feed programs**.)

Effluent — Waste, usually liquid, released or discharged to the environment. Generally the term refers to **point source** discharges of sewage or contaminated wastewaters into surface waters.

Effluent limitation — An EPA “standard of performance” reflecting the maximum degree of discharge reduction achievable by the best available technology for various categories of sources of water pollution. These categories include feedlots, grain mills, and several kinds of food processing.

EFNEP — Expanded Food and Nutrition Education Program

EFP — Emergency Feed Program

EI — Erosion index

EIA — Environmental impact assessment; economic impact assessment

EID — Electronic identification devices

EIP — Export Incentive Program

EIR — Environmental impact report

EIS — Environmental impact statement

Elderly and disabled — For food stamp purposes: “elderly” persons are age 60 or older; and “disabled” persons are beneficiaries of disability-based governmental assistance, such as social security disability payments and certain veterans disability payments.

Electronic benefit transfer (EBT) systems — Under an EBT system, recipients are issued an “ATM-like” card and a “personal identification number” (PIN) instead of food stamp coupons. They access their food stamp benefits when purchasing food by using the card at an approved retailer: “swiping” the card through a point-of-sale terminal and entering their PIN. This electronically debits a “food stamp account” maintained for them (and is replenished monthly) and credits the retailer with the purchase amount. States are permitted to issue food stamp benefits through EBT systems, and, unless a waiver is granted, must use EBT systems by 2002.

Elevator — A tall warehouse facility that uses vertical conveyors to raise or elevate grain, generally owned privately or by an agricultural cooperative, where grain is stored before being marketed.

ELISA — Enzyme immunosorbant assay (test)

ELS — Extra-long staple (cotton)

ELS cotton — The abbreviation for **extra-long staple cotton**.

EM — Emergency disaster loans

EMAP — Environmental Monitoring and Assessment Program

Embargo — A government-ordered prohibition or limitation on trade with another country. Under an embargo, all trade, or selected goods and services, may be restricted. The **Food Security Act of 1985** states that U.S. policy is: (1) to foster and encourage agricultural exports, (2) not to restrict or limit such exports except under the most compelling circumstances, (3) that any prohibition or limitation on such exports should be imposed only when the President declares a national emergency under the **Export Administration Act**, and (4) that contracts to export agricultural commodities and products agreed upon before any prohibition or limitation should not be abrogated. Whenever commercial export sales of an agricultural commodity are suspended for reasons of short supply, but to a country with which the United States continues commercial trade, the **Food and Agriculture Act of 1977** requires USDA to set the commodity price support loan rate at 90% of the **parity price**. The **Food, Agriculture, Conservation, and Trade Act of 1990** contains **contract sanctity** provisions that place constraints on the embargo of agricultural commodities from

the United States. The 1990 Act also: (1) provides for agricultural embargo protection that, if certain conditions are met, compensates producers with payments if the President suspends or restricts exports of a commodity for national security or foreign policy reasons, and (2) requires USDA to develop plans to alleviate the adverse effects of embargoes if imposed. The **FAIR Act of 1996** requires USDA to compensate producers of a commodity, or commodities, if the U.S. government imposes an export embargo on any country for national security or foreign policy reasons, and if no other country joins the U.S. embargo within 90 days. Compensation may take the form of payments to producers or funds made available to promote agricultural exports or food aid.

Emergency Conservation Program — A program administered by the **Farm Service Agency** to help farmers to rehabilitate farmland damaged by natural disasters by sharing in the cost of rehabilitation.

Emergency Disaster (EM) Loan Program — When a county has been declared a disaster area by either the President or the Secretary of Agriculture, farmers in that county may become eligible for low-interest emergency disaster (EM) loans available through the **Farm Service Agency** (formerly Farmers Home Administration). EM loan funds may be used to help producers recover from production losses (when the producer suffers a significant loss of an annual crop) or from physical losses (such as repairing or replacing damaged or destroyed structures or equipment, or for the replanting of permanent crops such as orchards). A qualified producer can then borrow up to 80% of the actual production loss or \$500,000, whichever is less, at a subsidized interest rate.

Emergency feeding agency — This refers to an organization serving the food needs of the poor and unemployed that is designated by a state as eligible for commodities and administrative support to distribute commodities or operate a meal service program under the **Emergency Food Assistance Program**.

Emergency Food Assistance Act of 1983 — P.L. 98-92 (September 2, 1983) amended the original **Temporary Emergency Food Assistance Act (TEFAA) of 1983** to authorize multi-year funding and commodity donations from excess CCC inventories of foodstuffs for food distribution by emergency feeding organizations serving the needy and homeless. It subsequently was amended in 1985, 1988, 1990, and 1996 (under the **FAIR Act of 1996**) and currently authorizes funding through FY2002 to buy and donate commodities and to provide grants for state and local costs of transporting, storing, and distributing them to emergency feeding organizations, soup kitchens, and food banks serving low-income persons. In addition to discretionary funds authorized to be appropriated by this law, the welfare reform law of 1996 required that \$100 million of food stamp appropriations be used annually to buy commodities for emergency feeding organizations.

Emergency Food Assistance and Soup Kitchen-Food Bank Program (EFAP-Soup kitchens) — This program provides USDA commodities to **emergency feeding organizations** to help with the food needs of low-income populations. It also authorizes grants to states to help with the state and local costs of transporting, storing, and distributing the commodities. In addition to authorizing funding to buy commodities for these programs, the program also requires that \$100 million of food stamp funds be used annually for that purpose. The program is authorized through FY2002 by the **Emergency Food Assistance Act of 1983**, as amended by the **FAIR Act of 1996**. Eligible agencies include food banks, food pantries, soup kitchens, and public and private charitable agencies serving the poor. States determine the agencies eligible to participate and set low-income standards for eligibility.

Emergency livestock feed programs — The USDA was given permanent authority by the **Disaster Assistance Act of 1988** to implement an array of emergency livestock feed programs. These programs were designed to assist livestock producers who lose a significant amount of feed grown on the farm due to a natural disaster. The primary livestock feed programs implemented by USDA were: (1) the Emergency Feed Assistance Program (EFAP), which provided farmers who experienced a large loss of feed production with government-owned grain at a subsidized price, and, (2) the Emergency Feed Program (EFP), a cost-share program for farmers affected by a disaster who purchased their needed feed in the marketplace. To meet mandated budget savings requirements, the **FAIR Act of 1996** suspended these programs from the law through 2002.

Emergency Wetlands Reserve Program (EWRP) — Authorized in 1993 under emergency supplemental appropriations to respond to widespread floods in the Midwest, EWRP provided payments to purchase easements and partial financial assistance to landowners who permanently restored wetlands at sites where the restoration costs exceeded the land's fair market value. EWRP was administered by Natural Resources Conservation Service as part of its Emergency Watershed Program and operated in seven midwestern states. Land in this program is considered to be a part of the land enrolled in the **Wetland Reserve Program**.

Emerging Markets Program — A program originally authorized by the **FACT Act of 1990**, and titled the Emerging Democracies Program. The program was authorized to promote U.S. agricultural exports by providing technical assistance and credits or credit guarantees to emerging democracies annually for fiscal years 1991-95. Funds could be used to establish or provide facilities, services, or U.S. products to improve handling, marketing, storage, or distribution of imported agricultural products. The **FAIR Act of 1996** reauthorized the program through 2002 and renamed it the Emerging Markets Program. The program is retargeted to emerging markets (defined as countries that USDA determines are taking steps toward market-oriented economies and have the potential to provide viable markets for U.S. agricultural commodities). The Commodity Credit Corporation must make available not less than \$1 billion of direct credit or credit guarantees to emerging markets for fiscal years 1996-2002, in addition to the amounts authorized for **GSM-102/103**.

Emission — Waste released or emitted to the environment. The term is commonly used in referring to discharges of gases and particles to the atmosphere, i.e., air pollutants, and also is used in referring to particles or energy released radioactively. Sometimes the term is used broadly, encompassing any pollutant discharge.

Endangered species — **Species** of animals or plants likely to go extinct in the foreseeable future unless current trends are altered. They are listed by regulation under the **Endangered Species Act** and assigned the Act's highest level of protection. Only scientific factors may be taken into account in deciding whether to list a species as endangered, though economic factors may be taken into account at other stages of the Act. See also **threatened species**. For the legal definition, see Section 3 of the Act.

Endangered Species Act (ESA) of 1973 — P.L. 93-205 (December 28, 1973), as amended, is one of the major federal laws protecting **species** and the ecosystems on which they depend. While states generally have primacy in wildlife law, this is one of a handful of areas in which federal law plays the major role. ESA is administered primarily by the **Fish and Wildlife Service** (and by the National Marine Fisheries Service (NMFS) for certain marine species). Under authority of this Act, species of plants and animals at risk of extinction are listed as either “endangered” or “threatened” according to the degree of risk.

Once a species is listed, powerful legal tools are available to aid the recovery of the species and to protect its habitat. Over 1000 species of domestic animals and plants have been listed as either endangered or threatened. The ESA has been controversial for two main reasons: First, its standards of protection are substantive, rather than procedural, occasionally preventing activities that would lead to the taking of an endangered or threatened species or jeopardizing its continued existence. Thus, the protection of endangered salmon may result in limitations on logging around spawning habitat. Even if a given activity is rarely prohibited outright, mandatory changes or modifications of practices are not infrequent. Second, because other laws often lack the strict substantive provisions that Congress included in the ESA regarding taking of species, critical habitat, and avoidance of jeopardy, the ESA often becomes a battleground by default over larger controversies concerning resource scarcities and altered ecosystems. Like the miners' canaries, endangered species have flagged controversies over the Tellico Dam (hydropower development versus farmland protection and tribal graves, as well as the snail darter); northwest timber harvest (protection of logging jobs and communities versus commercial and sport fishing, recreation, and ecosystem protection, as well as salmon and spotted owls); and the Edwards Aquifer (allocation of water among various users with differing short- and long-term interests, with a few spring-dependent species caught in the cross-fire). Farmers, ranchers, and loggers can be affected by ESA in various ways, depending on the particular listed species, the locale, the nature and health of the ecosystem, the ownership of the land, etc. On federal land, ESA may require land managers to restrict or modify resource uses to protect listed species; on private land, ESA prohibits **takings** and requires agencies providing any Federal service--such as permitting, increasing irrigation flows, or loans--to ensure the action will not adversely affect critical habitat.

Endocrine disruptor — A chemical agent that interferes with natural hormones in the body. Hormones are secreted by endocrine glands (such as the pituitary, thyroid, pancreas, ovary, and testis), are transported through the body in the bloodstream, and regulate body growth and metabolism, other endocrine organs, and reproductive functions. There is emerging concern that endocrine disruptors may be causing human health or ecological effects, such as abnormal thyroid function, decreased fertility, and alteration of immune and behavioral function. This concern arises from demonstrated instances (an example is the ability of **diethylstilbestrol (DES)** to disrupt female reproductive function through the lifespan in laboratory animals and humans) and the fact that hormones are biologically active at very low concentrations (at parts per billion or less), so low levels of disruptors may similarly be biologically active. In amendments to the **Safe Drink Water Act** and the **Federal Insecticide, Fungicide, and Rodenticide Act in 1996**, Congress directed EPA to study endocrine disruptors. The outcome of this research will be of consequence to agriculture because some pesticides and animal growth stimulants have been hypothesized to act as endocrine disruptors.

Environment — The totality of the surrounding external conditions—biological, chemical, and physical—within which an organism, community, or object exists. The term is not exclusive in that organisms can be and usually are part of another organism's environment. Thus one can speak of the environment as that within which humankind lives, i.e., separate and external; or, one can speak of humankind as a component of the environment.

Environmental Conservation Acreage Reserve Program (ECARP) — An umbrella program authorized by the **FACT Act of 1990** that includes the **Conservation Reserve Program**, and the **Wetland Reserve Program**. The **FAIR Act of 1996** continues the CRP and WRP and creates the **Environmental Quality Incentives Program**. The goal of the ECARP is to provide long-term protection of environmentally sensitive land. Contracts, easements, and cost-share payments are used to assist landowners and operators of farms and

ranches to conserve and enhance soil, water, and related natural resources, including grazing land, wetland, and wildlife habitat.

Environmental equity/ justice — Equal protection from environmental hazards for individuals, groups, or communities regardless of race, ethnicity, or economic status. This applies to the development, implementation, and enforcement of environmental laws, regulations, and policies, and implies that no population of people should be forced to shoulder a disproportionate share of adverse impacts of pollution.

Environmental impact statement (EIS) — A document required of federal agencies by the **National Environmental Policy Act** for major projects or legislative proposals significantly affecting the environment. A tool for decision making, it describes the positive and negative effects of the undertaking and assesses alternative actions.

Environmental Protection Agency (EPA) — An independent federal government agency established in 1970 and charged with coordinating effective governmental action concerning the environment, including setting standards, promulgating and enforcing regulations, and initiating and implementing environmental programs. Two areas of jurisdiction that most directly affect agricultural production are the registration of **pesticides** and enforcement of water quality laws. <http://www.epa.gov/epahome/>

Environmental Quality Incentives Program (EQIP) — A program created by the **FAIR Act of 1996** to provide primarily cost-sharing assistance, but also technical and educational assistance, aimed at reducing soil, water, and related natural resource problems. The program replaces the **Agricultural Conservation Program**, the **Water Quality Incentives Program**, the **Great Plains Conservation Program**, and the **Colorado River Basin Salinity Control Program**. EQIP is authorized at \$1.3 billion in mandatory spending over 7 years (total), with at least half of the funding targeted to environmental concerns associated with livestock production; spending in general is to be targeted to state-designated **priority areas**. EQIP is to be operated to maximize the environmental benefits per dollar expended.

EPA — Environmental Protection Agency

Epidemiology — Study of the distribution of disease, or other health-related conditions and events in human or animal populations, in order to identify health problems and possible causes.

EQIP — Environmental Quality Incentives Program

Equivalence — A term applied by the **Uruguay Round** Agreement on the Application of **Sanitary and Phytosanitary (SPS)** Measures. WTO Member countries shall accord acceptance to the SPS measures of other countries (even if those measures differ from their own or from those used by other Member countries trading in the same product) if the exporting country demonstrates to the importing country that its measures achieve the importer's appropriate level of sanitary and phytosanitary protection.

Erosion — The wearing away of the land surface. Unconsolidated materials, such as soil, erode more rapidly than consolidated materials, such as rock. The most common causes of erosion are wind and moving water. The susceptibility of soil to erosion is quantified by the erosion index. Water causes **sheet, rill, and gully erosion**.

Erosion (erodibility) index (EI) — The erosion (sometimes called erodibility) index is created by dividing potential **erosion** (from all sources except gully erosion) by the “**T**” **value**, which is the rate of soil erosion above which long term productivity may be adversely affected. The erodibility index is used in the **conservation compliance** and **Conservation Reserve Programs**. For example, one of the eligibility requirements for the CRP is that land have an EI greater than 8.

ERS — Economic Research Service

ESA — Endangered Species Act; environmentally sensitive area

Estuary — Regions of interaction between rivers and near-shore ocean waters, where tidal action and river flow mix fresh and salt water. Such areas include bays, mouths of rivers, salt marshes, and lagoons. These brackish water ecosystems shelter and feed marine life, birds, and wildlife. Estuaries typically include adjoining **wetlands**.

Ethanol — C₂H₅OH; the **alcohol** product of carbohydrate fermentation used in alcoholic beverages and for industrial purposes (also known as ethyl alcohol or grain alcohol). It is blended with gasoline to make **gasohol**. In the 1997/98 corn marketing year, about 485 million bushels of corn were used to produce about 1.2 billion gallons of ethanol.

EU — European Union

EUP — Experimental use permit

European Community (EC) — A regional organization created by the Treaty of Rome (1957), which provided for the gradual elimination of customs duties and other interregional trade barriers, a common external tariff, and gradual adoption of other integrating measures, including the **Common Agricultural Policy (CAP)**, and guarantees of free movement of labor and capital. Of the current 15 member countries, the original six were Belgium, France, West German, Luxembourg, and the Netherlands. Membership expanded to include Denmark, Ireland, and the United Kingdom in 1973; Greece in 1981; Spain and Portugal in 1986; and Austria, Finland, and Sweden in 1995. In 1993, with establishment of the **European Union (EU)**, the EC became the customs union component of the EU.

European Currency Unit (ECU) — The official unit of account of the European Monetary System. It is a combination or basket of the currencies from the twelve European Union countries — the Deutschemark, French franc, British pound sterling, Irish pound, Italian lira, Belgian franc, Dutch guilder, Luxembourg franc, Greek drachma, Spanish peseta, Portuguese escudo, and the Danish krona.

European Union (EU) — Since 1993, the term used to describe the **European Community** and related institutions. The entry into force of the Maastricht Treaty of European Union on November 1, 1993, introduced this change in terminology regarding the EC and many of its institutions.

Eutrophication — The process by which a body of water acquires a high concentration of plant nutrients, especially nitrates or phosphates. This nutrification promotes algae growth that, when it dies, can lead to the depletion of **dissolved oxygen**, killing fish and other aquatic organisms. While eutrophication is a natural, slow-aging process for a body of water, human activities can greatly accelerate the process.

Evans-Allen funds — Federal funds distributed to the **1890 land grant colleges of agriculture** under a provision in the **National Agricultural Research, Extension, and Teaching Policy Act of 1977**, to support research programs. The provision became known by the names of two of its primary proponents in Congress, Representative Frank Evans of Colorado and Representative James Allen of Alabama.

Evapotranspiration — The loss of water from the soil both by evaporation and by transpiration from the plants growing in the soil.

EWG — Environmental Working Group

EWP — Emergency Watershed Protection Program

Excess land — Irrigable land, other than exempt land, owned by any landowner in excess of the maximum **acreage limitation** (ownership entitlement) under the applicable provision of **reclamation law**.

Exotic species — A **species** that is not indigenous to a region.

Expense deductions (for food stamps) — For purposes of calculating a household's food stamp benefit, certain household expenses are "deducted" from total monthly cash income when calculating the household's **net income**: (1) 20% of any earnings (to recognize taxes, social security contributions, and work expenses and encourage work), (2) dependent care expenses necessary for work or training (up to \$200 a month for children under age 2 and \$175 a month for other dependents), (3) legally obligated child support payments, (5) any medical expenses (other than those related to special diets) above \$35 a month for elderly or disabled persons, and (6) any shelter expenses (including utilities and insurance) above a certain proportion of the household's monthly income. The larger these deductions are, the greater the household's food stamp benefit.

Experimental use permit — A permit under the **Federal Insecticide, Fungicide, and Rodenticide Act** that authorizes the testing of new pesticides or uses thereof in experimental field studies on 10 acres or more of land or one acre or more of water. Such tests provide data to support **registration** of pesticides.

Export Administration Act of 1979 — P.L. 96-72 (September 29, 1979) provided legal authority to the President to control U.S. exports for reasons of national security, foreign policy, and/or short supply. However, the **FACT Act of 1990** (P.L.101-624) provides for **contract sanctity** by prohibiting the President from restricting the export of any agricultural commodity already under contract for delivery within 270 days from the date the **embargo** is imposed, except during national emergency or war. With the Act's expiration in August 1994, the President (exercising authority under the **International Emergency Economic Powers Act**) issued an executive order to continue the 1979 Act's export control regulations.

Export allocations or quotas — Controls applied to exports by an exporting country to limit the amount of goods leaving that country. Such controls usually are applied in time of war or during some other emergency requiring conservation of domestic supplies, as well as to advance foreign policy and national security objectives of the exporting country. The European Union, in 1996, used a licensing system to allocate and restrict exports of wheat because of short supplies and high prices.

Export Credit Guarantee Programs (GSM-102/103) — The Commodity Credit Corporation finances export credit guarantee programs for commercial financing of U.S. agricultural exports. The programs finance the sale of exports to buyers in countries where credit is needed but where financing may not be available without CCC guarantees. Two programs back up credit extended by private banks in the United States (or in some instances by the U.S. exporter) to approved foreign banks using dollar-denominated letters of credit to pay for food and agricultural products sold to foreign buyers. The Export Credit Guarantee Program (**GSM-102**) guarantees credit terms up to 3 years. The Intermediate Export Credit Guarantee Program (**GSM-103**) guarantees longer term credits up to 10 years. Under these programs, the CCC does not provide financing, but guarantees payments due from foreign banks. Typically, 98% of principal and a portion of interest at an adjustable rate is covered. Because repayment is guaranteed, U.S. financial institutions can offer credit on competitive terms to foreign banks, usually with interest rates based on the London Inter-Bank Offered Rate (LIBOR).

Export credit revolving fund — The **Agriculture and Food Act of 1981** authorized a revolving loan fund that would provide short-term and intermediate-term direct credit for export sales of agricultural commodities, breeding animals, and handling facilities in developing markets. Once capitalized, loans would be made from the initial fund and repayments of principal and interest would return to the fund to be revolved as new loans. Money was never appropriated to capitalize the revolving fund and its statutory authority was eliminated in the **FACT Act of 1990**.

Export Enhancement Program (EEP) — A program initiated in May 1985 under the **CCC Charter Act** to help U.S. exporters meet competitors' subsidized prices in targeted markets. The program was later authorized by the **Food Security Act of 1985**; the **FACT Act of 1990**; the **Uruguay Round Agreements Act**; and the **FAIR Act of 1996**. Under the EEP, exporters are awarded cash payments, which enable an exporter to sell certain commodities to specified countries at competitive prices. The **FAIR Act of 1996** caps EEP program levels annually through 2002 and allows USDA, under certain conditions, to target up to \$100 million annually for the sale of intermediate-value products.

Export Incentive Program (EIP) — A federal export promotion effort operated by the Foreign Agricultural Service of USDA. Assistance is provided to private firms to help them promote brand name food items in overseas markets. EIP is administered as part of the **Market Access Program**.

Export licenses — A government document authorizing the export of specific goods in specific quantities to a particular destination. Licenses may be required to export to some countries for most or all goods, and for other countries only under special circumstances. The Office of Export Administration in the Department of Commerce administers the export licensing system under the authority of the **Export Administration Act**.

Export PIK — A program used in the 1980s that made **payment-in-kind** to U.S. exporters as export subsidies for surplus commodities.

Export subsidy — A direct or indirect compensation provided by government to private commercial firms to promote exports of domestic products. Article 16 of the GATT considers that export subsidies are unfair competition and allows **countervailing duties** to be imposed on subsidized products. Indirect methods of export subsidization include government subsidized financing for exports, export promotion and information activities, tax benefits, or

other forms of assistance that may lead to lower than normal costs for exported products. The **Uruguay Round** Agreement on Agriculture imposes limits on agricultural export subsidies.

Exposure assessment — Identifying the pathways by which toxicants may reach individuals, estimating how much of a chemical various individuals are likely to be exposed to, and estimating the number likely to be exposed at each level.

Extension Service — Refers to a nationwide continuing education system that is based on the academic programs of the **land grant colleges of agriculture** (see **Cooperative Extension System**). The term also is the former name of the USDA agency that distributes federal funds to the states under the **Smith-Lever Act of 1914** to carry out Extension programs. The 1994 USDA reorganization merged this agency with the Cooperative State Research Service (CSRS) to form the **Cooperative State Research, Education, and Extension Service**.

Extra-long staple (ELS) cotton — Also called American Pima, this cotton has a staple length of 1-3/8" or more, is characterized by fineness and high fiber strength, and is used in high-value products such as sewing thread and expensive apparel. It is grown chiefly in west Texas, New Mexico and Arizona.

Extra-Long Staple Cotton Act of 1983 — P.L. 98-88 (August 26, 1983) eliminated marketing quotas and allotments for extra-long staple cotton and tied its support to upland cotton through a formula that set the **nonrecourse loan** rate at not less than 150% of the upland cotton loan level.

F.O.B — Free on board

Free on board (F.O.B. or f.o.b.) — Indicates that the seller assumes all responsibilities and costs up to the specific point or stage of delivery named including transportation, packing, insuring, etc. A wide variety of f.o.b. terms is used, such as f.o.b. factor Detroit, f.o.b. cars New York, f.o.b. ship Norfolk. "Free on board vessel," under most P.L. 480 grain contracts, means delivery at the discharge end of the loading spout.

FAC — Food and Agriculture Council; Food Aid Convention

FACA — Federal Advisory Committee Act

FACT — Food Animal Concerns Trust

FACT Act of 1990 — Food, Agriculture, Conservation, and Trade Act of 1990; the omnibus 1990 **farm bill**.

Failed acreage — Tracts of properly-planted and managed crops that did not grow or were destroyed due to a natural disaster. Failed acreage is eligible for indemnification if covered by the **federal crop insurance program**.

Fair market value (FMV) — The amount in cash, or on terms reasonably equivalent to cash, for which in all probability something might be sold by a knowledgeable owner to a knowledgeable purchaser. Several federal statutes state that the federal government should receive fair market value when exchanging or selling federal lands and resources.

FAIR Act of 1996 — **Federal Agriculture Improvement and Reform Act of 1996**; the 1996 omnibus **farm bill**.

Fallow cropland — Cropland left idle during the growing season, sometimes called **summer fallow**. It may be tilled or sprayed to control weeds and conserve moisture in the soil. The amount of cultivated summer fallow has ranged between 22 and 32 million acres over the past 10 years, or 7 to 10% of the cropland used for crops.

FAMC — Federal Agricultural Mortgage Corporation (**Farmer Mac**)

Family farm — As defined by USDA regulations, a farm that (1) produces agricultural commodities for sale in such quantities so as to be recognized in the community as a farm and not a rural residence; (2) produces enough income (including off-farm employment) to pay family and farm operating expenses, pay debts, and maintain the property; (3) is managed by the operator; (4) has a substantial amount of labor provided by the operator and the operator's family; and (5) may use seasonal labor during peak periods and a reasonable amount of full-time hired labor.

FAO — **Food and Agriculture Organization** of the United Nations

FAPRI — Food and Agricultural Policy Research Institute

Farm — As defined for purposes of the Census of Agriculture since 1978, a farm is any place that has, or has the potential to produce, \$1,000 or more in annual gross sales of farm products. According to the 1992 Census of Agriculture, there are about 1.925 million farms in the United States. This number includes all **farm sizes** and ownership structures, including **corporate farms**, partnerships, and **family farms**.

FARM — Farm Animal Reform Movement

Farm acreage base — The total of the crop **acreage bases** (wheat, feed grains, cotton, and rice) for a farm for a year, the average acreage planted to soybeans and other non-program crops, and the average acreage devoted to conserving uses (excluding **Acreage Reduction Program** land). The **FAIR Act of 1996** eliminated the need to calculate a farm acreage base.

Farm bill — A phrase that refers to a multi-year federal commodity support law. It usually amends some and suspends many provisions of **permanent law**, reauthorizes, amends, or repeals provisions of preceding temporary agricultural acts, and puts forth new policy provisions for a limited time into the future. Beginning in 1973, farm bills have included titles on **commodity programs**, trade, rural development, farm credit, conservation, agricultural research, food and nutrition programs, marketing, etc. These are referred to as omnibus farm bills. The most recent omnibus farm bill was the **FAIR Act of 1996**, with many of its provisions being effective through the year 2002. The previous omnibus farm bill was the **FACT Act of 1990**.

Farm Credit Act of 1971 — P.L. 92-181 (December 10, 1971) recodified all previous acts governing the **Farm Credit System (FCS, or System)**, a cooperatively owned government sponsored enterprise that provides credit primarily to farmers and ranchers. The Act eliminated earlier provisions relating to government capitalization of the System, and expanded the lending authorities of many System institutions. The Act, as amended, currently serves as the authorizing statute for the Farm Credit System. Major legislation that has

modified the 1971 Act in recent years include: **Agricultural Credit Act of 1987** (P.L. 100-233, January 6, 1988) authorized up to \$4 billion in federal financial assistance to FCS institutions to assist in their recovery from the agricultural credit crisis of the 1980s. The Act created a System entity to issue up to \$4 billion in federally guaranteed bonds, required the U.S. Treasury to pay a portion of the interest on these bonds, and also required the FCS to ultimately repay the Treasury for this assistance. The Act also mandated the merger of certain System banks within each farm credit district and expanded other merger authorities, and gave delinquent FCS borrowers certain rights. A separate System institution was established by the Act to insure the timely repayment of principal and interest on consolidated Systemwide debt issues. **Farm Credit Banks and Associations Safety and Soundness Act of 1992** (P.L. 102-552, October 28, 1992) was designed to enhance the financial safety and soundness of FCS banks and associations by establishing new mechanisms to ensure repayment of Farm Credit System debt resulting from federal financial assistance provided to the System under the 1987 Act. The **Farm Credit System Reform Act of 1996** (P.L. 104-105, February 10, 1996) includes numerous provisions that provide regulatory relief for the FCS.

Farm Credit Administration (FCA) — The independent federal regulator responsible for examining and insuring the safety and soundness of all **Farm Credit System** institutions. The FCA is governed by a 3-member, Presidentially-appointed board of directors, one of whom serves as chairman.

Farm Credit Banks — Institutions within the **Farm Credit System (FCS)** that make direct long-term agricultural loans secured by farm real estate through **Federal Land Bank Associations**. They provide wholesale loan funds to direct FCS lending associations — **Production Credit Associations, Federal Land Credit Associations,** and Agricultural Credit Associations.

Farm Credit System (FCS) — A network of cooperatively owned lending institutions and related service organizations serving all 50 states and the Commonwealth of Puerto Rico. The FCS specializes in providing farm real estate and rural homeowner loans, operating credit, and related services to farmers, ranchers, and producers or harvesters of aquatic products. The FCS may also finance the processing and marketing activities of these borrowers, certain farm-related businesses, and agricultural, aquatic, and public utility cooperatives. It is chartered under authorities in the **Farm Credit Act of 1971**, as amended, but does not receive any direct government funding. The System provides about one-fourth of the total credit used by U.S. farmers, ranchers, and cooperatives. Historically, the FCS consisted of a Federal Land Bank (FLB), a Federal Intermediate Credit Bank (FICB) and a Bank for Cooperatives (BC) in each of the 12 districts across the nation. Within each district, Federal Land Bank Associations (FLBA) and Production Credit Associations (PCA) served as local lenders for the FCS providing farm real estate and operating credit, respectively. A severe financial crisis led to the enactment of the **Agricultural Credit Act of 1987**, which provided federal financial assistance to weak institutions in the FCS, but required the FCS to streamline its operations as a condition for assistance. As a result, each district was required to merge its FLB and FICB to form a **Farm Credit Bank (FCB)**. For FLBAs and PCAs that share a similar geographical territory, stockholders were given the option of merging institutions to form an **Agricultural Credit Association (ACA)**. The Central Bank for Cooperatives and 10 of the 12 BCs also agreed to a merger forming a **National Bank for Cooperatives (CoBank)**.

Farm Credit System Assistance Board — A temporary board created by the **Agricultural Credit Act of 1987** and responsible for approving **Farm Credit System**

lender requests for federal financial assistance. Members of the Board consisted of the Secretary of Agriculture, Secretary of Treasury (or their appointees), and an agricultural producer with financial experience.

Farm Credit System Insurance Corporation (FCSIC) — An entity of the **Farm Credit System (FCS)**, established by law in 1987, to insure the timely repayment of principal and interest on FCS debt securities.

Farm equity — The net worth of the farm sector's assets (i.e., farmland, machinery, equipment, facilities, crop and livestock inventories) against which there is no debt. This represents all farm proprietors' residual claims to farm assets. Increases in farm equity in the late 1970s became increasingly important for most agricultural producers as a source of additional collateral against which to obtain credit for operating and expansion purposes. The level of farm equity ranges widely from one farm to another and reflects the extent to which an individual producer has borrowed.

Farm income — Several measures are used to gauge the earnings of a farming operation over a given period of time: **Gross cash income** is the sum of all receipts from the sale of crops, livestock, and farm related goods and services as well as all forms of direct payments from the government. **Gross farm income** is the same as gross cash income with the addition of nonmoney income, such as the value of home consumption of self-produced food and the imputed gross rental value of farm dwellings. **Net cash income** is gross cash income less all cash expenses such as for feed, seed, fertilizer, property taxes, interest on debt, wages to hired labor, contract labor and rent to nonoperator landlords. **Net farm income** is gross farm income less cash expenses and noncash expenses, such as capital consumption, perquisites to hired labor, and farm household expenses. Net farm income is a longer term measure of the ability of the farm to survive as a viable income-earning business, while net cash income is a shorter term measure of cash flow.

Farm income and balance sheet — The income statement measures the profitability of a farm business for a particular period of time, usually one year. The balance sheet measures the wealth or financial position of the business at a particular point in time by reporting the farm's assets, debt, and net worth. USDA publishes annually its Economic Indicators of the Farm Sector, National Financial Summary which summarizes the income statement and balance sheet of the nation's farm sector, and a State Financial Summary containing each state's financial statements.

Farm inputs — The resources that are used in farm production, such as chemicals, equipment, feed, seed, and energy. Most farm inputs are purchased (a change from the days when animals powered most operations), making production costs susceptible to nonfarm economic conditions. Over time, prices of farm inputs have increased relative to commodity prices, creating what farmers describe as a cost-price squeeze. The relationship between prices paid for inputs compared to prices received for output is quantified in the **parity ratio**.

Farm loan programs of the FSA — Loan programs, administered by the **Farm Service Agency** (replacing FmHA), providing both direct and guaranteed real estate, operating loans, and direct emergency disaster loans to individuals whose primary business is farming and ranching. Loans are targeted to **family farms** whose operators are unable to obtain sufficient credit from private commercial lenders on reasonable terms. Under the **FAIR Act of 1996**, farm lending programs are permanently reauthorized, with new restrictions on the purposes for which loans can be used and on the length of time borrowers are eligible for new

credit assistance. Provisions are extended that reserve a portion of loan funds for new and beginning farmers.

Farm labor housing grants — Section 516 grants are available through the **Rural Housing Service** to qualified nonprofit organizations to providing housing to farm workers.

Farm labor housing loans — Section 514 loans are available through the **Rural Housing Service** to qualified farm owners for the purpose of providing housing to **domestic farm labor**.

Farm Operating (OL) Loans — Subtitle B of the **Consolidated Farm and Rural Development Act**, as amended, authorizes the **Farm Service Agency** (formerly FmHA) to make direct and guaranteed farm operating loans. Applicants must be family-sized farmers, who are denied credit by private and cooperative sources, and have reasonable prospects for success in the farm operation. Operating loans are made to farmers to help them pay their operating expenses for such productions costs as feed, seed, fertilizer, and pesticides, and to meet other essential operating expenses. The loan limit is \$200,000 for a direct loan and \$400,000 for a guaranteed loan, and the scheduled repayment is usually over 1 to 7 years depending on loan purposes. The interest rate on direct loans is determined by the Farm Service Agency and does not exceed the federal cost of borrowing plus 1 percentage point. However, loans to “limited resource” borrowers can be made at significantly below market rates. The interest rate on guaranteed loans is negotiated between the borrower and the lender. USDA guarantees the timely repayment of 90% of principal and interest on guaranteed loans, and in some cases can subsidize the interest rate on these loans. The amount USDA can directly lend or guarantee each year is determined in the annual congressional appropriations process.

Farm operator — A person who operates a farm, either by doing or supervising the work or by making the day-to-day management decisions. Nationally, farm operators own about 57% of their land and lease or rent the remainder.

Farm ownership (FO) loans — Subtitle A of the **Consolidated Farm and Rural Development Act**, as amended, authorizes the **Farm Service Agency** (formerly FmHA) to make direct and guaranteed farm ownership loans to eligible family farmers. One of the functions of the FO loan program is to assist farmers, especially beginning farmers, in the purchase and enlargement of farms. An eligible borrower must be unable to obtain sufficient credit from a commercial lender, but must assure reasonable prospects of success in the farm operation. Loans are made for up to 40 years and cannot exceed \$200,000 for a direct loan, or \$300,000 for a guaranteed loan. The interest rate for a direct loan is determined by USDA, and cannot exceed the cost of funds to the Government plus 1 percentage point. However, direct loans to “limited resource” borrowers can be made at significantly below the federal cost of funds. The interest rate on guaranteed loans is negotiated between the borrower and the lender. USDA guarantees the timely repayment of 90% of principal and interest on guaranteed loans, and in some cases can subsidize the interest rate on these loans. The amount USDA can directly lend or guarantee each year is determined in the annual congressional appropriations process.

Farm price — The price farmers receive for the commodities they market. Sometimes the term farm-gate price is used to emphasize that the price does not include transportation or processing costs.

Farm programs — This term is generally meant to include the **commodity programs** administered by the **Farm Service Agency**, as well as the other USDA programs that

directly benefit farmers. Some examples of the other programs include **farm loans**, **federal crop insurance**, the **noninsured assistance program** (NAP), the **Conservation Reserve Program** (CRP), and conservation cost sharing.

Farm Service Agency (FSA) — One result of the 1994 legislative reorganization of USDA was the consolidation of the ASCS, FCIC and FmHA into a single agency, the FSA. This agency is responsible for administering farm income-support programs, conservation cost-sharing programs, **noninsured crop assistance** (NAP), and the former FmHA **farm loan programs**. FSA services are provided through **field service centers** located throughout the agricultural areas of the nation. <http://www.fsa.usda.gov/pas/default.asp>

Farm size — Although a standard definition is not available, the most common way to measure farm size is by the value of gross farm sales. USDA defines small farms as those having less than \$50,000 in sales annually, representing 73% of the 2.1 million farms counted in 1992. It considers the remaining 27% of all farms (with sales of \$50,000 or more) to be commercial farms. Although the 558,000 commercial farms counted in 1992 were a relatively small portion of all farms, they accounted for 88% of gross farm sales.

Farm to retail price spread — The difference between the **farm price** and the retail price of food, reflecting charges for processing, shipping, and retailing farm goods. The current spread accounts for about three-fourths of the retail price for a **market basket** of foods, according to USDA. The farm value accounts for about 51% of the retail cost of eggs, compared to 19% for processed fruits and vegetables.

Farmed wetland — Under the **swampbuster program**, these are **wetlands** that were partially drained or altered to improve crop production before swampbuster was enacted as part of the December 23, 1985, farm law. Farmed wetlands may be farmed as they were before the 1985 date, and the drainage that was in place before that date can be maintained, but no additional drainage is allowed.

Farmer Mac (Federal Agricultural Mortgage Corporation) — Created by the **Agricultural Credit Act of 1987** as a federally chartered, private corporation responsible for guaranteeing the timely repayment of principal and interest to investors in a new agricultural secondary market. The secondary market allows a lending institution to sell a qualified farm real estate loan to an agricultural mortgage marketing facility, or pooler, which packages these loans, and sells to investors securities that are backed by, or represent interests in, the pooled loans. Farmer Mac guarantees the timely repayment of principal and interest on these securities and, under authorities granted in 1995, can also serve as a loan pooler.

Farmer-Owned Grain Reserve (FOR) — A program, established under the **Food and Agriculture Act of 1977**, designed to buffer sharp price movements and to provide reserves against production shortfalls by allowing wheat and feed grain farmers to participate in a subsidized grain storage program. Farmers who placed their grain in storage received an extended nonrecourse loan for at least 3 years. Under certain conditions, interest on the loan could be waived and farmers could receive annual storage payments from the government. The **FAIR Act of 1996** repealed this program.

Farmers Home Administration (FmHA) — Formerly an agency of USDA that provided direct and guaranteed credit to family-sized farmers who were denied credit by a commercial lender. The 1994 USDA reorganization transferred FmHA's **farm loan programs** to the newly formed Farm Service Agency.

Farmers Market Nutrition Program — Authorized through FY1998 under Section 17 of the **Child Nutrition Act of 1966**, this program provides funding for grants to selected states that develop programs promoting the use of farmers markets by **WIC** recipients.

Farmland — Land used for agricultural purposes. The federal government recognizes **prime farmland** and **unique farmland** as the most important categories. According to USDA, the United States has had roughly 1 billion acres of farmland. Farmland consists of **cropland, pastureland, and grazing land**.

Farmland protection — Programs, operated mostly at state and local levels by government agencies or private entities such as land trusts, that are designed to limit conversion of agricultural land to other uses that otherwise might have been more financially attractive to the landowner. Every state has at least one such program; the most popular programs are tax relief through preferential or differential assessment, and right-to-farm laws. **Easements** are used in some states.

Farmland Protection Program (FPP) — A program established by the **FAIR Act of 1996** to fund the purchase of conservation easements of 170,000-340,000 acres of land having prime or unique soil or other desirable production qualities that are threatened by urban development. Eligibility depends upon already having a pending offer from a state or local government to protect qualifying land by limiting nonagricultural use. USDA is authorized to use up to \$35 million of funds from the CCC. During the first year of operation, USDA awarded almost \$15 million to 18 states to protect an estimated 50,000 acres of farmland.

Farrow-to-finish — Typically, a confinement operation where pigs are bred and raised to their slaughter weight, usually 200-250 pounds. Facilities that have 2,500 or more swine are considered by the EPA to be a **concentrated animal feeding operation (CAFO)** subject to **point source pollution** permit requirements.

FAS — Foreign Agricultural Service

FASEB — Federation of American Societies for Experimental Biologies

FASFAS — Federation of American Societies of Food Animal Sciences

Fast track authority — A legislative procedure that may be adopted by Congress for considering bills to implement trade agreements. The procedure calls for consultation between the President and Congress as trade agreements are negotiated. Normally, once an implementing bill is introduced, it may not be amended, time for debate is limited, and the bill is subject to an up or down vote.

FB — Farm Bureau (American Farm Bureau Federation)

FCA — Farm Credit Administration

FCB — Farm Credit Bank

FCC — Farm Credit Council

FCIC — Federal Crop Insurance Corporation

FCS — Farm Credit System; Food and Consumer Service**FCSIC** — Farm Credit System Insurance Corporation**FDA — Food and Drug Administration****FDPIR — Food Distribution Program on Indian Reservations**

Fecal coliform bacteria — Bacteria found in the intestinal tracts of mammals. Their presence in water or sludge is an indicator of pollution and possible contamination by pathogens.

Fed cattle — Animals leaving a **feedlot**, after fattening on a high protein ration, that are ready to be sold to a **packing plant** for slaughter. Beef cattle are typically sold to packers at about 1,100 pounds, which yields a **carcass weight** of about 660 pounds.

Federal Agricultural Mortgage Corporation — An organization more commonly referred to as **Farmer Mac**, which is a secondary (resale) market for agricultural mortgages. Farmer Mac was authorized by the **Agricultural Credit Act of 1987** (JW)

Federal Agriculture Improvement and Reform (FAIR) Act of 1996 — P.L. 104-127 (April 4, 1996) was the omnibus 1996 **farm bill** that removed the link between **income support** payments and farm prices. It authorized 7-year production flexibility **contract payments** that provide participating producers with fixed government payments independent of current farm prices and production. The law specifies the total amount of money to be made available through contract payments under **production flexibility contracts** for each fiscal year from 1996 through 2002. Payment levels are allocated among **contract commodities** according to specified percentages, generally derived from each commodity's share of projected deficiency payments for fiscal 1996-2002. The law increases planting flexibility by allowing participants to plant 100% of their total **contract acreage** to any crop, except with limitations on fruits and vegetables. The authority for **acreage reduction programs** is eliminated, while **nonrecourse loans** (with **marketing loan** repayment provisions) are continued in a modified form. Minimum loan rates generally are calculated each year at 85% of recent past market prices. Authority for the **Farmer-Owned Reserve Program** is suspended through the 2002 crop year. Authority for the honey program is eliminated. Dairy price supports are phased down for milk over 4 years and then eliminated. A new **recourse loan program** is initiated for dairy products starting in the year 2000. The **peanut program** is continued but revised to reduce the likelihood of the federal government incurring loan program costs due to loan forfeitures. The minimum national poundage quota is eliminated. The **sugar program** also is continued but modified. Trade and food aid programs are reoriented toward greater market development, with increased emphasis on high-value and value-added products. Other provisions establish a Commission to conduct a comprehensive review of changes to production agriculture under the 1996 Act, require USDA to conduct research on futures and options contracts through pilot programs, cap expenditures for the **Export Enhancement Program**, and change the name of the Market Promotion Program to the **Market Access Program**. The 1996 Act also reauthorizes the **Food Stamp Program** for 2 years and commodity donation programs for 7 years, and establishes a **Fund for Rural America** to augment existing resources for agricultural research and rural development. Other research authorities were revised and extended, some only for 2 years rather than 7 years. The 1996 Act authorized new enrollments in the **Conservation Reserve Program** to maintain total acreage at up to 36.4 million acres.

Other conservation programs were also revised and extended. The Act also contains numerous provisions in the areas of farm credit, rural development, and generic commodity promotion through **check-off programs**, among others.

Federal Crop Insurance Corporation (FCIC) — The wholly owned federal corporation within USDA that administers the **Federal Crop Insurance Program**. The **FAIR Act of 1996** created an Office Of Risk Management (which USDA has renamed the **Risk Management Agency**), which houses the FCIC. <http://www.act.fcic.usda.gov/>

Federal Crop Insurance Program — A subsidized multiperil insurance program, administered by USDA's Risk Management Agency, which provides farmers with a means to manage the risk of crop losses resulting from natural disasters. Administrative funds are appropriated by Congress and a portion of the insurance premium cost is federally subsidized. Federal crop insurance is available for about 60 different crops, although not all insurable crops are covered in every county. With the amendments to the **Federal Crop Insurance Act** made by the **Federal Crop Insurance Reform Act of 1994**, USDA was authorized to offer basically "free" **catastrophic (CAT)** coverage to producers who grow an insurable crop. Farmers must sign a waiver foregoing any federal disaster assistance if they decline CAT coverage. For an additional premium, farmers can buy additional coverage beyond the CAT level. Crops for which insurance is not available are protected under the **Noninsured Assistance Program (NAP)**.

Federal Crop Insurance Reform Act of 1994 — This Act is Title I of P.L. 103-354 (October 4, 1994). Beginning with the 1995 crops, it modified the **Federal Crop Insurance Program** by authorizing a new **catastrophic (CAT)** coverage level available to farmers. The premium on this level of coverage (crop losses in excess of 50% receiving a payment of 60% of the market price of the insured crop) is 100% subsidized by the government, but requires a farmer to pay a \$50 per crop per county administrative fee. The Act allows farmers to purchase additional insurance coverage providing higher yield or price protection levels, with the premium on this buyup coverage partially subsidized by the government. The Act also created the **Noninsured Assistance Program (NAP)**, a permanent disaster payment program for crops not covered by crop insurance. The 1994 Act amended and in many cases superseded major portions of the **Federal Crop Insurance Act of 1980** (P.L. 96-365, September 26, 1980) which serves as the authorizing statute for the federal crop insurance program. The 1980 Act expanded the scope of the crop insurance program and permitted USA to subsidize farmer premium payments.

Federal Farm Credit Banks Funding Corporation (FFCBFC) — An entity within the **Farm Credit System (FCS)** that manages and coordinates the sale of system-wide bonds and notes in the national financial markets. Since the FCS, by law, is not permitted to accept customer deposits, these bonds and notes are the FCS's primary source of loanable funds.

Federal Food, Drug, and Cosmetic Act (FFDCA) of 1938 — P.L. 75-717 (June 25, 1938) is the basic authority intended to ensure that foods are pure and wholesome, safe to eat, and produced under sanitary conditions; that drugs and devices are safe and effective for their intended uses; that cosmetics are safe and made from appropriate ingredients; and that all labeling and packaging is truthful, informative, and not deceptive. The **Food and Drug Administration** is primarily responsible for enforcing the FFDCA, although USDA also has some enforcement responsibility. The EPA establishes limits for concentrations of pesticide residues on food under this Act.

Federal grain inspection program — The grain inspection program administered by the **Grain Inspection, Packers and Stockyards Administration**. The program establishes official U.S. standards for grain and certain other commodities such as rice, hops, and processed grain products. The program offers a user-financed nationwide inspection and weighing system to certify that grain meets approved standards. By law, all grain exported from the United States must be officially inspected.

Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) — P.L. 80-44 (June 25, 1947), as amended, is the basic authority that requires the EPA to regulate the sales and use of **pesticides**. The federal government began regulating pesticides in 1910 for the purpose of preventing the exploitation of farmers from adulterated and ineffective products. The original 1947 FIFRA was the first effort to address potential risks to human health. FIFRA was completely revised in 1972 (P.L. 92-516) to become the basis for current federal policy. The law directs EPA to restrict the use of pesticides to prevent unreasonable adverse effects on people and the environment taking into account the costs and benefits of various uses. The sale of any pesticide is prohibited unless it has gone through **registration** and is labeled to show the approved uses and restrictions.

Federal Land Bank Associations (FLBAs) — Institutions within the **Farm Credit System** that take applications for and service long-term real estate loans for the **Farm Credit Banks**, but do not have direct lending authority.

Federal Land Credit Associations — Institutions within the **Farm Credit System (FCS)** that have authority to make long-term real estate loans to eligible retail customers. FLCAs receive their funds directly from the **Farm Credit Banks**.

Federal Land Policy and Management Act of 1976 (FLPMA) — P.L. 94-579 (October 21, 1976) 1) set out for the **Bureau of Land Management** standards for managing **public land**, including land-use planning, sales, withdrawals, acquisitions, and exchanges; 2) authorized local advisory councils to represent major citizens groups interested in land use planning and management; 3) established criteria for review of proposed wilderness areas; and 4) provided guidelines for other aspects of public land management such as grazing. This law is also known as the BLM “organic” act.

Federal Meat Inspection Act of 1906 — Enacted June 30, 1906, as chapter 3913, 34 Stat. 674, and substantially amended by the Wholesome Meat Act 1967 (P.L. 90-201), requires USDA only to inspect all cattle, sheep, swine, goats, and horses when slaughtered and processed into products for human consumption. The primary goals of the law are to prevent adulterated or misbranded livestock and products from being sold as food, and to ensure that meat and meat products are slaughtered and processed under sanitary conditions. These requirements apply to animals and their products produced and sold within states as well as to imports, which must be inspected under **equivalent** foreign standards. FDA is responsible for all meats considered “exotic” at this time, including deer and buffalo.

Federal Noxious Weed Act — P.L. 93-629 (January 3, 1975) was adopted to prevent foreign weeds from entering and becoming established to the detriment of U.S. crops and livestock. Under this act, the **Animal and Plant Health Inspection Service** inspects incoming passengers, baggage, and cargo at international airports, seaports and border stations to intercept any of 2,300 listed noxious weeds before they enter the country. If a noxious weed does become established, APHIS has the authority under this act to work with federal, state, and local agencies to confine, eradicate, or control it.

Federal Register — Each federal working day, the Federal Register publishes current Presidential orders or directives, agency regulations, proposed agency rules, notices and other documents that are required by statute to be published for wide public distribution. USDA publishes its rules, notices and other documents in the Federal Register.

Federal Water Pollution Control Act — See **Clean Water Act**.

Feed grain — Any of several grains most commonly used for livestock feed, including corn, grain sorghum, oats, rye, and barley. These grains and the farms producing them historically have received federal price and income support. They qualify as **contract commodities** and receive **production flexibility contract** payments.

Feed ratio — The relationship of the cost of feeding animal to their market weight, expressed as a ratio to the sale price of animals, such as the **hog/corn ratio**. This serves as an indicator of the profit margin or lack of profit in feeding animals to market weight.

Feedlot — A confined **cattle feeding** facility where feeder cattle (usually less than a year old) are put on higher protein rations to prepare them for slaughter as **fed cattle** at “good” or better **grades**. Commercial feedlots of 1,000 head or more are considered by the EPA to be **concentrated animal feeding operation (CAFO)** and therefore subject to rules requiring permits setting effluent standards.

FERM — Forest Ecosystem Restoration and Management

Fertilizer — Any organic or inorganic material, either natural or synthetic, used to supply elements (such as nitrogen (N), phosphate (P₂O₅), and potash (K₂O)) essential for plant growth. If used in excess or attached to eroding soil, fertilizers can become a source of water pollution.

FFA — Future Farmers of America

FFCBFC — Federal Farm Credit Banks Funding Corporation

FFDCA — **Federal Food, Drug, and Cosmetic Act**

FIA — Futures Industry Association

FICB — Federal Intermediate Credit Bank

Field office technical guide — A manual placed in all **Natural Resource Conservation Service** district offices and **field service centers** that gives the technical specifications and guidelines for all approved **conservation practices**.

Field service center — A centralized location for a variety of USDA agency field offices. These have been reduced in number through closures and consolidations initiated as part of a USDA reorganization and streamlining effort mandated by **Department of Agriculture Reorganization Act of 1994**. USDA plans to have approximately 2,500 centers in place in 1997 to provide “one-stop shopping” for clients of the **Farm Service Agency**, the **Natural Resources Conservation Service**, and USDA’s rural development agencies. Some 1,300 separate office locations of these various agencies have been or are being closed or moved, according to USDA. The Office of Management and Budget directed USDA to close even more offices, to reduce total field service centers to 2,000 by 1999.

FIFRA — Federal Insecticide, Fungicide, and Rodenticide Act

Filter strip — An area of vegetation, generally narrow and long, that slows the rate of runoff, allowing sediments, organic matter, and other pollutants that are being conveyed by the water to be removed. Filter strips reduce **erosion** and the accompanying stream pollution, and can be a **best management practice**.

Findley payments — Under the so-called Findley Provision authorized by the **Food Security Act of 1985** (and first sponsored by former Congressman Paul Findley), USDA was able to reduce the basic, formula-set **nonrecourse loan** rate for major crops by up to an additional 20% if that was necessary to keep the United States competitive in international markets. If done, direct compensatory payments were made to producers equal to the amount of the loan rate reduction. These “Findley Payments,” limited to \$200,000 per **person**, essentially added to the larger direct **deficiency payment**. The Findley provisions are superseded by the **FAIR Act of 1996**.

FIP — Forestry Incentives Program

Fire ants — A South American stinging ant that has become established in southern states from North Carolina to Texas. The **Animal and Plant Health Inspection Service** quarantines nursery products from affected states and conducts a project to find promising biological control agents in South America that could be imported to combat the pest in the United States.

Fish and Wildlife Service (FWS) — FWS is the federal agency charged with managing and protecting the nation’s wild plants and animals, including **endangered** and **threatened species**. It generally works closely with state agencies, which have management primacy for most **species**. (The federal government has assumed responsibility for marine mammals, migratory birds, and endangered and threatened species). It manages the **National Wildlife Refuge System**, and cooperates with private landowners in **habitat conservation**.
<http://www.fws.gov/>

Fish farming — Usually, freshwater commercial **aquaculture**; catfish farms are an example.

FLB — Federal Land Bank

FLBA — Federal Land Bank Association

FLCA — Federal Land Credit Association

Flex acreage — The Omnibus Budget Reconciliation Act of 1990 mandated that **deficiency payments** not be made on 15% of a farm’s crop acreage base, called normal flex acres. The acreage could be planted to any program crop (called flexing), but not fruits and vegetables. An additional 10% of the farm’s **base acreage** could be flexed at the option of the operator. Flexing did not diminish the crop acreage base of a farm. The **FAIR Act of 1996** effectively provides total flexibility among all commodities, except for fruits and vegetables.

Flood risk reduction program — Provides for contracts for producers on farms that have **contract acreage** under Title I of the **FAIR Act of 1996** that are flooded frequently. Individuals can receive up to 95% of transition payments and projected **crop insurance**

payments in lieu of **market transition payments**. In return, producers must comply with **swampbuster** and **conservation compliance** provisions and forego future conservation program payments and disaster payments. Though authorized, this program has not yet been implemented.

Flow to market — A quantity provision in a fruit or vegetable **marketing order** that does not change the total quantity that can be marketed during a season, but rather controls the rate or time period that quantities can be shipped to markets by means of **shipping holidays** and **prorates**.

FLPMA — Federal Land Policy and Management Act

Flue-cured tobacco — A type of cigarette tobacco, it and **burley tobacco** account for more than 90% of U.S. tobacco production. Flue-cured tobacco production is limited by national **marketing quotas** and **acreage allotments**, and is eligible for **nonrecourse price support loans**. Flue-cured production is centered in North Carolina.

Fluid differential — In federal **milk marketing orders**, the **Class I differential** is the amount added to the **basic formula price** to determine a region's minimum price for milk used for fluid (drinking) purposes.

Fluid Milk Promotion Act of 1990 — This is the designation given to Subtitle H of Title XIX of the **Food, Agriculture, Conservation, and Trade (FACT) Act of 1990**. Subtitle H authorized the establishment of a national milk processor **check-off program** for fluid milk promotion. The program is funded through a 20-cent per hundredweight (cwt.) **assessment** on all milk processed for fluid consumption. The Act required USDA to conduct a referendum among fluid milk processors to determine if a majority favored implementing the program. The Fluid Milk Order was approved by processors and became effective December 10, 1993.

Fluid Milk Processor Promotion Program — A national program authorized by the **Fluid Milk Promotion Act of 1990** (Fluid Act) with the purpose of increasing consumption of milk and dairy products and reducing milk surpluses by developing generic advertising programs. The program is funded by a mandatory 20-cent per hundredweight **assessment** on processors for all fluid milk processed in the contiguous 48 states and marketed commercially. The program is administered by the National Fluid Milk Processor Promotion Board. It should not be confused with the dairy farmer funded **Dairy Promotion Program**. The **FAIR Act of 1996** extends the Fluid Milk Promotion Program through 2002.

FMD — Foot-and-mouth disease

FMDP — Foreign Market Development (Cooperator) Program

FmHA — Farmers Home Administration

FMI — Food Marketing Institute

FMIA — Federal Meat Inspection Act

FMMO — Federal milk marketing orders

FMV — Fair market value

FO — Farm ownership loans

FOIA — Freedom of Information Act

Food additives — Any substance or mixture of substances other than the basic foodstuff present in a food as a result of any phase of production, processing, packaging, storage, transport or handling. USDA allows food additives in meat, poultry and egg products only after they have received **Food and Drug Administration** safety approval. Food additives are regulated under the authority of the **Federal Food Drug and Cosmetic Act** and are subject to the **Delaney Clause**.

Food, Agriculture, Conservation, and Trade (FACT) Act of 1990 — P.L. 101-624 (November 28, 1990) was a 5-year omnibus **farm bill**. It continued to move agriculture in a market-oriented direction by freezing target prices and allowing more planting flexibility. New titles included rural development, forestry, organic certification, and **commodity promotion programs**. The law established a Rural Development Administration (RDA) in the USDA to administer programs relating to rural and small community development. It extended and modified the **Food Stamp Program** and other domestic nutrition programs and made major changes in the operation of **P.L. 480**. It revised existing law involving agricultural trade credits and guarantees. The **FACT Act** was soon altered by the **Food, Agriculture, Conservation, and Trade Act Amendments of 1991** (P.L. 102-237) to correct errors and alleviate problems in implementing the law. The amendments allowed the Farm Credit Bank for Cooperatives to make loans for agricultural exports and established a new regulatory scheme and capital standards for the Federal Agricultural Mortgage Corporation (**Farmer Mac**). The law also established new handling requirements for eggs to help prevent food-borne illness. More policy changes were made by the Omnibus Budget Reconciliation Act (OBRA) of 1993 (P.L. 103-66). This law intended to reduce federal farm spending by \$3 billion over 5 years by eliminating USDA's authority to waive minimum acreage **set-aside** requirements for wheat and corn, reducing deficiency payments to farmers participating in the 0/92 and 50/92 programs from 92% to 85% of the normal payment level, reducing the acreage to be enrolled in the **Conservation Reserve Program** and **Wetlands Reserve Program**, and requiring improvement in the actuarial soundness of the federal crop insurance program. The measure also provided for a temporary moratorium on sales of synthetic bovine growth hormone and reduced the loan rate for soybeans. It reduced **Market Promotion Program (MPP)** funding through fiscal 1997 and provided for a series of significant MPP operational reforms. It also provided, among other provisions, for the designation of a series rural (and urban) empowerment and enterprise zones, eligible for special federal aid and tax credits.

Food Aid Consultative Group — A group created by the **FACT Act of 1990** to review and address issues concerning the effectiveness of regulations and procedures that govern U.S. food aid programs. The **FAIR Act of 1996** extends the authority for the Food Aid Consultative Group through 2002.

Food Aid Convention (FAC) — See **International Grains Agreement**.

Food and Agricultural Act of 1965 — P.L. 89-321 (November 3, 1965) was the first multi-year farm legislation, providing for 4-year commodity programs for wheat, feed grains, and upland cotton. It was extended for 1 more year, through 1970, by enactment of P.L. 90-559. It authorized a Class I milk base plan for the 75 federal **milk marketing orders** and

a long-term acreage diversion under a Cropland Adjustment Program. The law also continued payment and **acreage diversion programs** for feed grains and cotton, and certificate and diversion programs for wheat.

Food and Agriculture Act of 1977 — P.L. 95-113 (September 9, 1977) was an omnibus **farm bill**. It increased price and income supports and established a **farmer-owned reserve** for grain. It also established a new two-tiered pricing program for peanuts. Under the **peanut program**, producers were given an **acreage allotment** on which a **poundage quota** was set. Growers could produce in excess of their quota, within their acreage allotment, but would receive the higher of the two price-support levels only for the quota amount. Peanuts in excess of the quota are referred to as “additional.” Title XIII was designated the **Food Stamp Act of 1977** and permanently amended the **Food Stamp Act of 1964** by eliminating the purchase requirement and simplifying eligibility requirements. Title XIV was designated the **National Agricultural Research, Extension, and Teaching Policy Act** and made USDA the leading federal agency for agricultural research, extension, and teaching programs. It also consolidated the funding for these programs.

Food and Agriculture Councils (FACs) — These councils were instituted in 1982 by USDA to function as interagency coordinating groups on three levels: national, state, and local. The state FACs are composed of senior level officials of individual USDA agencies within each state, and in recent years they have played a major role in managing the reorganization and “downsizing” of USDA’s field office structure. Local FACs have consisted of USDA representatives at county or area-wide levels; and a national FAC at USDA’s Washington headquarters has served as a liaison with the state and local FACs.
(GB)

Food and Agriculture Organization of the United Nations (FAO) — A UN organization, founded in 1945, that collects and disseminates information about world agriculture. FAO also provides technical assistance to developing countries in agricultural production and distribution, food processing, nutrition, fisheries, and forestry. The FAO’s Global Information Early Warning System (GIEWS) monitors for famine conditions in regions of risk.

Food and Consumer Service (FCS) — The USDA agency whose goals are to provide needy people with access to a more nutritious diet, to improve the eating habits of the nation’s children, and to stabilize farm prices through the distribution of surplus foods. It administers 15 domestic food assistance programs (including the **food stamp program**, **child nutrition programs** (e.g., school feeding programs), and the **Special Supplemental Nutrition Program for Women, Infants and Children (WIC)**). FCS works in partnership with the states and reimburses most of the administrative costs the states incur for carrying out local program administration. <http://www.usda.gov/fcs/>

Food and Drug Administration (FDA) — An agency within the Public Health Service of Department of Health and Human Services. FDA is a public health agency, charged with protecting consumers by enforcing the **Federal Food, Drug, and Cosmetic Act** and several related public health laws. Importantly for agriculture, a major FDA mission is to protect the safety and wholesomeness of food. In this regard, its scientists test samples to see if any substances, such as pesticide residues, are present in unacceptable amounts, it sets food labeling standards, and it sees that medicated feeds and other drugs given to animals raised for food are not threatening to the consumer’s health. <http://www.fda.gov/>

Food and fiber system — That sector of the U.S. economy that includes agricultural production and all economic activities supporting or utilizing that production, including farm machinery and chemical production, and processing, manufacturing, transportation, and retailing. In 1995, the food and fiber system employed 22.9 million workers, or 17.3% of the U.S. workforce, and accounted for \$983 billion, or 13.5% of the **gross domestic product**.

Food Code — The code, published by FDA, consists of model requirements for safeguarding public health that may be adopted and used by various parts of local, state, and federal governments, if desired. It is used by officials who have compliance responsibilities for food service, retail food stores, or food vending operations.

Food Distribution Program on Indian Reservations (FDPIR) — This program allows Indian Tribal Organizations to operate a food distribution program as an alternative to the **food stamp program** for those living on or near an Indian reservation. Eligibility for benefits is the same as that for the food stamp program and funds for the program are drawn from food stamp appropriations. Foods contained in packages include frozen and/or canned meats and poultry, canned fruits and vegetables and juices, dry cereals, cornmeal, flour, butter, macaroni, cheese, evaporated and nonfat dry milk, oats, peanuts and peanut butter, shortening and oils.

Food donations to charitable institutions, soup kitchens, and food banks — Donations of food by the Commodity Credit Corporation to help provide meals to needy people. Foods donated are from agricultural surpluses acquired by USDA as part of its price stabilization and surplus removal activities. Eligible charitable groups range from churches operating community kitchens for the homeless to orphanages and homes for the elderly. Other eligible groups include meals-on-wheels programs, soup kitchens, temporary shelters, correctional institutions offering rehabilitative activities, group homes for the mentally retarded, and hospitals that offer general and long-term health care.

Food for Peace Program — A label given to the food donation activities carried out under **P.L. 480**.

Food for Progress Program (FPP) — A food aid program originally authorized by the **Food Security Act of 1985** to provide commodities on credit terms or on a grant basis to developing countries and emerging democracies to assist in the introduction of elements of free enterprise into the countries' agricultural economies. Commodities may be provided under authority of **P.L. 480** (Title I) or **Section 416(b)**; the CCC may purchase commodities for use in Food for Progress if the commodities are currently not held in CCC inventories. The **FAIR Act of 1996** extends authority for the FPP through 2002.

Food package — Generally refers to foods contained in the package of specific items provided to those participating in the **WIC program or CSFP**. Also may refer to foods distributed by food banks and pantries, and by Indian Tribal agencies distributing commodities in lieu of food stamps.

Food power — The act of withholding or making available agricultural commodities for export or aid by an exporting nation or group of nations for the purpose of influencing the actions of another country or group of countries. Food power implies a foreign policy motivation rather than a financial or humanitarian motivation to export activities.

Food safety initiative — A 1997 interagency initiative among FDA, CDC, EPA, and USDA to implement a series of coordinated efforts to reduce the annual incidence of foodborne illness

and resultant economic losses to consumers and industry by enhancing the safety of the U.S. food supply.

Food Safety and Inspection Service (FSIS) — A 10,000 employee agency within USDA responsible for ensuring food safety in some 6,400 meat and poultry plants throughout the United States; the agency also certifies the safety programs operated for state and foreign plants. Most food safety inspection costs are borne by taxpayers rather than the industry, in contrast to user fees for inspection and grading related to marketing standards. <http://www.usda.gov/agency/fsis/homepage.htm>

Food Security Act of 1985 — P.L. 99-198 (December 23, 1985), a 5-year omnibus **farm bill**, allowed lower commodity price and income supports, established a dairy herd buyout program. Changes were made in a variety of other USDA programs. Several enduring conservation program were created, including **sodbuster**, **swampbuster**, and the **Conservation Reserve Program**. Shortly after enactment, the **Technical Corrections to Food Security Act of 1985 Amendments** (P.L. 99-253, February 28, 1986) gave USDA discretion to require **cross-compliance** for wheat and feed grains instead of mandating them, changed acreage base calculations, and specified election procedures for local Agricultural Stabilization and Conservation committees. Technical changes and other modifications were enacted by the **Food Security Improvements Act of 1986** (P.L. 99-260, March 20, 1986), including limiting the nonprogram crops that could be planted under the 50/92 provision, permitting haying and grazing on diverted wheat and feed grain acreage for a limited period in regions of distress, and increasing deductions taken from the price of milk received by producers to fund the **dairy termination program** (also called the whole herd buyout) program. Again in 1986, the Omnibus Budget Reconciliation Act (P.L. 99-509) made changes in the 1985 Act requiring advance deficiency payments to be made to producers of 1987 wheat, feed grains, upland cotton, and rice crops at a minimum of 40% for wheat and feed grains and 30% for rice and upland cotton. It also amended the **Farm Credit Act of 1971**. Further commodity program changes were made in the FY1987 agricultural appropriations bill (P.L. 99-591, October 30, 1986). In addition to its funding provisions, this law set the **payment limitation** at \$50,000 per person for deficiency and paid land diversion payments, and included honey, resource adjustment (excluding land diversion), disaster, and Findley payments under a \$250,000 aggregate payment limitation. Once again, the Omnibus Budget Reconciliation Act of 1987 (P.L. 100-203) not only set the 1988 fiscal year budget for agriculture and all federal agencies, but also set target prices for 1988 and 1989 program crops, established loan rates for program and nonprogram crops, and required a voluntary paid land diversion for feed grains. This law further defined who could receive farm program payments by defining a “person” in terms of payment limitations.

Food Security Commodity Reserve — A special reserve of up to 4 million metric tons of wheat, corn, sorghum, and rice to be used for international humanitarian purposes. This reserve created by the **FAIR Act of 1996** is an expansion and replacement of the Food Security Wheat Reserve established by the **Agriculture Act of 1980**. The reserve is to be used to provide famine relief and other emergency relief when commodities are not available for programming under **P.L. 480**.

Food Security Wheat Reserve (FSWR) — Title III of the **Agriculture Act of 1980** established a reserve of up to 4 million **metric tons** of wheat for use in meeting emergency food needs in developing countries. This reserve generally was to be used to meet famine or other urgent or extraordinary relief requirements during periods of tight supplies and high prices when commodities are not available under the provisions of **P.L. 480**. The FSWR was replaced by the **Food Security Commodity Reserve** under the **FAIR Act of 1996**.

Food Stamp Act of 1964 — P.L. 88-525 (August 31, 1964) provided permanent legislative authority to the **Food Stamp Program**, which had been administratively implemented on a pilot basis in 1962. It was later replaced by the food stamp provisions of the **Food and Agricultural Act of 1977** (Title XIII), which eliminated the purchase requirement and simplified eligibility requirements. Major changes again were made by the **Food Stamp Program Improvements Act of 1994** (P.L. 103-225). This law modified reporting requirements and ensured adequate access to retail food stores by food stamp households. Title I of the law permitted a state to require periodic reporting by migrant or seasonal farmworker households and set forth conditions under which a state may require such reporting for Indian reservation households. The law also provided for staggered food stamp issuances on reservations and required a General Accounting Office study and report on tribal organization administration of the Food Stamp Program. Title II redefined “retail food store” and “staple foods,” and made numerous other changes affecting establishments that accept food stamps.

Food Stamp Program (FSP) — A program that supplements the food buying power of eligible low-income households by providing them with monthly benefits through coupons or Electronic Benefits Transfer (EBT) cards, which are redeemable at authorized retail food stores. The program began as a pilot operation in 1961 and was made part of **permanent law** in the **Food Stamp Act of 1964**. Funding authority was extended through FY1997 by an amendment to the **FAIR Act of 1996**, and through FY2002 under the 1996 welfare law.

Foodborne pathogens — Disease-causing microorganisms found in food, usually bacteria, fungi, parasites, protozoans, and viruses. Older pathogens are acquiring greater potency while new organisms are emerging as health threats. The top ten pathogens are: *Salmonella*; *Staphylococcus Aureus*; *Campylobacter jejuni*; *Yersinia enterocolitica*; *Listeria monocytogenes*; *Vibrio cholerae non-01*; *Vibrio Parahemolyticus*; *Bacillus cereus*; *Escherichia coli - enteropathogenic*; and *Shigella*. Many of these pathogens may be found in contaminated meat, poultry, shell eggs, dairy products, and seafood.

Foot-and-mouth disease (FMD) — A major disease of cloven-footed animals (e.g., cattle and pigs) that does not exist in the United States. The **Animal and Plant Health Inspection Service** conducts a surveillance program to track the disease in foreign countries, regulates the importation of animal products from countries where FMD exists, and tests imported animals in quarantine.

FOR — Farmer-Owned Reserve

Forage value index (FVI) — A derived index of the relative change in the previous year’s average monthly rate per head for pasturing cattle on privately owned land in the West. Used in calculating federal **grazing fees**.

Foreign Agricultural Service (FAS) — The USDA agency that administers agricultural export and food aid programs. FAS is also responsible for formulating agricultural trade policy, negotiating to reduce foreign agricultural trade barriers, and carrying out programs of international cooperation and technical assistance. The agency maintains a global network of agricultural officers (counselors and attaches) as well as a Washington-based staff to analyze and disseminate information on world agriculture and trade, develop and expand export markets, and represent the agricultural trade policy interests of U.S. producers in multilateral forums. <http://www.fas.usda.gov/>

Foreign Market Development Program (FMDFP) — More commonly called the **cooperator program**.

Forest health — a term used for a collection of concerns over the alleged deterioration in forest conditions, including both current problems (e.g., insect and disease infestations, wildfires, and related tree mortality) and risks of future problems (e.g., too many small-diameter trees (overstocking), excessive biomass, and an unnatural mix of tree species in mixed stands).

Forest plans — land and resource management plans for units of the **National Forest System** under the **National Forest Management Act**. The Act specifies a detailed process and numerous requirements, including public participation and periodic revision, intended to achieve **multiple use** in the **national forests**.

Forest Service (FS) — The largest USDA agency in terms of employees (about 37,000) with responsibility for administering the **National Forest System**, for providing financial and technical forestry assistance to states and to private landowners under **State and Private Forestry**, and for conducting Forestry Research. <http://www.fs.fed.us/>

Forestland — A classification of land use in the **Natural Resources Inventory (NRI)**. It includes areas where trees cover at least 10% of the land and must be at least an acre in size. Forestland was found on 395 million acres, almost 30% of all private lands, in the 1992 NRI.

Forestry Incentive Program (FIP) — Initiated in 1975 as an independent program and currently administered by the **Natural Resources Conservation Service**, FIP provides financial assistance for up to 65% of the cost of tree planting and timber stand improvement on private forest stands of less than 1,000 acres. Payments are limited to \$10,000 per year. More than 4,500 forest owners with 165,000 acres participated in 1995. The program now is authorized under the **Cooperative Forestry Assistance Act of 1978**, as amended.

Forfeiture penalty (sugar) — A penalty paid to the Commodity Credit Corporation by a processor of sugar beets or sugarcane who, having taken out a **nonrecourse loan**, decides to hand over sugar pledged as collateral to the **CCC** rather than accept the then-market price (see **loan forfeiture**). The penalty is 1 cent/lb. on raw cane sugar, 1.072 cents/lb. on refined beet sugar. The impact of this penalty is to lower the effective **price support** levels authorized by the **FAIR Act of 1996** by the penalty amount (i.e., for raw cane sugar, from 18 cents/lb. to 17 cents/lb.).

Formula funds — Federal dollars distributed to the **land grant colleges of agriculture** through formulas found in the **Hatch Act**, the **Smith-Lever Act**, the **McIntire-Stennis Act**, and the **Evans-Allen Act** for (1) agricultural research at the **state agricultural experiment stations**, (2) extension programs and (3) forestry research at the land grant colleges of agriculture, and (4) research at the **1890 institutions**, respectively.

Forward contract — A cash transaction common in many industries, including agricultural commodity merchandising, in which a commercial buyer and seller agree upon delivery of a specified quality and quantity of goods at a specified future date. A price may be agreed upon in advance, or there may be agreement that the price will be determined at the time of delivery. Forward contracts, in contrast to **futures contracts**, are privately negotiated and are not standardized.

Forward market — This refers to informal (non-exchange) trading of commodities to be delivered at a future date. Contracts for forward delivery are “personalized” (i.e., delivery time and amount are determined between seller and customer).

Forward selling — Forward contracting in which the price is fixed at the time the contract is entered.

FPP — Farmland Protection Program; Food for Progress Program

FPPA — Farmland Policy Protection Act

FR — Federal Register; final rulemaking

FRAC — Food Research and Action Center

Free lunch (or breakfast, snack, or milk) — refers to a meal (or snacks or half-pint of milk) that is offered under a child nutrition program at no cost to children who apply for and whose family income qualifies them for it. Income eligibility for free meals is set at 130% or less of the federal poverty income level, and substantially higher subsidies generally are provided for these meals than for **paid** meals, or **reduced price** meals.

Free market — A system in which the market forces of supply and demand determine prices and allocate available supplies, without government intervention. The concept of a free-market approach in agricultural policy, in its purest form, is no government price and income support programs, supply management programs, export subsidies, or barriers to international trade.

Free rider — In agricultural policy, the term generally refers to a firm or person who benefits from a collectively funded activity (such as a **generic advertising and promotion**, or **check-off**, program) without contributing to its costs.

Free stocks — Commodity stocks owned by farmers or others in the trade, rather than by those owned or controlled by the government. (Supplies in the **Food Security Commodity Reserve** are government-controlled and not considered free stocks.) (JW)

Free trade area — A group of countries that have removed trade barriers among the members, but each country may maintain its own trade regime with nonmember countries. The best known current example is the **North American Free Trade Agreement (NAFTA)**.

Free Trade Area of the Americas (FTAA) — A proposal under discussion with the launch of comprehensive negotiations envisaged for the Summit of the Americas, scheduled for Santiago, Chile in March 1998.

Freedom-to-farm — A phrase that was used in the congressional arena to characterize the **production flexibility contract** provisions of the **FAIR Act of 1996**.

FS, USFS — U.S. **Forest Service**

FSA — **Farm Service Agency**

FSCR — **Food Security Commodity Reserve**

FSIS — **Food Safety and Inspection Service**

FSP — **Food Stamp Program**

FSU — **Former Soviet Union**

FSWR — Food Security Wheat Reserve

FTA — Free trade area, or free trade agreement

FTE — Full-time equivalent (generally refers to agency staffing levels)

Full-cost water — An annual rate for water delivered from Bureau of Reclamation facilities, which includes project construction costs attributed to irrigation, as well as outstanding deficits on operation and maintenance charges, with interest on both accruing from October 12, 1982. The term is defined in Section 202 of the **Reclamation Reform Act of 1982**. The Bureau charges full-cost for water delivered to lands above the **acreage limitation**.

Fumigant — A vaporized pesticide used to control pests in soil, buildings and greenhouses, and chambers holding products such as fruits to be treated. **Methyl bromide** is an example.

Fund for Rural America — A fund established by the **FAIR Act of 1996** to augment existing resources for agricultural research and rural development. Funding is provided from the U.S. Treasury in three separate payments between January 1, 1997, and October 1, 1999. One-third of the fund is to be for competitive agricultural research grants, one-third for rural development, and one-third to be designated by USDA either for research or for rural development.

Fungibility — The characteristic of interchangeability. **Bulk commodities** are generally described as fungible, whereas those with special characteristics may be marketed as **identity preserved**. **Futures contracts** for the same commodity and delivery month are fungible due to their standardized specifications for quality, quantity, delivery date and delivery locations.

Fungicide — Any pesticide used to control, deter, or destroy fungi, which are forms of plant life, often undesirable, that lack chlorophyll and are unable to make their own food (such as the plant pathogen, powdery mildew).

Furrow irrigation — Small, shallow channels guide water across the surface of a leveled field. Crops are typically grown on a ridge or raised bed between the furrows. This is the major irrigation system that is based on gravity.

Futures contract — A standardized agreement calling for deferred delivery of a commodity, or its equivalent, entered through organized futures exchanges. Most agricultural futures contracts call for physical delivery, but feeder cattle futures contracts call for cash settlement at contract maturity. In fact, contracts are usually liquidated before delivery. Traders are classified as hedgers or speculators. The **FAIR Act of 1996** requires USDA to conduct research through pilot programs to determine if futures and options contracts can provide producers with reasonable protection from the financial risks of fluctuations in price, yield, and income inherent in the production and marketing of agricultural commodities.

Futures price — (1) Commonly held to mean the price of a commodity for future delivery that is traded on a futures exchange. (2) The price of any **futures contract**.

FVI — Forage value index

FW — **Farmed wetlands**

FWPCA — Federal Water Pollution and Control Act (Clean Water Act); Federal Water Pollution and Control Administration

FWS — Fish and Wildlife Service

FY — Fiscal year

GAP — Government Accountability Project

Gas chromatograph / mass spectrometer — An analytical technique for identifying the molecular composition and concentrations of various chemicals in water and soil samples.

Gasohol — Registered trade name for a blend consisting of 90% unleaded gasoline and 10% fermentation **ethanol**. Gasohol emissions contain less carbon monoxide than those from gasoline.

GATT — General Agreement on Tariffs and Trade (See also **Uruguay Round** and **World Trade Organization**.)

GDP — Gross domestic product

General Agreement on Tariffs and Trade (GATT) — An agreement originally negotiated in Geneva, Switzerland in 1947 to increase international trade by reducing **tariffs** and **nontariff trade barriers**. The agreement provides a code of conduct for international commerce and a framework for periodic **multilateral negotiations** on trade liberalization and expansion. The **Uruguay Round** Agreement (resulting from negotiations that stretched from 1986 through 1993 among over 100 nations) established the World Trade Organization (WTO) to replace the institutions created by the GATT. The WTO officially replaced the GATT institutions on January 1, 1995. The WTO administers the GATT 1947, the revisions in GATT resulting from the Uruguay Round negotiations (GATT 1994), dispute resolution among WTO member countries, and various agreements resulting from other previous multilateral trade negotiations.

Generalized System of Preferences (GSP) — First authorized by the **Trade Act of 1974**, GSP allows some 140 developing countries to ship more than 3,000 products to the United States **duty** free. This helps developing countries to generate foreign exchange needed to purchase import commodities. The United States and 18 other industrialized nations began GSP programs in the mid-1970s to promote the economic growth of developing nations.

Generic advertising and promotion — The promotion of a particular commodity without reference to a specific producer, brand name, or manufacturer. Because individual producers of nearly homogeneous agricultural commodities cannot easily convince consumers to choose one egg or orange or a single cut of beef over another, they join together to use generic advertising to expand total demand for the commodity, thereby helping their own sales as well. Activities are intended to expand both domestic and export demand; examples include advertising, nutrition education, research to improve product quality and appeal, market research studies, and technical assistance. These activities are often self-funded through assessments on marketings called **check-off programs**.

Generic certificates — Commodity certificates used by the CCC in the 1980s to meet payment obligations and simultaneously dispose of commodity inventories.

Genetic engineering — The genetic modification of organisms by recombinant DNA or other specific molecular gene transfer or exchange techniques. USDA's **Agricultural Research Service** does in-house research in this field, and the **Animal and Plant Health Inspection Service** regulates the release of genetically engineered organisms for field experiments.

Genome — All the genetic material in the chromosomes of a particular organism. USDA's research agencies have a Plant Genome Mapping Program to identify, characterize, and map the position of agriculturally important genes on the chromosomes of plants grown as crops or trees in order to better use these genes for improving the characteristics of the plant (resistance to disease, higher yields, etc.) through breeding.

Germicide — Any compound that kills disease-causing microorganisms. Germicides must be registered by EPA as pesticides.

GIPSA — Grain Inspection, Packers & Stockyards Administration

GIS — Geographic information systems

Gleaning — Collecting unharvested crops from fields or obtaining unused agricultural products from farmers, processors, or retailers, usually for distribution to food banks and charitable feeding organizations.

GMA — Grocery Manufacturers of America

GMP — Good manufacturing practices

Good manufacturing practices (GMPs) — Standards published in the Code of Federal Regulations and used by the **Food and Drug Administration** to ensure the quality of marketed products and that products are produced under sanitary conditions. Any FDA-regulated product can be designated **adulterated** if the manufacturing methods or facilities for processing do not conform with GMPs. GMPs are developed through a consultative process between the FDA and the affected industry.

Good samaritan laws — With respect to food and agriculture programs, these laws are designed to encourage the donation of food and grocery products to nonprofit organizations serving the needy by minimizing the risks of legal actions against donors and distributors of the foods. The **Model Good Samaritan Food Donation Act** was amended and revised in 1996 and renamed the **Bill Emerson Good Samaritan Act (P.L. 104-210)** in memory of the late Congressman who sponsored and championed Good Samaritan laws. It excludes from civil or criminal liability a person or nonprofit food organization that, in good faith, donates or distributes donated foods for food relief. Protection does not apply to an injury or death resulting from gross neglect or intentional misconduct and does not supersede state or local health regulations.

GPCP — Great Plains Conservation Program

GPRA — Government Performance and Results Act

GPS — Global Positioning System

Grade A milk — Milk produced under sufficiently sanitary conditions to qualify for fluid (beverage) consumption. Also referred to as fluid grade milk. Only Grade A milk is regulated under federal **milk marketing orders**. Grade B milk (also referred to as manufacturing grade) does not meet fluid grade standards and is used only in manufactured products. More than 90% of all milk produced nationally is Grade A. Therefore, much of the Grade A milk supply is used in manufactured dairy products.

Grade A Pasteurized Milk Ordinance — Minimum standards and requirements for Grade A milk production and processing are outlined in the Grade A Pasteurized Milk Ordinance (PMO) published by the **Food and Drug Administration**. Grade A standards are recommended by the National Conference on Interstate Milk Shipments (NCIMS), which is comprised of voting representatives from state and local regulatory agencies, and non-voting representatives of the dairy industry and FDA. As a general rule, FDA accepts the Conference recommendations and incorporates them into the revised PMO. The state regulator (which is usually either the State Department of Agriculture or the State Health Department) adopts the PMO standards as a minimum, and in many cases requires more stringent standards.

Grades and standards — The segregation, or classification, of agricultural commodities into groupings that share common characteristics. Grades provide a common “trading language,” or common reference, so that buyers and sellers can more easily determine the quality (and therefore value) of those commodities. Two USDA agencies—the **Agricultural Marketing Service** and **Grain Inspection, Packers, and Stockyards Administration**—serve as objective sources for this information. These agencies develop common grades and standards and conduct inspection and grading services for most food and farm products, and industry pays for most of the cost through **user fees**.

Grading certificates — A formal document setting forth the quality of a commodity as determined by authorized inspectors or graders.

Grain Inspection, Packers and Stockyards Administration (GIPSA) — An agency established in 1994 with the combination of the Federal Grain Inspection Service (FGIS) and the Packers and Stockyards Administration (P&S). FGIS provides grain marketing standards and an official inspection system. P&S programs are regulatory in nature to protect livestock producers by ensuring open and competitive markets. <http://www.usda.gov/gipsa/>

Grain reserve — A phrase that might refer to the **food security commodity reserve**, **food security wheat reserve**, the **farmer-owned grain reserve**, or the **strategic grain reserve**.

Grain Standards Act of 1916 — See **United States Grain Standards Act of 1916**.

Grains Trade Convention (GTC) — See **International Grains Agreement**.

Granger-Thye Act of 1950 — P.L. 81-478 (April 24, 1950) established a new direction for some aspects of National Forest System management; authorized the use of grazing fee receipts for rangeland improvement; authorized the **Forest Service** to issue grazing permits for terms up to 10 years; authorized the Forest Service to participate in funding cooperative forestry and rangeland resource improvements; established grazing advisory boards; and, authorized the Forest Service to assist with work on private forestlands.

GRAS — Generally recognized as safe

Grassed waterway — A generally broad and shallow depression planted with erosion-resistant grasses, which is used to convey surface waters off of or across cropland.

Grazing district — An administrative unit of BLM-managed **rangelands** established by the Secretary of the Interior under Section 3 of the **Taylor Grazing Act of 1934**.

Grazing fee — A charge, usually on a monthly basis, for grazing a specific kind of livestock. For federal lands, the grazing fee is based on a formula found in the **Public Rangelands Improvement Act (PRIA)**. The federal grazing fee is equal to a base fee of [$\$1.23 \times$ the **Forage Value Index (FVI)**] + [the **Beef Price Index (BPI)**] - [the **Prices Paid Index (PPI)**] \div [100] and is charged per **animal unit month**.

Grazing Lands Conservation Initiative (GLCI) — A program started by USDA under its discretionary authority in 1991 and then specifically authorized by the **FAIR Act of 1996** to provide increased technical and educational assistance to conserve and enhance private grazing lands. More than 60% of these grazing lands are considered to have serious environmental problems that could lessen their productive capacity if corrective actions are not taken. The **FAIR Act of 1996** authorizes funding at \$20 million the first year, increasing to \$60 million in the third year.

Grazing permit/license/lease — Official written permission to graze a specific number, kind, and class of livestock for a specified time period on defined federal **rangeland**.

Grazing preference — The status of qualified holders of **grazing permits** acquired by grant, prior use, or purchase, that entitles them to special consideration over applicants who have not acquired preference.

Grazing privilege — The benefit or advantage enjoyed by a person or company beyond the common advantage of other citizens to graze livestock on federal lands. Privilege may be created by permit, license, lease, or agreement.

Great Plains Conservation Program (GPCP) — This program, initiated in 1957, provided cost share and technical assistance to apply conservation on entire farms in 10 Great Plains states from the Dakotas and Montana to Texas and New Mexico. Contracts were limited to \$35,000. At the end of 1995, over 6,800 farms in 558 counties with 20 million acres were participating. It was replaced by the **Environmental Quality Incentives Program** in the **FAIR Act of 1996**.

Green box — Domestic or trade policies that are deemed to be minimally trade-distorting and that are excluded from reduction commitments in the **Uruguay Round** Agreement on Agriculture. Examples are domestic policies dealing with inspection and grading, environmental and conservation programs, disaster relief, crop insurance, domestic food assistance, and direct payments not linked to production. Trade measures or policies such as export market promotion (but not **export subsidies** or foreign food aid) are also exempt. See **blue box**.

Greenhouse effect — The hypothesized warming of the Earth's atmosphere as a result of increasing atmospheric levels of carbon dioxide and other gases that trap infrared radiation emitted from the earth's surface. While the increase in such gases is well documented, the effect on climate remains debatable. Estimates of the temperature effect range from zero to an increase of several degrees average global temperature by 2050; changes in temperature would

affect rainfall patterns. Significant climate change would inevitably affect agricultural practices.

Gross domestic product (GDP) — Gross domestic product is a measure of the total production and consumption of goods and services in the United States. The Bureau of Economic Analysis constructs two complementary measures of GDP, one based on income and one based on expenditures. It is measured on the product side by adding up the labor, capital, and tax costs of producing the output. On the expenditure side, GDP is measured by adding up expenditures by households, businesses, government and net foreign purchases. Theoretically, these two measures should be equal. However, due to problems collecting data, there is often a discrepancy between the two measures. The GDP price deflator is used to convert output measured at current prices into constant-dollar GDP.

Gross farm income — The monetary and non-monetary income received by farm operators. Its main components include cash receipts from the sale of farm products, government payments, other **farm income** (such as income from custom work), value of food and fuel produced and consumed on the same farm, rental value of farm dwellings, and change in value of year-end inventories of crops and livestock.

Gross processing margin (GPM) — This refers to the difference between the cost of a commodity and the combined sales income of the finished products that result from processing the commodity. Various industries have formulas to express the relationship of raw material costs to sales income from finished products.

Groundwater — The water from wells and underground aquifers. An estimated 95% of the drinking water used in rural areas is from groundwater. Because of its use as drinking water, there is concern over contamination from leaching agricultural and industrial pollutants or leaking underground storage tanks.

Growing season — The time period, usually measured in days, between the last freeze in the spring and the first frost in the fall. Varies for crops as different plants have different freezing thresholds. It also is an important component in defining wetland areas.

GSM — General Sales Manager

GSM 102/103 — See **Export Credit Guarantee Programs**.

General Sales Manager (GSM) — General Sales Manager of the **Foreign Agricultural Service**. This office administers the **export credit guarantee** programs (GSM-102 and GSM-103), the **export enhancement program**, the **P.L. 480 program**, and other USDA export assistance programs.

GSP — Generalized System of Preferences

Guaranteed export credit — A **Commodity Credit Corporation** guarantee of commercial export credit is available through several **export credit guarantee programs**.

Gully erosion — Also called ephemeral gully **erosion**, this process occurs when water flows in small channels and larger swales that are routinely destroyed by tillage or along field edges. Most gully erosion occurs on **highly erodible** soils, where there is little or no crop residue cover, or where crop harvest disturbs the soil. Gully erosion is not accounted for in the

universal soil loss equation. In a few states it amounts to more than half of all erosion, but more typically 30% to 60% of soil is lost through **sheet erosion** and **rill erosion**.

ha — One hectare=2.47 acres. One acre=0.405 hectares. See **acre**.

Habitat — The place where a population (e.g., human, animal, plant, microorganism) lives, characterized by physical features (e.g., desert) and/or dominant plants (e.g., deciduous forest).

Habitat conservation plans (HCPs) — Plans prepared under the **Endangered Species Act**, by nonfederal parties wishing to obtain permits for incidental **taking** of threatened and **endangered species**. The number of HCPs has expanded enough in the last 5 years that there are concerns over cost, effectiveness, contributions to recovery, monitoring, and other issues.

HACCP — Hazard analysis and critical control point

Handler — Generally, the first buyer of a farmer's commodity destined for fresh market use (in contrast to processing). Under **marketing orders**, handlers are defined as anyone who receives the commodity from producers, **grades** and packs it, and sells it to someone else for further marketing. Usually, the requirements spelled out in **marketing orders** technically apply to handlers, although producers absorb their effects.

Harmonization — The process of establishment, recognition, and application of internationally recognized measures or standards. Used most often in reference to tariffs (as in the Harmonized Tariff Schedule of the United States (HTSUS)), technical standards, or **sanitary and phytosanitary measures** applied to imported food products.

Harmonized system — The international classification system for goods, implemented by most countries on January 1, 1998, which is used for tariff classification, trade statistics, and ultimately, transport documentation. Officially known as the Harmonized Commodity Description and Coding System, conversion was begun by the Customs Cooperation Council in 1970 as a replacement for the Customs Cooperation Council Nomenclature also known as the Brussels Tariff Nomenclature.

Harvested acres — The cropland actually harvested for a particular crop, usually somewhat smaller at the national level than planted acres due to weather damage or abandonment because of low market prices.

Hatch Act of 1887 — The permanent statute (24 Stat. 440) authorizing federal funds to **state agricultural experiment stations** affiliated with the **land grant colleges of agriculture**. Congress last amended the act in 1955, adding a formula that USDA uses to allocate the annual appropriation among the states. The formula provides for each state to receive what it received in 1955 as a base amount. Sums appropriated in excess of the 1955 level are distributed as follows: 20% is allotted equally to each state; 52% is allocated on the basis of a state's share of U.S. rural and farm population; a maximum of 25% is allocated to the states for research projects that involve more than one state; and 3% is reserved for administration. On average, **Hatch Act formula funds** constitute 10% of total funding for each experiment station.

Haying and grazing rules — Under previous commodity support law, farmers were permitted, for limited time periods (usually during droughts) and under specific circumstances,

to harvest hay or graze cattle on land idled under **acreage reduction programs**. These rules were eliminated by the **FAIR Act of 1996** (JW)

Hazard analysis and critical control point (HACCP) — A production quality control system now being adopted throughout much of the food industry as a method for minimizing the entry of **foodborne pathogens** into the food supply in order to protect human health. Under a HACCP system, potential hazards are identified and risks are analyzed in each phase of production; **critical control points** for preventing such hazards are identified and constantly monitored; and corrective actions are taken when necessary. Record keeping and verification procedures are used to ensure that the system is working. HACCP is one of the major elements of regulations, issued by USDA in July 1996, to control pathogens in meat and poultry products. Under the rules, all meat and poultry slaughter and processing plants with 500 or more employees must develop and implement, by January 1998, a USDA-approved HACCP plan for each of their processes and products. Plants with 10 to 500 employees have until January 1999 to comply, and plants with less than 10 employees have until January 2000, to implement HACCP. Seafood processors and importers also are required to implement HACCP plans, but under separate rules issued by the **Food and Drug Administration** in December 1995.

HAZMAT — Hazardous materials

HCP — **Habitat conservation plan**

Head month — A month's use and occupancy of **rangeland** by a single animal or equivalent. A full head month's fee is charged for each month of grazing by adult animals if the grazing animal (1) is weaned, (2) is 6 months old or older when entering National Forest System land, or (3) will become 12 months old during the period of use. For fee purposes, a head month is equivalent to one **animal unit month**.

Headwaters — The source, or upper part, of a stream. Often used in discussing water rights related to wilderness or other federal land designations.

Healthy Meals for Healthy Americans Act of 1994 — P.L. 103-448 (November 2, 1994) most recent amendments reauthorizing several expiring programs under the **National School Lunch Act** and **Child Nutrition Amendments of 1966** through FY1998. Required that federally subsidized meal programs conform their meal requirements to the Dietary Guidelines for Americans, made the **nutrition education and training (NET) program** an entitlement, and made other changes to the WIC program expanding program outreach and coordination.

Hedging — Taking a position in a futures market opposite to a position held in the **cash market** to minimize the risk of financial loss from an adverse price change; a purchase or sale of **futures contract** as a temporary substitute for a cash transaction that will occur later (i.e., **long** hedge and **short** hedge). Hedgers use the futures markets to protect their business from adverse price changes.

HEL — **Highly-erodible land**

Herbicide — Any **pesticide** used to destroy or inhibit plant growth; a weed killer.

HHS — Department of Health and Human Services

High-fructose corn syrup (HFCS) — Produced from converting to fructose a portion of naturally occurring glucose in starch produced from corn. A natural sweetener, HFCS production expanded during the 1980s as a substitute for higher-cost sugar used in soft drinks. HFCS-55 (55% fructose), which is as sweet as sugar, has almost completely replaced liquid sugar in beverages. HFCS-42 (42% fructose) is roughly 90% as sweet as sugar, and is mainly used in cereal, baking, dairy, and processed foods. HFCS and two other corn-derived sweeteners (glucose syrup and dextrose) accounted for 55% of total U.S. natural (caloric) sweetener use in recent years.

High moisture feed grains — Corn and grain sorghum must have moisture content below CCC standards in order to qualify for **marketing assistance loans**. However, the **FAIR Act of 1996** makes **recourse loans** available to producers of corn and grain sorghum that have higher moisture content.

High value products (HVP) — Agricultural products that are high in value, often but not necessarily due to processing. HVPs can be divided into three groups: 1) semi-processed products, such as fresh and frozen meats, flour, vegetable oils, roasted coffee, refined sugar; 2) highly processed products that are ready for the consumer, such as milk, cheese, wine, breakfast cereals; and 3) high-value unprocessed products that are also often consumer-ready, such as fresh and dried fruits and vegetables, eggs, and nuts. In recent years HVPs account for a greater percentage than bulk commodities in total U.S. agricultural exports.

Highly erodible land (HEL) — Land that is very susceptible to **erosion**, including fields that have at least 1/3 or 50 acres of soils with a natural erosion potential of at least 8 times their “**T**” level. More than 140 million acres are classified as HEL. Farms cropping highly erodible land and under **production flexibility contract** must be in compliance with a **conservation plan** that protects this cropland.

Hog/corn ratio (corn-hog ratio) — Number of bushels of corn equal in value to 100 pounds of live hogs (**feed ratio**). Put another way, the price of hogs, per hundredweight, divided by the price of corn per bushel. Since corn is a major input cost to hog producers, the higher the price of hogs relative to corn, the more profit there is in feeding hogs.

Holding pond — A pond or reservoir, usually made of earth, built to store polluted runoff.

Homestead protection — When a USDA farm loan borrower lacks the financial resources to make payments on a delinquent loan, is ineligible for a restructured loan, and is unable to buy out the loan at the net recovery value of the collateral property, the borrower can convey the property to USDA in lieu of loan payments. Until eliminated by the FAIR Act of 1996, the borrower may have been eligible for homestead protection, whereby the borrower could lease and/or purchase the residence and up to 10 acres of adjoining land.

Honey program — The **FACT Act of 1990** set honey loan rates at 53.8 cents per pound and permitted deficiency payments. **Non-recourse** marketing loans were available to support honey prices until FY1994 when annual appropriations measures suspended funding for this activity. The 1996 **FAIR Act** repealed the statutory authority for the honey program.

Horticultural specialty crops — The Census of Agriculture includes as “horticultural specialties” bedding plants, florists’ greens, flower and vegetable seeds, flowers, foliage, fruit stocks, nursery and ornamental plants, shrubbery, sod, mushrooms, and vegetables grown under cover (e.g., in greenhouses).

Household (foodstamp) — A food stamp household is composed of all those who purchase food and prepare meals in common. All related co-residents must apply as a single food stamp household, no matter how they purchase and prepare food — except for elderly persons who are medically certified as unable to purchase and prepare meals separately. Other co-residents may apply separately if they purchase and prepare food separately, and residents in certain eligible institutional settings (e.g., shelters for battered women, residential drug treatment programs) may apply as separate households no matter how they purchase and prepare food.

Housing Act of 1949 — Title V of P.L. 81-171 (October 25, 1949) authorized USDA to make loans to farmers to construct, improve, repair, or replace dwellings and other farm buildings to provide decent, safe, and sanitary living conditions for themselves, their tenants, lessees, sharecroppers, and laborers. The USDA was authorized to make grants or combinations of loans and grants to farmers who could not qualify to repay the full amount of a loan, but who needed the funds to make the dwellings sanitary or to remove health hazards to the occupants or the community. Over time, the Act has been amended to authorize housing loans and grants to rural residents in general and these are administered by the **Rural Housing Service (RHS)**. The rural housing programs are generally referred to by the section number under which they are authorized in the **Housing Act of 1949**, as amended.

HSI — Habitat suitability index

HSUS — Humane Society of the United States

HTS — Harmonized Tariff Schedule of the United States

Hundredweight — One hundred pounds (abbreviated as cwt.). A standard unit of measure for milk, rice, and some meat livestock.

Hunger Prevention Act of 1988 — P.L. 100-435 (September 19, 1988) amended the **Temporary Emergency Food Assistance Act of 1983** to require the USDA to make additional types of commodities available for the Temporary Emergency Food Assistance Program (**TEFAP**), to improve the **child nutrition** and **food stamp** programs, and to provide other hunger relief.

HVP — **High value product**

Hydric soil — Soil that, in its undrained state, is flooded long enough during a growing season to develop anaerobic conditions that support the growth and regeneration of hydrophytic vegetation. This term is part of the legal definition of a wetland included in the **Food Security Act of 1985**. The **Natural Resources Conservation Service** maintains a national list of hydric soils.

Hydroponics — The growing of plants without soil by using an inert medium such as sand, peat, or vermiculite and adding a nutrient solution containing all the essential elements needed by the plant for its normal growth and development. Water culture, when plant roots are suspended in a liquid medium containing the nutrient solution while their crowns are supported in a thin layer of inert medium, is true hydroponics. Often called soilless culture, it also includes aeroponics where plant roots are suspended in a dark chamber and sprayed with the nutrient solution.

Hypoxie zone — An area in the Gulf of Mexico off the mouth of the Mississippi River covering about 6,000 square miles where there is not enough oxygen to support fish and

shellfish populations. The oxygen depletion is caused by an excessive amount of nutrients that are brought together from throughout the Mississippi River **watershed**. Many of these nutrients are believed to originate from agricultural activities, and the largest portion, over 30%, has been traced to the upper Mississippi drainage, according to research prepared by the U.S. Geological Survey.

IAI — International Apple Institute

ICM — Integrated crop management

Identity preserved (IP) — This is the designation given to **bulk commodities** marketed in a manner that isolates and preserves the identity of a shipment, presumably because of unique characteristics that have value otherwise lost through commingling during normal storage, handling and shipping procedures.

IDFA — International Dairy Foods Association

IFIC — International Food Information Council

IFT — Institute of Food Technologists

ILSI — International Life Sciences Institute

Import fee — Generally, an import fee is a charge assessed for a service rendered. For example, when an import stamp or **import license** is issued, the government assesses a fee for this service. Within the context of **Section 22** of the **Agricultural Adjustment Act of 1935**, "fees" were imposed on imports of agricultural products when deemed necessary to protect domestic **farm programs** until 1995. Then, under the **North American Free Trade Agreement** and the **Uruguay Round** Agreement on Agriculture, Section 22 import fees and quotas were converted into **tariff-rate quotas**.

Import license — A document required and issued by some national governments authorizing the importation of specified goods into their respective countries. When used in a discriminatory manner, these licenses can become **nontariff trade barriers**.

Import quota — A trade barrier that sets the maximum quantity (**quantitative restriction**) or value of a commodity allowed to enter a country during a specified time period. The **Uruguay Round** Agreement on Agriculture requires the conversion of import quotas and other quantitative restrictions to **tariff-rate quotas** and/or **bound tariff rates**.

Incentive payments — Direct payments made to producers of wool and mohair, which were similar to **deficiency payments** made to producers of grains and cotton. The **wool and mohair commodity programs** ended after the 1995 marketing year as required by P.L. 103-130.

Income insurance — A concept, similar to **revenue insurance**, that envisions an insurance program that would insure farm families a specified minimum annual income.

Income support — Generally, programs providing direct, income-supplementing payments to farmers. Intended to protect farm income without affecting market prices. **Production flexibility contract** payments provide income support, not **price support**. The phrase also

is used to characterize the nature of support provided to low-income families by various food assistance programs.

Indemnity payment — The payment that eligible producers receive if they realize a qualifying crop loss under **crop insurance**, **revenue insurance**, or any insurance program.

Industrial crops — Crops that primarily have industrial applications in contrast to food or livestock feed uses. Industrial uses account for a relatively small but a growing and potentially much larger share of the market for farm commodities. The USDA devotes a significant research effort to identifying and developing new industrial uses for crops; this effort is encouraged by the **Alternative Agricultural Research and Commercialization Corporation (AARC)**. Some of the industrial and experimental crops include: castor beans (lubricants, nylon, cosmetics); chia (cosmetics); crotalaria (fibers); cuphea (soap, surfactants); guar (food stiffeners, drilling muds, paper manufacturing); guayule (natural rubber and hypoallergenic latex products); hesperaloe (specialty pulp paper); kenaf (twine, fiberboard, carpet padding, newsprint); lesquerella (lubricants, cosmetics); meadowfoam (cosmetics, lubricants, water repellents); milkweed (insulated clothing, filler for comforters, nonwoven textiles) and plantago ovato (high fiber additive to laxatives). While corn is the primary feedstock for **ethanol**, it is not considered an industrial crop because nearly 95% of production goes to feed uses.

Inert ingredient — **Pesticide** components such as solvents, carriers, dispersants, and surfactants that are not active against target pests. Inert ingredients may be toxic and may be subject to testing under the **Federal Insecticide, Fungicide, and Rodenticide Act**.

Infant formula cost-containment — Refers to statutory provisions in the **Child Nutrition Act of 1966** that require state WIC agencies to solicit bids to infant formula companies for the sale of infant formula used in WIC food packages.

Infiltration — The downward entry of water into soil. Also called **percolation**. A high rate of infiltration means that soil moisture for crops will be higher. Many conservation practices, such as **conservation tillage**, reduce rates of runoff and increase infiltration rates.

Infoshare — USDA established this program in 1993 to merge and coordinate the business management and information technology (computer) activities of its agencies, particularly in the field, in order to support consolidation of field offices into one-stop **field service centers** for farmers and other USDA clients. However, the program, which initially had been budgeted at nearly \$3 billion, was terminated by early 1996 in the wake of critical reviews by USDA's Office of Inspector General, the General Accounting Office, and others, which found, among other things, that despite Infoshare, individual USDA agencies were continuing to buy their own computers, were not sharing information technology with each other, and were still not operating in a common computing environment. Infoshare has been replaced by another computer modernization initiative now being designed and coordinated by the Farm Service Agency.

Insecticide — A **pesticide** used to kill, deter, or control insects.

Instream use — Water use taking place within the stream channel. Examples are hydroelectric power generation, navigation, fish propagation and use, and recreational activities. Often used in discussions concerning water allocation and/or water rights.

Integrated Farm Management Program (IFMP) — A program authorized by the **FACT Act of 1990** to assist producers in adopting resource-conserving crop rotations by protecting participants' **base acreage**, payment yields, and program payments. The program's goal was to enroll 3 to 5 million acres over 5 years. The **FAIR Act of 1996** replaced the IFMP with **production flexibility contracts** and a pilot **conservation farm option program**.

Integrated Pest Management (IPM) — A program, begun in 1972, that aims to decrease pesticide applications by teaching farmers to use a variety of alternative control techniques to capitalize on natural pest mortality. These techniques include **biological controls**, genetic resistance, tillage, pruning, and others. Pesticide applications are used only when preventive practices fail to keep impending crop damage from exceeding the cost of controlling the pest with a chemical.

Integration — The combination (under the management of one firm) of two or more identical (horizontal) or successive (vertical) stages in the production or marketing process of a particular product. Generally the stages are capable of being operated as separate businesses. The firm that has management responsibility is called the integrator. The poultry industry, for example, is **vertically integrated**, from production through processing and distribution. Diversification, on the other hand, is the production of two or more products by one firm or farmer.

Intermediate Export Credit Guarantee Program (GSM-103) — One of several CCC **export credit guarantee programs**.

International commodity agreement — An undertaking by a group of countries to stabilize trade, supplies, and prices of a commodity for the benefit of participating countries. An agreement usually involves a consensus on quantities traded, prices, and stock management. As of mid-1997, the United States is a party to the International Tropical Timber Agreement, the International Natural Rubber Agreement, and the **International Grains Agreement**.

International Grains Agreement (IGA) — Replaced the International Wheat Agreement in 1995. The IGA comprises a Grains Trade Convention (GTC) and a Food Aid Convention (FAC). The IGA is administered by the International Grains Council (IGC), an intergovernmental forum for cooperation on wheat and coarse grain matters. The IGA remains in force until June 30, 1998. The GTC provides for information-sharing, analysis and consultations on grain market and policy developments. Under the FAC, 11 donor countries pledge to provide annually specified amounts of food aid to developing countries in the form of grain suitable for human consumption, or cash to buy suitable grains in recipient countries.

International Grains Council (IGC) — An intergovernmental forum responsible for administering the International Grains Agreement (IGA).

International Wheat Agreement — Replaced in 1995 by the **International Grains Agreement**.

Interregional Project 4 (IR-4) — The term stands for Interregional Research project number 4, which is a **Cooperative State Research education and Extension Service** research program assisting producers of **minor crops** in the area of pest control. Chemical pesticides for minor crops are more limited in availability because they are not as profitable for the chemical industry to produce.

Interstate Shellfish Sanitation Conference (ISSC) — The federal-state-industry cooperative body which manages the **National Shellfish Sanitation Program**.

IP — Income protection program (See **revenue insurance**.)

IPM — **Integrated pest management**

IR-4 — **Interregional Project 4**

IRIS — Instructional resources information system; integrated risk information system

IRM — Integrated resource management

Irradiation — The process of exposing food or other items to radiation of wavelengths shorter than those of visible light (gamma, x-ray, or ultraviolet) in order to destroy contamination from microorganisms or other undesirable organisms. It is approved and now used for some food products.

Irrigation — Applying water (or wastewater) to land areas to supply the water (and sometimes nutrient) needs of plants. Techniques for irrigating include **furrow irrigation**, sprinkler irrigation, **trickle (or drip) irrigation**, and flooding. About 51 million acres of land are irrigated in the United States. More acres of corn are irrigated than any other crop, but only about 15% of the harvested acres. In contrast, irrigation is used for 100% of rice, 81% of orchards, 64% of vegetables, and 36% of cotton. About 40% of freshwater withdrawals in the nation are for irrigation, making agriculture the single largest user of water. Nearly half of all irrigation water withdrawals are in the western states, where in some areas competition for available supplies among uses, including base stream flow, has become controversial. **Consumptive use** as a percent of withdrawals is about 56% for irrigation.

Irrigation return flow — Part of artificially applied water that is not consumed by plants or evaporation, and that eventually “returns” to an aquifer or surface water body, such as a lake or stream. Commonly used when discussing water conservation techniques and measurement.

Irrigation water management — Limiting irrigation applications based on the water-holding capacity of the soil and the need of the crop. The water is applied at a rate and in such a manner that the crop can use it efficiently and resource losses are minimized. Irrigation efficiency is the ratio of the amount of water stored in the crop root zone compared to the amount of water applied. Water conservation has become more important as costs have risen and demands have grown for wildlife and urban uses.

ISSC — Interstate Shellfish Sanitation Conference

ITC — See **U.S. International Trade Commission**.

IWA — **International Wheat Agreement**

Jones Act — The common reference for Section 27 of the **Merchant Marine Act of 1920**, which restricts to U.S. vessels the water transportation of goods between points in the United States. The purpose of the law is to support the U.S. merchant marine industry, but agricultural interests generally oppose it because it raises the cost of shipping their goods, making them less competitive with foreign sources.

JSA — Joint Subcommittee on Aquaculture

Karnal bunt — A fungus disease of wheat that reduces yields and causes an unpalatable but harmless flavor in flour milled from infected kernels. Appearance of the disease in the United States in early 1996 resulted in the **Animal and Plant Health Inspection Service** implementing an emergency quarantine, inspection, and certification program for wheat moving out of the infested areas, along with regulations on sanitizing machinery and storage facilities. Many foreign countries have a zero tolerance for karnal bunt in import shipments.

LAA — Local administrative area

Land capability (classification) — The quality of soil resources for agricultural use is commonly expressed as land capability classes and subclasses, which show, in a general way, the suitability of soils for most kinds of field crops. Soils are grouped according to their limitations when they are used to grow field crops, the risk of damage when they are used, and the way they respond to treatment. Capability classes, the broadest groups, are designated by Roman numerals I through VIII, with I being the best soils and VIII being the poorest.

Land evaluation and site assessment system (LESA) — A technique that can be used at the local level to determine the quality of land or agricultural uses and to assess sites or areas of land for their agricultural viability. It was first used in the early 1980s.

Land grant colleges of agriculture — The **Morrill Act of 1862** granted federal land to states to sell, and instructed each state to use the proceeds to endow a college to teach “agriculture and the mechanical arts.” States not having any federal land within their borders were given “land in scrip,” permitting them to sell federal land located in other (usually western) states in order to establish an agricultural college. The original schools are called the 1862 Institutions. Subsequently, the **Morrill Act of 1890** created the black colleges of agriculture, called the 1890 Institutions. The **Elementary and Secondary Education Reauthorization Act of 1994** then gave land grant status to 29 Native American colleges, called the 1994 Institutions.

Land grant university — The term used to identify a public university in each state that was originally established as a **land grant college of agriculture** pursuant to the **Morrill Act of 1862**. In most states the original agricultural colleges grew over time into full-fledged public universities by adding other colleges (e.g., arts and sciences, medicine, law, etc.); in states where a public university existed prior to 1862, the first **Morrill Act** resulted in a college of agriculture being added to the university. USDA funds go only to the original land grant colleges of agriculture within the so-called land grant universities.

Land management services contracts — A proposed **national forest** timber sale contract where purchasers would be required to perform activities, other than those directly related to timber cutting and removal, in or near the sale area, in exchange for a reduction in the **stumpage price**. Pilot tests of this contract arrangement have been conducted, but its general use is not authorized.

Land treatment — Any activity or project to improve conservation of soil, water, or other resources and improve production.

Land use plan — A coordinated collection of data, programs, and activities related to existing and potential uses of land and resources within a defined area. Commonly associated

with local units of government trying to anticipate and organize uses of space so as to meet defined goals. For producers, **conservation plans** are a type of land use plan.

LATS — Long-Term Agricultural Trade Strategy

LD₅₀/ lethal dose / LC₅₀/lethal concentration— The dose (median concentration) of a toxicant that will kill 50% of the test animals within a designated period. The lower the LC₅₀, the more toxic the compound. Testing to determine lethal dosages is used to characterize the acute toxicity of pesticides and other toxic chemicals.

LDCs — **Less developed countries**

LDP — Loan **deficiency payment**

Leaching — The process by which chemicals are dissolved and transported through the soil by **percolating** water. Pesticides and nutrients from fertilizers or manures may leach from fields, areas of spills, or feedlots and thereby enter surface water, groundwater, or soil. Leaching from concentrated sources such as waste sites and loading areas vulnerable to spills can be prevented by paving or containment with a liner of relatively impermeable material designed to keep leachate inside a treatment pond, landfill, or a tailings disposal area. Liner materials include plastic and dense clay.

Legumes — A family of plants, including many valuable food, forage and cover species, such as peas, beans, soybeans, peanuts, clovers, alfalfas, sweet clovers, lespedezas, vetches, and kudzu. Sometimes referred to as nitrogen-fixing plants, they can convert nitrogen from the air to build up nitrogen in the soil. Legumes are an important rotation crop because of their nitrogen-fixing property.

LESA — **Land evaluation and site assessment**

Less developed countries (LDCs) — Countries with low per capita incomes. Also known as third world, poor, under-developed, lesser developed, developing, or economically emerging countries.

Levy — The USDA defines levy as an import charge assessed by a country or group of countries not in accordance with a definite tariff schedule. The “variable import levy” of the European Community is an example. The EC’s levy on grains varied from day to day, depending on the offering price of third-country suppliers. In USDA’s view the variable import levy is a nontariff trade barrier because, unlike a moderate customs **duty** or even a quota, it can completely bar imports. The **Uruguay Round** Agreement on Agriculture resulted in the replacement of variable levies by fixed tariffs.

LIBOR — London interbank offered rate

Linters — The short fibers that remain on cottonseed after ginning. They are used mainly for batting, mattress stuffing, and as a source of cellulose.

Listeria — *Listeria monocytogenes*, a pathogenic bacterium found widely in nature, can be carried in a variety of foods such as dairy products, red meat, poultry, seafood, and vegetables.

Live weight — The weight of live animals purchased or sold by a producer.

LOAEL — Lowest-observed-adverse-effect-level

Loan deficiency payments — A commodity payment program authorized by the **Food Security Act of 1985** giving USDA discretion to provide direct payments, equal to **marketing loan payments**, to wheat, feed grain, upland cotton, rice, or oilseed producers who agree not to obtain **nonrecourse loans**, even though they are eligible. Loan deficiency payments continue to be available under the **FAIR Act of 1996** for all loan commodities except **extra-long staple cotton**.

Loan forfeiture — Under **commodity program** rules, a producer or processor who pledges a stored commodity as collateral to the **Commodity Credit Corporation** to obtain a nonrecourse loan can settle the repayment obligation by forfeiting the commodity without any penalty. This happens, by design, if forfeiture is more profitable than selling the commodity in the marketplace. In this way the loan program serves a **price support** function.

Loan forfeiture level, sugar — The lowest market price that a processor must receive before concluding that forfeiting pledged sugar to the **Commodity Credit Corporation** is a more profitable than selling the sugar. USDA calculates the loan forfeiture level to be equal to the loan rate, *plus* transportation costs to a refinery (applicable only for raw cane sugar) *plus* interest expenses on a **nonrecourse loan** *minus* a sugar loan **forfeiture penalty**.

Loan rate — The price per unit (bushel, bale, pound, or hundredweight, depending on the commodity) at which the government will provide **nonrecourse** or recourse loans to farmers (or others), enabling them to hold their commodities for later sale.

Long — (1) One who has bought a **futures contract** or **option** to establish a market position; (2) a market position that obligates the holder to take delivery; (3) one who owns an inventory of commodities. The opposite of **short**.

Low-flow irrigation systems — These systems (drip, trickle, and micro sprinklers) provide water in small volumes and generally provide water to plants with less waste than **furrow irrigation**. Drip and trickle systems apply water through small holes in small diameter tubes placed on or below the surface of the field. Another type of system, micro sprinklers, supplies water from low-volume sprinkler heads located above the surface. Low flow systems are expensive and their use is generally limited to high-value crops such as vegetables, fruits, and vineyards.

Lump-sum sales — A common term for **tree measurement sales**.

M-W price — **Minnesota-Wisconsin price**

Mad cow disease — The common term used for **bovine spongiform encephalopathy** (BSE).

Major land resource area (MLRA) — Major land resource areas are geographically associated land resource units delineated by the **Natural Resources Conservation Service** and characterized by a particular pattern that combines soils, water, climate, vegetation, land use, and type of farming. There are 204 MLRAs in the United States, ranging in size from less than 500,000 acres to more than 60 million acres.

Make allowance (or milk manufacturing marketing adjustment) — The margin between the government support price for milk and the CCC's purchase price for butter, nonfat

dry milk, and cheese. This margin is administratively set to cover the costs of “making” milk into butter, nonfat dry milk, or cheese to reach the desired level of prices for milk in manufacturing uses.

MAP — Market Access Program

MARAD — Maritime Administration

Margin — The amount of money or collateral deposited by a customer with a broker, by a broker with a clearing member, or by a clearing member with the clearinghouse, for the purpose of insuring against loss on open **futures contracts**. The margin is not partial payment on a purchase. (1) Initial margin is the total amount of margin per contract required by the broker when a futures position is opened; (2) maintenance margin is a sum that must be maintained on deposit at all times. If the equity in a customer’s account drops to, or under, the level because of adverse price movement, the broker must issue a **margin call** to restore the customer’s equity. Sometimes called a performance bond.

Margin call — (1) A request from a brokerage firm to a customer to bring **margin** deposits up to initial levels; (2) a request by the clearinghouse to a clearing member to make a deposit of original margin, or a daily or intra-day variation payment, because of adverse price movement, based on positions carried by the clearing member.

Mariculture — The form of **aquaculture** where fish, shellfish, or aquatic plants are cultured in a salt water environment.

Market Access Program (MAP) — MAP, previously called the Market Promotion Program or MPP, is administered by the **Foreign Agricultural Service** and uses funds from the **Commodity Credit Corporation**. It helps producers, exporters, private companies, and other trade organizations finance promotional activities for U.S. agricultural products. MAP is designed to encourage development, maintenance, and expansion of commercial agricultural export markets. Activities financed include consumer promotions, market research, technical assistance, and trade servicing. The **Export Incentive Program**, which is part of MAP, helps U.S. commercial entities conduct brand promotion activities including advertising, trade shows, in-store demonstrations, and trade seminars. MAP is authorized in Section 244 of the **FAIR Act of 1996**. The program promotes exports of specific U.S. commodities or products in specific markets. Under MAP, program participants are reimbursed for their expenses in carrying out approved promotional activities. Participating organizations include nonprofit trade associations, state regional trade groups, and private companies. Funding authority is limited to \$90 million annually for fiscal years 1996-2002.

Market allocation — A quantity provision in a fruit or vegetable **marketing order** specifying the maximum amount of the regulated commodity that can be sold for a given use or market (such as the domestic fresh market).

Market basket — Average quantities of consumables, including U.S. farm foods, purchased per household for a given base period, used to compute an index of retail prices.

Market price — The price per bushel (or pound or hundredweight) of an agricultural commodity paid in the private sector. It can sometimes refer to the price paid at domestic seaports or large inland terminal markets (such as daily cash prices listed in newspapers) and sometimes refers to the **farm price**.

Market Promotion Program (MPP) — An export promotion program authorized by the **FACT Act of 1990** that replaced the Targeted Export Assistance (TEA) program authorized by the **Food Security Act of 1985**. The MPP was renamed the **Market Access Program (MAP)** under the **FAIR Act of 1996**.

Market structure — Characteristics of an industry that relate to its economic performance, such as the number of buyers and sellers, product differentiation among firms, barriers to entry, costs, degree of **integration**, and diversification.

Market transition payments — Referred to variously as AMTA payments, **contract payments**, or **production flexibility contract** payments made to farmers under Title I (the **Agriculture Market Transition Act (AMTA)**) of the **FAIR Act of 1996**.

Marketing assessments — Producers and first purchasers of some supported commodities are required to pay an **assessment** as a contribution toward achieving budget deficit reduction targets. Under the **FAIR Act of 1996**, assessments are imposed on sugar processors and on producers and first buyers of peanuts. Tobacco also is subject to deficit reduction assessments. The **FAIR Act of 1996** eliminated the milk marketing assessment.

Marketing assistance loans — **Nonrecourse loans** made available to producers of wheat, feed grains, upland and ELS cotton, rice, soybeans, and minor oilseeds under the **Agriculture Market Transition Act** provisions in the **FAIR Act of 1996**. The new law largely continues the commodity loan programs as they were under previous law. Loan rate caps are specified in the law. **Marketing loan repayment provisions** apply should market prices drop below the loan rates. For farmers who forego the use of marketing assistance loans, **loan deficiency payment** rules apply.

Marketing certificate — A **certificate** that may be redeemed for a specified amount of CCC-owned commodities. The certificates may be generic or for a specific commodity.

Marketing loan provisions — A loan settlement provision, first authorized by the **Food Security Act of 1985**, that allows producers to repay **nonrecourse loans** at less than the announced loan rates whenever the world price or loan repayment rate for the commodity is less than the loan rate. Marketing loan provisions became mandatory for soybeans and other oilseeds, upland cotton, and rice and were permitted for wheat, feed grains, and honey under amendments made by the **FACT Act of 1990**. The **FAIR Act of 1996** retains the marketing loan provisions for feed grains, wheat, rice, upland cotton, and oilseeds.

Marketing (or crop) year — Generally, the 12-month period, from the beginning of a new harvest, over which a crop is marketed. For example, for wool, mohair, and Hawaiian sugarcane, the marketing year is January 1-December 31; for honey, it is April 1-March 31; for wheat, barley, and oats, it is June 1-May 31; for flue-cured tobacco, it is July 1-June 30; for cotton, peanuts, and rice, it is August 1-July 31; for sugar beets, it is September 1-August 31; for corn, sorghum, soybeans, mainland sugarcane, all tobacco but flue-cured, and milk, it is October 1-September 30.

Marketing orders and agreements — Orders and agreements (authorized by the **Agricultural Marketing Agreement Act of 1937**, as amended) allow producers to promote orderly marketing through collectively influencing the supply, demand, or price of a particular commodity so as to create orderly marketing. Research and promotion can be financed with pooled funds. Once approved by a required number of a commodity's producers—usually two-thirds—the marketing order is binding on all handlers of the

commodity within the geographic area of regulation. It may limit the quantity of goods marketed, or establish the **grade**, size, maturity, or quality of the goods. Marketing orders have been established for milk, fruits, vegetables, and other commodities. Marketing agreements may contain more diversified provisions, but are enforceable only against those handlers who enter into the agreement. An order can be terminated when a majority of all producers favor its termination or when USDA determines that the order no longer serves its intended purpose.

Marketing quotas (or allotments) — Authorized by the **Agricultural Adjustment Act of 1938**, these quotas (sometimes called **poundage quotas**) limit marketings of certain commodities. The marketing quota, which must be approved by at least two-thirds of the eligible producers voting in a referendum, is intended to ensure an adequate and normal supply of the commodity, and ensure that production and supplies are not excessive. Growers who market in excess of their quotas pay penalties on the “excess” and are ineligible for government price-support loans. Quotas have been suspended for wheat, feed grains, and cotton since the 1960s. Rice quotas were abolished in 1981. Marketing quotas still are used in conjunction with the **tobacco program** and the **peanut program**. The authority for standby marketing allotments for domestically produced sugar and crystalline fructose mandated by the **FACT Act of 1990** was eliminated under the **FAIR Act of 1996** (JW)

Marketing spread — See **farm to retail price spread**.

Maximum tolerated dose (MTD) — Loosely, the highest dose of a chemical that when administered to a group of test animals does not increase the death rate during a long-term study (other than deaths due to tumors caused by the chemical being tested, that is). The purpose of administering MTD is to determine whether long-term exposure to a chemical might lead to any adverse health effects in a population, when the level of exposure is not sufficient to cause premature mortality due to short-term toxic effects. The maximum dose is used, rather than a lower dose, to reduce the number of animals that need to be tested (and thus, the cost of animal testing), in order to detect an effect that occurs only rarely. This analysis is used in establishing chemical residue tolerances in foods.

mbf — Thousand board feet

MBTA — Migratory Bird Treaty Act

McIntire-Stennis Act of 1962 — P.L. 87-788 (October 10, 1962) makes funding available to the **state agricultural experiment stations** and to forestry schools and programs at the **land grant colleges of agriculture** for forestry research. The research covers such areas as reforestation, woodlands and related **watershed** management, outdoor recreation, wildlife habitats and wood utilization. Many of the research projects are performed cooperatively with scientists at the laboratories of USDA’s **Forest Service**. USDA distributes McIntire-Stennis funds by a formula that allocates \$10,000 to each state, with 40% of the remainder being distributed according to a state’s share of the nation’s total commercial forest land, 40% according to the value of its timber cut annually, and 20% according to its state appropriation for forestry research.

MDM — Mechanically deboned meat

Medfly — A shortened name for the Mediterranean fruit fly, a destructive pest of fruits and vegetables that is found throughout most of Central America. The **Animal and Plant Health Inspection Service** is involved in programs to keep the Medfly from spreading north

into Mexico, where it could easily enter the United States on imported winter fruits and vegetables.

Mega-reg — A term meaning a large set of regulations that some have used to describe the extensive new rules issued by USDA in July 1996 that are aimed at controlling pathogens in meat and poultry products, including mandatory **hazard analysis and critical control point (HACCP)** plans.

Memorandum of agreement (MOA) — An agreement between federal agencies, or divisions/units within an agency or department, which delineate tasks, jurisdiction, standard operating procedures or other matters which the agencies or units are duly authorized and directed to conduct. Sometimes referred to as a memorandum of understanding (MOU).

Mercado Commun del Sur (MERCOSUR) — A **customs union** between Argentina, Brazil, Paraguay, and Uruguay, which came into effect on January 1, 1995. Chile and Bolivia have become associate members.

Merchant Marine Act of 1920 — P.L. 66-261, also known as the **Jones Act**, provides for the promotion and maintenance of a U.S. merchant marine. Provisions dealing with cabotage (i.e., with coastal shipping) require that all goods transported by water between U.S. ports be carried in U.S.-flag ships, constructed in the United States, owned by U.S. citizens, and crewed wholly by U.S. citizens. In addition, amendments to the **Jones Act**, known as the **Cargo Preference Act**, provide permanent legislation for the transportation of waterborne cargoes in U.S.-flag vessels.

MERCOSUR — **Mercado Commun del Sur** (Southern Cone Common Market)

Methane — A gas created by anaerobic decomposition of organic compounds. Natural gas is composed mostly of methane. Methane is a so-called greenhouse gas (see **greenhouse effect**). Agricultural wastes, especially animal wastes, are a major source of methane releases to the atmosphere.

Methanol — A liquid alcohol (also known as methyl alcohol or wood alcohol), formed in the destructive distillation of wood or made synthetically, and used especially as an alternative fuel, a gasoline additive, a solvent, an antifreeze, or a denaturant for ethyl alcohol. As a gasoline additive it lowers the carbon monoxide emissions but increases hydrocarbon emissions.

Methyl bromide — A **fumigant** used for soil treatment, to control pests in postharvest storage, for killing pests on fruits, vegetables, and grain going into export trade, for plant quarantine treatment, and for fumigation of buildings. Because methyl bromide contributes to depletion of stratospheric **ozone**, it is subject to phaseout requirements of the 1987 **Montreal Protocol on Ozone Depleting Substances** and Section 602 of the **Clean Air Act (CAA)**. The Montreal Protocol and Vienna Adjustments require a complete phase out in industrialized countries by the year 2010, and a future freeze in developing country use. The **Clean Air Act** bans U.S. production and import as of January 1, 2001. The produce industry in the United States and abroad are seeking exemptions for some agricultural applications after the phaseout dates. U.S. growers have petitioned the EPA to extend the domestic phaseout date to be the same as other industrialized countries under the Montreal Protocol. All methyl bromide regulations so far exempt quarantine and pre-shipment treatment of agricultural commodities; however, this exemption is being reevaluated after completion of additional scientific assessments. Methyl bromide is regulated as a pesticide under the **Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)**, as a hazardous substance under

the **Resource Conservation and Recovery Act (RCRA)**, and is subject to reporting requirements under the **Emergency Planning and Community Right to Know Act (EPCRA)**.

Metric ton — Usually abbreviated mt. or MT, a metric ton is 2,204.62 pounds, compared to a short ton of 2,000 pounds. Generally, international agricultural trade data are cited in metric tons.

MFN — Most-favored-nation

MIF — Milk Industry Foundation

Migratory Bird Treaty Act of 1918 — P.L. 65-186 (July 3, 1918), as amended, regulates the taking of wild birds and implements the provisions of four different bilateral treaties for bird conservation (with Canada, Mexico, Japan, and Russia). Very few of its provisions affect farmers more than any other citizen, save when bird populations become pests. The act and the associated treaties allow taking of birds to prevent serious injury “to the agricultural or other interests in any particular community.” As implemented, the practice has been to use non-lethal methods where possible, especially for native species. The control of bird pests is managed by the **Animal and Plant Health Inspection Service** of USDA.

Milk equivalent — A measure of the quantity of fluid milk used in a processed dairy product, usually expressed on a milkfat basis. For example, one pound of cheese is the equivalent of 9.88 pounds of milk.

Milk-feed price ratio — A measure of the value of 16% protein ration (feed) to one pound of whole milk. As with the **hog-corn ratio**, this relationship is an indicator of the profitability of milk production.

Milk marketing orders — Administered by the Agricultural Marketing Service, federal milk marketing orders were first instituted in the 1930s to promote orderly marketing conditions by, among other things, applying a uniform system of **classified pricing** throughout the farm milk market. Federal milk marketing orders regulate handlers that sell milk or milk products within an order region, by requiring them to pay not less than an established minimum price for the Grade A milk they purchase from dairy producers, depending on how the milk is used. This classified pricing system requires **handlers** to pay a higher price for milk used for fluid consumption (Class I) than for milk used in manufactured dairy products such as yogurt, ice cream, cheese, butter and nonfat dry milk (Class II, Class III and Class III-A products). The **FAIR Act of 1996** requires USDA to consolidate the number of federal milk marketing orders into 10 to 14 regions, down from 32, by 1999.

Minnesota-Wisconsin price (M-W price) — A component of the **basic formula price** for farm milk used in federal **milk marketing orders**. It is a survey of the average price Minnesota and Wisconsin plants are paying farmers for Grade B milk to be used in processed dairy products.

Minimal nutritional value — Refers to foods that may not be sold in competition with the school lunch and breakfast programs. These are foods that USDA has determined contain little if any nutritional value. For example, sugar candy, soda pop without fruit juices, and chewing gum are considered to be foods of minimal nutritional value. Candy containing nuts or chocolate is considered to have some nutritional value.

Minimum access — In the **Uruguay Round** Agreement on Agriculture, countries are obliged to provide minimum levels of imports for products subject to tariffication. Access is assured by **tariff-rate quotas**.

Minimum tillage — The minimum soil manipulation necessary for crop production. **Conservation tillage**, **reduced tillage**, and **no-till** farming are related terms.

Minor crops — Crops that may be very high in value but that are not widely grown. Many fruits, vegetables, and tree nuts come under this definition. The **IR-4** program is one publicly funded program to help producers of minor crops with their unique problems.

Minor oilseeds — **Oilseed crops** other than soybeans and peanuts; usually a reference to the other oilseeds eligible for **marketing assistance loans** under the **FAIR Act of 1996** (sunflower seed, canola, rapeseed, safflower, mustard seed, and flaxseed).

Mitigation bank, wetlands — A bank is created when wetlands at a site are restored, enhanced or created in advance of destruction of similar wetlands in nearby locations. The bank then sells “credits” in the bank to permit applicants under **Section 404** who are required, as a permit condition, to offset the negative impacts their project will have on wetlands. Banks may be established by public entities or private enterprise. The **FAIR Act of 1996** has a provision allowing USDA to establish a pilot banking program.

mmt — Million metric tons

MOA — **Memorandum of agreement**

Model Good Samaritan Food Donation Act — See **Bill Emerson Good Samaritan Act of 1996**.

Monetization — A **P.L. 480** provision added by the **Food Security Act of 1985** that allows **private voluntary organizations** to sell a small percentage of donated P.L. 480 commodities within the recipient country. The currency generated by these sales can then be used for such purposes as defraying the cost of food distribution within the country.

Monoculture — A pattern of crop production that relies on a single plant variety.

Montreal Protocol on Ozone Depleting Substances — An international agreement, to which the U.S. is a signatory, for controlling emissions of chemicals that deplete stratospheric **ozone** (including **methyl bromide**). The **Clean Air Act Amendments of 1990** contain provisions for implementing the Montreal Protocol, as well as explicit, separate authority for EPA to regulate ozone depleting chemicals.

Morbidity — Rate of disease incidence; an important measure in **epidemiological studies**.

Morrill Act of 1862 — Enacted July 2, 1862 (chapter 130, 12 Stat. 503), this law allocated federal land to each state and directed the states to sell the land and use the proceeds to establish a college dedicated to the agricultural and mechanical arts. States without federal lands within their borders received land in scrip, giving them the right to sell federal land located in other states. The act resulted in the establishment of the **land grant colleges of agriculture**. The purpose of the Act was not only to improve the economic and social welfare of farmers, but also to make a higher education with a practical application generally available to all segments of U.S. society. The Act pertained only to the original establishment of the

colleges of agriculture, and is not an authority under which the colleges currently receive federal funds.

Morrill Act of 1890 — Enacted August 30, 1890, (chapter 841, 26 Stat. 417), this law authorized additional direct appropriations for the **land grant colleges of agriculture** that had been established under the **Morrill Act of 1862**. The most significant feature of the second Morrill Act was that the 1862 schools could receive the additional funds only if they admitted blacks into their programs or if they provided separate but equal agricultural higher education to black students. In the period following the Civil War, sixteen southern states established separate land grant colleges of agriculture for black students under this Act; Congress designated Tuskegee University an 1890 institution at a later date. Federal funds for research and extension at the 1890 schools are provided under subsequent acts, not the second Morrill Act.

Most-favored-nation treatment (MFN) — A commitment that a country will extend to another country the lowest tariff rates it applies to any third country. MFN is a basic principle of the General Agreement on Tariffs and Trade (GATT) (1947). Almost all countries are effectively accorded permanent MFN status by the United States. However, Title IV of the **Trade Act of 1974** established conditions on U.S. MFN tariff treatment to certain non-market economies, one of which is certain freedom-of-emigration requirements (better known as the Jackson-Vanik amendment). The Act authorizes the President to waive a country's full compliance with Jackson-Vanik under specified conditions, and this must be renewed by June 3 of each year. Once the President does so, the waiver is automatic unless Congress passes (and sustains a Presidential veto of) a disapproval resolution. MFN status for China, which had been originally suspended in 1951, was restored in 1980 and has been continued in effect through subsequent annual Presidential extensions. Since the Tiananmen Square incident in 1989, however, the annual renewal of China's MFN status has been a source of considerable debate in the Congress. Several Members have sought through legislation to terminate China's MFN status or to impose additional conditions relating to improvements in China's actions on various trade and nontrade issues. Agricultural interests generally have opposed attempts to block MFN renewal for Congress, contending that several billion dollars annually in current and future U.S. agricultural exports to China could be jeopardized if that country retaliated.

MOU — Memorandum of understanding (See **memorandum of agreement**.)

MPP — **Market Promotion Program**

MRL — Maximum-residue limit (See **registration** and **pesticide**.)

MTD — **Maximum tolerated dose**

MTN — **Multilateral trade negotiations**

Mulch — A natural or artificial layer of plant residue or other material on the soil surface. Mulch reduces **erosion**, conserves soil moisture, inhibits weed growth, and can provide the soil with organic matter as it breaks down. Mulch till prepares the soil so as to leave plant residues (or other mulching materials) on or near the surface.

Multilateral agreement — A trade agreement involving three or more countries (as with the **World Trade Organization**) in contrast to a **bilateral agreement** (as with the US-Canada agreement) involving only two countries.

Multilateral trade negotiations (MTN) — Negotiations between **General Agreement on Tariffs and Trade (GATT)** member nations that are conducted under the auspices of the GATT and that are aimed at reducing **tariff** and **nontariff trade barriers**. The **World Trade Organization** has now replaced the GATT as the administrative body.

Multiple basing points — A method of regional pricing in **milk marketing orders** that would allow more than one **basing point**, or “surplus area,” to be used. Surplus areas are administratively defined as areas with low Class I utilization, meaning that a relatively small percentage of the milk produced in an area is used in that area as Class I (fluid) milk. In a **multiple basing point** system, the order used as the basing point has the smallest **Class I differential** (the difference between the Class I price and the Class III price). The Class I differential for other orders is then based on transportation costs to the nearest basing point plus the minimum differential.

Multiple component pricing — The practice of valuing farm milk according to the value of its protein, fat, and mineral content. This practice has been adopted by many regions for federal **milk marketing orders**. Historically, milk was priced solely on the basis of fat content.

Multiple use — According to the **Multiple Use and Sustained Yield Act of 1960** (P.L. 86-517, June 12, 1960), as amended, multiple use of the national forests means the “harmonious and coordinated management of the various resources, each with the other, without impairment of the productivity of the land, with consideration being given to the relative values of the various resources, and not necessarily the combination of uses that will give the greatest dollar return or the greatest unit output.” Multiple use implies a **sustained yield** of outdoor recreation, range, timber, **watershed**, and wildlife and fish values.

MUSY — **Multiple Use and Sustained Yield Act of 1960** (P.L. 86-517, June 12, 1960)

Mutagen — An agent that causes a permanent genetic change in a cell other than that which occurs during normal growth. Testing to determine mutagenicity is one component of assessing the potential **chronic toxicity** of pesticides and other chemicals.

Mutual self-help housing — A program to assist groups of low-income families in building their own homes. Each family is expected to contribute at least 700 hours of labor in building homes for each other. Participating families generally have low income and are unable to pay for homes built by the contract method. The homes are generally financed by **Section 502 loans**.

NAA — **National Aquaculture Act of 1980**

NACD — National Association of Conservation Districts

NACMCF — National Advisory Committee on Microbiological Criteria for Foods

NACO — National Association of Counties

NAD — National Appeals Division

NADA — New animal drug applications

NAEGA — North American Export Grain Association

NAFTA — North American Free Trade Agreement

NAFV — National Association of Federal Veterinarians

NAHMS — National Animal Health Monitoring System

NAL — National Agricultural Library

NAMP — National Association of Meat Purveyors

NAP — Noninsured Assistance Payments

NARC&DC — National Association of Resource Conservation and Development Councils

NAS — National Academy of Sciences

NASCOE — National Association of State and County Office Employees

NASDA — National Association of State Departments of Agriculture

NASS — National Agricultural Statistics Service

NASULGC — National Association of State Universities and Land Grant Colleges

National Academy of Sciences (NAS) — An institution created by Congress in 1863 to provide science-based advice to the government. The sister organizations associated with the Academy are the National Academy of Engineers, Institute of Medicine, and the National Research Council. The Academies and the Institute are honorary societies that elect new members to their ranks each year. The bulk of the institutions science-policy and technical work is conducted by the National Research Council (NRC), created expressly for that purpose. The NRC's Board on Agriculture addresses issues confronting agriculture, food, and related environmental topics. <http://www.nas.edu/>

National Agricultural Library (NAL) — A national depository of scientific and popular agricultural information located at the **Agricultural Research Service's** research center in Beltsville, Maryland. NAL's administration was merged with ARS in 1994. <http://www.nalusda.gov/>

National Agricultural Research, Extension, and Teaching Policy Act — Title XIV of **Food and Agriculture Act of 1977** made USDA the leading federal agency for agricultural research, extension, and teaching programs. It also consolidated the funding for these programs.

National Agricultural Research, Extension, Education, and Economics Advisory Board — A 30-member board established by the **FAIR Act of 1996** to replace three previous advisory committees. The Board advises USDA on national priorities and policies related to agricultural research, extension, and education.

National Agricultural Statistics Service (NASS) — A USDA agency that collects and publishes statistics on the U.S. food and fiber system, with offices located in each state's department of agriculture. <http://www.usda.gov/nass/>

National Ambient Air Quality Standards (NAAQS) — National standards set by EPA under authority of the **Clean Air Act**; NAAQS define the maximum allowable concentrations of specified air pollutants in outdoor (ambient) air. NAAQS have been set for carbon monoxide, **particulate matter**, sulfur oxides, nitrogen dioxide, lead, and **ozone**. “Primary” NAAQS protect human health, with a margin of safety; “secondary” NAAQS protect human welfare, which includes effects on soils, water, crops, vegetation, materials, etc.

National Appeals Division (NAD) — The National Appeals Division of USDA was established by the **Department of Agriculture Reorganization Act of 1994** (Title II of P.L. 103-354) to consolidate and improve the hearing procedures for USDA claims and disputes. The statute and regulations provide that certain sections of the **Administrative Procedure Act (APA)**, including the hearing requirements, do not apply to NAD proceedings. The NAD procedures govern informal and formal hearings covering appeals of decisions made by the rural development agencies, **Natural Resources Conservation Service**, Risk Management Agency, and the **Farm Service Agency**. The statute and regulations set forth the procedures for hearings, requirements for the presiding officers, requirements for communications between the decision-maker and persons interested in the matter, and other important issues. After a decision is made by a hearing officer, both the appellant and the agency have the right to a review by the NAD director, who then issues a final determination. The final determination of the NAD is reviewable and enforceable by the U.S. District Court in accordance with the judicial review provisions of the APA.

National Aquaculture Act of 1980 — P.L. 96-362 (September 26, 1980), as amended, is intended to promote and support the development of private aquaculture and to ensure coordination among the various federal agencies that have aquaculture programs and policies. It provided for a national aquaculture policy, including a formal National Aquaculture Development Plan; established a Joint Subcommittee on Aquaculture on which officials of USDA, Commerce, Interior, and nine other federal agencies sit; designated USDA as the lead agency for coordination; and authorized the National Aquaculture Information Center within USDA’s National Agricultural Library.

National Cheese Exchange (NCE) — A now defunct private non-profit corporation that operated in Green Bay, Wisconsin. Every Friday morning for one-half hour, members of the NCE met to buy or sell cheddar cheese in 40-pound blocks and 500-pound barrels on the exchange. The closing prices were published and widely circulated throughout the dairy industry, and were used as the basis for buying and selling cheese throughout the food distribution system. Up until April 1997 the USDA used changes in the NCE price as a principal component in determining the **basic formula price** for all milk sold under federal **milk marketing orders**. Activity on the NCE was regulated by the Wisconsin Department of Agriculture and the Wisconsin Attorney General.

National Early Warning System — A program run by the Centers for Disease Control to increase federal support to state health departments to detect **foodborne diseases** by increasing the number of scientists available to investigate foodborne outbreaks and by enhancing laboratory-based surveillance of important foodborne pathogens.

National Environmental Policy Act of 1970 — P.L. 91-190 (January 1, 1970) made a declaration of national environmental policy and established a continuing responsibility of the federal government to reach a number of substantive goals that embody nationwide improvements in environmental quality. Federal policies, regulations, and laws must be administered in accordance with NEPA. To insure this is accomplished, all federal agencies must consider the environmental consequences of their actions through the preparation of

environmental impact statements (EIS). Also, the law creates the Council on Environmental Quality in the Executive Office of the President.

National Estuary Program — A program established under the **Clean Water Act Amendments of 1987** to develop and implement conservation and management plans for protecting estuaries and restoring and maintaining their chemical, physical, and biological integrity, as well as controlling **point source** and **nonpoint source** pollution sources.

National farm program acreage — The number of harvested acres of feed grains, wheat, and cotton needed nationally to meet domestic and export use and to accomplish any desired increase or decrease in carryover levels. The **acreage base** for an individual farm was calculated as the producer's share of the national **farm program** acreage. The **FAIR Act of 1996** eliminated the need to calculate a national program acreage.

National forest — Originally, forest reserves, established by Presidential proclamation mostly between 1891 and 1909. Today, the boundaries of the 155 national forests cannot be modified without congressional authorization, although many (especially eastern) national forests are combined for easier administration. The 120 administrative units, commonly referred to as national forests, are managed by the **Forest Service** for **multiple use** and **sustained yield** of **renewable resources**, as determined in **forest plans**.

National Forest Management Act (NFMA) of 1976 — P.L. 94-588 (October 22, 1976) largely amended the **Forest and Rangeland Renewable Resources Planning Act of 1974**, which required a national, strategic planning process for renewable resources for the **Forest Service**, and comprehensive, interdisciplinary land and resource management plans for units of the National Forest System. The law was seen as necessary, because a lawsuit (commonly known as the Monongahela decision) had invalidated most timber practices in the national forests. NFMA substantially enacted detailed guidance for forest planning, particularly in regulating when, where, and how much timber could be harvested and in requiring public involvement in preparing and revising the plans. NFMA also established the Salvage Sale Fund and expanded other Forest Service trust funds and special accounts.

National Forest System (NFS) — The 192 million acres administered by the **Forest Service** for **multiple use**; comprised of 155 **national forests** (in 120 units) with 187 million acres, 20 **national grasslands** with 4 million acres, and 112 other units (e.g., purchase units, land utilization projects, research and experimental areas) with about 500,000 acres. While the NFS lands are concentrated in the West, the 25 million acres east of the 100th Meridian (the Great Plains) make the Forest Service the largest land manager in the East.

National grasslands — A type of unit designated by USDA and under Title II of the **Bankhead-Jones Farm Tenant Act**, permanently held by USDA as part of the National Forest System.

National Marine Fisheries Service (NMFS) — An agency within the National Oceanic and Atmospheric Administration at the Department of Commerce that conducts voluntary seafood inspection on a fee-for-service basis, mainly as a marketing and quality program rather than as a food safety program.

National Milk Laboratory Certification Program — Under a Memorandum of Understanding with the National Conference on Interstate Milk Shipments, the **Food and Drug Administration** (FDA) conducts a national certification program for state centralized laboratories which test dairy products for contaminants and residues. FDA maintains

accreditation of milk laboratories and sample collection surveillance procedures by making triennial on-site evaluations of laboratory facilities and equipment and by testing annually the performance skills of analysts. The FDA also standardizes, evaluates, and certifies state and territorial milk laboratory evaluation officers and state sampling surveillance officers.

National Natural Resources Conservation Foundation (NNRCF) — A nonprofit private organization established by the **FAIR Act of 1996** to promote and fund innovative solutions to conservation problems through effective partnerships. The Foundation can accept gifts and raise money. The NNRCF will conduct research, undertake educational activities, support demonstration projects, and make grants to state and local governments and nonprofit organizations. Appropriations are authorized at \$1 million per year for 1997-99, but no appropriations have been provided and the Foundation is not yet operational. Similar foundations have been created for several other natural resource areas.

National Organic Standards Board — A board established by Title 21 of the **FACT Act of 1990** to develop national standards for practices and substances to be used in organic production. Producers meeting these standards can sell their products as “USDA Certified Organic.” (JMR)

National Partnership Office (NPO) — The NPO is responsible for implementing **National Rural Development Partnership** policies and activities. The NPO provides budgetary and financial technical assistance to **State Rural Development Councils**.

National Research Council (NRC) — See **National Academy of Sciences**.

National Research Initiative Competitive Grants Program (NRI) — Generally referred to as the NRI, this program makes grants to scientists at both public and private laboratories for basic and applied agricultural research in priority areas as designated in the research title of the **FACT Act of 1990**. Grants are awarded competitively through a peer-review process.

National resources inventory (NRI) — A periodic survey of status and changing conditions of the soil, water, and related resources on private land conducted by USDA’s Natural Resource Conservation Service. The survey is conducted every 5 years; the most recent survey was in 1992.

National Rural Development Partnership — A collaborative effort comprised of representatives of the federal, state, local, and tribal governments, the private sector, and the nonprofit sector to promote rural development across the nation. The principle component of the Partnership is the **State Rural Development Councils**.

National Rural Development Council (NRDC) — This is the federal component of the **National Rural Development Partnership**. The NRDC comprises representatives from various federal departments and national organizations whose activities or policies may affect rural areas. The NRDC provides guidance for the **Partnership** and works on behalf of State Rural Development Councils at the national level.

National Rural Economic Development Institute (NREDI) — Helps develop the capacity of the **National Rural Development Partnership** and its constituent organizations (**State Rural Development Councils** and the **National Rural Development Council**) by providing economic development-related training and consulting services.

National School Lunch Act — P.L. 79-396 (June 4, 1946) authorized federal cash and commodity support for school lunch and milk programs, “...as a measure of national security...” in response to claims that many American men had been rejected for military service in World War II because of diet-related health problems. Beginning in the early 1930's federal support had been provided for school lunch programs through donations of surplus commodities, and when these dried up during the War, by grants provided under annual appropriations laws. The original **National School Lunch Act** established multi-year authority for the financing of school feeding programs. It since has been amended numerous times and now permanently authorizes the **national school lunch program** and the **child and adult care food program**. Federally guaranteed subsidies are provided for every lunch served, with higher amounts generally provided for lunches served to low-income children who meet income criteria set by the law. This Act also requires federal payments for meals and snacks served to children and elderly and disabled persons in day care facilities (the **child and adult care food program**) and children in summer programs operated in low-income areas (the **summer food service program**), and it requires a set value of commodity assistance for each lunch served under these programs. Other activities supported by this Act include meals supplements for children in afterschool care, a homeless children nutrition program, meal service for Department of Defense overseas dependents schools , and an information clearinghouse.

National School Lunch Program — Federal meal service program that, in FY1996, provided federal reimbursements for over 4.3 billion lunches served in nearly 88,000 schools to 26.5 million children (12.7 million children received **free meals**, 1.98 million bought **reduced price meals**, and 11.3 million bought so-called **paid meals**). Permanently authorized by the **National School Lunch Act**, federal funding is provided in the form of cash reimbursements for each lunch served, varied in amount by the family income of the participating child. All children in participating schools and residential institutions are eligible for a federally subsidized meal, regardless of family income. However, **free meals** must be offered to children from families with incomes below 130% of the federal poverty income level, and **reduced price meals** to those with family incomes between 130 and 185% of the poverty level.

National Shellfish Sanitation Program (NSSP) — A program under which the federal **Food and Drug Administration** works cooperatively with the states, the **Interstate Shellfish Sanitation Conference**, and industry to assure the safety of molluscan shellfish (clams, oysters, mussels). Among other things, all such products entering interstate commerce must be handled by state-certified dealers, properly tagged, tracked by appropriate records, and be processed in plants that meet sanitation requirements. FDA continually reviews state shellfish control programs for effectiveness.

National Wildlife Refuge System (NWRS) — Consists of all of the National Wildlife Refuges, the **Waterfowl Production Areas**, and certain other small tracts managed by states under cooperative agreements with the **Fish and Wildlife Service**. In general, these areas are managed primarily for conservation of wild plants and animals (particularly waterfowl). Other uses, such as recreation, grazing, energy development, etc., are permitted to the extent they are compatible with the conservation purpose. Some refuges have additional purposes defined in law.

National Wool Act of 1954 — Title VII of **Agricultural Act of 1954** was designated the **National Wool Act** and provided for a new and permanent **price support** program for wool and mohair to encourage increased domestic production. Price support for wool and

mohair was in effect through marketing year 1995, at which time it was terminated under the explicit mandate of P.L. 103-130 (November 1, 1993).

Natural Resource Conservation Service (NRCS) — A USDA agency responsible for developing and carrying out national soil and water programs in cooperation with landowners, operators, and others. It was created in 1994 reorganization legislation by merging the Soil Conservation Service and many of the conservation cost-sharing programs of the Agricultural Stabilization and Conservation Service. The NRCS is responsible for developing and carrying out national soil and water conservation programs in cooperation with landowners, farm operators, and others. More than 70% of the approximately 12,000 employees work at the field level.

NAWD — National Association of WIC Directors

NAWG — National Association of Wheat Growers

NAWGA — National Wholesale Grocers Association

NBC — National Broiler Council

NCA — National crop acreage

NCAMP — National Coalition Against the Misuse of Pesticides

NCBA — National Cattlemen's Beef Association; National Cooperative Business Association

NCC — National Cotton Council

NCE — National Cheese Exchange

NCFAP — National Center for Food and Agricultural Policy

NCFC — National Council of Farmer Cooperatives

NCGA — National Corn Growers Association

NCIMS — National Conference on Interstate Milk Shipments

NDC — National Dairy Council

NE — Northern Europe (price)

NEPA — **National Environmental Policy Act of 1970**

NEPA analysis — Analyses conducted during the preparation of documents required under the **National Environmental Policy Act of 1970**, particularly environmental assessments and environmental impact statements.

Net cash income — A farm's actual cash receipts and expenses in a given year, regardless of the year the goods sold were produced. In general, it serves as an indicator of the short-term financial condition of agricultural producers and their ability to pay household expenses, farm operating expenses, loan payments, and to purchase capital assets such as machinery. It

consists of cash receipts from farm marketings of crop and livestock products, other cash income from such farm-related sources as machine hire, custom work and farm recreational activities, and direct government payments, less production expenses paid in cash. It excludes the non-monetary components of **gross farm income** and **net farm income**.

Net farm income — The return (both monetary and non-monetary) to farm operators for their labor, management and capital, after all production expenses have been paid (that is, **gross farm income** minus production expenses). It includes net income from farm production as well as net income attributed to the rental value of farm dwellings, the value of commodities consumed on the farm, depreciation, and inventory changes.

Net income — As relates to the food stamp program, net monthly income is an amount calculated for each food stamp household that, together with its size, effectively determines its food stamp benefit. It is calculated by reducing the household's total cash monthly income by a series of deductions. The lower a household's net income, the larger its food stamp benefit.

Net pen culture — A type of **aquaculture** where fish remain captive throughout their lives in marine pens built from nets, used by the salmon industry.

NET — Nutrition Education and Training Program

NFI — National Fisheries Institute

NFMA — **National Forest Management Act of 1976**

NFO — National Farmers Organization

NFPA — National Food Processors Association; National Forest Products Association

NFS — **National Forest System**

NFU — National Farmers Union

NGA — National Governors Association; National Grocers Association

NGFA — National Grain and Feed Association

NHCP — National Handbook of Conservation Practices

Nitrate — A nitrogen compound. Nitrate pollution of drinking water, shallow wells being particularly vulnerable, is of concern because infants are particularly sensitive. A nitrate drinking water standard has been set under the **Safe Drinking Water Act**. An EPA national survey of drinking water wells conducted from 1988 to 1990 indicated that 2.4% of rural domestic wells contained nitrate at or above the 10 mg/L standard. Higher rates of contamination have been found in areas of high vulnerability; for example, surveys along the upper Des Moines river indicate that 20 to 30% of wells exceed the standard.

Nitrogen — An element found in the air and in all plant and animal tissues. For many crops, nitrogen **fertilizer** is essential for economic yields. However, nitrogen can also be a pollutant when nitrogen compounds are mobilized in the environment (e.g., leach from fertilized or manured fields), are discharged from septic tanks or feedlots, volatilize to the air, or are emitted from combustion engines. As pollutants, nitrogen compounds can have adverse health effects

(see **nitrate** and **air pollution**) and contribute to degradation of waters (see **eutrophication**).

NLEA — **Nutrition Labeling and Education Act of 1991**

NMA — National Meat Association

NMFS — National Marine Fisheries Service

NMPF — National Milk Producers Federation

No net cost — A provision requiring that a **price support** program be operated at no cost to the federal government. The **No-Net-Cost Tobacco Act of 1982** required the participants in the 1982 and subsequent year tobacco programs to pay an **assessment** to cover potential losses in operating the **tobacco price support program**. The **Food Security Act of 1985** required that USDA operate the sugar program at no cost. This provision applied through the 1996 crop year for the sugar crops, and was repealed by the **FAIR Act of 1996**. The 1996 changes to the peanut program are designed to ensure that it also operates at no cost.

No Net Cost Tobacco Act of 1982 — P.L. 97-218 (July 20, 1982) required that the **tobacco price support program** operate at no net cost to taxpayers, other than for the administrative expenses common to all price support programs. To satisfy this mandate, sellers and buyers (including importers) of tobacco are assessed equally to build a capital account that is drawn upon to reimburse the **Commodity Credit Corporation** for any losses of principal and interest resulting from **nonrecourse loans**. Other provisions of this law provided for reducing the level of support for tobacco and made various modifications to the marketing quota and acreage allotment programs.

No net loss wetlands policy — An overall policy goal for wetland protection first adopted by the Bush Administration, and more recently by the Clinton Administration. The goal is to halt the decline in the overall number of wetland acres in the country. It refers only to acres and does not compare the functions and values of wetlands gained and lost. Also, this goal does not address the question of whether it is acceptable to destroy some wetlands if at least the same number of acres are created or restored at another site. Currently there are about 100 million wetland acres, compared to about 200 million when the country was first settled.

No observable adverse effect level (NOAEL) — From long-term toxicological studies of agricultural chemical active ingredients, levels which indicate a safe, lifetime exposure level. Used in setting pesticide residue **tolerances**.

No-till farming — A method of planting crops that involves no seed bed preparation other than opening the soil to place individual seeds in holes or small slits; usually no cultivation during crop production; chemical weed control is normally used. May also be referred to as slot tillage or zero cultivation. See also, for comparison, **conservation tillage** and **minimum tillage**.

NOAA — National Oceanic and Atmospheric Administration

NOAEL — No observable adverse effect level

Nonbasic commodities — Commodities other than basic commodities for which USDA is authorized to provide **price support in permanent law**. This includes soybeans and other oilseeds, milk, sugar beets, and sugarcane.

Noncompetitive imports — A term used by the Economic Research Service in its reporting of agricultural trade statistics to refer to imports of commodities not produced in the United States. Commodities such as tea, bananas, or coffee are considered noncompetitive imports. In contrast, imported commodities that are also produced in the United States are referred to as **competitive imports**.

Noninsured Assistance Program (NAP) — Producers who grow a crop that is currently not eligible for crop insurance may be eligible for a **direct payment** under the Farm Service Agency's noninsured assistance program (NAP). NAP has permanent authority under the **Federal Crop Insurance Reform Act of 1994** and was designed to replace ad-hoc farm disaster legislation that was enacted nearly every year between 1988 and 1993. For a producer of a noninsured crop to become eligible for a payment, areawide losses for that crop must be at least 35% of normal yields. Once the 35% areawide threshold is reached, an individual producer must then experience a minimum crop loss of 50%. A noninsured producer then receives a payment comparable to an insured producer under **catastrophic crop insurance** coverage — 60% of the market price on losses in excess of 50%. A producer of a noninsured crop is subject to a **payment limit** of \$100,000 per **person** and is ineligible for a payment if the producer's qualifying gross revenues exceed \$2 million.

Nonmoney income — A statistical allowance used in **farm income** compilations to credit farmers with income for the value of farm products used on the farm (instead of being sold for cash) and the rental value of farm dwellings. It assumes farmers otherwise live rent-free on their farm business premises.

Nonpoint source pollution — Pollutants that are not discharged or emitted from a specific "point" source, such as a pipe or smokestack. Nonpoint water pollutants are often carried from dispersed, diverse sources into water channels by rain-induced runoff. Runoff from streets, open pit and strip mines, and agricultural fields are prominent examples (see **agricultural pollution**). Nonpoint source air pollutants (often called fugitive emissions) include small dispersed sources, e.g., fireplace smoke, and uncontained emissions like dust blown from fields and unpaved roads.

Nonprogram crops — Any agricultural commodity not covered by federal **commodity programs**. **Program crops** are wheat, corn, barley, grain sorghum, oats, upland cotton, and rice.

Nonrecourse loans — Farmers or processors participating in government **commodity programs** may pledge certain stored commodities as collateral and obtain a loan from the CCC at a commodity-specific, per-unit **loan rate**. The borrower may repay the loan, with interest, within a specified period and regain control of the commodity. Alternatively, the commodity can be forfeited to the CCC at the end of the term with no penalty. The government takes no recourse beyond accepting the commodity as full settlement of the loan. The loans provide operating capital to producers of wheat, feed grains, cotton, peanuts, tobacco, rice, and oilseeds. Dairy processors (until 2000) and sugar processors (when imports are equal to or greater than 1.5 million short tons) are also eligible for nonrecourse loans. In the past, loan rates sometimes exceeded market prices. The CCC then became an alternative purchaser to the market, thereby supporting prices. For those commodities eligible for **marketing**

assistance loan benefits, producers may repay the loan at the **world price** (rice and upland cotton) or **posted county price** (wheat, feed grains, and oilseeds).

Nonrenewable resources — Resources that do not naturally replenish themselves within the limits of human time, such as minerals, in contrast to **renewable resources** such as soil and water. An example of nonrenewable resource, also called a stock resource, important to agriculture is petroleum.

Non-road emissions — Pollutants emitted by non-road engines and non-road vehicles, e.g., farm and construction equipment, gasoline-powered lawn and garden equipment, and power boats and outboard motors. The **Clean Air Act**, §213, provides that EPA can issue regulations to limit emissions from these sources.

Nontariff barriers (NTB's) — Any restriction, charge, or policy other than a **tariff**, that limits access of imported goods. Examples of nontariff barriers include quantitative restrictions, mainly **import quotas** and **embargoes**; **import licenses**; exchange controls; **state trading enterprises**; **bilateral agreements**; and certain rules and regulations on health, safety, and sanitation. The **Uruguay Round** Agreement on Agriculture requires conversion of NTBs to **bound tariffs** and that **sanitary and phytosanitary measures** be based on sound science.

Normal crop acreage — The acreage on a farm normally devoted to a group of designated crops. When a **set-aside program** is in effect, a participating farm's total planted acreage of such designated crops plus set-aside acreage cannot exceed the normal crop acreage. The authority for set-asides was eliminated by the **FAIR Act of 1996**.

Normal flex acreage — A provision of the Omnibus Budget Reconciliation Act of 1990 requiring a mandatory 15% reduction in **payment acreage**. Under this provision, producers were ineligible to receive **deficiency payments** on 15% of their **crop acreage base** (not including any acreage removed from production under any **production adjustment** program). Producers, however, were allowed to plant any crop on this acreage, except fruits, vegetables, and other prohibited crops. Normal **flex acreage** no longer exists under the **FAIR Act of 1996**.

Normal yield — The average historic yield established for a particular farm or area. Can also describe average yields. Normal production would be the **normal crop acreage** planted multiplied by the **normal yield**. These measures, required by previous **commodity programs**, are not required for **production flexibility contracts** under the **FAIR Act of 1996**.

North American Free Trade Agreement (NAFTA) — A **multilateral trade agreement** negotiated by the United States, Canada and Mexico that sets forth agreements to lower and/or eliminate unfair trade barriers that affect the trade of goods and services between the three countries. NAFTA entered into force on January 1, 1994. The agriculture portion of NAFTA effectively is three bilateral agreements; U.S./Mexico, Mexico/Canada, and U.S./Canada. The U.S.-Canada agricultural agreement in NAFTA was negotiated previously as part of the U.S.-Canada Free Trade Agreement.

North American Free Trade Agreement Implementation Act — P.L. 103-182 (December 8, 1993) approved and implemented the North American Free Trade Agreement (NAFTA). NAFTA pertains to cross-border trade between the United States, Mexico, and

Canada. NAFTA substantially eliminated all nontariff barriers to agricultural trade between the United States and Mexico, generally through their conversion to tariff rate quotas or ordinary tariffs, and maintained the provisions of the United States-Canada Free Trade Agreement on agricultural trade. The law eliminated tariffs on a broad range of agricultural products and provided for a phase-out over up to 15 years for tariffs on other products. A special safeguard provision will apply to certain products, with a designated quantity of imports allowed at a NAFTA preferential tariff rate. NAFTA increases incentives for buying within the NAFTA region.

North American Waterfowl Management Plan — An international program in cooperation with Mexico and Canada to protect, restore, enhance, and manage **wetland** ecosystems for migratory birds and other wildlife and fish. It was authorized by the **North American Wetlands Conservation Act of 1989**. This program is administered by the **Fish and Wildlife Service**, and USDA agencies participate as appropriate.

North American Wetlands Conservation Act — P.L. 101-233 (December 13, 1989), and amended in 1990 and 1994, authorizes a wetlands habitat program; administered by the **Fish and Wildlife Service**. The law authorizes annual appropriations of up to \$20 million to fund a grant program to protect and manage **wetland** habitats for migratory birds and other wetland wildlife in the United States, Mexico, and Canada. A nine-member council meets periodically to decide which projects to fund. The program encourages private-public cost-sharing projects. It must allocate between 50% and 70% of all funds to projects in Mexico and Canada, and no more than 50% of the U.S. share for projects in these countries can come from federal funds. Agricultural wetlands are not specifically identified in the law, and agricultural interests are not expressly represented on the council.

Northeast Interstate Dairy Compact — An agreement among the six New England States to support the farm price of milk used for fluid consumption at a higher level than under current federally mandated minimum prices in the region. Current law allows membership in the compact to expand to New York, New Jersey, Pennsylvania, Delaware, Maryland, and Virginia, if the prospective state is contiguous to a member state, and if the compact is approved by the state legislature of the prospective state and the U.S. Congress. Under law, the compact must terminate when reforms to federal **milk marketing orders** are implemented by USDA, which has a statutory deadline of April 1999.

Northern Europe (NE) cotton price — An average of the lowest prices of several cottons (including cost, insurance, and freight) in Northern Europe. The NE price is used by USDA in its formula for calculating the **adjusted world price** under the cotton support program.

NOSB — National Organic Standards Board

Noxious weeds — Undesirable plants that infest either land or water resources and cause physical and economic damage. Under the **Federal Noxious Weeds Act of 1974**, (P.L. 93-629, January 3, 1975) The **Animal and Plant Health Inspection Service** works to prevent noxious weeds from entering the country, and conducts cooperative control/eradication programs with the states. Local governments frequently impose taxes on landowners to carry out noxious weed control programs.

NPE — Nutrition Program for the Elderly

NPHAP — National Pesticide Hazard Assessment Program

NPHAP — National Pesticide Hazard Assessment Program

NPPC — National Pork Producers Council

NPR — National Performance Review

NPS — **Non-point source**

NRA — National Renderers Association; National Restaurant Association; National Rifle Association

NRC — National Research Council (National Academy of Sciences)

NRCS — Natural Resources Conservation Service

NRDC — National Rural Development Councils; Natural Resources Defense Council

NRECA — National Rural Electric Cooperative Association

NRI — National Research Initiative Competitive Grants Program; National Resources Inventory

NSLA — **National School Lunch Act**

NSLP — **National School Lunch Program**

NSSC — National Soil Survey Center

NSSP — **National Shellfish Sanitation Program**

NTB — **Nontariff barriers**

NTF — National Turkey Federation

NTP — National Toxicology Program

Nutrient pollution — Contamination by excessive inputs of nutrient: a primary cause of **eutrophication** of surface waters, in which excess nutrients, usually **nitrogen** or **phosphorus**, stimulate algal growth. Sources of nutrient pollution include runoff from fields and pastures, discharges from septic tanks and **feedlots**, and emissions from combustion.

Nutrition Assistance Programs — Federal programs in Puerto Rico and American Samoa that provide food assistance through block grant funds in lieu of food stamps.

Nutrition Education and Training (NET) Program — Authorizes grants to states for a nutrition education program targeting school children, teachers, parents, and food service workers. The program is authorized under the **Child Nutrition Act** through FY2002 at an annual funding level of \$10 million.

Nutrition guidelines — Guidelines established for meals served in **child nutrition** meal service programs governing the types of foods and nutrient content required in order to be eligible for reimbursement.

NWF — National Wildlife Federation

NWR — National Wildlife Refuge

NWRS — National Wildlife Refuge System

NWS — National Weather Service

OBPA — Office of Budget and Program Analysis

Ocean freight differential (under P.L. 480) — The difference between the cost of **P.L. 480** shipments that are required to be carried on U.S. flag vessels compared to the cost that would have been incurred had they been carried on lower cost foreign **bottoms**. The U.S. government pays this difference either by paying the total freight, if the sale is made under Title II of P.L. 480, or by reimbursing the recipient country or private grain company (whichever pays the shipping) if the sale is made under Title I of P.L. 480.

Ocean ranching — A type of **aquaculture**, used mainly by the salmon industry, which cultures juvenile fish, releases them to mature in the open ocean, and catches them when they return as adults to spawn.

OECD — **Organization for Economic Cooperation and Development**

Offal — The less valuable byproduct material from the preparation of a specific product; primarily refers to the byproducts of meat and poultry plants, e.g., blood, bone, feathers, fat.

Offer versus serve — Refers to the option children may have to refuse one or more items offered as part of a federally subsidized school lunch or breakfast without losing eligibility for federal reimbursement.

Office of the Chief Economist (OCE) — The Office of the Chief Economist advises the Secretary of Agriculture on the economic implications of policies and programs affecting the U.S. food and fiber system and rural areas. The Chief Economist coordinates, reviews, and approves the USDA's commodity and farm sector forecasts. In addition, the Chief Economist oversees the activities of the Coordinator of Agricultural Labor Affairs, the Director of Sustainable Development, the **World Agricultural Outlook Board** and the Office of Risk Assessment & Cost-Benefit Analysis. <http://www.usda.gov/oce/>

Office Of Risk Management — See **Risk Management Agency**.

Off-farm (non-farm) income — That portion of farm household income obtained off the farm, including nonfarm wages and salaries, pensions, and interest income earned by farm families. On average for all farms in the United States, off-farm income accounts for about 90% of farm operator household income.

Offset — Liquidating a purchase of **futures contracts** through the sale of an equal number of contracts of the same delivery month, or liquidating a **short** sale of futures through the purchase of an equal number of contracts of the same delivery month. In other words, selling if one has bought, or buying if one has sold, a futures or option contract.

Offsetting compliance — A requirement that a farmer owning multiple farms who wishes to participate in a crop program must comply with the program's provisions on all farms under

the farmer's ownership in order to be eligible for program benefits. This provision does not apply to **production flexibility contracts** enacted under the **FAIR Act of 1996**.

OGC — Office of General Counsel

OIG — Office of Inspector General

Oilseed crops — Primarily soybeans, sunflower seed, canola, rapeseed, safflower, flaxseed, mustard seed, peanuts and cottonseed, used for the production of cooking oils, protein meals for livestock, and industrial uses. These specific oilseeds are eligible for **nonrecourse loans**. Other oilseed crops include castor beans and sesame.

OL — Operating loans, farm

Omnibus Trade and Competitiveness Act of 1988 — P.L. 100-418 (August 23, 1988) provided the President with negotiating authority for the General Agreement on Tariffs and Trade (GATT) **Uruguay Round**, U.S.-Canada Free Trade Agreement, and the **North American Free Trade Agreement**, and specified U.S. negotiating objectives regarding agriculture. The law revised statutory procedures for dealing with unfair trade practices and import damage to U.S. industries. It gave USDA discretionary authority to trigger **marketing loans** for wheat, feed grains, and soybeans, if it is determined that unfair trade practices exist.

Open position — Ownership of a fixed-price forward contract, especially a **futures contract**.

Option contract — An option contract gives the buyer the right, but not the obligation, to buy (**call option**) or sell (**put option**) a **futures contract** at a specific price within a specified period of time, regardless of the market price of that commodity.

Option premium, futures — The amount an option buyer pays the **option writer** for an **option contract** (JYJ)

Option writer, futures — A person who sells a **option contract**, receives the premium, and bears the obligation to buy or sell the asset at the **strike price**.

Optional flex acreage — Under the planting flexibility provision of the **Agricultural Act of 1949**, as amended by the **FACT Act of 1990**, producers could choose to plant up to 25% of the **crop acreage base** to other CCC-specified crops (except fruits and vegetables) without a reduction in crop acreage bases on the farm, but receive no **deficiency payments** on this acreage. The Omnibus Budget Reconciliation Act of 1990 further amended the 1949 Act to make a 15% reduction in **payment acreage** mandatory. The remaining 10% was optional **flex acreage**. Optional flex acreage was eligible for deficiency payments when planted to the program crop. Optional flex acres no longer exist under the **FAIR Act of 1996**.

Options contracts, futures — A contract traded on a commodity futures exchange that gives the buyer the right without obligation to buy or sell a **futures contract** over a specified time period. The **FAIR Act of 1996** requires USDA to conduct research through pilot programs to determine if futures and options contracts can provide producers with reasonable protection from the financial risks of fluctuations in price, yield, and income inherent in the production and marketing of agricultural commodities.

ORACBA — Office of Risk Assessment and Cost Benefit Analysis, USDA

Oral toxicity — Ability of a chemical to cause injury when ingested by mouth.

Orderly marketing — Coordination of the total supply of a commodity in order to achieve sellers' joint market objectives. This is an activity carried out by some **marketing order** programs.

Organic — Chemically, a compound or molecule containing carbon bound to hydrogen. Organic compounds make up all living matter. The term organic frequently is used to distinguish “natural” products or processes from man-made “synthetic” ones. Thus natural **fertilizers** include manures or rock phosphate, as opposed to fertilizers synthesized from chemical feedstocks. Likewise, organic farming and **organic foods** refer to the growing of food crops without the use of synthetic chemical **pesticides** or fertilizers; pests are controlled by cultivation techniques and the use of pesticides derived from natural sources (e.g., rotenone and pyrethrins, both from plants) and the use of natural fertilizers (e.g., manure and compost). Some consumers, alleging risks from synthetic chemicals, prefer organic food products. The **FACT Act of 1990** required USDA to define organic foods for marketing purposes.

Organic certification — The **FACT Act of 1990** authorizes producers of organically grown crops and livestock to label their products as “USDA Certified Organic” if their operations meet established federal standards for organic production, as determined by accredited certifying agents. Delays in implementation have pushed the anticipated implementation date to late 1997 or early 1998.

Organic farming — Crop production systems that generally exclude the use of synthetic fertilizers, pesticides, and other chemicals. To the maximum extent feasible, organic farming systems rely on **crop rotations**, **crop residues**, animal manures, **legumes**, green manures, off-farm organic wastes, mechanical cultivation, and biological pest control to maintain soil productivity, to supply nutrients to plants, and to control weeds and pests.

Organic foods — Food products produced by organic farming practices and handled or processed under organic handling and manufacturing processes as defined by several private and state organic certifying agencies. Once a USDA organic certification and labeling program is operational, there will be a single national standard for what constitutes organic foods.

Organization for Economic Development and Cooperation (OECD) — An international organization established by the United States and Canada and certain Western European countries in 1960. The OECD studies and discusses trade and related matters. Members include the United States, Canada, **European Union** countries, Australia, New Zealand, Japan, and Turkey. Most recently Mexico and South Korea have become OECD members.

Organoleptic — Relating to the senses (taste, color, odor, feel). Traditional USDA meat and poultry inspection techniques are considered organoleptic because inspectors perform a variety of such procedures—involving visually examining, feeling, and smelling animal parts—to detect signs of disease or contamination. These inspection techniques are not adequate to detect **foodborne pathogens** that are of growing concern.

Organophosphates — Insecticides that contain phosphorus, carbon, and hydrogen. They are **cholinesterase inhibitors**; some are highly acutely toxic, but they usually are not persistent in the environment. Parathion is an example of an organophosphate.

OSHA — Occupational Safety and Health Administration

Ozone (O₃) — A highly reactive molecule composed of three oxygen atoms. Environmentally, ozone is important in two completely separate contexts—one, as a naturally occurring screen of harmful radiation in the outer atmosphere (i.e., stratospheric ozone), and two, as a component of polluting smog formed from emissions resulting from human activities (i.e., urban smog). In the stratosphere 7 to 10 miles above the Earth, naturally occurring ozone acts to shield the Earth from harmful radiation. In the 1970s and 1980s, it was discovered that emissions of certain chemicals catalyze destruction of stratospheric ozone, allowing more radiation to reach the Earth's surface. The U.S. is a signatory to the 1987 **Montreal Protocol on Ozone Depleting Substances**, which bans or limits uses of chemicals whose emissions deplete stratospheric ozone. Among the chemicals being phased out as ozone depleters are chlorofluorocarbons used in refrigeration and air conditioning and **methyl bromide**, a pesticide. In the lower atmosphere (troposphere), ozone is a major air pollutant that contributes to smog, adversely affects human health, and is toxic to some plants, damaging forests and crops. Tropospheric ozone forms from reactions between nitrogen oxides and volatile organic compounds in the presence of sunlight. The precursor pollutants are emitted by combustion sources such as motor vehicles and utilities, use of solvents, and petrochemical facilities. Tropospheric ozone is regulated under a **National Ambient Air Quality Standard**.

P.L. 480 (or **Public Law 480**) — P.L. 83-480 (July 10, 1954), also called **Food for Peace**, is the common name for food aid programs established by the **Agricultural Trade Development and Assistance Act of 1954**, which seeks to expand foreign markets for U.S. agricultural products, combat hunger, and encourage economic development in developing countries. Title I makes **export credit** available on concessional terms, for example, at low interest rates for up to 30 years. Donations for emergency food relief and nonemergency humanitarian assistance are provided under Title II. Title III authorizes a Food for Development program that provides government-to-government grant food assistance to least developed countries. The **FAIR Act of 1996** extends the authority to enter into new P.L. 480 agreements through 2002.

P.L. 566 — Public Law 83-566 (August 4, 1954), **Watershed Protection and Flood Prevention Act of 1954**

PACA — Perishable Agricultural Commodities Act

Packer concentration — The degree to which a few large firms dominate total sales within segments of the meat packing industry, which, some farmers and other critics contend, can cause or at least contribute to lower prices for their animals. Market control by five large packers in the early 1900s led to passage of the **Packers and Stockyards Act of 1921**. **Concentration** declined after that, but has increased sharply in more recent years. For example, the four largest firms accounted for 82% of the steer and heifer slaughter in 1994, compared with 36% in 1980. Four-firm concentration in hog slaughter increased to 46% in 1994 compared with 34% in 1980, according to USDA. Numerous government-sponsored studies and investigations have been inconclusive on the relationship in recent years between concentration and prices.

Packers and Stockyards Act of 1921 — P.L. 67-51 (August 15, 1921) remains, in amended form, the basic authority for USDA to regulate marketing practices in the livestock, poultry, and meat industries. The law was enacted to prevent unfair, deceptive, and monopolistic trade practices, focusing on livestock terminal and auction markets, livestock

marketing agencies, dealers, meat packers, and live poultry dealers. The law also includes provisions to ensure that livestock and poultry producers are promptly paid when they sell their animals.

Paid diversion — A program, repealed by the **FAIR Act of 1996**, under which farmers were paid to voluntarily take acreage out of production. The diverted land was devoted to approved **conservation practices**. Unlike **acreage reduction** and **set-aside programs**, participation in a paid diversion program was not normally a condition of eligibility for other support program benefits.

Paid lunch (or breakfast, supper, or snack) — Refers to a federally reimbursed meal (or snack) bought by a child who does not qualify for a free or reduced price meal. Also often referred to as a “full-price” lunch, or a **Section 4** lunch.

Parity price — A measurement of the purchasing power of a unit of a particular commodity. Originally, parity was the price per bushel, bale, pound, or hundredweight that would be necessary for a unit of a commodity today to buy the same quantity of other goods (from a standard list) that the commodity could have purchased in the 1910-14 base period. Under **permanent law**, prices of some commodities would be supported at 50 to 90% of parity through direct government purchases or **nonrecourse loans**. In 1948, the parity price formula was revised to make parity prices dependent on the relationship of farm and nonfarm prices during the most recent 10-year period for **nonbasic commodities**. **Basic commodities**, including wheat, corn, rice, peanuts, and cotton use the higher of the historical or the new formula.

Parity ratio — An aggregate measure of the relative purchasing power of farm products; the ratio between the index of prices received by farmers for all farm products and the index of prices paid by farmers for commodities and services used in farm production and family living. The parity ratio measures relative price relationships (prices received versus prices paid). Over time the parity ratio has declined due to greater efficiency gains in agriculture. Compared to a parity ratio of 100 in the 1910-14 time period, the 1995 annual parity ratio was 45.

Particulate matter — A category of air pollutants that refers to small, solid particles or liquid droplets suspended in the air, including soot, fumes, dust, pollen and spores, smoke, and spray. Particles vary in biological effect depending on their size and composition. Two **National Ambient Air Quality Standards** have been set for particulates: One, in effect since 1987, regulates particles smaller than 10 microns in diameter (PM₁₀), a size range that includes fugitive dust from construction and tilling the soil. A 1997 change in how compliance with the PM₁₀ standard is measured somewhat reduces the stringency of the standard, which will make it easier for areas not in compliance (41 in early 1997) to attain the standard. The second PM standard, promulgated in July 1997, regulates particles smaller than 2.5 microns (PM_{2.5}), a size range dominated by combustion products, but which can include very fine fugitive dust and ammonia that can come from agricultural sources. Because of the need to develop monitoring and to assess ambient levels of PM_{2.5}, it will be the mid-2000s before pollution levels are established and any control programs might be instituted.

Partners for Wildlife — A voluntary partnership program administered by the **Fish and Wildlife Service** to provide financial and technical assistance to private landowners who wish to protect or restore **wetlands**. This program has been widely used by rural landowners, including farmers.

Pastureland — Land used primarily for the production of domesticated forage plants for livestock (in contrast to rangeland, where vegetation is naturally-occurring and is dominated by grasses and perhaps shrubs). Rotation pasture or cropland under winter cover crops is not included in this definition. The 1992 **national resources inventory** recorded 126 million acres of pastureland, 9% of all nonfederal rural lands.

Pathogen; pathogenic — Pathogens are infectious or toxin forming microorganisms causing disease. A **foodborne pathogen** is a microorganism that causes illness through the ingestion of food.

Payment-in-kind (PIK) — In general, a payment made in the form of CCC-owned commodities (or title to them) in lieu of cash. This form of payment was widely used during the 1980s for **paid diversion**, **deficiency payments**, and **export subsidy** payments as a means of disposing of or avoiding the acquisition of commodity inventories. **PIK certificates** entitled the holder to specific quantity of commodities.

Payment limitation — The maximum amount of **commodity program** benefits a **person** can receive by law. Persons are defined under payment limitation regulations, established by USDA, to be individuals, members of joint operations, or entities such as limited partnerships, corporations, associations, trusts, and estates that are actively engaged in farming. The **three entity rule** limits the number of farms from which a person can receive program payments. The **FAIR Act of 1996** sets payment limits at \$40,000 per person per fiscal year on **production flexibility contracts** (down from \$50,000 on target price **deficiency payments**). The limits of \$75,000/person/year with respect to **marketing assistance loan** gains and **loan deficiency payments** for crops of contract commodities or oilseeds is maintained.

Payment quantity — The quantity of production eligible for **production flexibility contract** payments under the **FAIR Act of 1996**. Payment quantity is calculated as the farm's **program yield** (per acre) multiplied by 85% of the farm's **contract acreage** (but subject to **payment limitations**).

Payment rate — Generally, the amount paid per unit of production (i.e., bushel, pound, hundredweight) to each participating farmer for eligible production under commodity income and **price support** programs.

Payments in lieu of taxes (PILT) — A program administered by the **Bureau of Land Management** of the Department of Interior to compensate counties for the tax-exempt status of federal lands; the fixed payments per entitlement acre (on most but not all federal lands) are adjusted for low county populations and for other revenue-sharing payments (e.g., Forest Service **county payments**) in a complicated formula.

PBIS — Performance Based Inspection System

PC — **Prior converted wetlands**

PCA — **Production Credit Association**

PCC — Prior converted cropland

PDP — **Pesticide data program**

Peace clause — Term used to refer to Article 13 of the **Uruguay Round** Agreement on Agriculture which exempts certain policies from challenges in the World Trade Organization so long as countries are meeting their commitments under the agreement.

Peanut poundage quota — A **peanut price support program** supply control mechanism authorized by the **Agricultural Adjustment Act of 1938** to regulate the marketing of peanuts consumed domestically for food when production becomes excessive. The **FAIR Act of 1996** requires that (for the 1996-2002 crops) the poundage quota be set equal to projected food demand and related uses (but not including seed use). A related provision allocates a separate temporary (annual) quota to all peanut producers, based on the amount of seed peanuts planted on each farm. The national quota is allocated among states based on a historical share, and then divided among farms based on production history. Owners (via inheritance or purchase) of farm quota may sell peanuts produced against their quota, or sell, lease and transfer their quota to other producers. The **FAIR Act of 1996** permits the sale, lease, and transfer of a farm quota across county lines up to specified limited percentages of a county's total of all farm quotas. Quota owners in certain counties, depending on the size of the state or county quota, have unlimited rights to transfer their farm quota within the state. Government entities and out-of-state quota owners cannot hold quotas after the 1997 crop. Peanuts marketed outside the quota limits must be crushed for nonedible uses or exported and are called **additional peanuts**.

Peanut price support program — The federal program that supports the **farm price** of peanuts by offering **price support** loans to peanut growers and by placing limits on the amount of peanuts allowed to be sold for domestic food use. Farmers may sell peanuts produced in excess of marketing limits (referred to as the **peanut poundage quota** — one example of a **marketing quota**), primarily for export and crushing into peanut oil and meal. Two **nonrecourse loan** levels are available to producers, depending on the end use and destination of the peanuts sold. Peanuts marketed for food use in the United States (quota peanuts) are eligible for a higher loan reflecting the historical price premium associated with selling into the high-value domestic market. The **FAIR Act of 1996** freezes the quota loan rate for the 1996-2002 crops at \$610 per ton. All other peanuts (called **additional peanuts**) are eligible for a lower level of support (\$132/ton for the 1997 crop) to ensure that the Commodity Credit Corporation does not incur any losses on its peanut loan operations. The 1996 Act also requires that the national **peanut poundage quota** be set at an amount equal to projected “domestic edible” (food) and related uses (excluding seed). For the 1997 crop, the national quota is set at 1.133 million short tons. Other provisions make the peanut support program a **no cost** program.

Percolation — The movement of water downward and radially through subsurface soil layers, usually continuing downward to groundwater. The rate at which soils permit percolation is a measure of the vulnerability of groundwaters to contamination by surface waters as well as a determinant in the siting of septic fields.

Performance Based Inspection System (PBIS) — A computer-based system used by USDA's meat and poultry inspection agency, the Food Safety Inspection Service. The system organizes inspection requirements, schedules inspection activities, and maintains records of findings for meat and poultry processing operations under federal inspection. PBIS has been at issue because consumer advocates and some inspectors have contended that it is not flexible and “second-guesses” inspectors' more reliable experience and judgement. USDA views it as a much more objective tool for inspection that enhances rather than undermines inspectors' roles.

Perishable Agricultural Commodities Act (PACA) of 1930 — P.L. 71-325 (June 10, 1930), as amended, regulates the buying and selling of fresh and frozen fruits and vegetables to prevent unfair trading practices and to assure that sellers will be paid promptly. Both produce sellers and buyers must pay fees for a license in order to do business, and these license fees are the source of funding for a trust program that resolves disputes and protects sellers from non-payment when buyers become bankrupt. Amendments to the Act in 1995 (P.L. 104-48) include a 3-year phaseout of the annual license fees for retailers and grocery wholesaler-dealers to be replaced by one-time fee.

Perishable commodities — Farm goods that prior to processing cannot be stored for a substantial period of time without excessive loss through deterioration or spoilage. Examples of perishable commodities are fresh and frozen fruits and vegetables, meat and poultry. Most of the commodities purchased by the Agricultural Marketing Service under **Section 32** authority are perishable items.

Permanent law — Legislation that would be in force in the absence of all temporary or short-term laws (e.g., **farm bills**). The **Agricultural Adjustment Act of 1938**, the **Agricultural Act of 1949**, and the **Commodity Credit Corporation Charter Act of 1948** serve as the basic laws authorizing the major **commodity programs**. Technically, each new farm bill (including the **FAIR Act of 1996**) amends the permanent law for a specified period. The **FAIR Act of 1996** also repeals some provisions of permanent law and suspends other provisions through 2002. Many programs and activities of USDA are authorized by permanent laws that are periodically amended.

Permanent vegetative cover — Trees, or perennial grasses, legumes, or shrubs with an expected life span of at least 5 years. Permanent cover is required on cropland entered into the **Conservation Reserve Program**.

Permitted acreage — The acreage on which a **farm program** participant is permitted to grow a **program crop** after satisfying **acreage reduction** requirements. For example, when a 10% **acreage reduction program** is in effect for wheat, a farmer with a 100-acre wheat base may grow wheat on 90 acres, the permitted acres. Limits on production are eliminated by the **FAIR Act of 1996** through the year 2002.

Persistent pesticides — Pesticides that do not readily break down in the environment. Becoming long-lived components of the ecosystem, these chemicals may have enduring effects at low concentrations or may **bioaccumulate**, posing hazards to higher predators.

Person — An entity defined by USDA as being eligible to receive federal **farm program** benefits, subject to **payment limitation** constraints.

Personal Responsibility & Work Opportunity Reconciliation Act of 1996 — P.L. 104-193 (September 22, 1996) was labeled as a major “welfare reform” initiative. In addition to provisions making major changes to federal cash welfare, medicaid, work, and child care development programs, this law revised the **food stamp program** and several commodity distribution programs (notably the **emergency food assistance program** and the **soup kitchen food bank program**).

Pest — An animal or plant that is directly or indirectly detrimental to human interests, causing harm or reducing the quality and value of a harvestable crop or other resource. Weeds, termites, rats, and mildew are examples of pests.

Pest resistance management plans (PRM) — To protect the continued use of **biopesticides**, EPA is requiring companies developing transgenic crops to submit and implement pest resistance management (PRM) plans as a requirement of product registration. If they are exposed to a toxin excessively, most insect populations can develop resistance, making pest control products less effective. With new biopesticide technologies comes the concern that pests will rapidly develop resistance to natural insecticides. A resistance management plan is intended to sustain the useful life of transgenic technology.

Pest scouting — Inspecting a field for pests, including insects, weeds, and pathogens. Pest scouting is a basic component of **integrated pest management** programs. It is used to determine whether pest populations are at levels that warrant control intervention and also may help to determine the most appropriate method of control.

Pesticide — A substance used to kill, control, repel, or mitigate any pest. **Insecticides, fungicides, rodenticides, herbicides**, and germicides are all pesticides. EPA regulates pesticides under authority of the **Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)**. In addition, under FIFRA, a substance used as a plant regulator, defoliant, or desiccant is defined as a pesticide and regulated accordingly. All pesticides must be registered and carry a label approved by EPA.

Pesticide Data Program (PDP) — A program established by USDA's **Agricultural Marketing Service** to provide pesticide residue data on food commodities, primarily fruits and vegetables. Congress transferred funding for the \$10 million program to EPA for FY1997.

Pesticide Recordkeeping Program (PRP) — Authorized by the **FACT Act of 1990**, the program requires that private pesticide applicators keep records of the pesticides they use in agricultural production and that the records be surveyed to provide a database on restricted-use pesticides.

PETA — People for the Ethical Treatment of Animals

PFC — **Production flexibility contract**

pH — An expression of the intensity of the basic or acidic condition of a liquid or of soil; may range from 0 to 14, where 0 is the most acid, 7 is neutral, and above 7 is alkaline on a logarithmic scale. Natural waters usually have a pH between 6.5 and 8.5.

Phosphorus — An essential nutrient for plants and animals that is commonly applied to crops as a phosphate fertilizer. Phosphorus can contribute to the **eutrophication** of lakes and other water bodies. Sources of excess phosphorus include sewage and agricultural runoff.

Phytosanitary — See **sanitary and phytosanitary standards (SPS)**.

PIK — **Payment-in-kind**

PILT — **Payments in lieu of taxes**

PIN — Pesticide information network

Plant-pesticide — As proposed by EPA (November 23, 1994), plant-pesticides are all substances responsible for pest resistance in plants, as well as the genes needed for production of these substances. EPA has further proposed that plant-pesticide traits introduced into plants

using **recombinant DNA** techniques should be registered under legal requirements of FIFRA and FFDCFA. Exempt from tolerance requirements would be those defense substances and genes evolved naturally or transferred to the plant by traditional plant breeding methods.

Plant regulator — A chemical that affects the physiological behavior of plants, for example through accelerating or retarding the rate of growth or maturation of produce. Typically the definition of plant regulator excludes nutrients. Plant regulators must be registered as **pesticides** under the **Federal Insecticide, Fungicide, and Rodenticide Act**.

Plant Variety Protection Act of 1970 — P.L. 91-577 (December 24, 1970) was enacted to provide patent-like protection for new non-hybrid seed varieties. The ultimate goal was to create an incentive for public and private research on new commercial plant varieties by making it possible for scientists to benefit financially from developing them. The Plant Variety Protection Act Amendments of 1994 (P.L. 103-349, October 6, 1994) made the law consistent with the International Convention for the Protection of New Varieties of Plants of March 19, 1991, to which the United States is a signatory. The law now ensures that new varieties are protected as intellectual property, as defined under the International Convention for the Protection of New Varieties of Plants. USDA rather than the Patent and Trademark Office, administers the law.

PLD — **Paid land diversion**

PMA — Produce Marketing Association; Power Marketing Administration

PMO — **Pasturized Milk Ordinance**

Point — A measure of price change equal to 1/100 of one cent in most **futures contracts** traded in decimal units. In grains, it is one cent; in T-bonds, it is one percent of par.

Point source pollution — Pollutants that are discharged or emitted from discrete “point” sources, such as pipes and smokestacks. Both the **Clean Water Act** and the **Clean Air Act** focus control requirements on point sources and both require permits for major sources of discharges from point sources. While much agricultural pollution is **nonpoint source**, some agricultural activities are affected: for example, feedlots of over 1000 **animal units** are considered point sources requiring permits under the **Clean Water Act**. However, irrigation **return flows**, although considered point sources, are expressly exempted from the permit requirement.

Pollution — Alteration of the environment, as through the introduction of hazardous or detrimental substances, heat, or noise whose nature, location, or quantity produces adverse health or environmental effects. Under Section 502 of the **Clean Water Act**, for example, pollution means the man-made or man-induced alteration of the physical, biological, chemical, and radiological integrity of water.

Pork bellies — One of the major cuts of the hog carcass that, when cured, becomes bacon. **Futures contracts** for pork bellies are traded in the futures market.

Posted county price (PCP) — This price is calculated for wheat and feed grains for each county by the Farm Service Agency. The PCP reflects changes in prices in major terminal grain markets (of which there are 18 in the country), corrected for the cost of transporting grain from the county to the terminal. It is utilized under the **marketing loan** repayment provisions

and **loan deficiency payment** provisions of the wheat and feed grains **commodity programs**.

Postharvest — Refers to activities in the food and fiber sector that occur after agricultural products are sold from, or leave, the farm or ranch. In total, about 75% of the retail cost of the **market basket** of foods is added in postharvest activities.

Postmortem inspection — As used in the meat and poultry inspection program, the phrase refers to the inspection that **Food Safety Inspection Service** inspectors are required to conduct of all animal carcasses immediately after they are killed.

Poultry Products Inspection Act of 1957 — P.L. 85-172 (August 28, 1957), as amended by the Wholesome Poultry Products Act of 1968 (P.L. 90-492, August 18, 1968), requires USDA to inspect all “domesticated birds” when slaughtered and processed into products for human consumption. The USDA has defined, by regulation, domesticated birds as chickens, turkeys, ducks, geese, and guineas. The primary goals of the law are to prevent adulterated or misbranded poultry and products from being sold as food, and to ensure that poultry and poultry products are slaughtered and processed under sanitary conditions. These requirements also apply to products produced and sold within states as well as to imports, which must be inspected under **equivalent** foreign standards.

Poundage quota — A quantitative limit on the amount of a commodity that can be marketed (also called a **marketing quota**) under the provisions of a **permanent law**. Once a common feature of **price support** programs, this supply control mechanism now only restricts the production and/or sale of tobacco and peanuts.

Poverty guidelines — These are monthly or annual income amounts that are used to help determine eligibility for a number of federal food assistance and other programs. They are derived from the income poverty thresholds used by the Census Bureau in counting the number of poor persons, differ by household size, are adjusted upward for Alaska and Hawaii, are published by the Department of Health and Human Services early each spring, and are updated annually for overall inflation. For example, 130% of the income poverty guidelines is the limit for food stamp and free school lunch income eligibility.

PPB — Parts per billion

PPI — **Producer Price Index; Prices Paid Index**

PPIA — **Poultry Products Inspection Act**

PPM — Parts per million

PPT — Parts per trillion

PRA — **Paperwork Reduction Act**

Prairie potholes — A type of wetland characteristic of glaciated areas in the Upper Midwest (North Dakota especially) that is at the center of a shallow depression. Many potholes are wet during only a portion of the year, usually early spring. They provide important nesting habitat for migratory waterfowl, and were designated as a national **priority area** by the Secretary of Agriculture under the **Conservation Reserve Program**.

Precision farming — Farmers use global positioning (GPS) technology involving satellites and sensors on the ground and intensive information management tools to understand variations in resource conditions within fields. They use this information to more precisely apply fertilizers and other inputs and to more accurately predict crop yields.

Preharvest — Refers to activities on the farm or ranch that occur before crop or livestock products are sold. “Preharvest food safety activities,” for example, is a term often used to describe USDA’s efforts, through research and cooperative work, to foster changes in on-farm production that can reduce public health risks in live animals before they are sent to slaughter.

Preproduction expenses — Expenses incurred prior to the period when a farm activity begins producing, primarily raising orchard trees or breeding animals.

Prevented planting acreage — Land on which a farmer intended to plant a **program crop** or insurable crop, but was unable to because of drought, flood, or other natural disaster. Used in the calculation of disaster payments and crop insurance **indemnity payments**.

PRIA — Public Rangelands Improvement Act

Price elasticity of demand — The relationship between the change in the price of a commodity and the corresponding change in the quantity that is sold. If a small change in the price is accompanied by a relatively large change in the quantity sold, demand is said to be elastic (responsive to price changes). But if a large change in the price is accompanied by a small change in the quantity sold, demand is said to be inelastic. The demand for many farm products is relatively price inelastic. As a consequence the presence of surpluses results in disproportional large price declines, and conversely shortages result in disproportional large price increases. For these reasons, agriculture often is described as an inherently unstable industry.

Price index — Current price expressed as a proportion to the same price in an earlier time period, commonly called the base period. Monthly price indexes computed by the **National Agricultural Statistics Service** are the index of prices received by farmers and the index of prices paid by farmers for commodities and services, interest, taxes, and farm wage rates. The ratio of these two indexes is referred to as the **parity ratio**.

Price support — Programs operated by USDA that are intended to raise **farm prices** when supply exceeds demand and prices are unacceptably low. Support usually is achieved through nonrecourse loans, payments, and purchases. Some commodities are designated in the law to receive mandatory support; others may be supported at the discretion of USDA. Over time, policy changes have shifted toward farm income support and away from commodity price support.

Prices paid index— An index of prices that livestock and other agricultural producers pay for goods and services (including interest, taxes, and farm wage rates) used for producing farm products and in farm family living (1964-1968=100). Used in calculating the federal **grazing fee**, among other purposes. It is referred to as the **parity** index when computed on a 1910-14=100 base.

Prices received index — An index of the prices received by farmers for agricultural products. Commodities are weighted by their share of total farm marketings. The prices received index and the **prices paid index** are used to calculate the **parity ratio**.

Prime farmland — Land that is best suited to and available for the production of food, feed, forage, fiber, and oilseed crops. It can be cropland, pastureland, rangeland, forestland, or other land. It has the soil quality, growing season, and moisture needed to produce high yields of crops each year economically, if managed according to acceptable farm practices. Prime farmland produces the highest yields with minimal expenditure of energy and economic resources and does so with the least damage to the environment. Of the 334 million acres of prime farmland, 216 million are in cropland use, according to the 1992 **national resources inventory**. See also **unique farmland**.

Prior appropriations — The system of water allocation used primarily in the arid western United States, where water is scarce. Under this system, earlier claims have priority over later claims, and claims are associated with specific volumes of water. Rights to water can be lost if they are not used.

Prior converted wetland — Under the **swampbuster program**, these are **wetlands** that were converted to cropland before swampbuster was enacted on December 23, 1985, and meet wetland criteria for saturated soils or water-loving plants. Under swampbuster, there are no restrictions on either drainage maintenance or additional drainage on prior converted wetlands, which are estimated to total more than 50 million acres.

Private grazing land lease rate index — See **forage value index**.

Private voluntary organization (PVO) — A nongovernmental, nonprofit organization that provides economic and social assistance to people in need, often in foreign countries. PVOs play an important role, along with cooperatives, in distributing U.S. food aid and implementing development projects under **P.L. 480** Title II.

PRN — Pesticide registration notice

Producer subsidy equivalent (PSE) — A measure of the value of monetary transfers to agricultural producers resulting from agricultural policies in a given year. It includes both transfers from consumers of agricultural products (through domestic market **price supports**) and transfers from taxpayers (through budgetary or tax expenditures).

Production Credit Association (PCA) — **Farm Credit System** institutions that have direct lending authority to make short and intermediate term loans to eligible retail customers.

Production expenses — Measures the aggregate business cost of farming. The two main components are current farm operating expenses and overhead costs. Farm production expenses are accounted for differently in the **farm income** measures. Only production expenses paid in cash are included in **net cash farm income**. **Gross farm income** and **net farm income** include both cash and noncash production expenses. Non-cash expenses include such overhead costs as charges for depreciation and other capital consumption associated with farm buildings and other structures, motor vehicles, farm machinery and equipment, and expenses associated with farm operator dwellings.

Production flexibility contract — A 7-year contract covering crop years 1996-2002, authorized by the **FAIR Act of 1996** between the CCC and farmers, which makes fixed income support payments in place of the previous variable target price **deficiency payments**. Farmers are given production flexibility and diversification options on their **contract acres** not previously allowed on **base acres**. Each farm's **total payment** is the **payment rate** times the **payment quantity** for participating base acres. In exchange for annual fixed

payments, the owner or operator must agree to comply with the applicable conservation plan for the farm, the wetland protection requirements currently in law, and the constraints on growing fruits and vegetables on contract acres. Land enrolled in a contract must be maintained in an agricultural or related activity. The law states that not more than \$35.6 billion will be paid over the 7-year period, in declining annual amounts from \$5.3 billion in FY1996 to \$4.0 billion in FY in 2002. The annual payments are allocated among commodities similar to historical deficiency payments, with 53.6% going to feed grains, 26.3% for wheat, 11.6% for upland cotton, and 8.5% for rice.

Productivity — A measure of technical efficiency, typically expressed as the added output for an additional unit of input or the average output per unit of input, i.e., labor, land, capital productivity.

Program crops — Program crops was the expression for those crops eligible for **deficiency payments** under **commodity program** provisions that ended in 1995. These were wheat, **feed grains**, cotton, and rice. These same crops are now called **contract commodities** because they are eligible for **production flexibility contract** payments. Other commodities receiving support include extra long staple cotton, soybeans and other oilseeds, tobacco, peanuts, sugar, and milk.

Program yield — The farm commodity yield of record, determined, in general, by averaging the yield of a particular commodity for the past 5 years, dropping the high and low years. This yield was used in calculating **deficiency payments** under prior laws, for example, and for calculating **contract payments** for **production flexibility contracts** under the **FAIR Act of 1996**. Program yields remained frozen at their 1985 levels from that date forward.

Projected yield — The number of bushels (or pounds or hundredweight) per acre that, based on current weather estimates and other factors, USDA analysts estimate farmers will harvest.

Promotion program — Any program by an approved **commodity promotion** board or **marketing order**, including paid advertising, to present a favorable image of an agricultural commodity to the public to stimulate sales and improve the competitive position of the commodity in the marketplace. Funds are collected through a mandatory **check-off** on marketings to finance the promotion activities.

Prorate — A quantity provision in a fruit or vegetable **marketing order** that is intended to even out weekly shipments (or shipments for some other specified periods of time); it aims to prevent too much of the regulated commodity from entering the commercial market at the same time and depressing prices.

PSA — Packers and Stockyards Act

PSE — Producer subsidy equivalent

Pseudorabies — A disease of swine that can cause severe economic losses due to reproductive problems and fatal infection of other domestic livestock. The **Animal and Plant Health Inspection Service** began a cooperative federal-state-industry eradication program in 1989 that is expected to be completed by 1999.

Public elevators — Grain elevators in which bulk storage of grain is provided for the public for a fee. Grain of the same grade but owned by different persons is usually mixed or

commingled as opposed to storing it “**identity preserved**.” Some elevators are approved by exchanges as “regular” for delivery on futures contracts.

Public lands — As defined in the **Federal Land Policy and Management Act**, public lands are any land and interest in land outside of Alaska owned by the United States and administered by the Secretary of the Interior through the Bureau of Land Management. In common usage, public lands may refer to all federal land no matter what agency has responsibility for its management or may refer even to state- and local municipality-owned lands.

Public Rangelands Improvement Act of 1978 (PRIA) — P.L. 95-514 (October 25, 1978) defines the current grazing fee formula and establishes rangeland monitoring and inventory procedures for **Bureau of Land Management** and **Forest Service** rangelands. The **National Grasslands** are exempt from PRIA.

Puerto Rico Block Grant — A federal **nutrition assistance program** provided in lieu of food stamps.

Purchaser road credits — Credits granted to purchasers of timber in the national forests in exchange for the construction of permanent roads specified in the timber sale contract. The amount of the credits is the **Forest Service’s** estimate of construction costs, and the credits can be used to pay for timber cut. Occasionally, when **stumpage prices** are at or near the **base rates**, some or all of the credits cannot be used, and are then termed ineffective road credits.

Put option — An **option contract** to sell a **futures contract** at an agreed price and time at any time until the expiration of the option. A put option is purchased to protect against a fall in price. The buyer pays a premium to the seller of this option. The buyer has the right to sell the futures contract or enter into a **short** position in the futures market if the option is exercised. See also **call option**.

PVO — **Private voluntary organization**

QA/QC — Quality assistance / quality control

QR — **Quantitative restriction**

Quantitative restrictions, trade — Quantitative restrictions are limitations on the quantity or value of a product that may be permitted to enter a country. They are probably the most familiar of the **nontariff barriers** and include **quotas**, **embargoes**, restrictive licensing, and other means of limiting imports. The **Uruguay Round** Agreement on Agriculture requires the conversion of quantitative restrictions to **bound tariffs** and **tariff rate quotas**.

Quotas, import — A quantitative limit placed on the importation of specific commodities. The protection afforded by quotas is more certain than can be obtained by raising import **duties** as the effect of the latter will depend on the price elasticities of the imported commodities. Quotas, like **tariffs**, can also be used to favor preferred sources of foreign supply. Quotas may be specified as an absolute limit or changed from year to year in response to changes in domestic supply and demand.

R&D — Research and development

Range Betterment Fund — Money collected from livestock grazing on federal lands and used for **rangeland** improvements. The **Bureau of Land Management** calls these funds Range Improvement Funds and uses them solely for labor, materials, and final survey and design of projects to improve rangelands. The **Forest Service** calls these funds Range Betterment Funds and uses them for planning and building rangeland improvements.

Range Improvement Fund — See **Range Betterment Fund**.

Rangeland — Land on which the natural potential (climax) plant cover is principally native grasses, grasslike plants, and shrubs. It includes natural grasslands, savannahs, certain shrubs and grasslike lands, most deserts, tundra, alpine communities, coastal marshlands, and wet meadows. It also includes lands that are revegetated naturally or artificially and are managed like native vegetation. The United States has 399 million acres of non-federal rangeland, about 30% of all non-federal rural lands, according to the 1992 National Resources Inventory. The BLM manages approximately 167 million acres of federal rangelands, and the Forest Service manages approximately 95 million acres of federal rangelands.

Ratite — A family of large flightless birds that include ostriches, emus, and rheas, which U.S. farmers are beginning to domesticate and raise for food. Ratite inspection has become a policy issue because producers want USDA to include them under the mandatory meat and poultry inspection laws. If plants that slaughter and process these birds were under mandatory inspection, most of the cost would be covered by taxpayers. Currently, such plants must pay for USDA inspection on a fee-for-service basis, under a voluntary ratite inspection program instituted in 1995 under authority of the **Agricultural Marketing Act of 1946**.

Raw agricultural product — The **Federal Food, Drug, and Cosmetic Act** defines this term as “any food in its raw or natural state, including all fruits that are washed, colored, or otherwise treated in the unpeeled natural form prior to marketing.” The nonregulatory definition generally means any agricultural commodity that has undergone little or no processing.

RBS, RBCS — Rural Business-Cooperative Service

RC — Regional conservationist

RC&D — Resource Conservation and Development Program

RCA — Soil and Water Resource Conservation Act of 1977

RCAP — Rural Community Advancement Program

RCD — Resource Conservation District

RCRA — Resource Conservation and Recovery Act

RD — Rural development

RD&D — Research, development and demonstration

RDA — Recommended dietary allowance

rDNA — Recombinant DNA

REC — Rural electric cooperative

Reclamation — The process of rehabilitating disturbed lands, or converting unproductive lands to productive uses. The term is also used for the process of recycling or reusing water. In the context of the **Reclamation Act** and **reclamation law**, it means putting arid lands to use through irrigation.

Reclamation Act of 1902 — P.L. 57-161 (June 17, 1902), as amended, appropriated the receipts from the sale and disposal of public lands and resources in 17 western states to the construction of irrigation works for the **reclamation of arid lands**. Amendments made by the **Reclamation Project Act of 1939** gave the Department of the Interior, among other things, the authority to amend repayment contracts and to extend repayment for not more than 40 years. Amendments made by the **Reclamation Reform Act of 1982** (RRA) eliminated the residency requirement provisions of reclamation law, raised the **acreage limitation** on lands irrigated with **full-cost** water, and established and required **full-cost** rates for land receiving water above the acreage limit.

Reclamation fund — A special fund established by Congress under the **Reclamation Act of 1902**, as amended, for receipts from the sale of **public lands** and timber, proceeds from the **Mineral Leasing Act**, and certain other revenues. Congress appropriates money from this fund for the investigation, construction, operation, and administration of Bureau of Reclamation projects. Collections from water users for payments made on the reimbursable costs of the federal projects are also returned to the fund.

Reclamation law — The body of law beginning with the **Reclamation Act of 1902** that governs investigation, construction, and operation of Bureau of Reclamation projects.

Recombinant DNA (rDNA) — The technique of isolating DNA molecules and inserting them into the DNA of a cell (“recombining DNA”). Also known as genetic engineering.

Recommended dietary allowances (RDAs) — Levels of essential nutrients that, on the basis of scientific knowledge, are judged by the Food and Nutrition Board (FNB of the Institute of Medicine at the National Academy of Sciences), to be adequate to meet the known nutrient needs of practically all healthy persons. They are designed to provide a safety factor appropriate for each nutrient and exceed the actual requirements of most persons whose individual nutrient needs vary.

Record of decision — The document signed by a responsible official recording a decision following the preparation and consideration of an **environmental impact statement**.

Recourse loan program — Under the **FAIR Act of 1996**, recourse loans are available to producers of high moisture corn and seed cotton, dairy processors, and sugar processors. The commodity is pledged as security, but in contrast to **nonrecourse loans**, the borrower must repay the loan with interest within a specified period. The recourse loan program for butter, nonfat dry milk, and cheese begins in 2000. Loans for sugar are recourse when the **tariff-rate import quota** is below 1.5 million short tons. However, such loans revert to nonrecourse status if the tariff-rate import quota is equal to or above 1.5 million short tons.

Recycle / reuse — Minimizing waste generation by recovering and reprocessing usable products that might otherwise become waste (i.e., recycling of aluminum cans, paper, and bottles, etc.).

Reduced price lunch (or breakfast, supper, snack) — A federally reimbursable meal (or snack) served to a child who applies for and qualifies because the family's income is between 130% and 185% of the federal income poverty level. Schools may not charge more than 40 cents for reduced price lunches, or more than 30 cents for reduced price breakfasts.

REE — Research, education and economics (a mission area within USDA)

Reentry interval — The period of time immediately following the application of a pesticide during which unprotected workers should not enter a field.

Referendum — In agriculture, referendum generally refers to a vote by farmers on whether to approve or disapprove a **farm program**, such as mandatory production or marketing controls, **assessments** for generic **commodity promotion**, or **marketing orders**.

Registrant — Any manufacturer or formulator of a **pesticide** who obtains registration for an **active ingredient** or product.

Registration — EPA approval of a new **pesticide** for specific uses before it can be sold or distributed in the United States. Under the **Federal Insecticide, Fungicide, and Rodenticide Act**, EPA is responsible for registering (pre-market licensing) pesticides based on scientific evidence that the approved use will result in no unreasonable adverse effects on human health or the environment when applied according to approved label directions. The label on a registered pesticide specifies the legal obligations of the user in terms of uses, timing, and rates of application.

Regulatory Flexibility Act (RFA) — P.L. 96-354 (September 19, 1964) requires federal agencies to consider the special needs and concerns of small business entities whenever they engage in rulemaking subject to notice and comment requirements of the **Administrative Procedures Act** or other laws. In most cases, when an agency publishes a proposed rule in the **Federal Register**, it must prepare and publish a regulatory flexibility analysis describing the impact on small businesses.

Reinsurance companies — Private companies that sell federal crop insurance policy. The private company conducts all activities to serve the client and is reinsured by the **Federal Crop Insurance Corporation** against most operational and actuarial losses.

Renewable resources — Natural resources, such as soil and water, that replenish themselves within the limits of human time. Sometimes defined as flow resources. Alternatively, the surface resources from forests and rangelands, including timber, livestock forage, recreation, water, and wildlife and fish. Mineral and petroleum resources are **nonrenewable**, or stock resources.

Repayment contract — A contract between a water user's organization and the Bureau of Reclamation by which the organization obligates itself to repay a share of the reimbursable construction and other costs (not all construction costs are reimbursed by water users) of a Bureau project in installments determined in accordance with **reclamation law** in exchange for delivery of water.

Reregistration — The reevaluation and reapproval by EPA of **pesticides** originally registered prior to 1984. The purpose of reregistration is to evaluate and approve the older formulations against modern scientific and regulatory standards. The process is scheduled to be completed on the older **active ingredients** by the end of 2002.

Reserve pool — A quantity provision in a fruit or vegetable **marketing order** that requires that some marketable supplies be withheld from the fresh market to be used instead in a so-called secondary market such as for frozen or processed forms, for a nonfood use, or stored for sales in a future marketing year.

Residual supplier — A country that supplies the world market only after importers have met their initial needs from preferred suppliers. A residual supplier is not initially competitive because of high prices or lower quality. The United States used to be considered a residual supplier of grains and cotton because its commodity support programs kept its prices higher than those of competing exporters.

Resistance, pesticide — The evolutionary capacity of pests to thrive despite exposure to a pesticide. Some **genetically engineered** crops now being marketed are accompanied by a plan to prevent or substantially retard the development of resistance.

Resource Conservation and Development Program (RC&D) — The RC&D program, initiated in 1962 under authority of **Food and Agriculture Act of 1962** (P.L. 87-703), assists multi-county areas in enhancing conservation, water quality, wildlife habitat, recreation and rural development. Work in each area is coordinated by a council. At present, 269 areas have been approved; they cover 60% of the private land in the country.

Resource Management Plan (RMP) — A BLM planning document, prepared in accordance with Section 202 of the **Federal Land Policy and Management Act**. The plan contains guidelines for making resource management decisions for specific areas managed by BLM, known as resource areas.

Restricted-use pesticides — A **pesticide** may be classified for restricted use if it requires special handling because of its toxicity. These may be applied only by trained, certified applicators or those under their direct supervision.

Return flow — Surface and subsurface water that leaves the field following application of **irrigation** water. While irrigation return flows are a “**point source**,” they are expressly exempted from permit requirements under the **Clean Water Act**.

Revenue insurance — A program that provides coverage to producers against lost revenues (or incomes) caused by low prices, low yields, or a combination of low prices and low yields. An indemnity is paid to a producer when any combination of yield and price results in revenue that is less than a pre-specified revenue guarantee. The **FAIR Act of 1996** mandates a USDA pilot program for crop years 1997-2000 under which producers of feed grains, wheat, soybeans, and other crops in specified areas may elect to receive insurance against loss of revenue. The two largest pilot programs to date are the Crop Revenue Coverage (CRC) program and the Income Protection (IP) program. The two programs are similar, except that the CRC allows farmers to insure their revenue at either planting-time prices or harvest prices, whichever is higher. The full cost of the premium associated with CRC and IP is paid by the participating farmer.

Revised universal soil loss equation (RUSLE) — Revisions to the **universal soil loss equation** implemented in the mid 1990s to more accurately predict soil **erosion** caused by water. It includes the same factors as the earlier formula; climate, soils, topographic conditions, and the degree to which the use and management of the soil reduces erosion. But it takes advantage of new knowledge about these relationships and the capabilities of computer

technology. The comparison between predicted erosion and **T-value** is important in making and carrying out **conservation plans** and achieving **conservation compliance**.

Revolving loan program — A program that uses the repayments of existing loans to make additional loans to qualified borrowers. Initial capitalization of a revolving loan fund may be derived from federal appropriations or contributions from other sources.

RFA — Regulatory Flexibility Act

RHS — Rural Housing Service

RIA — Regulatory impact analysis/assessment

Rill erosion — An **erosion** process in which numerous small channels, typically a few inches deep, are formed. It occurs mainly on recently cultivated soils or on recent cuts and fills.

Riparian — Pertaining to or situated on or along the bank of a stream or other body of water. Often referred to in the context of cattle grazing and protection of streams for fish and wildlife habitat, and water quality purposes. **Riparian rights** refers to the entitlement of a land owner to certain uses of water on or bordering the property, including the right to prevent diversion or misuse of upstream waters (generally a matter of state law).

Riparian buffer — A strip of vegetation planted along the bank of a body of water which slows the rate of flow of runoff from adjoining uplands, causing sediment and other materials to fall out onto the land before the runoff enters and pollutes the body of water.

Riparian rights— The system of water allocation used in the humid eastern portion of the United States. Water may be used only by riparian landowners and is recognized that all users will experience shortages periodically. In contrast with the **prior appropriations** system used in the arid West, water is not acquired by use, and access to it cannot be lost by lack of use.

Risk assessment — The qualitative and quantitative evaluation of risks posed to health or the environment that arise from an activity, chemical use, or technology. The process includes describing potential adverse effects, evaluating the magnitude of each risk (e.g., the toxicity of a chemical), estimating potential exposure to the chemical or other hazard, estimating the range of likely effects given the likely exposures, and describing uncertainties.

Risk-benefit analysis — Comparison of the short- and long-term risks to the overall societal benefits of an activity, chemical use, or technology. When risks and benefits are expressed in monetary terms, this is effectively cost-benefit analysis. Both the **Federal Insecticide, Fungicide, and Rodenticide Act** and the **Toxic Substances Control Act** direct EPA to base regulatory decisions on a risk-benefit or cost-benefit basis.

Risk management — The process of deciding whether and how to manage risks. Public risk management requires consideration of legal, economic, and behavioral factors, as well as environmental and human health effects of each management alternative. Management may involve regulatory and non-regulatory responses. For example, characterizing the risk to farm workers of entering a field after application of a particular pesticide is **risk assessment**; promulgating **reentry** standards is risk management. The federal government has played an active role over the years in helping farmers manage risk. The two major risks faced by agricultural producers are production risks and price risks, and the USDA has assisted with

federal **crop insurance** and **commodity programs**. The **Risk Management Agency** is now helping farmers utilize other risk management tool.

Risk Management Agency — An independent office within USDA that is responsible for the supervision of the **Federal Crop Insurance Corporation**; the administration and oversight of the federal **crop insurance** program and any pilot or other programs involving **revenue insurance**; the use of the **futures contracts** to manage farm risk and support income. <http://www.act.fcic.usda.gov/>

RMA — **Risk Management Agency**

RMP — **Resource Management Plan**

Rodenticide — A **pesticide** used to destroy, control, or deter rats or other rodent pests from damaging food, crops, etc.

RPA assessment / program — As required by the **Forest and Rangeland Renewable Resources Planning Act of 1974**, the **Forest Service** makes a periodic (every 10 years) national assessment of **renewable resource** supplies, demands, and trends, to identify potential problems and opportunities. In response to the problems and opportunities identified in the assessment, the Forest Service prepares a periodic (every 5 years) national strategic program plan.

RPA — **Forest and Rangeland Renewable Resources Planning Act of 1974**

RPAR — Rebuttable presumption against registration

RRA — **Reclamation Reform Act**

RTB — Rural Telephone Bank

RUAP — Rural Utilities Assistance Program

Ruminant — An animal with a stomach that has four compartments, and a more complex digestive system than other mammals. Ruminants include cattle, sheep, goats, deer, bison, elk, and camels. Swine, dogs, and humans are examples of nonruminants.

Runoff, direct — Water that flows over the ground surface or through the ground directly into streams, rivers, and lakes. Runoff is the cause of **rill erosion** and a source of **nonpoint pollution**.

RUP — **Restricted use pesticide**

Rural — The Bureau of the Census defines the rural population (in contrast to urban) as all persons living in the open country, plus those in places of less than 2,500 inhabitants that are beyond the densely settled (1,000 or more persons per square mile) suburban fringes of metropolitan cities. However, the **Rural Development Act of 1972** defines rural as any area not included in any city or town with a population in excess of 10,000 inhabitants.

Rural Business-Cooperative Service (RBS) — One of three USDA agencies charged with implementing rural development policies and programs. The RBS provides loans,

guarantees, technical assistance, and grants to rural businesses and cooperatives. See also **Rural Housing Service** and **Rural Utilities Services**. <http://www.rurdev.usda.gov/rbs/>

Rural Community Advancement Program (RCAP) — A program established by the rural development Title of the **FAIR Act of 1996** under which USDA is authorized to provide **state rural development block grants**, direct and guaranteed loans, and other assistance to meet rural development needs across the country. Program funding will be allocated to three areas: (1) rural community facilities, (2) rural utilities, and (3) rural business and cooperative development. See **Rural Development Trust Fund**.

Rural Development Trust Fund — Authorized under the **FAIR Act of 1996** the trust fund is used to distribute **Rural Community Assistance Program** funds. Funds are allocated among states based on such factors as rural population, income, and unemployment.

Rural Electric Cooperatives — There are 874 electric distribution cooperatives and 60 generation and transmission cooperatives in the United States, which provide electric service to some 30 million people in 46 States. Reflecting their rural location, these cooperatives account for 7.4% of the kilowatt hours sold, but they maintain nearly half of the nation's electric distribution lines. Rural electric cooperatives have access to insured and guaranteed loans from USDA's **Rural Utility Service**. Insured loans primarily finance the construction of facilities for the distribution of electric power in rural areas. Guaranteed loans primarily finance generation and bulk transmission facilities for power supply borrowers.

Rural Electrification Administration — The predecessor USDA agency to the **Rural Utilities Service** charged with administering certain telephone and **rural electric cooperative** loan programs.

Rural Housing Service (RHS) — The USDA agency responsible for administering the housing programs including direct loans, loan guarantees, rental assistance payments, and grants for low income families residing in rural areas. The agency also administers the **community facility** loan and grant programs. <http://www.rurdev.usda.gov/agency/rhs/rhs.html>

Rural Utilities Service (RUS) — An agency within USDA charged with administering activities that support rural telecommunications, **distance learning and telemedicine**, electrical, and water and waste disposal activities. RUS assistance can be provided in the form of direct and guaranteed loans, and grants. <http://www.usda.gov/rus/home/home.htm>

Rural home loans — **Section 502 loans** are available through the **Rural Housing Service** to low- and moderate-income rural households to purchase and repair of single-family homes.

Rural home repair loans and grants — **Section 504 Loans and grants** are available through the **Rural Housing Service** to lower income rural homeowners for making repairs.

Rural housing preservation grants — **Section 533 grants** are available through the **Rural Housing Service** for repairing and rehabilitating rural housing for low- and very low-income families.

Rural Housing Service (RHS) — USDA's Rural Housing Service administers various housing programs intended to aid in the development of rural America. Rural housing programs are divided into three categories: community facilities, single family housing, and

multi-family housing. These programs were formerly operated by the Rural Development Administration and the Farmers Home Administration.

Rural multifamily housing loans — Section 515 loans are available through the **Rural Housing Service** for providing rental housing for low- and moderate-income families in rural areas, and for congregate housing for the elderly and handicapped.

Rural rental assistance — Section 521 rental assistance available through the **Rural Housing Service** reduces out-of-pocket cash that very-low-income and low-income families pay for rent, including utilities.

RUS — Rural Utilities Service

RUSLE — Revised universal soil loss equation

S/U — Stocks-to-use ratio

S-K — Saltonstall-Kennedy Grant Program

S&D — Special and differential treatment

S&PF — State & Private Forestry

SAB — Science Advisory Board

SAC — Suspended and canceled pesticides

SAES — State Agricultural Experiment Stations

SAF — Society of American Foresters

Safe Drinking Water Act (SDWA) — P.L. 93-523 (December 16, 1974) as amended, is the key federal law for protecting public water systems from harmful contaminants. First enacted in 1974, the Act, as amended, is administered by the EPA through regulatory programs that establish standards and treatment requirements for drinking water contaminants, control underground injection of wastes that might contaminate water supplies, and protect ground and surface water sources. Regulated public water systems under the Act are those that have at least 15 service connections or regularly serve 25 or more individuals. The 1996 amendments (P.L. 104-182) broadened the definition of “public water system” to include systems that deliver water through pipes or “other constructed conveyances,” and intended to include agricultural irrigation systems that convey water through open viaducts or ditches (unless the water is not used for “residential uses”, or unless alternative water is provided for drinking and cooking; or unless water for drinking, cooking, and bathing is treated). The 1996 amendments also require states to identify, to the extent practicable, origins of contaminants in areas providing source waters for public water systems to determine the susceptibility of systems to contamination.

Safe Meat and Poultry Inspection Panel — A permanent advisory panel that could be created under a provision of the **FAIR Act of 1996**. The panel would review and evaluate inspection policies and procedures and any proposed changes to them.

Safeguards, import — A trade policy tool available to temporarily increase border protection for designated commodities and products. Its purpose is to allow a producing sector to adjust to changed market conditions before facing competition again without such protection. For agricultural products subject to **tariffication**, the **Uruguay Round**'s Agreement on Agriculture (Part I, Article 5) establishes a special agricultural safeguard that allows countries to impose an additional **duty** when sudden import surges (volumes) exceed, or import prices fall below, a trigger level. The United States has announced quantity and price trigger levels for those products whose imports were previously restricted using **Section 22** fees and quotas and for which **tariff-rate quotas** are now in place: beef, mutton, 18 dairy products, peanuts, peanut butter and paste, raw cane sugar, refined sugar and syrups, eight types of sugar-containing products, mixed condiments and seasonings, animal feed containing milk, and six cotton categories. The **North American Free Trade Agreement (NAFTA)** includes a special agricultural safeguard to provide added protection against import surges of six seasonal vegetables and fruit from Mexico until tariffs are completely phased out by year-end 2003. Covered by this safeguard are U.S. imports from Mexico of fresh tomatoes, eggplant, chili peppers, squash, onion and shallots, and watermelon during specified time periods. Comparable safeguards exist on Mexican imports from the United States of 17 categories of goods that include live swine, certain pork products, certain potato products, fresh apples, and coffee extract. NAFTA provides that no such special safeguard may be maintained on a good if it is the subject of an emergency action. Both the **Uruguay Round** and **NAFTA** special safeguard provisions differ from broader import relief authority laid out in **Section 201** of the **Trade Act of 1974**.

Sales for local currencies — A provision of **P.L. 480** permits a portion of commercial sales (under Title I) to be repaid in the country's local currency.

Salmonella — A pathogenic, diarrhea-producing bacterium that is the leading cause of human foodborne illness among intestinal pathogens. It is commonly found in varying amounts in raw meats, poultry, milk, and eggs, but other foods can carry it. Under 1996 rules published by USDA to control pathogens in meat and poultry, all plants that slaughter food animals and that produce raw ground meat products must meet and stay below a standard national incidence rate for *salmonella* contamination. The standards, which take effect in January 1998, vary by product. Plants where USDA testing indicates contamination rates are above the national standard will be required to take remedial actions.

Salvage rider — Section 2001 in the Emergency Supplemental Appropriations Act of 1995 (P.L. 104-19, July 27, 1995) to expand salvage timber sales from July 27, 1995 through December 31, 1996, by exempting them from public challenges under environmental laws; also controversial because it reinstated numerous timber sales in Washington and Oregon that had been stopped to protect **endangered** and **threatened species** habitat.

Salvage sales — Timber sales from **national forests** to remove dead, infested, damaged, or down trees and associated trees for stand improvement; controversial partly because there are no standards for the number or proportion of trees that must be dead, infested, damaged, or down and partly because the **Forest Service** retains at least some of the revenues to prepare and administer future salvage sales.

Sample grade — In commodities, usually the lowest quality of a commodity, too low to be acceptable for delivery in satisfaction of **futures contracts**.

Sanitary and phytosanitary (SPS) measures and agreements — Measures to protect humans, animals, and plants from diseases, pests, or contaminants. The final act of the

Uruguay Round of the Multilateral Trade Negotiations contains “The Agreement on the Application of Sanitary and Phytosanitary Measures.” It applies to all sanitary (relating to animals) and phytosanitary (relating to plants) (SPS) measures that may have a direct or indirect impact on international trade. The SPS agreement includes a series of understandings (trade disciplines) on how SPS measures will be established and used by countries when they establish, revise, or apply their domestic laws and regulations. Countries agree to base their SPS standards on science, and as guidance for their actions, the agreement encourages countries to use standards set by international standard setting organizations. The SPS agreement seeks to ensure that SPS measures will not arbitrarily or unjustifiably discriminate against trade of certain other members nor be used to disguise trade restrictions. In this SPS agreement, countries maintain the sovereign right to provide the level of health protection they deem appropriate, but agree that this right will not be misused for protectionist purposes nor result in unnecessary **trade barriers**. A rule of **equivalency** rather than equality applies to the use of SPS measures.

Sanitation standard operating procedures (SSOPs) — Refers to the cleaning procedures that meat and poultry plants use, both before and during production, to prevent contamination of products. Site-specific SSOPs were required to be implemented in January 1997 by all slaughter and processing plants, under the comprehensive pathogen reduction regulations issued by USDA in July 1996.

SAB — Science Advisory Board

SAP — Scientific Advisory Panel

SARE — Sustainable Agriculture Research and Extension Program

SBP — School Breakfast Program

SC; STC — State conservationist

Scaling — A method for **Forest Service** personnel, or an independent third-party, to measure the volume of timber actually removed as a result of a timber sale. Scaled sales are a timber sales that use scaling for billing purchasers at the **stumpage price** for the timber cut.

SCD/SWDC — Soil Conservation District; or Soil and Water Conservation District

School Breakfast Program — Federal meal service program that, in FY1996, provided federal reimbursements for over 1.1 billion breakfasts served in nearly 62,000 schools to 6.6 million children. Authorized by the **Child Nutrition Act of 1966**, federal funding is provided in the form of cash reimbursements for each breakfast served, varied in amount by the family income of the participating child. All children in participating schools and residential institutions are eligible for a federally subsidized meal, regardless of family income. However, **free meals** must be offered to children from families with incomes below 130% of the federal poverty income level, and **reduced price** meals to those with family incomes between 130 and 185% of the poverty level.

School Lunch Program — See **National School Lunch Program**.

School meals initiative for healthy children — Initiative undertaken by the Food and Consumer Service (FCS) of USDA to revise and update the nutrition standards of school meals and bring them into compliance with the Dietary Guidelines for Americans.

Science Advisory Board — A group of independent scientists selected by the Administrator of EPA to advise on the scientific and technical aspects of environmental problems and issues and who, at the request of the Administrator, review the scientific aspects of any reports or other written products prepared by the agency. Congress established the Board when it enacted the Environmental Research, Development, and Demonstration Authorization Act of 1978 (P.L. 95-477).

Scientific Advisory Panel — Formally known as the FIFRA Scientific Advisory Panel, this group of independent scientists was authorized by the **Federal Insecticide, Fungicide, and Rodenticide Act**. Its purpose is to provide scientific advice to EPA on pesticides and pesticide-related issues.

Scrapie — A fatal, degenerative neurological disease of sheep and goats. The similarity of scrapie to **bovine spongiform encephalopathy (BSE)** (mad cow) disease in cattle, with the possibility of subsequent transmission to humans, has caused the **Food and Drug Administration** to propose regulations to prohibit using sheep and goat by-products as a component in cattle feeds. The **Animal and Plant Health Inspection Service** also conducts a “voluntary scrapie flock certification program” to certify scrapie-free herds.

SDWA — Safe Drinking Water Act

SE — Salmonella enteritidis

SEC — Office of the Secretary; Securities and Exchange Commission

Section 3 lands — Public lands within a **grazing district** administered by the **Bureau of Land Management** under Section 3 of the **Taylor Grazing Act of 1934**. BLM authorizes livestock grazing on these lands by issuing permits to permittees. Section 3 lands make up the vast majority of BLM-administered lands.

Section 4 general or basic assistance — This refers to the section of **National School Lunch Act** requiring the federal government to subsidize all lunches served through the school lunch program, regardless of the income of the participant. Sometimes referred to as **paid** or **full-price** lunches because children buying meals pay most of the cost, as opposed to those getting **free lunches** or those paying not more than 40 cents for a **reduced price**.

Section 11 special assistance - This refers to the section of **National School Lunch Act** that provides additional cash reimbursements (or so-called special assistance payments) for **free lunches** and **reduced price lunches** to children from lower income families.

Section 15 lands — Public lands outside a **grazing district** administered by **Bureau of Land Management** under Section 15 of the **Taylor Grazing Act of 1934**. The BLM authorizes livestock grazing on these lands by issuing leases private parties.

Section 22 — A provision of permanent agricultural law (**Agricultural Adjustment Act Amendment of 1935**) that allows the President to impose **import fees** or import **quotas** to prevent imports from non-WTO member countries from undermining the **price support**

and **supply** control objectives of domestic **farm programs**. Legislation implementing NAFTA and the **Uruguay Round** Agreement on Agriculture exempts NAFTA partners and WTO member countries from Section 22 quotas and fees. Under both trade agreements, the United States converted then-in-effect Section 22 restrictions into **tariff-rate quotas**. This effectively eliminates Section 22 as a tool to shield domestic price support operations.

Section 32 — Section 32 of **Agricultural Adjustment Act Amendment of 1935** was enacted to widen market outlets for surplus agricultural commodities as one means of strengthening **farm prices**. Section 32 programs are financed by a permanent appropriation equal to 30% of the import **duties** collected on all items entering the United States under the customs laws, plus any unused balances up to \$300 million. Most funds are annually transferred by appropriators to pay for **child nutrition programs**, although a portion of money is reserved to buy perishable commodities (mainly produce, meat, and poultry products) that are in surplus. Section 32 funds were used to finance the **Cottonseed Oil Assistance Program** and **Sunflower Oil Assistance Program** export subsidy programs, which were effectively terminated in the **FAIR Act of 1996**.

Section 201 — A section of the **Trade Act of 1974** that permits the President to grant temporary import relief, by raising import **duties** or imposing **nontariff barriers** on goods entering the United States that injure or threaten to injure domestic industries producing like goods. This provision is the analog of GATT Article 19, which allows GATT contracting parties to provide relief from injurious competition when temporary protection will enable the domestic industry to make adjustments to meet the competition.

Section 301 — A section of the **Trade Act of 1974** that authorizes the President to take all appropriate action, including retaliation, to obtain the removal of any act, policy, or practice of a foreign government which violates an international trade agreement or is unjustified, unreasonable, or discriminatory, and which burdens or restricts U.S. commerce.

Section 404 — A provision of the **Clean Water Act** establishing a program regulating the discharge of dredge or fill material into the nation's waters. Permits for individual dredge or fill activities are issued by the Army Corps of Engineers, subject to guidelines prepared by EPA. Primarily because this program can impact economic development by restricting the filling of wetlands, it has been controversial. It applies to agricultural, as well as non-agricultural lands. However, normal farming operations, **silviculture**, and ranching activities—such as plowing, cultivating, and minor drainage, and the construction and maintenance of farm and stock ponds, irrigation and drainage ditches, and farm and forest roads—are exempted by law from the permit requirements of this program. In addition, Section 404 authorizes “general permits” for certain activities, including several agricultural ones, so that individual landowners need not apply for a permit. For example, there are general permits for cranberry bogs and for rice culture.

Section 416 — A section of the **Agricultural Act of 1949** that provides for the disposition of agricultural commodities held by the **Commodity Credit Corporation** to prevent waste. Disposal is usually carried out by donation of commodities to charitable groups and foreign governments.

Section 502 loans — A rural housing loan program, administered by USDA's **Rural Housing Service** (RHS), authorized under Section 502 of the **Housing Act of 1949**. Borrowers may obtain loans for purchasing or repairing new or existing single-family housing. Loans are made directly by RHS or by private lenders with a USDA guarantee. Borrowers with income of 80% or less of the area median may be eligible for 33-year direct loans and may

receive interest credit to bring the interest rate to as low as 1%. In a given fiscal year, at least 40% of the units financed under this section must be made available only to very low-income families or individuals (below 60% of the area median) with terms up to 38 years. Borrowers must have the means to repay the loans, but be unable to secure reasonable credit terms elsewhere. Borrowers with income of up to 115% of the area median may be eligible for 30-year guaranteed loans from private lenders. Priority is given to first-time homebuyers, and the RHS may require that borrowers complete a homeownership counseling program.

Section 504 loans and grants — A USDA rural housing repair program authorized under Section 504 of the **Housing Act of 1949**. Under current regulations, rural homeowners with incomes of 50% or less of the area median may qualify for the **Rural Housing Service** direct loans to repair their homes. Loans are limited to \$15,000 and have a 20-year term at a 1% interest rate. Owners of age 62 or more may qualify for grants of up to \$5,000 to pay for needed repairs. To qualify for the grants, the elderly must lack the ability to repay the full cost of the repairs. Depending on the cost of the repairs and the income of the homeowner, the owner may be eligible for a grant for the full cost of the repairs or for some combination of a loan and a grant to cover repair costs. The combination loan and grant may total no more than \$15,000.

Section 514 loans — A USDA **domestic farm labor** housing program authorized under Section 514 of the **Housing Act of 1949**. The **Rural Housing Service** (RHS) makes loans to farm owners, associations of farm owners, or nonprofit organizations to provide “modest” living quarters, basic household furnishings, and related facilities. The loans are repayable in 33 years and bear an interest rate of 1%. Applicants, who own farms or who represent farm owners, must show that the farming operations have a demonstrated need for farm labor housing and the applicants must agree to own and operate the property on a nonprofit basis. Except for state and local public agencies or political subdivisions, the applicants must be unable to provide the housing from their own resources and unable to obtain the credit from other sources on terms and conditions that they could reasonably be expected to fulfill and still provide farmworker housing at rental rates that would be affordable to the workers. The RHS may make exceptions to the “credit elsewhere” test when (1) there is a need in the area for housing for migrant farm workers and the applicant will provide such housing, and (2) there is no state or local body or no nonprofit organization that, within a reasonable period of time, is willing and able to provide the housing.

Section 515 loans — A USDA rural housing program authorized under Section 515 of the **Housing Act of 1949**. The **Rural Housing Service** is authorized to make loans to provide rental housing for low- and moderate-income families in rural areas. Section 515 loans also may be used for congregate housing for the elderly and handicapped. Loans under Section 515 are made to individuals, corporations, associations, trusts, partnerships, or public agencies. The loans are made at 1% interest for a term of 50 years. Except for public agencies, all borrowers must demonstrate that financial assistance from other sources will not enable the borrower to provide the housing at terms that are affordable to the target population.

Section 516 grants — A USDA farm labor housing program authorized under Section 516 of the **Housing Act of 1949**. Qualified nonprofit organizations, Indian tribes, or public bodies obtain grants for the development cost of farm labor housing. Grants may be used simultaneously with **Section 514 loans** if the housing, for which there is a “pressing need,” will not be built without assistance from the **Rural Housing Service**. Grants may be made for up to 90% of the development cost of the housing. In a given fiscal year, up to 10% of the Section 516 funds shall be for domestic and migrant farm worker housing. Applicants must contribute at least 10% of the total development costs from their own resources or from other sources including Section 514 loans. Funds may be used to buy, build, or improve housing and

related facilities for farm workers, and to purchase and improve the land upon which the housing will be located, including installation of streets, water supply and waste disposal systems, parking areas, and driveways as well as for the purchase and installation of appliances such as ranges, refrigerators, and clothes washers and dryers. Related facilities may include the maintenance workshop, recreation center, small infirmary, laundry room, day care center, and office and living quarters for the resident manager.

Section 521 rental assistance — Rental assistance authorized under Section 521 of the **Housing Act of 1949**. Owners of housing financed under **Section 515** or **Section 514** may receive rental assistance payments from the **Rural Housing Service** (RHS). The assistance payments enable eligible tenants to make monthly rent payments that do not exceed the greater of (1) 30 percent of monthly adjusted family income, (2) 10 percent of monthly income, or (3) for welfare recipients, the portion of the family's welfare payment that is designated for housing costs. The rental assistance payments, which are made directly to the borrowers, make up the difference between the tenants' payments and the RHS-approved rent for the units. Borrowers must agree to operate the property on a limited profit or nonprofit basis. The term of the rental assistance agreement is 20 years for new construction projects and 5 years for existing projects. Agreements may be renewed for up to 5 years. An eligible borrower who does not participate in the program may be petitioned to participate by 20 percent or more of the tenants eligible for rental assistance.

Section 523 loans — A USDA **mutual self-help** rural housing program authorized under Section 523 of the **Housing Act of 1949** and administered by the **Rural Housing Service**. Nonprofit organizations may obtain 2-year loans to purchase and develop land that is to be subdivided into building sites for housing. The interest rate is 3% for these loans. Applicants must demonstrate a need for the proposed building sites in the locality. Sponsors may also obtain technical assistance (TA) grants to pay for all or part of the cost of developing, administering, and coordinating programs of technical and supervisory assistance to the families who are building their own homes. Each family is expected to contribute at least 700 hours of labor in building homes for each other. Applicants must demonstrate that (1) there is a need for self-help housing in the area, (2) the applicant has or can hire qualified people to carry out its responsibilities under the program, and (3) funds for the proposed TA project are not available from other sources. The program is generally limited to very low- and low-income families. Moderate income families may be eligible to participate provided they are unable to pay for a home built by the contract method. TA funds may not be used to hire construction workers or to buy real estate or building materials. Private or public nonprofit corporations, however, may be eligible for 2-year site loans under Section 523. The loans may be used to purchase and develop land in rural areas. The land is subdivided into building sites and sold on a nonprofit basis to low and moderate income families. Generally, a land loan must result in at least 10 home sites. The sites need not be contiguous. Sites financed through Section 523 may only be sold to families who are building homes by the mutual self-help method. The homes are financed through the Section 502 program.

Section 524 loans — Land acquisition and development loans authorized under Section 524 of the **Housing Act of 1949**. Nonprofit organizations and Indian tribes may obtain loans from the **Rural Housing Service** to purchase and develop land that is to be subdivided into building sites for housing low- and moderate-income families. The loans are made for a 2-year period. Sites financed through Section 524 have no restrictions on the methods by which the homes are financed or constructed. The interest rate on Section 524 site loans is the Treasury cost of funds.

Section 533 grants — A USDA rural housing rehabilitation program authorized under Section 533 of the **Housing Act of 1949**. The **Rural Housing Service** is authorized to

make grants to capable organizations for (1) rehabilitating single family housing in rural areas which is owned by low- and very low-income families, (2) rehabilitating rural rental properties, and (3) rehabilitating rural cooperative housing structured to provide affordable housing to low- and very low-income occupants. The homes must be located in rural areas and be in need of housing preservation assistance. Assisted families must meet the income restrictions (income of 80% or less of the median income for the area) and must have occupied the property for at least one year prior to receiving assistance. Occupants of leased homes may be eligible for assistance if (1) the unexpired portion of the lease extends for 5 years or more, and (2) the lease permits the occupant to make modifications to the structure and precludes the owner from increasing the rent because of the modifications.

Sediments — Particulate material, including soil, sand, and minerals, transported and deposited by water or wind (see **erosion**). Waterborne sediments cloud the water diminishing sunlight available to aquatic plants; sediments deposited in reservoirs, rivers, and harbors destroy fish and wildlife habitat and may fill shipping channels. Farming, mining, and building and construction activities that expose soil to wind and rain are major sources of sediments.

Seed bank — A facility used for the preservation and dissemination of seed, particularly varieties that are not in commercial use and that may be threatened with extinction. The USDA administers the U.S. National Plant Germplasm System.

Self-Help land development loans — **Section 523 loans** are for acquiring and developing land that will be used for **mutual self-help** housing.

Septic system — An on-site system designed to treat and dispose of domestic sewage from a residence or business not connected to a sewer line. A typical septic system consists of a tank that receives waste and holds it while bacteria decompose solids, and a system of tile lines or a pit for disposal of the liquid effluent. The sludge that remains in the tank after decomposition of the solids must be pumped out periodically. By using the assimilative capacity of the land, a properly operating septic system has minimal impact but an improperly functioning system can be a source of nitrogen **pollution** and of groundwater contamination.

Set-aside program — A program (not used since the late 1970s) under which farmers are required to set aside a certain percentage of their total planted acreage and devote this land to approved **conservation uses** (such as grasses, legumes, and small grain which is not allowed to mature) in order to be eligible for **nonrecourse loans** and **deficiency payments**. Set-aside acreage is based on the number of acres a farmer actually plants in the program year as opposed to being based on prior crop years. The authority for set-aside was eliminated by the **FAIR Act of 1996**.

SFIREG — State FIFRA Issues Research and Evaluation Group

SFSP — **Summer Food Service Program**

Sharecropper — A tenant who receives a share of the crops, livestock, or livestock products from the landowner, who in turn may extend credit to and supervises the tenant. The tenant generally supplies only labor.

Sheep Promotion, Research, and Information Act of 1994 — P.L. 103-407 (October 22, 1994) enabled sheep producers and feeders and importers of sheep and sheep products to develop, finance, and carry out a nationally coordinated program for sheep and sheep product promotion, research, and information. This law was enacted a year after the legislation to

phase out the wool price support program. The USDA was authorized to issue a sheep and wool promotion, research, education, and information order subject to approval referenda among producers, feeders, and importers. In a 1996 referendum, the proposed check-off program was defeated. About 53% of nearly 12,000 ballots opposed the order. This group represented 67% of the production that voted.

Sheet erosion — The removal of a thin, relatively uniform layer of soil from the land surface caused by runoff.

Shelterbelt — A plant barrier of trees, shrubs, or other approved perennial vegetation designed to reduce wind **erosion**.

Shelter expense deductions — For the purpose of the food stamp program, shelter expense deductions are calculated as any shelter expense (including items such as utilities and insurance) in excess of 50% of a household's monthly income after all other potential deductions have been taken out. In effect, this means that all shelter expenses above roughly 35% of a typical household's total cash income are themselves deductible. Shelter expense deductions are limited by a "cap" of \$250 a month (which will rise, in stages, to \$300 a month by 2001).

Shippers export declaration — A form required by the government for the compilation of statistics on trade. It is necessary on practically every commercial shipment leaving the United States with the exception of mail shipments of small value.

Shipping holiday — A fruit and vegetable **marketing order** provision that prohibits the commercial shipping of the regulated commodity during periods following certain holidays when demand is historically low—such as the several days after Thanksgiving and Christmas.

Short — (1) The selling side of an open **futures contract**; (2) a trader whose net position in the futures market shows an excess of open sales over open purchases. See also **long**.

Short selling — Selling a **futures contract** with the idea of delivering on it or **offsetting** it at a later date.

Short ton — Two thousand pounds. By contrast, a long ton equals 2,240 pounds. A metric ton equals 2,204.62 pounds.

SIC — Standard industrial classification

Sign-up period — A USDA-prescribed time period, usually lasting several months, when farmers can enroll in a crop **price support** or other **farm program**.

Silt — **Sedimentary** materials composed of fine or intermediate-sized mineral particles.

Silviculture — A branch of forestry dealing with the development and care of forests.

SIP — Stewardship Incentives Program

Site loans — **Section 523 loans** and **Section 524 loans** are for acquiring and developing land for low- and moderate-income rural residents.

Smith-Lever Act of 1914 — P.L. 63-95 (May 8, 1914) authorized and provided initial funding for states to establish an educational outreach arm to “extend” the results of research programs at the **land grant colleges of agriculture** and their affiliated **state agricultural experiment stations** to all citizens who might benefit from them. In 1962 Congress amended the act to establish a formula for distributing federal funds to states for agricultural extension programs. The formula provides for each state to receive what it received in 1962 as a base. Funds appropriated in excess of the 1962 level are allocated as follows: 4% of funds go to the federal component of the **Cooperative Extension System** (now part of the **Cooperative State Research, Education, and Extension Service** of USDA); of the remainder, 20% is allocated to each state equally; and 80% is allocated on the basis of a state’s share of the U.S. rural and farm populations. On average, Smith-Lever formula funds account for about 30% of a state’s total funding for extension programs.

Smoot-Hawley — See **Tariff Act of 1930**.

SMP — **School Milk Program**

SNE — Society for Nutrition Education

SOAP — **Sunflowerseed Oil Assistance Program**

SOCMI — Synthetic Organic Chemicals Manufacturing Industry

Sodbuster — A program created by Title 12 of the **Food Security Act of 1985** designed to discourage the plowing up of erosion-prone grasslands for use as cropland. If such highly erodible land is used for crop production without proper conservation measures as laid out in a **conservation plan**, a producer may lose eligibility to participate in USDA **farm programs**. Sodbuster provisions remain in effect under the **FAIR Act of 1996**.

Soil — In the United States, about 70,000 kinds of soil are recognized in the nationwide system of classification. Each has a unique set of characteristics and a potential for use. These characteristics are important in designing a **conservation plan** to protect the soil from **erosion** if it is being cultivated. The Natural Resources Conservation Service is responsible for mapping the United States by soil type, through the **Soil Survey Program**.

Soil Bank Act — Title I of the **Agricultural Act of 1956** (P.L. 84-540), designated the **Soil Bank Act**, created the Acreage Reserve Program to retire land producing basic commodities under an annual agreement from 1956 through 1959, and the Conservation Reserve Program, to retire agricultural land under contracts of 3, 5, or 10 years. The **Soil Bank Act** was repealed by Section 601 of the **Food and Agriculture Act of 1965** (P.L. 89-321). Nevertheless, this early Conservation Reserve served as the model for the current **Conservation Reserve Program** (CRP), which was enacted in the **Food Security Act of 1985**.

Soil Bank Program — A federal program of the late 1950s and early 1960s that paid farmers to retire land from production for 10 years; the predecessor to today’s **Conservation Reserve Program**. Some elements in the CRP, such as a limit on CRP acres per county, were a response to the Soil Bank experience.

Soil conditioner — An organic material like humus or compost that helps soil absorb water, build a bacterial community, and take up mineral nutrients.

Soil conservation district — A legal subdivision of state government, with a locally elected governing body, responsible for developing and carrying out a program of soil and water conservation within a geographic boundary, usually coinciding with county lines. The nearly 3,000 districts in the United States have varying names — soil conservation districts, soil and water conservation districts, natural resources districts, resource districts, resource conservation districts.

Soil Conservation and Domestic Allotment Act of 1936 — P.L. 74-46 (February 26, 1936) was designed to support farm income by making soil-conservation and soil-building payments to participating farmers. This design overcame the unconstitutional taxes on processors in the support program authorized by the **Agricultural Adjustment Act of 1933**. The 1936 Act supported farm income and reduced surpluses by paying farmers for shifting from crops in excess supply (soil depleting crops) to soil building crops like legumes and grasses. This law, as amended, continues to serve as the enabling authority for a number of activities and programs carried out by the **Natural Resources Conservation Service**.

Soil Conservation Service (SCS) — Replaced by a new USDA agency, the **Natural Resource Conservation Service** after USDA reorganization in 1994. Responsibilities include carrying out technical assistance programs in cooperation with **soil conservation districts** to improve and conserve soil and water resources, and operating related programs such as the national **soil survey** and the **natural resources inventory**.

Soil loss tolerance (“T” value) — For a specific soil, the maximum average annual soil loss expressed as tons per acre per year that will permit current production levels to be maintained economically and indefinitely. T values range from 2 to 5 tons per acre per year. According to the 1992 **natural resources inventory**, about 63 million acres of **highly erodible cropland** are still eroding at more than their “T” value, including 21 million acres that are still eroding at three times “T”.

Soil moisture zone — Depth of soil from which plant roots extract water.

Soil quality (health) — Soil quality includes consideration of measures related to both productivity for crops and environmental factors.

Soil series — A group of soils having horizons (or layers) similar in characteristics and arrangement in the soil profile, except for the texture of the surface portion. They are given proper names from place names within the areas where they occur. Thus, Norfolk, Miami, and Houston are names of some well-known soil series.

Soil solarization — Fumigating and warming soil by covering it with black plastic. This is an alternative pest control technique being investigated as an alternative to the use of **methyl bromide** (a chemical fumigant use in Florida tomato production and for other speciality crops and will be phased out of use because of its **ozone** depleting effects).

Soil sterilant — A chemical that temporarily or permanently prevents the growth of all plants and animals, depending on the chemical. Soil sterilants must be registered as **pesticides**.

Soil survey — A program of the Natural Resource Conservation Service to inventory soil resources as a basis for determining land capabilities and conservation treatments that are needed, provide soil information to the public (primarily through maps), and provide technical support to those who use soils information. About 90% of the private lands have been mapped. In FY1996, maps were prepared or updated on more than 17 million acres.

Sole source bid — This refers to the required bidding process for infant formula sold through the WIC program. It offers an infant formula manufacturer the option of bidding to be the only provider of infant formula contained in WIC food packages in the state. Contracts must be awarded to the company that offers the lowest price (or largest discount) on its infant formula.

Solid waste — Non-liquid, non-soluble materials ranging from municipal garbage to industrial wastes that contain complex and sometimes hazardous substances. Solid wastes also include sewage sludge, agricultural refuse, demolition wastes, and mining residues. Technically, solid waste also refers to liquids and gases in containers. The disposal of solid waste is regulated by EPA.

SOPs — Standard operating procedures

Soup Kitchen-Food Bank Program — Originally authorized under the **Hunger Prevention Act of 1988** to buy commodities for soup kitchens and food banks not participating in the **Emergency Food Assistance Program (EFAP)**. Program authority was extended through FY2002 by an amendment to the **Hunger Prevention Act of 1988**, enacted under the **FAIR Act of 1996**. This program was consolidated with **EFAP** by an amendment to the **Emergency Food Assistance Act of 1983** that was enacted as part of the 1996 welfare reform law (the **Personal Responsibility and Work Opportunity Reconciliation Act of 1996**, P.L. 104-193).

Special and differential treatment (S&D) — A set of GATT provisions (in Article 18) that exempts developing countries from the same strict trade rules and disciplines of more industrialized countries. In the **Uruguay Round** Agreement on Agriculture, for example, developing countries are given longer time periods to phase in **export subsidy** and **tariff** reductions than the more industrialized countries.

Special Milk Program — Offers federal reimbursements for each half-pint of milk served to a child in a participating outlet, which generally is any school or facility caring for children that does not participate in other federally subsidized meal programs. There is an exception from this limitation for kindergarten children in split session programs. The program is permanently authorized under the **Child Nutrition Act of 1966**. Schools may offer free milk to children meeting **free lunch** income requirements, if they choose, and this milk is reimbursed at full cost. Otherwise, children buy so-called paid milk, which is subsidized at a legislatively set rate for each half-pint served. This program is administered by USDA and funded by annual agricultural appropriations.

Special review — Formerly known as Rebuttable Presumption Against Registration (RPAR), this is a regulatory process through which existing **pesticides** suspected of posing unreasonable risks to human health, non-target organisms, or the environment are referred for review by EPA. Such review requires an intensive risk/benefit analysis with opportunity for public comment. If risk is found to outweigh social and economic benefits, regulatory actions ranging from label revisions and use-restriction to **cancellation** or suspended **registration** can be initiated.

Special Supplemental Nutrition Program for Women, Infants and Children (WIC) — WIC provides federal grant funds to state health agencies and recognized Indian tribal organizations to operate programs for low-income pregnant and postpartum mothers, infants, and children (under age 5) who are at risk due to inadequate income and diet. The program offers monthly food packages consisting of specifically authorized supplemental foods containing nutrients often found lacking in the diets of WIC participants, and is operated at the

local level by public health and other agencies with a link to health care providers. WIC foods include infant formula and cereals, milk, cheese, eggs, breakfast cereals, fruit and vegetable juices, dry beans and peas, and peanut butter. Participants must meet both a low-income and nutritional risk test to be eligible. Foods are provided either directly by a local WIC clinic, or more commonly, in the form of **WIC vouchers** issued to participants that list specific types and amounts of foods that may be redeemed by the participant at authorized grocery stores. The program is authorized through FY1998 under Section 17 of the **Child Nutrition Act of 1966**.

Specialty crops — Usually refers to crops covered by **marketing orders** that generally are not fruits or vegetables. Specialty crops have included almonds, filberts, walnuts, spearmint oil, hops, dates, raisins, and prunes.

Species — Species represent the lowest and most important of the primary groupings used in classifying plants, animals, and microorganisms. While no single definition applies to all organisms, biologists rely principally on (1) morphological and genetic similarities and (2), for sexually reproducing organisms, the capability of interbreeding with one another but not other groups. If different species do interbreed, the offspring, if any, are often sterile. Biologists give species unique, binomial names: a generic name that includes closely related species, and a species-specific name. The horse, for example, is *Equus caballus*; the donkey or ass is *Equus asinus*. (Their offspring, the mule, is sterile.) As populations of organisms vary geographically and change over time (becoming extinct, or splitting or evolving into new species), species classifications are neither absolute nor immutable; where some biologists see variations within a species (and may designate subspecies), others may see separate species. About 1.5 to 2 million species have been named, but scientists estimate the total number of species could be 5 to 100 million, many of them probably undiscovered microorganisms. The **Endangered Species Act** (ESA) protects species designated as **endangered** or threatened with extinction; these protections prohibit **taking endangered species** and can include restrictions on habitat alterations, such as logging or water pollution. Because of the way “species” is defined in the ESA, policy debates have arisen over whether certain groups of organisms qualify for listing (e.g., northern goshawks and the Alexander Archipelago wolf).

Speculator — In commodity trading, an individual who does not **hedge**, but who trades in **futures contracts** with the objective of achieving profits through the successful anticipation of price movements.

Spot commodity — The actual commodity as distinguished from a **futures contract**. Sometimes used to refer to **cash commodities** available for immediate delivery.

Spot market — A public or open marketplace (such as open exchanges or auction houses) where products (including agricultural products such as livestock, grain, cotton, etc.) are bought and sold. The Minneapolis Grain Exchange and the **National Cheese Exchange** are examples. Spot also refers to a maturing delivery month of a **futures contract**.

Spot price — The price at which a physical commodity for immediate delivery is selling at a given time and place. See **cash price**.

Spread (or straddle) — The purchase of a **futures contract** of one **delivery month** against the sale of another futures delivery month of the same commodity; the purchase of one delivery month of one commodity against the sale of that same delivery month of a different commodity; or the purchase of one commodity in one market against the sale of the commodity in another market, to take advantage of a profit from a change in price relationships. The term

spread is also used to refer to the difference between the price of a futures month and the price of another month of the same commodity. A spread can also apply to **options contracts**.

SPS — Sanitary and phytosanitary

SRM — Society for Range Management

SSOPs — Sanitation standard operating procedures

SSSA — Soil Science Society of America

Standard deduction — For the **food stamp program**, the standard deduction (\$134 a month) is an amount subtracted from all recipients' total monthly cash income before any other deduction. It is meant to recognize expenses for household necessities not accounted for by other deductions and target more benefits to the very poorest recipients.

Staple — A commodity that is widely and regularly produced and consumed (i.e., wheat, rice, potatoes). A term used to designate the length of fiber in cotton and wool.

State Agricultural Experiment Stations (SAES) — The **Hatch Act of 1887** established an agricultural experiment station to be affiliated with the **land grant college of agriculture** in each state. Research done at these stations underpins the curriculum of the colleges, as well as the programs of the **Cooperative Extension System**.

State and Private Forestry — A branch of the **Forest Service** providing technical and financial assistance to states and to private landowners for forest management and for **forest health**.

State inspection programs — Often refers to the state-run meat and poultry inspection programs to which USDA contributes 50% of the cost. State programs (about half the states use them) must be certified by USDA to be at least equal to federal inspection requirements. However, products from state-inspected plants (most of them are relatively smaller operations) cannot be sold outside of the state. Small plants and many state officials have endorsed bills in Congress that would permit state-inspected products to be sold into interstate and foreign commerce, but large meat and poultry companies (most of them already under federal inspection) generally oppose such a change.

State rural development block grant — Under provisions of the **Rural Community Advancement Program (RCAP)**, each state may receive, for direct administration, up to 10% of the funds allocated to the state. These funds may be used to establish a state administered block grant. The first 5% of the state block grant allocated does not require the community to make a matching fund contribution. A state may receive the additional 5% if it provides \$2 in matching funds for every \$1 in RCAP funds it would receive.

State rural development councils — A collaborative partnership comprised of representatives of the federal, state, local, and tribal governments, the private sector, and the nonprofit sector. Councils are created by a memorandum of understanding between USDA and the state Governor. The councils' purpose is to promote rural development within the state.

State technical committee — Advisory groups to state conservationists (coordinators of all **Natural Resource Conservation Service** activities within a state) created in the **FACT Act of 1990** and amended in the **FAIR Act of 1996**. These groups can include

representatives from agencies, agriculture, agribusiness, and non-profits, as well as individuals with a demonstrated expertise. Responsibilities assigned by the **FAIR Act** include establishing procedures for evaluating petitions on new **conservation practices** and identifying priority areas for the **Environmental Quality Incentive Program** and **Wetland Reserve Program**.

State trading enterprises (STEs) — STEs are enterprises authorized to engage in trade (exporting and/or importing) that are owned, sanctioned, or otherwise supported by government. STEs are legitimate trading entities and are subject to GATT rules. Some U.S. agricultural producers think, however, that STEs through their exercise of monopoly power and government support may distort trade in their respective commodities.

STC — State technical committee; state conservationist

STE — State trading enterprise

Steagall Amendment of 1941 — P.L. 77-144 (July 1, 1941) required **price support** for many nonbasic commodities at 85% of **parity** or higher. In 1942, the minimum rate was increased to 90% of parity and was required to be continued for 2 years after the end of World War II. The “Steagall commodities” included hogs, eggs, chickens (with certain exceptions), turkeys, milk, butterfat, certain dry peas, certain dry edible beans, soybeans, flaxseed and peanuts for oil, American-Egyptian (ELS) cotton, potatoes, and sweet potatoes.

Step 2 payments — Four special provisions are included as an adjunct to the upland cotton **marketing assistance loan** program, with the objective of keeping U.S. cotton competitive in domestic and export markets. The provisions are (1) USDA discretionary authority to reduce the **adjusted world price** under certain circumstances; (2) a user **marketing certificate** program (commonly known as “Step 2” of the four provisions); (3) a special import quota, and (4) a limited global import quota. Under Step 2, USDA is required to issue marketing certificates (or cash payments in lieu of certificates) to domestic users of upland cotton for documented purchases of such cotton, and to exporters of upland cotton for documented sales, that occurred in any week that follows a consecutive 4-week period during which certain cotton pricing benchmarks are exceeded. These benchmarks are determined by a specific (and complex) statutory formula. In effect, they provide a subsidy to U.S. cotton users and exporters so that U.S. rather than foreign cotton will be utilized, even when it is higher-priced.

Stewardship Incentives Program (SIP) — A program administered by the **Forest Service** through the **Farm Service Agency** that provides up to 75% cost sharing for practices implementing approved **renewable resource** plans. Payments are limited to \$10,000 annually per landowner, and practices must be maintained for 10 years. Through FY1993, practices had been implemented on more than 670,000 acres by more than 7,000 landowners.

Stewart B. McKinney Homeless Assistance Act — P.L. 100-77 (July 22, 1987). Enacted in response to concerns about increasing hunger, homelessness, and unemployment, this Act provided federal funding to support housing, food assistance, and job training.

Stocker cattle — Calves or older animals maintained, often on pasture or rangeland, to increase weight and maturity before being placed in a feedlot.

Stocking rate — The number of specific kinds and classes of livestock grazing or using a unit of land for a specified time. Not the same as **carrying capacity**.

Stocks, grain — Commercial grain stocks include domestic grain in storage in public and private elevators at important markets and grain afloat in vessels or barges in lake and seaboard ports. Commercial stocks plus government-owned stocks constitute total stocks. Information on grain stock levels is half of the supply demand equation that determines price levels.

S.T.O.P. — Safe Tables Our Priority

Strategic grain reserve — National grain stocks held in reserve intentionally by government programs for the purpose of meeting future domestic and international needs. See **Food Security Commodity Reserve, Food Security Wheat Reserve, Farmer-Owned Grain Reserve**.

Strike price (exercise or contract price) — The price, specified in the **option contract**, at which the underlying **futures contract** or commodity will move from seller to buyer.

Stripcropping — Growing crops in a systematic arrangement of strips or bands, usually parallel to the land's contour, that serve as barriers to wind and water **erosion**.

Strip tillage — Planting and tillage operations that are limited to a strip not to exceed one-third of the distance between rows; the area between is left untilled with a protective cover of crop residue on the surface for **erosion** control.

Structure of agriculture — The set of characteristics dealing with how the farm sector is organized, who controls it, and where it is heading.

Stubble-mulching — Leaving the stubble or crop residue essentially in place on the land as a surface cover during a fallow period. Stubble-mulching can prevent **erosion** from wind or water and conserve soil moisture.

Stumpage price (or stumpage rate) — The agreed-upon price, usually in dollars per thousand **board feet (MBF)**, between a private timber purchaser and the federal agency for the right to cut and remove trees and/or logs from the federal lands.

Subsidy — A direct or indirect benefit granted by a government for the production or distribution (including export) of a good or to supplement other services. Generally, subsidies are thought to be production and trade distorting, resulting in an inefficient use of resources. Arguably, subsidies may be justified on grounds that they adjust for nonmarket considerations that are as important as market values. This term also is used to refer to federal reimbursements for meals served through child and elderly nutrition programs.

Subsistence farm — A low-income farm where the operator is producing primarily for the family's needs rather than for sale.

Sugar price support program — The federal program that maintains a minimum price for sugar. The new program covers the 1996-2002 crops of sugarbeets and sugarcane. Under the **FAIR Act of 1996**, sugar processors benefit from a price guarantee only when **nonrecourse loan** policy is in effect (i.e., USDA projects that fiscal year imports of sugar will be equal to or greater than 1.5 million short tons). Should projected imports be below 1.5 million, only

recourse loans will be available to processors (i.e., no price guarantee exists). **Loan rates** are frozen through FY2003 at 18 cents/lb. for raw cane sugar, and 22.9 cents/lb. for refined beet sugar. Processors benefit, though, from a slightly higher level of **price support** accomplished by USDA administering an import quota in such a way that market prices are kept above **loan forfeiture levels**. Should a processor forfeit on a nonrecourse loan if market prices fall below his forfeiture level, a **forfeiture penalty** is imposed (i.e., 1 cent/lb. for raw cane sugar, 1.072 cents/lb. for beet sugar). Should this occur, the price guarantee level would be lower than a processor received in the past. The **FAIR Act of 1996** repealed both the program's **no cost** requirement (in effect since FY1986) and standby authority (in effect during FY1992-1996) to impose **marketing allotments** under certain conditions.

Sugar re-export programs — Administered by USDA, program regulations allow cane refiners and food manufacturers, subject to certain conditions, to import sugar exempt from **tariff-rate quota** provisions that apply to sugar imported for consumption in the U.S. market. Cane refiners process the imported sugar into refined sugar for re-export, or for transfer to food manufacturers for use in sugar containing products for export. These programs were designed in the early 1980s to utilize excess cane refining capacity and to make U.S. refined sugar and sugar-containing products more competitive on the world market by allowing participating companies to have access to lower world-priced sugar.

Suitable timberland — **Timberland** from which timber cutting is proposed in **forest planning**.

Summer fallow — Cropland in semi-arid regions that is purposely kept out of production during a cropping season mainly to conserve moisture for the next season. It is common for wheat producers in semi-arid regions to rotate half their cropland to summer fallow each year.

Summer Food Service Program (SFSP) — The SFSP operates in low-income areas during the summer months to provide meals and snacks to children in summer day camps. Federal support consists of guaranteed cash and commodity assistance and support for administration and operating expenses. It is authorized through FY1998 under the **National School Lunch Act**.

Sunflower Oil Assistance Program (SOAP) — Along with the **Cottonseed Oil Assistance Program (COAP)**, SOAP is one of two programs under which bonuses were awarded to exporters of U.S. vegetable oil to assist in exports to targeted markets. The SOAP was authorized beginning in fiscal year 1988 with funds made available under **Section 32** of the **Agricultural Adjustment Act of 1935**. The provision in the **Disaster Assistance Act of 1988**, which had authorized the SOAP, expired at the end of fiscal year 1995 and was not extended in the **FAIR Act of 1996**. However, the Agriculture Appropriations Act of 1996 provided authority to operate the program in fiscal year 1996.

Superfund — The hazardous substance cleanup program created by the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA, P.L. 99-499, December 11, 1980), as amended.

Supplement — For child nutrition programs, this refers to federally reimbursed snacks that are served to children in participating facilities. Also used to refer to the addition of nutrients in the diet by the use of vitamins.

Supply control programs — Any of several government programs to influence the supply of farm products on the market. Some, such as **acreage allotments** and **marketing**

quotas, are considered mandatory, in that farmers who produce or market in excess of assigned levels can be legally penalized. Others, such as cropland **set-asides**, **acreage reductions** and diversions, and farmer-held **grain reserves**, are considered voluntary, in that farmers are usually encouraged to participate through financial incentives.

Support price — A legislated minimum price for a particular commodity, maintained by USDA through a variety of mechanisms, such as **nonrecourse loans** and purchase programs.

Surface runoff — Precipitation, snow melt, or irrigation water in excess of what can **infiltrate** the soil surface and be stored in small surface depressions; a major cause of **erosion** and transporter of **nonpoint source pollutants**.

Surplus — The amount by which available supplies are greater than the quantity that will bring producers an adequate income. A surplus may be due to production outrunning demand, a decline in consumption, or a general decline in consumer income or buying power. Historically, USDA **commodity programs** have been designed to deal with “problems” of surplus, and the Secretary has had discretion to determine whether an item is in surplus and should be removed from market channels to shore up prices. Approaches have included cropland diversion to reduce production, long-term storage of excess supplies, and purchase and donation of surplus items for foreign or domestic food program use.

Suspension — A process under the **Federal Insecticide, Fungicide, and Rodenticide Act** by which EPA can suspend the use of a **pesticide** in order to prevent an imminent hazard resulting from its continued use. An emergency suspension takes effect immediately; under an ordinary suspension a registrant can request a hearing before the suspension goes into effect. Such a hearing process might take 6 months.

Sustainable agriculture — A systematic approach to agriculture that focuses on ensuring the long-term productivity of human and natural resources for meeting food and fiber needs. The **FACT Act of 1990** defines sustainable agriculture as “an integrated system of plant and animal production practices having a site-specific application that will, over the long term (A) satisfy human food and fiber needs; (B) enhance environmental quality and the natural resource base upon which the agricultural economy depends; (C) make the most efficient use of non-renewable resources and on-farm resources and integrate, where appropriate, natural biological cycles and controls, (D) sustain the economic viability of farm operations, and (E) enhance the quality of life for farmers and society as a whole.” Sustainable agriculture and **alternative agriculture** share overall goals, with the latter focusing attention more on nonconventional practices. The Sustainable Agriculture Research and Education (SARE) program in USDA, first authorized by the **Food Security Act of 1985** and originally called the Low-Input Sustainable Agriculture (LISA) program, provides assistance to farmers interested in sustainable practices such as less chemical-intensive methods of pest control and soil fertility. Grants are available to farmer-scientist teams for on-farm experiments. The program also trains **Cooperative Extension** personnel in sustainable practices in order to encourage more widespread adoption.

Sustained yield — A “high-level” output of **renewable resources** that does not impair the productivity of the land.

Swampbuster — A provision of the **Food Security Act of 1985** that discourages the conversion of **wetlands** to cropland use. Producers converting a wetland area to cropland lose eligibility for several federal **farm program** benefits. Benefits are lost from when water levels are lowered to facilitate agricultural production until they have been restored. Several

types of wetlands and wetlands in specified situations are exempt. Exceptions include conversions that began before December 23, 1985, conversions of wetlands that had been created artificially, crop production on wetlands that became dry through drought, and conversions that USDA has determined have minimal effect on wetland values. Swampbuster provisions were amended in the **FAIR Act of 1996** to provide greater flexibility for producers and landowners.

SWCD — Soil and Water Conservation District

SWCS — Soil and Water Conservation Society

SWDA — **Solid Waste Disposal Act**

Sweet potato whitefly — an insect pest of cotton, fruit and vegetable, and greenhouse crops. The **Animal and Plant Health Inspection Service** works cooperatively with producers to implement pest management strategies based on **integrated pest management** and **biological control** techniques.

T-value (or T-level) — For a specific soil, the maximum average annual soil loss expressed as tons per acre per year that will permit current production levels to be maintained economically and indefinitely, the **soil loss tolerance** level. T values range from 2 to 5 tons per acre per year. According to the 1992 **national resources inventory**, about 63 million acres of highly erodible cropland are still eroding at more than their “T” value, including 21 million acres that are still eroding at three times “T”.

TA — Technical assistance

Taking endangered or threatened species — “Taking,” in layman’s terms, means killing or removing a plant or animal of a **species** listed under the **Endangered Species Act (ESA)**, or seriously damaging its chances of reproduction. Except under specified circumstances, taking is forbidden under the ESA. The definition of taking is one of the current issues in the ESA debate. Incidental take of a listed species is a taking which occurs in the course of some other legal activity, whether carried out by a federal or a nonfederal entity.

Talmadge-Aiken plants — The approximately 250 meat and poultry plants in 10 states where USDA has contracted with state agency inspectors to conduct federal inspection activities. They are now formally known as Federal-State Cooperative Inspection Plants. Even though state employees are conducting the inspection in these plants, they are under the federal rather than **state inspection programs**.

Target price — Price levels established by past law for wheat, corn, grain sorghum, barley, oats, rice, and upland cotton. Prior to 1996, farmers participating in annual federal **commodity programs** received **deficiency payments** based on the difference between the target price and the higher of the national market price during a specified time period, or the **nonrecourse loan** rate. The **FAIR Act of 1996** eliminated target prices and replaced deficiency payments with fixed **production flexibility contract** payments through 2002.

Targeted Export Assistance Program (TEA) — A program authorized by the **Food Security Act of 1985** to assist U.S. producer groups in promoting exports of products adversely affected by foreign governments’ unfair trade practices. TEA is the predecessor of the **Market Promotion Program (MPP)**, which has been replaced by the **Market Access Program (MAP)**.

Targeting — A policy concept under which government **farm program** benefits would be directed toward specified groups of producers. One example of targeting might be to focus farm payments on small to medium-sized family owned and operated farms.

Tariff — A tariff is a list or schedule of taxes, while a **duty** is the tax imposed on a specific item. However, the terms duty and tariff have come to be used interchangeably. In international trade, these taxes must be paid to a government on selected imported or sometimes exported goods. The **Harmonized Tariff Schedules of the United States (HTSUS)** lists the items on which the United States levies duties. Tariffs may be protective of domestic producers (keeping **domestic prices** higher than **world prices**) or serve as revenue generators for the government. Tariffs are considered transparent trade barriers in contrast to several **nontariff barriers**. The **Uruguay Round** Agreement on Agriculture requires conversion of nontariff barriers to **bound tariffs**.

Tariff Act of 1930 — P.L. 71-361, also known as the Smoot-Hawley Act, is widely recognized as one of the most ill-conceived of the many tariff laws passed by Congress. This protectionist law raised U.S. import tariffs to their highest levels in history, prompting U.S. trading partners to adopt their own retaliatory trade barriers and exacerbating the Great Depression. Ensuing U.S. policies have virtually eliminated the Act's most onerous provisions, but some elements of the amended law still serve as the authorizing vehicle for a number of general trade provisions of importance to the agricultural sector, including **countervailing duties**, **antidumping duties**, and **country-of-origin labeling**.

Tariff rate quota — A trade policy tool used to protect a domestically-produced commodity or product from competitive imports. A tariff rate quota (TRQ) combines two policy instruments that nations historically have used to restrict such imports: **quotas** and **tariffs**. In a TRQ, the quota component works together with a specified tariff level to provide the desired degree of import protection. Imports entering during a specific time period under the quota portion of a TRQ are usually subject to a lower, or sometimes a zero, tariff rate. Imports above the quota's quantitative threshold face a much higher (usually prohibitive) tariff. Currently, TRQs apply to imports of certain dairy products, beef, cotton, peanuts, sugar, certain sugar-containing products, and tobacco.

Tariff schedule — A list or schedule of duties imposed in the conduct of international trade. The **Harmonized Tariff Schedules of the United States (HTSUS)** lists the items on which the United States levies a **duty** (or **tariff**) or imposes an import or **tariff rate quota**. A specific duty, and/or quota amount, is assigned to each item on the schedule.

Tariffication — The conversion of **nontariff barriers** to **tariffs** or **tariff-rate quotas**.

Taylor Grazing Act of 1934 (TGA) — P.L. 73-482 (June 28, 1934) provides for the regulation of grazing on the public lands (excluding Alaska) to improve **rangeland** conditions and stabilize the western livestock industry. The law initially permitted 80 million acres of previously unreserved public lands of the United States to be placed into grazing districts to be administered by the Department of the Interior. As amended, the law now sets no limit on the amount of lands in grazing districts. There are currently approximately 150 million acres in grazing districts.

TCDD — **Dioxin** (Tetrachlorodibenzo-p-dioxin)

TCK smut — *Tilletia controversa kuhn* is a wheat fungus present in the Pacific Northwest. It takes on policy significance because China applies a **zero tolerance** on TCK spores

resulting in a ban since 1974 on shipments from the Pacific Northwest. Until the summer of 1996, China accepted shipments of U.S. wheat from the Gulf coast, even if they contained traces of TCK and negotiated price discounts with the shippers to cover the cost of decontamination before the affected wheat was unloaded. But in June 1996, China rejected cargoes of U.S. wheat with traces of TCK. China and the United States since have exchanged scientific teams as part of an effort to resolve the problem.

TEA — Targeted Export Assistance Program

Team nutrition — Coordinated effort by the FCS to implement the **school meals initiative for healthy children**.

TEFAP — The **Temporary Emergency Food Assistance Program** (TEFAP) evolved out of a surplus commodity donation effort begun by the USDA in late 1981 to dispose of surplus foods (especially cheese) held by the **Commodity Credit Corporation**. This program was explicitly authorized by the Congress in 1983 when funding was provided to assist states with the costs involved in storing and distributing the commodities. The program originally was entitled the Temporary Emergency Food Assistance Program when authorized under the **Temporary Emergency Food Assistance Act of 1983**. The word, “temporary” was dropped from statute and program title in the **FACT Act of 1990**. The acronym EFAP now is used for this program.

Temporary Emergency Food Assistance Act of 1983 (TEFAA) — P.L. 98-8 (March 24, 1983) was a supplemental appropriations act for FY1983 that among other things explicitly authorized a discretionary commodity donation effort begun in 1981 by the USDA. The initial effort was limited to disposal of excess commodities held by the **Commodity Credit Corporation** by donating them to states. This law also authorized funding to help states and local emergency feeding organizations with the storage and distribution costs of handling the commodities. This is the origin of the current **Emergency Food Assistance Act of 1983** (P.L. 98-92) as amended.

Tender — As a verb, tender announces the intention of delivering a notice or an actual commodity; i.e., XYZ Grain Growers, Inc., tenders six cars to North Pacific at the time of shipment for application on an open sales contract”. As a noun, tender normally denotes a notice of an intent to buy. The tender usually spells out in detail quantities to be purchased, desired quality, time of shipment, country of origin, and all inspection, weighing, and payment terms. Overseas buyers usually issue tenders to ensure the maximum competition for a given piece of business. Also, the action of receiving offers, determining the best one, deciding whether, and how much, to buy, and announcing the awards of contracts. Ordinarily, a buyer reserves the right to reject any or all of the offers submitted.

Teratogen — A chemical that causes nonhereditary birth defects in a developing fetus. Teratogenicity is taken into account in assessing the toxicity of pesticides and other chemicals. Both level and timing of exposure to teratogens determine health effects.

Terminal elevator — Large elevator (warehouse) facility with the capacity to transfer grain to rail cars, barges, or ships for transport to domestic or foreign markets.

Terminal market — A central site, often in a metropolitan area, that serves as an assembly and trading place for agricultural commodities. Terminal markets are usually at or near major transportation hubs.

Terrace — An embankment, ridge, or leveled strip constructed across sloping soils on the contour or at a right angle to the contour. The terrace intercepts surface runoff so that it can soak into the soil or flow slowly to a prepared outlet, decreasing rates of soil **erosion**.

TFP — Thrifty Food Plan

Threatened species — Species listed by regulation under ESA, and are generally given a lower level of protection than **endangered species**.

Three entity rule — Federal law currently sets an annual cap on the amount of direct payments that a **person** may receive from major **farm programs**. A provision in this law permits a person to receive payments up to the full cap on the first farm in which the person has a substantial beneficial interest, and up to half the full cap on each of two additional farms; hence the so-called “three-entity rule.”

Threshold — The lowest non-zero dose of a chemical at which a specified measurable effect occurs. Sometimes used to refer to the income level above which an applicant for **food stamp** benefits would be ineligible.

Thrifty Food Plan (TFP) — The TFP is one of four food plans specifying foods and amounts of foods and designed by USDA to provide adequate nutrition. It is used as the basis for designing food stamp program benefits. It is the cheapest food plan and is priced monthly using the price data collected for the **consumer price index** (CPI). However, it is not the same as the food components of the CPI. The monthly cost of the TFP used for the **food stamp program** represents a national average of prices (four-person household consisting of an adult couple and two school-age children) adjusted for other household sizes through the use of a formula reflecting economies of scale. For food stamp purposes, the TFP as priced each June sets maximum benefit levels for the fiscal year beginning the following October.

Timberland — Lands that can grow annually a minimum amount of wood that can be used to produce commercial wood products; excludes lands where timber cutting is prohibited by law or by executive decision.

Timber sale — a contract for the sale of federal timber to a private purchaser with the right to cut and remove trees for an agreed-upon **stumpage price**; the contract includes an estimated volume of wood and an **appraised stumpage price**, which is the basis for competitive bidding by purchasers.

Tobacco Price Support Program — The tobacco price support program uses a combination of **marketing quotas** and **nonrecourse loans** to keep prices stable and higher than they would be otherwise. The marketing quotas limit production in order to raise prices. Nonrecourse loans allow producers to hold tobacco stocks for long periods in order to balance supplies with market demand conditions. By law since 1982, tobacco loan program operations are required to function at **no net cost** to taxpayers. A no net cost **assessment** is collected on all leaf tobacco sold to build a reserve fund that reimburses the **Commodity Credit Corporation** for any losses of loan principal and interest.

Tolerance, pesticide residue — The amount of **pesticide** residue allowed by law to remain in or on a food sold in interstate commerce. Whenever a pesticide is **registered** for use on a food or a feed crop, a tolerance (or exemption from the tolerance requirement) must be established. EPA establishes the tolerance levels, which are enforced by the **Food and Drug Administration** and USDA.

Toxic Substances Control Act (TSCA) — P.L. 94-469 (October 11, 1976) authorizes EPA to regulate toxic substances (any chemical that may present a risk of unreasonable harm to man or the environment). By definition, however, the Act excludes from EPA regulation under TSCA certain substances, including pesticides (as defined by and regulated under the **Federal Insecticide, Fungicide, and Rodenticide Act**), tobacco or tobacco products, and any food or food additive (as defined by and regulated under the **Poultry Products Inspection Act**, the **Federal Meat Inspection Act**, the **Egg Products Inspection Act**, or the **Federal Food, Drug, and Cosmetic Act**).

TPRG — Trade Policy Review Group

Traceback — See **animal identification and traceback**.

Trade Act of 1974 — P.L. 93-618 provided the President with tariff and nontariff trade barrier negotiating authority for the Tokyo Round of multilateral trade negotiations. It also gave the President broad authority to counteract injurious and unfair foreign trade practices. **Section 201** of the Act requires the **U.S. International Trade Commission** to investigate petitions filed by domestic industries or workers claiming injury or threat of injury due to expanding imports. Investigations must be completed within 6 months. If such injury is found, restrictive measures may be implemented. Action under Section 201 is allowed under the GATT escape clause, GATT Article XIX. **Section 301** was designed to eliminate unfair foreign trade practices that adversely affect U.S. trade and investment in both goods and services. Under Section 301, the President must determine whether the alleged practices are unjustifiable, unreasonable, or discriminatory and burden or restrict U.S. commerce. If the President determines that action is necessary, the law directs that all appropriate and feasible action within the President's power should be taken to secure the elimination of the practice.

Trade Adjustment Assistance — Assistance provided by the Departments of Labor and Commerce to workers and firms that are adversely affected by increased imports. The Labor Department administers a program offering certified workers monetary benefits for direct trade readjustment allowances and service benefits that include allocations for job search, relocation, and training. The Department of Commerce sponsors programs that provide technical services to certified firms designed to restore the economic viability of U.S. industries adversely affected by international import competition. This assistance is authorized by subchapter II of the **Trade Act of 1974** (P.L. 93-618, approved January 3, 1975). The Act has been amended several times, including 1993 when transitional assistance was approved for workers affected by increased imports from Canada or Mexico or by shifts of U.S. production to those countries as a result of the **North American Free Trade Agreement (NAFTA)**. The law expires on September 30, 1998.

Trade Agreements Act of 1979 — P.L. 96-39 (July 26, 1979) provided the implementing legislation for the Tokyo Round of **multilateral trade agreements** in such areas as customs valuation, standards, subsidies and government procurement.

Trade and Tariff Act of 1984 — P.L. 98-573 (October 30, 1984) clarified the conditions under which unfair trade cases under Section 301 of the **Trade Act of 1974** can be pursued. It also provided bilateral trade negotiating authority for the U.S.-Israel Free Trade Agreement and the U.S.-Canada Free Trade Agreement, and set out procedures to be followed for congressional approval of future bilateral free trade agreements.

Transmissible spongiform encephalopathies (TSEs) — The name of a number of degenerative brain diseases that infect humans and animals. For example, **bovine**

spongiform encephalopathy (BSE) infects cattle; **Creutzfeldt-Jacob disease (CJD)** infects humans.

Transshipment — Refers to the primary export of U.S. farm products to certain countries (notably Canada and the Netherlands) and their further shipment to other countries. Unless there is “adjustment for transshipment,” export statistics can reflect a distorted picture.

Tree measurement sales — A timber sale where purchasers pay the total bid value (the estimated timber volume times the **stumpage price**) regardless of the volume of timber actually removed.

Trickle irrigation / drip irrigation — Method in which water drips to the soil from perforated tubes or emitters. This **irrigation** technology is water conserving compared to flooding, **furrows**, and sprinklers.

Triple base plan — Also called the flexible base plan. A proposal under which farmers who raise program crops would receive program payments only on a certain percentage of their **permitted acreage**. A producer participating in a federal **price support** program actually would have three categories of **base acres** for program purposes: 1) permitted acres on which **deficiency payments** would be made; 2) permitted acres on which no federal payments would be made, but could be planted to other crops, either specified or unspecified; 3) idled acres (those required to be set aside under acreage reduction rules) where no crops other than those for conservation could be planted. Triple base is another name for what came to be known as **normal flex acres**. **Production flexibility contracts** now have eliminated the linkage between payments and actual plantings.

TRQ — **Tariff-rate quota**

TSCA — **Toxic Substances Control Act**

TSEs — **Transmissible spongiform encephalopathies**

Two-tiered pricing — Any **farm program** system under which commodities grown for domestic use are supported at one level and those grown for export markets at another, lower level. The peanut price support program uses a two-tiered pricing system.

U.S. International Trade Commission (USITC) — An independent, quasi-judicial federal agency that provides objective trade expertise to both the legislative and executive branches of government, determines the impact of imports on U.S. industries. It make recommendations concerning **countervailing duty** and **antidumping** petitions submitted by U.S. industries seeking relief from imports that benefit from unfair trade practices. The agency also updates and publishes the **Harmonized Tariff Schedule of the United States**. Established by Congress in 1916 as the U.S. Tariff Commission, the **Trade Act of 1974** changed its name to the U.S. International Trade Commission. <http://www.usitc.gov/>

U.S. Trade Representative (USTR) — See **United States Trade Representative**.

UEP — United Egg Producers

UFFVA — United Fresh Fruit and Vegetable Association

UIC — Underground injection control

UMR — Usual market requirements

UNCTAD — United Nations Commission on Trade and Development

Underground storage tank — For purposes of Subtitle I of the **Resource Conservation and Recovery Act**, this is any tank used to store petroleum or hazardous substances regulated under the **Comprehensive Environmental Response, Compensation, and Liability Act**, the volume of which is 10% or more beneath the surface of the ground. This does not include, among other things, any farm or residential tank of 1,100 gallons or less capacity used for storing motor fuel for noncommercial purposes, tanks used for storing heating oil for consumptive use on the premises, or septic tanks.

Uniform grain and rice storage agreement (USGRSA) — The contractual arrangement governing transactions between Farm Service Agency and private grain storage companies. Commercial warehouses storing grain under a nonrecourse loan or owned by the CCC must have a signed USGRSA.

Unique farmland — Land, other than **prime farmland**, that has combined conditions to produce sustained high quality and high yields of specialty crops, such as citrus, nuts, fruits, and vegetables when properly managed.

United Nations Conference on Trade and Development (UNCTAD) — A UN agency that focuses attention on international economic relations and on measures that might be taken by developed countries to accelerate economic development in developing countries.

United States-Canada Free Trade Agreement Implementation Act of 1988 — P.L. 100-449 (September 28, 1988) implemented the bilateral trade agreement between the United States and Canada, including agricultural trade. The agreement would phase out tariffs between the two countries over 10 years and revise other trade rules.

United States Grain Standards Act (USGSA) of 1916 — P.L. 64-190 (August 11, 1916), as amended, authorizes the **Grain Inspection, Packers and Stockyards Administration** to establish official marketing standards (not health and safety standards) for grains and oilseeds, and requires that exported grains and oilseeds be officially weighed and inspected. Domestically marketed grain and oilseeds may be, but is not required to be, officially inspected. Export inspections are carried out by federal inspectors or by federally supervised state inspection agencies, called delegated official inspection agencies. Official inspections of domestically traded grain is done by federally supervised state agencies and private companies, called designated official inspection agencies. Typically, marketing standards describe the physical characteristics (such as weight, damaged kernels, foreign material, shrunken and broken kernels, and defects) of the commodity and serve as contract language to facilitate marketing. Official weighing and inspection is paid for on a fee-for-service basis, not with federal funds. Major changes to the law were adopted in the USGSA Amendments of 1968, the USGSA of 1976 (P.L. 94-582), and the **Grain Quality Improvement Act of 1986** (P.L. 99-641).

United States Trade Representative (USTR) — The Office of the U.S. Trade Representative, originally Office of the Special Trade Representative (STR), is responsible for developing and coordinating international trade, commodity, and direct investment policy, and leading or directing negotiations with other countries. It is headed by the United States Trade Representative (also USTR), a Cabinet-level official with the rank of Ambassador. The agency

provides trade policy leadership and negotiating expertise on all matters within the **World Trade Organization (WTO)**; trade, commodity, and direct investment matters dealt with by international institutions such as the **Organization for Economic Cooperation and Development (OECD)** and the United Nations Conference on Trade and Development (UNCTAD); export expansion policy; industrial and services trade policy; international commodity agreements and policy; bilateral and multilateral trade and investment issues; trade-related intellectual property protection issues; and import policy. The agency has administrative responsibility for the **Generalized System of Preferences (GSP)**, **Section 301** complaints against foreign unfair trade practices, unlawful and unfair import competition under Section 337, and import relief cases under **Section 201**. Five Members from each of the House and Senate are formally appointed under statute as official Congressional advisors on trade policy, and additional Members may be appointed as advisors on particular issues or negotiations. <http://www.ustr.gov/>

Universal soil loss equation — A formula used to estimate **erosion** rates by considering climate, soils, and topographic conditions at a site, as well as any degree to which the use and management of the soil reduce erosion. It is being replaced by a **revised universal soil loss equation**.

Unreasonable risk — Under the **Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)**, “unreasonable adverse effects on the environment means (1) any unreasonable risk to man or the environment, taking into account the economic, social, and environmental costs and benefits of any pesticide, or (2) a human dietary risk from residues that result from a use of a pesticide in or on any food ...” in excess of that allowed by a **tolerance**.

Upland cotton — The predominant variety of cotton grown in the United States; upland cotton has long been eligible for government **price support** and is now eligible for **production flexibility contract** payments.

Uplands — Land at higher elevations than the alluvial plain or low stream terrace; all lands outside the **riparian-wetland** and aquatic zones. Used often in discussion of federal land management practices.

UR — Uruguay Round

Urban and built-up areas — A classification in the **natural resources inventory**, now called developed areas, that includes cities, villages, other build-up areas of more than 10 acres, industrial sites, railroad yards, cemeteries, airports, golf courses, shooting ranges, institutional and public administration sites, and similar areas. The 1992 **natural resources inventory** placed over 92 million acres in this category, an increase of 14 million acres since 1982.

Uruguay Round — The 8th round of **multilateral trade negotiations (MTN)** conducted within the framework of the GATT. Launched in Punta del Este, Uruguay, in 1986 and concluded in December 1993, the final Uruguay Round agreement signed in Marrakech in April 1994, embraces 110 participating countries (“contracting parties”) and came into effect in 1995. It is being implemented over the period to 2000 (2004 in the case of developing country contracting parties) under the administrative direction of the newly created **World Trade Organization (WTO)**. The Uruguay Round Agreement on Agriculture, administered by the World Trade Organization, brings agricultural trade more fully under the GATT. It provides for converting quantitative restrictions to tariffs and for a phased reduction of tariffs. The agreement also imposes rules and disciplines on agricultural **export subsidies**, domestic subsidies, and **sanitary and phytosanitary (SPS) measures**.

Uruguay Round Agreements (URA) Act of 1994 — P.L. 103-465 (December 8, 1994) approved and implemented the trade agreements concluded in the Uruguay Round of multilateral trade negotiations conducted under the auspices of the GATT, including the Agreement on Agriculture, the Agreement on **Sanitary and Phytosanitary (SPS) Measures**, and the Agreement on Technical Barriers to Trade (TBT). The law allowed for the reduction of **tariffs** and government subsidies on agricultural products and prohibits the use of **Section 22** fees and quotas with respect to products of WTO members. The law also extended the authorization of funding for the **Export Enhancement Program (EEP)** and **Dairy Export Incentive Program (DEIP)** through 2001 and eliminated the requirement that the EEP be targeted to respond to unfair trade practices. The law eliminated the requirement that the **Market Promotion Program** be used to counter the adverse effects of unfair trade practices. The law also included a Sense-of-Congress resolution that the President should consult with other nations to discuss appropriate levels of food aid commitments to developing countries.

USAHA — U.S. Animal Health Association

USAID — U.S. Agency for International Development

USC — U.S. Code

USDA — U.S. Department of Agriculture

User fees — Any of various charges and assessments levied on a specifically delineated group that is directly subject to a particular government service, program, or activity; such fees are not levied on the general public. User fees are intended to be used solely to support that service, program, or activity. For example, about 75% of the \$225 million budget of the **Agricultural Marketing Service**, which provides a variety of inspection and **grading**, market news reporting, and other services to the agricultural community, comes from user fees; the other 25% is appropriated funds. Similarly, grain inspection is paid for through user fees.

User marketing certificates — See **step 2 payments**.

USMEF — U.S. Meat Export Federation

USTR — United States Trade Representative

Usual market requirements (UMR) — A measure of the import requirement of a country met through commercial purchases; usually defined as a five-year average. The UMR is used to determine whether concessional sales (e.g., under Title I of **P.L. 480**) will adversely affect normal commercial agricultural trade.

Utilization rates — The percentage of milk in federal **milk marketing orders** that is used in each of the classes: Class III and IIIa, cheese, butter, and nonfat dry milk; Class II, all other manufactured products; Class I, milk used for fluid consumption.

UV — Ultraviolet

Value-added products — In general, products that have increased in value because of processing; such products include wheat flour, and soybean oil. Livestock are considered value added products because they have increased the value of pasture and feed grains going into them. The terms value-added and high-value are often used synonymously.

Value-based pricing — **Packers** are increasingly using this method of determining how much to pay cattle and hog producers for animals. Rather than simply paying a fixed rate based on the weight of the animals, value-based pricing attempts to establish the individual merits of each animal (or lot) purchased, building quality characteristics such as yield, fat thickness, likely **grade** (such as choice, select, etc.) into a formula to arrive at the price that will be paid. Under this system, the producer assumes the financial responsibility that the animals, once slaughtered, will meet these criteria. In traditional pricing methods, it is the packer that bears the greater financial risks associated with the uncertain quality of the animals purchased.

Variable import levy — A charge levied on imports that raises their price to a level at least as high as the **domestic price**. Such levies are adjusted frequently (hence “variable”) in response to changes in world market prices, and are imposed to defend administered prices set above world market prices. Under the **Uruguay Round** Agreement on Agriculture, the variable levies of the EU have been converted into fixed **tariffs** or **tariff-rate quotas**.

VAT — Value-added tax

Vegetative controls — **Nonpoint source pollution** control practices that involve planting **cover crops** to reduce **erosion** and minimize loss of pollutants.

VER — **Voluntary export restraint agreement**

Vertical integration — The integrating of successive stages of the production and marketing functions under the ownership or control of a single management organization. For example, much of the broiler industry is highly vertically integrated in that processing companies own or control the activities from production and hatching of eggs, through the growth and feeding of the chickens, to slaughter, processing, and wholesale marketing.

VFD — Veterinary Feed Directive

Visegrad countries — The countries that entered into an agreement to coordinate their policies with a view to apply for membership in the EU. The countries in the original Visegrad agreement were Poland, Hungary, and Czechoslovakia (now the Czech and Slovak Republics).

VOC — Volatile organic compounds

Voluntary export restraint arrangement (VER) — An arrangement, usually a negotiated bilateral agreement, between countries in which suppliers or their government in an exporting country agree to limit to predetermined levels their exports of a particular product to an importing country. Under the **Uruguay Round** Agreement on Agriculture, VERs are to be converted into fixed **tariffs** or **tariff-rate quotas**.

WAOB — World Agricultural Outlook Board

Warehouse receipt — A document certifying possession of a commodity in a licensed warehouse. Some warehouse receipts are recognized for delivery purposes by a commodity futures exchange.

Wash versus trim — See **zero tolerance**.

Waste treatment pond — A shallow lagoon or similar storage facility, often man-made, used to treat liquid agricultural wastes, particularly liquid manure from livestock production farms, through the interaction of sunlight, wind, algae, and oxygen. Through natural biological processes, microscopic organisms consume wastes present in the water.

Water 2000 Initiative — The program administered by the Rural Utility Service goal is to improve the quality of drinking water in distressed rural areas with the most serious safe drinking water problems.

Water Bank Program (WBP) — A program to set aside wetlands for a period of 10 years (renewable) for conservation purposes. Participants receive annual rental payments. As these contracts expire, participants are offered the opportunity to place the land in the **Wetland Reserve Program**.

Water Quality Incentives Program — This program was authorized in the **FACT Act of 1990** and is administered by the **Farm Service Agency**. It was repealed and replaced by the **Environmental Quality Incentives Program** in the **FAIR Act of 1996**. It provided cost-share assistance to implement comprehensive water quality protection plans and was funded by earmarking a portion of the **Agricultural Conservation Program**.

Water Quality Initiative — A multi-agency effort, initiated by USDA in 1990, to determine relationships between agricultural activities and water quality, and develop and implement strategies that protect surface and groundwater quality. This program, which builds earlier USDA water quality protection efforts, includes research activities, projects involving landowners, and information and data development. Landowners participate in demonstration projects, hydrologic unit area projects, water quality special projects, and water quality incentive projects.

Water quality standards — State-adopted and EPA-approved ambient standards for water bodies. The standards prescribe the use of the water body and establish the water quality criteria that must be met to protect designated uses, and contain policies to protect against degradation of water quality once standards are attained and maintained.

Water service contract — a type of contract, authorized by the **Reclamation Project Act of 1939**, whereby water is furnished for irrigation or municipal or miscellaneous purposes at rates to produce revenue sufficient to cover charges reimbursable to the federal government.

Waterfowl production areas — A small component of the **National Wildlife Refuge System**. There are over 2,000,000 acres of this prime duck-producing land, mostly prairie potholes in the Dakotas, Minnesota, and Montana. The **Fish and Wildlife Service** owns, leases, or holds easements on the lands.

Watershed — The total land area, regardless of size, above a given point on a waterway that contributes runoff water to the flow at that point. It is a major subdivision of a drainage basin. The United States is generally divided into 18 major drainage areas and 160 principal river **drainage basins** containing about 12,700 smaller watersheds.

Watershed and flood prevention operations — A program area of the Natural Resources Conservation Service that includes Flood Prevention Operations (under the **Flood Control Act of 1944**, P.L. 78-534), Emergency Watershed Protection, and Small Watershed Operations (under the **Watershed and Flood Prevention Act of 1954**, P.L. 83-566). These programs have built small **watershed** projects that reduce floods, protect watersheds,

improve water quality, reduce soil **erosion**, improve water supply, and provide recreation. They involve strong partnerships with local interests.

Wellhead protection area — A surface and subsurface land area regulated to prevent contamination of a well or wellfield supplying a public water system. This program, established under the **Safe Drinking Water Act**, is implemented through state governments.

WEQ — Wind erosion equation

Wetlands — Areas of predominantly **hydric soils** that can support a prevalence of water-loving plants, know as **hydrophitic vegetation**. Wetlands are transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. Types of wetlands are distinguished by water patterns (the frequency and length of flooding) and location in relation to upland areas and water bodies. Wetlands perform many functions including wildlife and fish habitat, storage and conveyance of flood waters, sediment and pollution control, and recreation. Under the **swampbuster program**, landowners may produce crops in these areas, but only if the water patterns, or hydrology, in the wetland area is not altered and any woody vegetation is not removed.

Wetlands Reserve Program (WRP) — A program authorized by **FACT Act of 1990** to provide long-term protection for wetlands. Producers enrolling in the program must agree to implement an approved wetlands restoration and protection plan. In return, participating producers receive payments based on the difference in the value of their land caused by placing an easement on a portion of it. The **FAIR Act of 1996** limits enrollment of the WRP to 975,000 acres. USDA is required to divide new enrollments among permanent easements, 30-year easements, and restoration cost-share agreements. Previously, all enrollment had been permanent easements.

Wet-milling — A process in which feed material is steeped in water, with or without sulphur dioxide, to soften the seed kernel in order to help separate the kernel's various components. For example, wet-milling plants can separate a bushel of corn into more than 31 pounds of starch (which in turn can be converted into corn sweeteners or **ethanol**), 15 pounds of animal feed, and nearly 2 pounds of corn oil.

WFP — United Nations **World Food Program**

WFPO — Watershed and Flood Prevention Operations

WGA — Western Growers Association

WHIP — **Wildlife Habitat Incentive Program**

WHO — World Health Organization

Whole herd buyout program — Another term for the **dairy termination program**.

Wholesale price index — A composite index of prices of commodities sold in primary U.S. markets. "Wholesale" refers to sale in large quantities by producers, not to prices received by wholesalers, jobbers, or distributors. In agriculture, it is the average price received by farmers for their farm commodities at the first point of sale when the commodity leaves the farm.

WIC — Special Supplemental Nutrition Program for Women, Infants and Children

WIC Farmers' Market Nutrition Act of 1992 — P.L. 102-314 (July 2, 1992) established a program authorizing projects that provide participants in the Special Supplemental Nutrition Program for Women, Infants, and Children (**WIC**) with food coupons that can be used to purchase fresh, unprocessed foods, such as fruits and vegetables at farmers' markets.

WIC vendors — Grocery and other stores authorized as eligible to accept WIC coupons or vouchers and to receive reimbursement from the state WIC program for purchases made with these food instruments.

WIC vouchers (coupons) — Food instruments commonly issued by WIC agencies to participants that are used in grocery and other authorized food stores to buy certain quantities and types of foods listed on the coupon, which are designated by the state as being authorized for purchase under the WIC program.

Wilderness — An area of federal land, usually 5,000 acres or more, where the impact of man is largely unnoticeable, and which has been designated as wilderness by Congress.

Wildlife Habitat Incentives Program — A program established by the **FAIR Act of 1996** to promote voluntary implementation of on-farm management practices to improve wildlife habitat. Landowner activities under this program implement a state plan. Cost-sharing will be available with funding authorized at \$50 million for fiscal years 1996-2002 from **Conservation Reserve Program** funds.

Wildlife Refuges — Units of the **National Wildlife Refuge System**. They may be designated under general authorities of the **Migratory Bird Treaty Act**, the **Endangered Species Act**, or (rarely) by specific acts of Congress. There are over 500 refuges, with over 89,000,000 acres.

Wind erosion — The detachment and transportation of soil by wind. Wind erosion is a cropland management concern in the Plains states.

Wind erosion equation — An equation used to design wind erosion control systems, which considers soil erodibility, soil roughness, climate, the unsheltered distance across a field, and the vegetative cover on the ground.

Wool Act of 1954 — See **National Wool Act of 1954**.

Work/training programs, food stamp — Work/training programs have two meanings in the **food stamp** program: (1) most able-bodied unemployed or underemployed (less than 30 hours a week) adults not caring for very young children must register for work and, if assigned, participate in work/training programs that can include a wide variety of activities such as supervised job search or job search training, a "workfare" program (where they work off the value of their benefit in public service jobs), work experience program or programs involving on-the-job training, education programs to improve basic skills; and (2) in order to maintain eligibility beyond 3 months, able-bodied adult recipients between age 18 and 50 and without dependents must, if not working at least 20 hours a week, participate in and comply with a much narrower range of work/training activities, including only workfare programs, programs under the **Job Training Partnership Act (JTPA)** or the **Trade Adjustment**

Assistance Act, and employment and training programs operated by states and political subdivisions that meet state-set standards. Work/training activities covered by the first (broader) definition are often referred to as food stamp program “employment and training” (“E and T”) programs.

World Agricultural Outlook Board (WAOB) — As part of the Office of the Chief Economist, the WAOB coordinates the USDA's commodity forecasting program; monitors global weather and analyzes its impact on agriculture; and coordinates USDA's weather, climate and remote sensing work. <http://www.usda.gov/agency/oce/waob/waob.htm>

World Food Program (WFP) — A UN agency that contributes commodities, services, and cash to developing countries to meet emergency food needs or to carry out economic and social development projects using food or local currencies generated from the sale of food aid commodities.

World price — The price at which commodities will move in international trade under existing marketing conditions. The concept “world price” lacks precision unless quality, location, and other factors are specified. See also **domestic price**.

World Trade Organization (WTO) — The international organization established by the **Uruguay Round** of multilateral trade negotiations to oversee implementation of the **General Agreement on Tariffs and Trade** and the agreements arising from the Uruguay Round, including the Uruguay Round Agreement on Agriculture.

WPA — Waterfowl production areas

WPS — Worker protection standard

WQIP — **Water Quality Incentives Program**

WRI — World Resources Institute

WRP — **Wetlands Reserve Program**

WTO — **World Trade Organization**

WWF — World Wildlife Fund

Yield — The number of bushels (or pounds or hundredweight) that a farmer harvests per acre. Under the 1985 **farm bill**, the **farm program** payment yield was the farmer's average yield for the 1981-1985 crop years, excluding the years when the yields were highest and lowest. Payment yields have remained frozen at the level fixed in the 1985 **farm bill** ever since.

Zero, 50/85-92 provisions — Refers to the 50/85 and 50/92 **commodity program** provisions for rice and cotton and the 0/85 and 0/92 commodity program provisions for wheat and feed grains that were in effect in various forms from 1986 through 1995. Under these provisions farmers could idle all or part of their **permitted acreage**, putting the land in a conserving use, and receive **deficiency payments** as if up to 92% of the **permitted acreage** had been planted. A minimum planting requirement of 50% of maximum payment acreage applied for rice and cotton. Under the **FAIR Act of 1996**, producers have no planting requirements but must observe appropriate conservation practices if the land remains idle.

Zero tolerance — In food safety policy, a “zero tolerance” standard generally means that if a potentially dangerous substance (whether microbiological, chemical, or other) is present in or on a product, that product will be considered **adulterated** and unfit for human consumption. In the meat and poultry inspection program, “zero tolerance” usually refers to USDA’s rule that permits no visible signs of fecal contamination (feces) on meat and poultry carcasses. USDA requires that any time such fecal contamination is detected, it must be removed from the carcass. At issue is how this rule has been applied and enforced by USDA in meat and poultry plants. For a number of years, poultry producers have been permitted to either rinse (wash) off or cut (trim) away such contamination, but beef producers have only been permitted to (trim) it with a knife—which they argue costs them money in lost product weight and imposes a requirement that poultry producers do not have to meet. The policy jargon for this debate is “wash versus trim.” USDA early in 1997 clarified its zero tolerance rule for poultry; a year earlier it gave beef plants permission to use a new high-temperature vacuuming method to remove fecal contamination in lieu of cutting it off.

Zoonotic diseases — Diseases that under natural conditions are communicable from animals to humans. Tuberculosis and rabies are examples of zoonotic diseases. **Brucellosis** in livestock becomes undulant fever in humans.