

## ■ Glossary of Agricultural Terms

**Acid soil.** Soil with a pH of less than 7.0.

**Agricultural Adjustment Act of 1933 (P.L. 73-10).** Signed May 12, 1933, this law introduced the price support programs, including production adjustments, and the incorporation of the Commodity Credit Corporation (CCC), under the laws of the State of Delaware on October 17, 1933. The program benefits were financed mostly by processing taxes on the specific commodity. The Act also made price support loans by the CCC mandatory for the designated "basic" (storable) commodities: corn, wheat, and cotton. Support for other commodities was authorized upon the recommendation by the Secretary of Agriculture with the President's approval.

**Agricultural Adjustment Act of 1938 (P.L. 75-430).** Signed February 16, 1938, this law was the first to make price support mandatory for corn, cotton, and wheat to help maintain a sufficient supply for low production times along with marketing quotas to keep supply in line with market demand. The 1938 Act is considered part of permanent agriculture legislation. Provisions of this law are often superseded by more current legislation. However, if the current legislation expires and new legislation is not enacted, the law reverts back to the permanent provisions of the 1938 Act, along with the Agricultural Act of 1949.

**Agronomy.** The science of crop production and soil management.

**Alfalfa.** A valuable leguminous crop for forage or hay used in livestock feeding.

**Alkaline soil.** Soil with a pH of more than 7.0.

**Alternative farming.** Production methods other than energy- and chemical intensive one-crop (monoculture) farming. Alternatives include using animal and green manure rather than chemical fertilizers, integrated pest

management instead of chemical pesticides, reduced tillage, crop rotation (especially with legumes to add nitrogen), alternative crops, or diversification of the farm enterprise.

**Animal unit.** A standard measure based on feed requirements, used to combine various classes of livestock according to size, weight, age, and use.

**Aquaculture.** The production of aquatic plants or animals in a controlled environment, such as ponds, raceways, tanks, or cages, for all or part of their life cycle. In the United States, baitfish, catfish, clams, crawfish, freshwater prawns, mussels, oysters, salmon, shrimp, tropical (or ornamental) fish, and trout account for most of the aquacultural production. Less widely established but growing species include alligator, hybrid striped bass, carp, eel, red fish, northern pike, sturgeon, and tilapia.

**Arid climate.** A dry climate with an annual precipitation usually less than 10 inches. Not suitable for crop production without irrigation.

**Artificial insemination (AI).** The mechanical injection of semen into the womb of the female animal with a syringe-like apparatus.

**Back hoe.** A shovel mounted on the rear of a tractor, hydraulically operated to dig trenches or pits in soil.

**Base acreage.** A farm's crop-specific acreage of wheat, feed grains, upland cotton, or rice eligible to enroll in commodity programs under previous legislation. Base acreage equals land planted for harvest to the crop, plus any land enrolled in acreage reduction programs, plus land considered planted to the crop in 0,50/85-92 or under permitted normal flex or optional flex acreage shifts during a specified period of time. A farmer's crop acreage base is reduced by the portion of land placed in the Conservation Reserve

Program, but is increased by CRP base acreage leaving the CRP.

**Basic commodities.** Six crops (corn, cotton, peanuts, rice, tobacco, and wheat) that are covered by parity-based price support provisions, provisions which have been suspended for the 1996 through 2002 crops of each of these commodities.

**Biological control of pests.** Control, but not total eradication, of insect pests achieved by using natural enemies, either indigenous or imported, or diseases to which the pest is susceptible. It includes such nontoxic pesticides as *Bacillus thuringiensis* (Bt).

**Biologics.** Immunization materials made from living or "killed" organisms and their products used for the detection and prevention of diseases; includes serums, vaccines, bacterins, antigens, and antitoxins.

**Biotechnology.** The use of technology, based on living systems, to develop processes and products for commercial, scientific, or other purposes. These include specific techniques of plant regeneration and gene manipulation and transfer (see also genetic engineering).

**Blended credit.** A form of export subsidy which combines direct Government export credit and credit guarantees to reduce the effective interest rate.

**Brucellosis.** A contagious disease in beef and dairy cattle, which causes abortion. Same disease in humans is known as undulant fever.

**BST (bovine somatotropin) (also called BGH, for bovine growth hormone).** A protein hormone produced naturally in the pituitary gland of cattle. Recombinant BST, or rBST, is BST produced using recombinant DNA biotechnology. BST controls the amount of milk produced by cows.

**Cargo preference.** A law that requires a certain portion of goods or commodities financed by the U.S. Government to be shipped on U.S. flag ships. The law has traditionally applied to P.L. 480 and other concessional financing or donations programs.

**Carryover.** Existing supplies of a farm commodity not used at the end of a marketing year, and remaining to be carried over into the next year. Marketing years generally start at the beginning of a new harvest for a commodity, and extend to the same time in the following year.

**Cash grain farm.** A farm on which corn, grain sorghum, small grains, soybeans, or field beans and peas account for at least 50 percent of value of products sold.

**Census of Agriculture.** A count taken every 5 years of the number of farms, land in farms, crop acreage and production, livestock numbers and production, farm expenses, farm facilities and equipment, farm tenure, value of farm products sold, farm size, type of farm, farm operator characteristics (age, race, sex), etc. Data are obtained for States and counties. USDA now administers the Census of Agriculture, which was previously done by the U.S. Bureau of the Census.

**Checkoff programs.** Research and promotion programs authorized by law and financed by assessments. The programs are paid for by specified industry members such as producers, importers, and handlers.

**Combine.** A self-propelled machine for harvesting grain and other seed crops. In one operation, it cuts, threshes, separates, and cleans the grain and scatters the straw.

**Commodity certificates.** Payments issued by the Commodity Credit Corporation (CCC) in lieu of cash payments to program participants. Holders of the certificates may exchange them with the CCC for CCC-owned commodities. With the exception of the upland cotton loan program, CCC authority to issue such certificates in lieu of cash payments was suspended for the 1996 through 2002 crops by the Federal Agriculture Improvement and Reform Act of 1996. Under the "special marketing loan provi-

sions” for the upland cotton loan program, however, cotton user marketing certificates may be paid by CCC with commodity certificates.

**Commodity Credit Corporation (CCC).**

A federally owned and operated corporation within USDA created to stabilize, support, and protect agricultural prices and farm income through loans, purchases, payments, and other operations. All money transactions for agricultural price and income support and related programs are handled through the CCC.

**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 1996 Act can be recourse for sugar and will become recourse for dairy in 2000.

**Complementary imports.** Agricultural import items not produced in appreciable commercial volume in the United States, such as bananas, coffee, rubber, cocoa, tea, spices, and cordage fiber (see also supplementary imports).

**Compost.** Organic residues, or a mixture of organic residues and soil, which have been piled, moistened, and allowed to undergo biological decomposition for use as a fertilizer.

**Concessional sales.** Credit sales of a commodity in which the buyer is allowed more favorable payment terms than those on the open market. For example, Title I of the Food for Peace Program (P.L. 480) provides for financing sales of U.S. commodities with low-interest, long-term credit.

**Conservation compliance.** This represents a portion of the Highly Erodible Land Conservation provisions of the Food Security Act of 1985 that is designed to encourage the use of conservation practices on highly erodible cropland. To remain eligible for many USDA program benefits, farmers are required to crop highly erodible land under an approved conservation plan. Also see "Sodbuster."

**Conservation district.** Any unit of local government formed to carry out a local soil and water conservation program.

**Conservation plan.** A combination of land uses and practices to protect and improve soil productivity and to prevent soil deterioration. A conservation plan must be approved by the local conservation district for acreage offered in the Conservation Reserve Program. The plan sets forth the conservation measures and maintenance that the owner or operator will carry out during the term of the contract.

**Conservation practices.** Methods which reduce soil erosion and retain soil moisture. Major conservation practices include conservation tillage, crop rotation, contour farming, strip cropping, terraces, diversions, and grassed waterways.

**Conservation Reserve Program (CRP).** A major provision of the Food Security Act of 1985 designed to reduce erosion and protect water quality on up to 45 million acres of farmland. Under the program, enrolled landowners agree to convert environmentally sensitive land to approved conserving uses for 10-15 years. In exchange, the landowner receives an annual rental payment as well as an initial cost-share payment for up to 50 percent of the cost of establishing permanent vegetative cover.

**Conservation tillage.** Any of several farming methods that provide for seed germination, plant growth, and weed control yet maintain effective ground cover throughout the year and disturb the soil as little as possible. The aim is to reduce soil loss and energy use while maintaining crop yields and quality. No-till is the most restrictive (soil-conserving) form of conservation tillage. Other practices include ridge-till, strip-till, and mulch-till.

**Contour farming.** Field operations such as plowing, planting, cultivating, and harvesting on the contour, or at right angles to the natural slope, to reduce soil erosion, protect soil fertility, and use water more efficiently.

**Contract acreage.** Enrolled 1996 commodity base acreage under the 1996 Farm Act 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 had an acreage base.

**Contract crops.** Crops eligible for production flexibility payments: wheat, corn, sorghum, barley, oats, rice, and upland cotton.

**Cooperative.** An organization formed for the purpose of producing and marketing goods or products owned collectively by members who share in the benefits.

**Cooperative Extension System.** A national, publicly funded, nonformal education network that links the educational and research resources and activities of USDA with land-grant universities in every State, territory, and the District of Columbia. The Federal partner is the Cooperative State Research, Education, and Extension Service. This unique Federal, State, and local partnership focuses on practical solutions to critical issues affecting people's daily lives.

**Cost of production.** The sum, measured in dollars, of all purchased inputs and other expenses necessary to produce farm products. Cost of production statistics may be expressed as an average per animal, per acre, or per unit of production (bushel, pound, or hundredweight) for all farms in an area or in the country.

**County extension agent.** An educator employed by a county and/or a State cooperative extension service to bring research-based agriculture and quality of life education to local people to help them address farm, home, and community problems at the local level.

**Cover crop.** A close-growing crop grown to protect and improve soils between periods of regular crops or between trees and vines in orchards and vineyards.

**Crop rotation.** The practice of growing different crops in recurring succession on the same land. Crop rotation plans are usually followed for the purpose of increasing soil fertility and maintaining good yields.

**Crop year.** Generally, the 12-month period from the beginning of harvest of a particular crop.

**Custom work.** Specific farm operations performed under contract between the farmer and the contractor. The contractor furnishes labor, equipment, and materials to perform the operation. Custom harvesting of grain, spraying and picking of fruit, and sheep shearing are examples of custom work.

**Dairy Export Incentive Program.** A program that offers subsidies to exporters of U.S. dairy products to assist in competition with other nations. Payments are made by the Commodity Credit Corporation on a bid basis either in cash or through certificates redeemable for commodities. The program was originally authorized by the 1985 Farm Act and reauthorized by the 1990 Farm Act. The 1996 Farm Act extends the program through 2002.

**Disaster payments.** Federal payments made to farmers because of a natural disaster when (1) planting is prevented or (2) crop yields are abnormally low because of adverse weather and related conditions. Disaster payments may be provided under existing legislation or under special legislation enacted after an extensive natural disaster.

**Distance Education.** Delivery of instructional material over a wide geographical area via one or more technologies, including video, computer, and laser.

**DNA.** Deoxyribonucleic acid, a polymeric chromosomal constituent of living cell nuclei, composed of deoxyribose (a sugar), phosphoric acid, and four nitrogen bases--adenine, cytosine, guanine, and thymine. It contains the genetic information for living organisms, and consists of two strands in the shape of a double helix. A gene is a piece of DNA.

**Double crop.** Two different crops grown on the same area in one growing season.

**Dryland farming.** A system of producing crops in semiarid regions (usually with less than 20 inches of annual rainfall) without the use of irrigation. Frequently, part of the land will lie fallow in alternate years to conserve moisture.

**Erosion.** The process in which water or wind moves soil from one location to another. Types of erosion are (1) sheet and rill—a general washing away of a thin uniform sheet of soil, or removal of soil in many small channels or incisions caused by rainfall or irrigation runoff; (2) gully—channels or incisions cut by concentrated water runoff after heavy rains; (3) ephemeral—a water-worn, short-lived or seasonal incision, wider, deeper and longer than a rill, but shallower and smaller than a gully; and (4) wind—the carrying away of dust and sediment by wind in areas of high prevailing winds or low annual rainfall.

**Ethanol.** An alcohol fuel that may be produced from an agricultural foodstock such as corn, sugarcane, or wood, and may be blended with gasoline to enhance octane, reduce automotive exhaust pollution, and reduce reliance on petroleum-based fuels.

**Export Enhancement Program (EEP).** Started in May 1985 under the Commodity Credit Corporation Charter Act to help U.S. exporters meet competitors' prices in subsidized markets. Under the EEP, exporters are awarded bonuses, enabling them to compete for sales in specified countries.

**Extra-long staple (ELS) cotton.** Cottons having a staple length of 1-3/8 inches or more, characterized by fineness and high-fiber strength. American types include American Pima and Sea Island cotton.

**Family Farm.** An agricultural business which (1) produces agricultural commodities for sale in such quantities so as to be recognized as a farm rather than a rural residence; (2) produces enough income (including off farm employment) to pay family and farm operating expenses, to pay debts, and to maintain the property; (3) is managed by the operator; (4) has a substantial amount of labor provided by the operator and family; and (5) may use seasonal labor during peak periods and a reasonable amount of full-time hired labor.

**Farm.** USDA defines a farm in 1997 as any place from which \$1,000 or more of agricultural products were produced and sold or normally would have been sold during the year.

**Farm Credit System.** The system made up of cooperatively owned financial institutions in districts covering the United States and Puerto Rico that finance farm and farm-related mortgages and operating loans. Institutions within each district specialize in farmland loans and operating credit, or lending to farmer-owned supply, marketing, and processing cooperatives. FCS institutions rely on the bond market as a source of funds.

**Federal Agriculture Improvement and Reform Act of 1996 (1996 Farm Act) (P.L.104-127).** The omnibus food and agriculture legislation signed into law on April 4, 1996, that provided a 7-year framework (1996-2002) for the Secretary of Agriculture to administer various agricultural and food programs. The 1996 Act fundamentally redesigns income support and supply management programs for producers of wheat, corn, grain sorghum, barley, oats, rice, and upland cotton. The 1996 Farm Act also makes program changes for dairy, sugar, and peanuts. Additionally, trade programs are more targeted and environmental programs are consolidated and extended in the 1996 Farm Act.

**Feed grain.** Any of several grains most commonly used for livestock or poultry feed, including corn, grain sorghum, oats, rye, and barley.

**Fertilizer.** Any organic or inorganic material of natural or synthetic origin which is added to soil to provide nutrients, including nitrogen, phosphorus, and potassium, necessary to sustain plant growth.

**FFA.** An organization for high school students studying vocational agriculture.

**Flood plains.** Lowland and relatively flat areas adjoining inland and coastal waters, including floodprone areas of islands. This land includes, at a minimum, those areas that are subject to a 1 percent or greater chance of flooding in any given year.

**Food, Agriculture, Conservation, and Trade Act of 1990 (1990 Farm Act) (P.L. 101-624).** Signed November 28, 1990, this 5-year farm bill applied to the 1991-95 crop programs. This Act continued the transition, started by the Food Security Act of 1985, toward greater market orientation of domestic commodity programs, the most notable changes being frozen minimum target prices and greater planting flexibility. Most of the commodity program provisions of this Act were superseded by the Federal Agriculture Improvement and Reform Act of 1996.

**Food grain.** Cereal seeds most commonly used for human food, chiefly wheat and rice.

**Food Security Act of 1985 (1985 Farm Act) (P.L. 99-198).** The omnibus food and agriculture legislation signed into law on December 23, 1985, that provided a 5-year framework (1986-90) for the Secretary of Agriculture to administer various agricultural and food programs.

**Forage.** Vegetable matter, fresh or preserved, that is gathered and fed to animals as roughage; includes alfalfa hay, corn silage, and other hay crops.

**Forward contracting.** A method of selling crops before harvest by which the buyer agrees to pay a specified price to a grower for a portion, or all, of the grower's crops.

**Fungicide.** A chemical substance used as a spray, dust, or disinfectant to kill fungi infesting plants or seeds.

**Futures contract.** An agreement between two people, one who sells and agrees to deliver and one who buys and agrees to receive a certain kind, quality, and quantity of product to be delivered during a specified delivery month at a specified price.

**General Agreement on Tariffs and Trade (GATT).** An agreement originally negotiated in 1947 to increase international trade by reducing tariffs and other 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 established the World Trade Organization (WTO) to replace the GATT. The WTO officially replaced the GATT on January 1, 1995.

**Genetic engineering.** Genetic modification of organisms by recombinant DNA, recombinant RNA, or other specific molecular gene transfer or exchange techniques.

**Genome.** All the genetic material in the chromosomes of a particular organism.

**Gleaning.** Collecting of unharvested crops from the fields, or obtaining agricultural products from farmers, processors, or retailers without charge.

**Gopher.** The Internet Gopher client/server is a distributed information delivery system around which a campuswide information system can readily be constructed. While providing a delivery vehicle for local information, Gopher facilitates access to other Gopher and information servers throughout the world.

**Grade A milk.** Milk, also referred to as fluid grade, produced under sanitary conditions that qualify it for fluid (beverage) consumption. Only Grade A milk is regulated under Federal milk marketing orders.

**Grade B milk.** Milk, also referred to as manufacturing grade, not meeting Grade A standards. Less stringent standards generally apply.

**Grafting.** The process of inserting a scion of a specified variety into a stem, root, or branch of another plant so that a permanent union is achieved.

**Great Plains.** A level to gently sloping region of the United States that lies between the Rockies and approximately the 98th meridian. The area is subject to recurring droughts and high winds. It consists of parts of North Dakota, South Dakota, Montana, Nebraska, Wyoming, Kansas, Colorado, Oklahoma, Texas, and New Mexico.

**Green manure.** Any crop or plant grown and plowed under to improve the soil, by adding

organic matter and subsequently releasing plant nutrients, especially nitrogen.

**Ground water.** Water beneath the Earth's surface between saturated soil and rock, which supplies wells and springs.

**Hedgerow.** Trees or shrubs grown closely together so that branches intertwine to form a continuous row.

**Herbicide.** Any agent or chemical used to destroy plants, especially weeds.

**Humus.** The well decomposed, relatively stable portion of the partly or wholly decayed organic matter in a soil, which provides nutrients and helps the soil retain moisture.

**Hydroponics.** Growing of plants in water containing dissolved nutrients, rather than in soil. This process is being used in greenhouses for intensive off-season production of vegetables.

**Infrastructure.** The transportation network, communications systems, financial institutions, and other public and private services necessary for economic activity.

**Integrated crop management.** An agriculture management system that integrates all controllable agricultural production factors for long-term sustained productivity, profitability, and ecological soundness.

**Integrated pest management (IPM).** The control of pests or diseases by using an array of crop production strategies, combined with careful monitoring of insect pests or weed populations and other methods. Some approaches include selection of resistant varieties, timing of cultivation, biological control methods, and minimal use of chemical pesticides so that natural enemies of pests are not destroyed. These approaches are used to anticipate and prevent pests and diseases from reaching economically damaging levels.

**International trade barriers.** Regulations used by governments to restrict imports from other countries. Examples include tariffs, embargoes, import quotas, and unnecessary sanitary restrictions.

**Internet.** The global connection of interconnected local, mid-level, and wide-area automated information/communications networks.

**Land-grant universities.** Institutions, including State colleges and universities and Tuskegee University, eligible to receive funds under the Morrill Acts of 1862 and 1890. The Federal Government granted land to each State and territory to encourage practical education in agriculture, homemaking, and mechanical arts.

**Land-use planning.** Decisionmaking process to determine present and future uses of land. The resulting plan is the key element of a comprehensive plan describing recommended location and intensity of development of public and private land uses such as residential, commercial, industrial, recreational, and agricultural.

**Leaching.** The process of removal of soluble materials by the passage of water through soil.

**Legumes.** A family of plants that includes many valuable food and forage species such as peas, beans, soybeans, peanuts, clovers, alfalfas, and sweet clovers. Legumes can convert nitrogen from the air to nitrates in the soil through a process known as nitrogen fixation. Many of these species are used as cover crops and are plowed under for soil improvement.

**Lint.** Cotton fiber remaining after the seeds have been ginned out.

**Loan deficiency payments.** A provision begun in the 1985 Farm Act to provide direct payments to producers who, although eligible to obtain price support loans for wheat, feed grains, upland cotton, rice, or oilseeds and thereby receive marketing loan gains, agree not to obtain loans.

**Loan rate.** The price per unit (bushel, bale, pound, or hundredweight) at which the Commodity Credit Corporation will provide loans to farmers enabling them to hold their crops for later sale.

**Market Access Program (MAP).** Formerly the Market Promotion Program. Participating organizations include nonprofit trade associations, State and regional trade groups, and private companies. Fund authority is capped at \$90 million annually for FY 1996-2002.

**Market basket of farm foods.** Average quantities of U.S. farm foods purchased annually per household in a given period. Retail cost of these foods used as a basis for computing an index of retail prices for domestically produced farm foods. Excluded are fishery products, imported foods, and meals eaten away from home.

**Marketing allotments.** Provides each processor or producer of a particular commodity a specific limit on sales for the year, above which penalties would apply.

**Marketing orders.** Federal marketing orders authorize agricultural producers to promote orderly marketing by influencing such factors as supply and quality, and to pool funds for promotion and research. Marketing orders are initiated by the industry, and are approved by the Secretary of Agriculture and by a vote among producers. Once approved, a marketing order is mandatory.

**Marketing spread.** The difference between the retail price of a product and the farm value of the ingredients in the product. This farm-retail spread includes charges for assembling, storing, processing, transporting, and distributing the products.

**Marketing year.** Year beginning at harvest time during which a crop moves to market.

**Metropolitan statistical area (MSA).** A county or group of contiguous counties that contain at least one city of 50,000 inhabitants or more, or twin cities with a combined population of at least 50,000. In addition, contiguous counties are included in an MSA if they are socially and economically integrated with a central city.

**Migrant farmworker.** A person who travels across State or county boundaries to do agricultural work of a seasonal or other temporary nature, and who is required to be absent

overnight from his or her permanent place of residence. Exceptions are immediate family members of an agricultural employer or a farm labor contractor, and temporary foreign workers.

**National forest.** A Federal reservation dedicated to protection and management of natural resources for a variety of benefits — including water, forage, wildlife habitat, wood, recreation, and minerals. National forests are administered by USDA's Forest Service, while national parks are administered by the Interior Department's National Park Service.

**National grassland.** Land, mainly grass and shrub cover, administered by the Forest Service as part of the National Forest System for promotion of grassland agriculture, watersheds, grazing wildlife, and recreation.

**Nematode.** Microscopic soil worm, which may attack root or other structures of plants and cause extensive damage.

**Net farm income.** A measurement of the profit or loss associated with a given year's production. It is an approximation of the net value of agricultural production, regardless of whether the commodities were sold, fed, or placed in inventory during the year. Net farm income equals the difference between gross farm income and total expenses. It includes nonmoney items such as depreciation, the consumption of farm-grown food, and the net imputed rental value of operator dwellings. Additions to inventory are treated as income.

**Nitrogen.** A chemical element essential to life and one of the primary plant nutrients. Animals get nitrogen from protein feeds; plants get it from soil; and some bacteria get it directly from air.

**Nonfarm income.** Includes all income from nonfarm sources (excluding money earned from working for other farmers) received by farm operator households.

**Nonpoint source pollution.** Pollutants that cannot be traced to a specific source, including stormwater runoff from urban and agricultural areas.



**Nonprogram crops.** Crops—such as potatoes, vegetables, fruits, and hay—that are not included in Federal price support programs.

**Nonrecourse loan program.** Provides operating capital to producers of wheat, feed grains, cotton, peanuts, tobacco, rice, and oilseeds. Dairy processors (until 2000) and sugar processors are also eligible for nonrecourse loans. Farmers or processors participating in government commodity programs may pledge a quantity of a commodity 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, or forfeit the commodity to the CCC after the specified period as full settlement of the loan with no penalty. For those commodities eligible for marketing loan benefits, producers may repay the loan at the world price (rice and upland cotton) or posted county price (wheat, feed grains, and oilseeds).

**Nutrient.** A chemical element or compound that is essential for the metabolism and growth of an organism.

**Off-farm income.** Includes wages and salaries from working for other farmers, plus nonfarm income, for all owner operator families (whether they live on a farm or not).

**Oilseed crops.** Primarily soybeans, and other crops such as peanuts, cottonseed, sunflower seed, flaxseed, safflower seed, rapeseed, sesame seed, castor beans, canola, rapeseed, and mustard seeds used to produce edible and/or inedible oils, as well as high-protein animal meal.

**Oilseed meal.** The product obtained by grinding the cakes, chips, or flakes that remain after most of the oil is removed from oilseeds. Used as a feedstuff for livestock and poultry.

**Organic farming.** There is no universally accepted definition, but in general organic farming is a production system which avoids or largely excludes the use of synthetically compounded fertilizers, pesticides, growth regulators, and livestock feed additives.

To the maximum extent feasible, organic farming systems rely on crop rotation, crop residues, animal manures, legumes, green manure, off-farm organic wastes, mechanical cultivation, mineral bearing rocks, and aspects of biological pest control to maintain soil productivity and tilth; to supply plant nutrients; and to control weeds, insects, and other pests.

**Payment limitations.** Limitations set by law on the amount of money any one person may receive in Federal farm program payments each year under the feed grain, wheat, cotton, rice, and other farm programs.

**Percolation.** The downward movement of water through soil under the influence of gravity.

**Permanent legislation.** Legislation that would be in effect in the absence of all temporary amendments (Farm Acts). The Agricultural Adjustment Act of 1938 and the Agricultural Act of 1949 serve as the basic laws authorizing the major commodity programs. Technically, each new Farm Act amends the permanent legislation for a specified period.

**Plant germplasm.** Living material such as seeds, rootstock, or leaf plant tissue from which new plants can grow.

**Pomology.** The science or study of growing fruit.

**Price index.** An indicator of average price change for a group of commodities that compares price for those same commodities in some other period, commonly called the base period.

**Price support level.** The price for a unit of a farm commodity (pound, ton) that the Government will support through price-support loans, purchases, and/or payments. Price support levels are determined by law and are set by the Secretary of Agriculture.

**Price support programs.** Government programs that aim to keep farm prices from falling below specific minimum levels. Price support programs for selected commodities

(peanuts, tobacco, sugar, and milk) are carried out through loans or purchases. With price-support loans, producers (or processors in the case of sugar) use their production of a commodity as collateral for a loan with the Commodity Credit Corporation (CCC). Loans enable the loan taker to store the commodity during periods of low prices. The loans may be redeemed later if commodity prices rise sufficiently to make the sale of the commodity on the market profitable, or the loan taker may forfeit the commodity used as collateral for the loan to CCC in lieu of cash repayment. In the case of milk, CCC is authorized through December 31, 1999, to purchase manufactured dairy products in order to support the price of fluid milk at statutorily prescribed levels.

**Production Credit Associations.** Lending groups, owned by their farmer borrowers, that provide short and intermediate-term loans for up to 10 years from funds obtained from investors in money markets. These associations are an integral part of the Farm Credit System.

**Production flexibility contract payments.** The payments to be made to farmers for contract crops in 1996 through 2002 under the 1996 Farm Act. Payments for each crop are allocated each fiscal year based on budgetary levels and crop-specific percentages in the 1996 Farm Act.

**Production flexibility contract payment quantity.** The quantity of production eligible for production flexibility contract payments under the 1996 Farm Act. Payment quantity is calculated as the farm's program yield (per acre) multiplied by 85 percent of the farm's contract acreage.

**Production flexibility contract payment rate.** The amount paid per unit of production to each participating farmer for eligible payment production under the 1996 Farm Act.

**Productive capacity.** The amount that could be produced within the next season if all the resources currently available were fully employed using the best available technology. Productive capacity increases whenever

the available resources increase or the production of those resources increases.

**Productivity.** The relationship between the quantity of inputs (land, labor, tractors, feed, etc.) employed and the quantity of outputs produced. An increase in productivity means that more outputs can be produced from the same inputs or that the same outputs are produced with fewer inputs. Both single-factor and multifactor indexes are used to measure productivity. Single-factor productivity indexes measure the output per unit of one input at the same time other inputs may be changing. Multifactor productivity indexes consider all productive resources as a whole, netting out the effects of substitution among inputs. Crop yield per acre, output per work hour, and livestock production per breeding animal are all single-factor productivity indicators. The Total Farm Output per Unit of Input Index is a multifactor measure.

**Program crops.** Crops for which Federal support programs are available to producers, including wheat, corn, barley, grain sorghum, oats, extra long staple and upland cotton, rice, oilseeds, tobacco, peanuts, and sugar.

**Public Law 480 (P.L. 480).** Common name for 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 of P.L. 480, also called the Food for Peace Program, makes U.S. agricultural commodities available through long-term dollar credit sales at low interest rates for up to 30 years. Donations for humanitarian food needs are provided under Title II. Title III authorizes "food for development" grants.

**Rangeland.** Land which is predominantly grasses, grasslike plants, or shrubs suitable for grazing and browsing. Rangeland includes natural grasslands, savannahs, many wetlands, some deserts, tundra, and certain shrub communities. It also includes areas seeded to native or adapted and introduced species that are managed like native vegetation.

**Renewable resources.** Resources such as forests, rangeland, soil, and water that can be restored and improved.

**Riparian rights.** Legal water rights of a person owning land containing or bordering on a water course or other body of water in or to its banks, bed, or waters.

**RNA (ribonucleic acid).** A molecule similar to DNA that functions primarily to decode instructions for protein synthesis that are carried by genes.

**Ruminant.** Animal having a stomach with four compartments (rumen, reticulum, omasum, and abomasum). Their digestive process is more complex than that of animals having a true stomach. Ruminants include cattle, sheep, and goats, as well as deer, bison, buffalo, camels, and giraffes.

**Rural.** An area that has a population of fewer than 2,500 inhabitants and is outside an urban area. A rural area does not apply only to farm residences or to sparsely settled areas, since a small town is rural as long as it meets the above criteria.

**Saline soil.** A soil containing enough soluble salts to impair its productivity for plants.

**Silage.** Prepared by chopping green forage (grass, legumes, field corn, etc.) into an airtight chamber, where it is compressed to exclude air and undergoes an acid fermentation that retards spoilage. Contains about 65 percent moisture.

**Silviculture.** A branch of forestry dealing with the development and care of forests.

**Sodbuster.** A portion of the Highly Erodible Land Conservation provision of the Food Security Act of 1985 that is designed to discourage the conversion of highly erodible land from extensive conserving uses, such as grasslands and woodlands, to intensive production of agricultural commodities. If highly erodible grasslands or woodlands are converted to intensive crop production without the application of appropriate conservation practices, producers may lose eligibility

for many USDA program benefits. Also see "Conservation Compliance."

**Staple.** Term used to designate length of fiber in cotton, wool, or flax.

**State Agricultural Experiment Station.** State-operated institutions, established under the Hatch Act of 1887 and connected to land-grant universities in each State, which carry out research of local and regional importance in the areas of food, agriculture, and natural resources.

**Stubble mulch.** A protective cover provided by leaving plant residues of any previous crop as a mulch on the soil surface when preparing for the following crop.

**Subsistence farm.** A low-income farm where the emphasis is on production for use of the operator and the operator's family rather than for sale.

**Supplementary imports.** Farm products shipped into this country that add to the output of U.S. agriculture. Examples include cattle, meat, fruit, vegetables, and tobacco (see complementary imports).

**Sustainable agriculture.** An integrated system of plant and animal production practices having a site-specific application that will, over the long term, satisfy food and fiber needs, enhance environmental quality and natural resources, make the most efficient use of nonrenewable resources and on-farm resources, integrate natural biological cycles and controls, sustain the economic viability of farm operations, and enhance the quality of life.

**Swampbuster.** This provision was authorized by the Food Security Act of 1985; it discourages the conversion of natural wetlands to cropland use. With some exceptions, producers converting a wetland area to cropland may lose eligibility for many USDA program benefits.

**Terminal market.** A metropolitan market that handles all agricultural commodities.

**Tissue culture.** The technique of growing a whole plant from a single engineered cell or piece of plant tissue.

**Unit cost.** The average cost to produce a single item. The total cost divided by the number of items produced.

**Upland cotton.** A fiber plant developed in the United States from stock native to Mexico and Central America. Includes all cotton grown in the continental United States except Sea Island and American Pima cotton. Staple length of upland cotton ranges from 3/4 inch to 1 1/4 inches.

**Urban.** A concept defining an area that has a population of 2,500 or more inhabitants.

**Uruguay Round.** The Uruguay Round of Multilateral Trade Negotiations (UR) under the auspices of the GATT; a trade agreement designed to open world agricultural markets. The UR agricultural agreement covers four areas: export subsidies, market access, internal supports, and sanitary and phytosanitary rules. The agreement is implemented over a 6-year period, 1995-2000.

**Vegetative cover.** Trees or perennial grasses, legumes, or shrubs with an expected lifespan of 5 years or more.

**Viticulture.** The science and practice of growing grapes.

**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. 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 some 12,700 smaller watersheds.

**Water table.** The upper limit of the part of the soil or underlying rock material that is wholly saturated with water.

**Wetlands.** Land that is characterized by an abundance of moisture and that is inundated by surface or ground water often enough to support a prevalence of vegetation typically adapted for life in saturated soil conditions.

**Wholesale price index.** Measure of average changes in prices of commodities sold in primary U.S. markets. "Wholesale" refers to sales 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.

**Zoonotic diseases.** Diseases that, under natural conditions, are communicable from animals to humans.

**4-H.** International youth organization that empowers young people 5-19 years old through programs and activities that foster agricultural, science, and technology literacy; citizenship; and other lifelong living skills, such as self-esteem, career and personal development. The national 4-H staff is located in the Families, 4-H, and Nutrition unit of the Cooperative State Research, Education, and Extension Service. The 4-Hs stand for Head, Heart, Hands, and Health.

**1890 Land-Grant Colleges and Universities and Tuskegee University.** Historically Black land-grant colleges and universities. Through the Act of August 30, 1890, and several other authorities, these institutions may receive Federal funds for agricultural research, extension, and teaching.