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Food and Agricultural Policy

Taking Stock for the New Century
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Our Nation’s farm and food system serves the population exceedingly well. Today, American consumers enjoy abundant and safe food presented in a wide variety of choices. Our affordable food has enabled consumer spending on many other goods and services that contribute to our unrivaled standard of living.

The outstanding performance of our food system has not come about by happenstance. Rather, it has been the result of far-sighted planning and investment decisions that long ago put policies and procedures in place to support it. But, in recent years the pace of change has been unparalleled.

Our producers now operate in a global, technologically advanced, rapidly diversifying, highly competitive business environment that is relentlessly driven by increasingly sophisticated consumers.

Our challenge today is twofold: to confront and manage the change immediately before us while at the same time modernizing our farm and food system infrastructure to ensure continued growth and development for the 21st century.

The stocktaking exercise described in this report is an effort to that end. Its purpose is to formulate a longer term view of the Nation’s agriculture and food system, and to offer constructive ideas and suggestions to help guide the necessary efforts and investments to meet future needs. That is a tall order and involves a wide range of considerations.

The changes are so sweeping that we must pause to take stock of the new operating environment, with a view to ensuring that our system continues to have the foundation it needs to serve us as well in the future as it has in the past.

Ann M. Veneman
Secretary
Executive Summary

The dynamism that characterizes today’s food system began to develop more than two centuries ago, at the advent of the Industrial Revolution, and continues relentlessly today. It reflects changes in our society—globalization of markets and culture, advances in information and biological (and other) technologies, fundamental changes in our family structure and workforce—and extends throughout the network of food marketing, distribution, trade, and consumption. These trends are positive and unstoppable. They reflect today’s realities and are leading to a fundamental restructuring of the food system and a much different business environment for food and agriculture in the future.

The implications of these trends and the changes they imply are enormous. Our national institutions, policies, regulations, indeed the entire infrastructure built to support agriculture and the food system, as well as the underlying resource base upon which it depends, are increasingly stressed as the system attempts to deal with this new environment. Modernizing our institutions and policies to deal with these new realities is a constant challenge.

Our system has served this nation exceedingly well in the past, the result of far-sighted planning and investment—and it is our current responsibility to reappraise and further develop that foundation to meet the needs of the future.

Entering a New Era

It has not been so long ago in America’s history that food was viewed strictly in terms of commodities produced in bulk and meant to be plentiful and affordable. But, in the last half century’s prosperity, our concept of and expectations from food have changed, and taken on a new significance. American consumers today expect a great deal more from our food system. And, there is no doubt that it delivers—more nutritious food with wider variety, improved safety, with less environmental impacts, and greater convenience than at any time in the Nation’s history.

Consumer-Driven Agriculture

Increasingly, U.S. consumers insist on defining what is produced, how food production takes place, and with what effects. With more secure supplies of food, consumer interest has shifted to the forms in which foods are available and the services these products include. This consumer driven focus became increasingly important as population growth slowed and prosperity grew, changing the nature of demand for food. Today, domestic food needs grow only at the same slow pace as the population expands. As the U.S. food market has matured, consumption growth for one food product increasingly comes at the expense of another.

As well, Americans consider environmental quality as a kind of “non-market” good that is extremely important in consumer choices. The close interactions between farming practices and natural resources, always important, have been in the spotlight since the 1960s. Whether preserving wetlands, improving wildlife habitat, or maintaining water quality in rivers, streams, and lakes, American farmers’ stewardship of the environment has shown
steady improvement. However, these issues remain a matter of both public and private concern and can impact consumer decision making.

**A Global Economy**

Political boundaries no longer constrain the conduct of good business, and this includes agribusiness. Better, faster, more reliable communications and transportation systems facilitate businesses’ abilities to produce, source, and sell in the locations that give them best advantage, even if that means operating in multiple locations around the world. This globalization of markets pressures firms to be more competitive and to “shorten the supply chain” (reducing the number of business transactions and their associated costs) in order to meet rapidly changing consumer demand.

Businesses in the food system around the world compete against each other to provide high-quality products at the best price. Globalization makes it imperative for companies to diversify their sources of raw materials and buy from the farmer, wholesaler, or food processor that provides the best product for the lowest price at any given time. Thus, we can no longer think of our agriculture as being confined to what takes place within our borders. We are part of a larger, world-wide interconnected system.

**Technological Innovation**

Not only has technology facilitated the growth of global markets by reducing the constraint of geography, so too have new technological innovations spurred remarkable adaptation of the U.S. food and agricultural system to new global conditions and demands. Agricultural technology has traditionally focused on tools and techniques to lower farmers’ costs and increase yields. In today’s agricultural economy, new biological and information technologies actually expand markets for farmers and assure better communication between producers and consumers, further increasing market opportunities.

Biologically based technology is a particularly promising source for new products and new uses for farmers. For example, agriculture is the source of clean-burning fuel and industrial ethanol, a variety of specialty chemicals derived from plants rather than from mined stock, soy-based inks and diesel fuel, industrial adhesives, biopolymers, and films. Scientists recently announced that soybean oil can replace a significant share of petroleum-based resin used in manufacturing auto parts. The possibilities are far ranging, important, and growing. They include “pharmaceutical” products (agriculturally grown pharmaceuticals) and crops or livestock that embody specific traits demanded broadly by consumers (like leaner meat) or by niche markets (such as organic foods).

Information technology and computer-based marketing promise, via “e-commerce,” far broader access to markets than has ever been the case before. This access extends to consumers seeking direct buying opportunities, and producers seeking buyers of all sizes and types for niche as well as bulk products. The consequence is that size and distance are diminishing in importance for successful marketing.

The combined effect of biological and information technologies is potentially staggering. At the same time that consumer demands and producer opportunities are more rapidly and accurately signaled through e-commerce transactions, advances in biotechnology permit more rapid transformation of such demands into new products than ever possible before.

Technical advances are also addressing environmental issues. The tools of precision agriculture permit fertilizers and other agricultural chemicals to be used in quantities that exactly meet crop nutrition requirements of individual plants rather than spreading them in a uniform fashion, thus significantly reducing pollution and waste.

Today, domestic food needs grow only at the same slow pace as the population expands. As the U.S. food market has matured, consumption growth for one food product increasingly comes at the expense of another.
Adaptations from space, energy, and manufacturing sectors, such as satellite monitoring and robotics, offer remarkable new opportunities for agri-environmental improvement as well as continued increases in production efficiency.

Agricultural Diversity

The explosion of productivity sparked by technological advance has meant big changes for the farming sector. A concentration of resources into fewer and larger farms occurred throughout the 20th century. While production doubled over the last 50 years, farm numbers dropped by more than two-thirds. Today, about 150,000 American farmers produce most of our food and fiber. While among the world’s most competitive farms, these operations make up just one segment of U.S. agriculture. USDA counts another 2 million farmers who meet the criterion of selling at least $1,000 worth of product annually, many of whom have other occupations but enjoy rural lifestyles.

A vast diversity of farms emerges out of this multitude: niche farms, hobby farms, hunting preserves, dude ranches, you-pick operations, farms that sell directly to consumers through farmer’s markets, bed and breakfasts, and more.

Farmers produce scores of different raw commodities every year and countless varieties of products, even though bulk commodities—such as cotton, corn, wheat, and other food and feed grains that are the focus of government programs—symbolize agriculture for many. These program crops, grown on almost every farm in the 1930s, are produced today on perhaps only 30 percent of all farms and account for just 20 percent of the total value of agricultural sales.

In the 1930s, when price and income support programs first were developed, there was little need to distinguish among farms, farmers, or farm households. In fact, farms and households (and farming communities, in many cases) were closely intertwined as a way of life and were considered inseparable. Today, fewer farmers are full time, choosing to merge farm and nonfarm employment opportunities. While income from farming, as measured by net farm cash income, was $55.7 billion in 1999, off-farm sources contributed $124 billion.

The Implications of Change

We see in 2001 a highly diverse set of farms, responding with alacrity to apply unique technological possibilities to a new array of increasingly well articulated consumer demands in a globalized food system. The role of government will also continue to change, particularly as it relates to trade, farm policy, infrastructure demands, conservation and the environment, rural communities, and nutrition and food assistance. How we approach these issues will set the course for the future of American agriculture.
Trade Expansion Is Critical

Trade is critically important to the long-term economic health and prosperity of our food and agricultural sector. We have far more capacity than needed to meet domestic food market requirements. To avoid excess capacity throughout the system—our farmland, transportation, processing, financing, and other ancillary services—we must maintain and expand our sales to customers outside this country. Steadily expanding foreign demand—brought on by income gains, trade liberalization, and changes in global market structures—has helped U.S. exports steadily increase over time from $7.3 billion in 1970 to $53.5 billion for the current fiscal year. Clearly, without the salutary effects of an expanding export market, farm prices and net cash incomes would be significantly lower today.

Over 96 percent of the world’s population lives outside the United States. Most future growth in food demand will be in developing and middle-income countries, where both population and income are growing relatively rapidly. While we continue to see growth in exports of traditional commodities, exports of consumer-oriented, high-value products (meats, poultry, fruits and vegetables, and processed grocery products) are growing even more rapidly. High-value products now account for two-thirds of total sales, compared with only half in 1990.

Working to “level the playing field” through worldwide reductions in tariffs and other barriers to trade is fundamental to expanding exports. The average food and agricultural tariff in world trade is much higher than tariffs on manufactured items. The United States already has one of the lowest food and agricultural tariffs (12 percent compared to a global average of 62 percent), and thus stands to gain immensely from ambitious efforts to cut tariffs where they are high.

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Principles for Expanding Trade

- **Recognize the critical importance of the global marketplace.** More than 96 percent of all consumers live outside the United States. Failing to reach the newly emerging middle-class consumers (where demand growth will be most rapid) will stifle expansion of market share.

- **Expand markets through new trade agreements.** Greater access to foreign markets requires aggressive trade policy to lower tariffs and eliminate distorting subsidies. Failure to provide strong leadership in global trade liberalization will result in our producers and exporters being left behind. Other nations are aggressively pursuing agreements, many right in this hemisphere which are markets where we should have transportation and other advantages.

- **Ensure that farm and trade policies are fully compatible.** Domestic farm support and international trade policies must be consistent and mutually reinforcing. It makes no sense to have trade policies and programs promoting farm exports at the same time domestic support programs inadvertently reduce competitiveness. Our domestic and export policy must support our existing international obligations and at the same time give us ample latitude in pursuing ambitious goals in ongoing and future negotiations.

- **Enforce existing trade agreements.** Once new trade agreements have been concluded, the Government must ensure that our trading partners meet their obligations. This includes ensuring that our trading partners use accepted scientific principles in enacting their regulations. The growing number of sanitary/phytosanitary-related trade issues also requires an enhanced regulatory infrastructure.

- **Sharpen marketing efforts.** Programs to expand exports—export credit guarantees and market development—have served our food and agriculture sector well. Continual review and modification of these programs are required to ensure they are cost-effective and target high-impact growth markets and high-value products.
Farm Sector Policy

More than seven decades of farm policy have provided a rich, full experience upon which to draw as we contemplate appropriate 21st century policies for our industry. Our experience with policies and programs across this span of time has proved very instructive, providing invaluable lessons which at a very minimum can help us avoid the obvious mistakes of the past. History also shows that growth in farm household income has been largely due to rapid improvements in productivity supported by a strong research base along with better opportunities to market products—including export markets and off-farm employment opportunities.

Many of the program approaches since the 1930s proved not to work well or at all, produced unexpected and unwanted consequences, became far costlier than expected, and have been continually modified in our long succession of farm laws. The Federal Agriculture Improvement and Reform (FAIR) Act of 1996 removed much of the decades-old program structure, provided unparalleled farmer decision-making flexibility through “decoupled” benefits, and set a new example throughout the world for providing domestic farm sector support. While that approach still is arguably the least market- and resource-use-distorting approach available, its direct payments do share some unintended effects with price support programs, namely, the artificial inflation of farm land prices. The effect clearly has been exacerbated by the size of payments in recent years, some $28 billion in the last 4 years above the amount provided in the 1996 law.

Because of their historical evolution, current program benefits still are largely directed to specific commodity producers reaching only about 40 percent of our farms. And, there still is no direct relationship between benefits received and financial status of the farm.

Our current broad-scale, commodity-oriented approach to farm support does not recognize existing wide differences in production costs, marketing approaches, or overall management capabilities that delineate competitive and noncompetitive operations. For example, highly efficient commercial farms benefit enormously from price supports, enabling them to expand their operations and lower costs even more. Other farms have not received enough benefits to remain viable and have been absorbed along the way.

Another unintended consequence of current programs stems from the increasing disconnect between land ownership and farm operation. While program benefits were intended to help farm operators, most support eventually accrues to landowners, in the short run through rising rental rates and in the longer term through capitalization into land values. For many farm operators, renting land is a key strategy to expand the size of the business and capture the size economies, as evidenced by 42 percent of farmers renting land in 1999. Clearly, operators farming mostly rented acreage may receive little benefit from the programs.

While the current policy made large strides towards greater market orientation, a careful evaluation in the context of today’s diverse farm structure and increasingly consumer-driven marketplace still reveals severe misalignment among policy goals, program mechanisms, and outcome. Improvements could support more sustainable prosperity for farmers and agriculture and rural communities without engendering long-term dependence on direct government support.
Principles for Farm Policy

- **Pay heed to lessons learned.** Above all, effective farm policies for the new century must build upon the lessons learned from over seven decades of rich experience with the farm programs. Even the most carefully designed government intervention distorts markets and resource allocation, produces unintended consequences, and spreads benefits unevenly. We cannot afford to keep relearning the lessons of the past.

- **Recognize our new operating environment.** Our farm sector and food system operate today in a new and evolving business and social environment. It is a competitive, consumer-driven environment, global and rapidly changing with enormous implications for the place and role of the farm sector in the overall food system. It is highly interdependent, blending the efforts of many industries to add value to farm sector products.

- **Continually expand our commitment to open markets.** The United States is thoroughly committed to market-oriented policies, well understood to serve the best long-term interests of all stakeholders in the food system and society at large. Markets have continually demonstrated their superiority to other alternatives in guiding allocation of resources, investment, and production in patterns that are most beneficial to society at large. Still, this commitment needs to be renewed and expanded.

- **Commit even more fully to future growth of the farm and food system.** There is a long-standing, national economic commitment to open markets in support of the Nation’s market-oriented policies. For the agriculture industry, development of foreign markets is essential to support future investment, growth, and the long-term health of the sector. Our agricultural production capacity today not only exceeds domestic demand but is growing faster as well. Thus, future asset values, incomes, growth, and general prosperity depend upon gaining greater access to the global growth markets. New and expanded trade agreements hold the best promise for our competitive producers to expand sales and gain market share and generate economic activity across rural America.

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- **Strengthen U.S. global leadership.** The world looks to U.S. leadership in policy formulation and program design for both domestic agriculture support and international trade. U.S. policymakers must be cognizant that our actions set examples and help persuade others to our positions.

- **Accommodate and build on the farm sector’s wide diversity.** Effective agricultural policies must recognize the wide diversity in the farm sector itself, in terms of size, location, financial status, crop and livestock products produced, managerial abilities, income sources, and goals and aspirations. The problems faced by these groups are widely different and require solutions tailored effectively to address particular needs. Failure to do so only exacerbates the problems and postpones the day of reckoning.

- **Provide a market-oriented economic safety net for farmers.** The national recognition that the farm sector is both unique and essential is long standing and widely held. The result is a parallel commitment to policies that support open markets and those that prevent precipitate downturns in the farm sector. Thus, these programs must conform to basic public policy principles including effectiveness, transparency, equity, consistency, and comprehensiveness. Current policies now take several forms, including countercyclical loans, crop and revenue insurance, and direct payments, but they could be constructed with other programs (such as tax-deferred income accounts) that fully comply with such principles.

- **Focus on a broader infrastructure.** Provide a longer term view of the requirements for a healthy and prosperous farm and food system to ensure that it continues to enjoy widespread consumer confidence and support. This entails refocusing institutions and continuing judicious investment for the entire system, including refurbishing and modernizing the infrastructure that underpins the farm, food, and trading system.
Enhancing the Infrastructure

U.S. agriculture successfully delivers abundant, affordable, safe, and nutritious food to markets worldwide. Nothing has been more important to this success than an extensive physical and institutional infrastructure—in effect, the backbone of the food and agricultural system. The recent outbreak of foot-and-mouth disease in Europe served to heighten our awareness of the infrastructure that protects the integrity of the food and agricultural system. Science, technology, and intergovernmental cooperation are key to keeping crop and animal pests and diseases out of the United States, and to managing the pest and disease challenges we face inside our borders.

America’s familiarity with health risks from foodborne microbial hazards has increased in recent years. Widely publicized outbreaks of foodborne illness—traceable to such sources as *E.coli* 0157:H7 in hamburger, *Listeria monocytogenes* in hot dogs, and *Salmonella* in poultry and eggs—have raised the public’s concern. Although preliminary evidence suggests the number of illnesses caused by some pathogens (notably *Salmonella*) may be decreasing, food safety systems are confronting an array of emerging pathogens such as *Cyclospora*, *Cryptosporidium*, and new strains of *Salmonella*.

The agricultural infrastructure includes all of the basic services, facilities, equipment, and institutions needed for the economic growth and efficient functioning of the food and fiber markets. This requires investment in services to protect farmers, ranchers, and consumers from the threats of crop and animal pests and foodborne diseases. It demands a strong commitment to research and the cooperative extension system that undergird production, marketing, food safety, nutrition, natural resource conservation, and all other functions of USDA agencies.

This structure now is being challenged in radically changed market and institutional contexts, calling for very different approaches than in the past. First, the various sectors of the food economy—from producers to processors to retailers—are more interconnected than ever before, and grow more so every day. For any new policy to succeed, it must have input and cooperation from every link in the food chain. Second, crop or animal diseases are increasingly global and require coordinated solutions. Third, recent increases in intellectual property protections and advances in biological science have prompted the private sector to more actively invest in the knowledge base and technological underpinnings of the food system. Stronger private sector incentives imply more opportunities for effective partnerships between the public sector and industry in solving problems.
Principles for Infrastructure Policy

• **Focus on a broader infrastructure.** Provide a longer term view of the requirements for a healthy and prosperous farm and food system to ensure that it continues to enjoy widespread consumer confidence and support. This entails refocusing institutions and continuing judicious investment for the entire system, including refurbishing and modernizing the infrastructure that underpins the farm, food, and trading system.

• **Recognize our new operating environment.** Our farm sector and food system operate today in a new and evolving business and social environment. It is a competitive, consumer-driven environment, global and rapidly changing with enormous implications for the place and role of the farm sector in the overall food system. It is highly interdependent, blending the efforts of many industries to add value to farm sector products.

• **Enhance pest and disease prevention for plants and animals.** From farmers to consumers, our food system depends on strong pest and disease prevention and eradication programs.

• **Build on current success in providing safe food for all Americans.** Emerging pathogens mean that our food safety systems must be continually assessed and updated in order to maintain consumer confidence in our food supply.

• **Anticipate future infrastructure needs.** Building new and different capacities for accomplishing priorities requires a long-term view with a process for anticipating change.

• **Base decisions on science.** Regardless of good intentions, no authorized program, no mandate, no request or emergency need can be carried out unless the appropriate research base, scientists, laboratories, methods, data and information, institutions, and technologies are available. New science is needed to ensure that any new regulations, in food safety, animal and plant health, environment, or other areas, are sound and cost-effective.

• **Capitalize on the unique public sector role in agricultural research and extension.** The private sector is playing an ever-larger role in agricultural research and information provision. Limited public sector research funding thus needs to be devoted to fundamental scientific discovery and questions that the private sector has no incentive to pursue, but that could lead to the betterment of society.

• **Recognize the importance of competition in the market for research.** Maintaining competitive research funding increases the likelihood that the best minds of the country will be applying themselves to important public sector research issues.

• **Recognize the importance of collaboration.** Collaborations involving public agencies, private companies, universities, and consumers are an important means for meeting the interests of various groups while advancing the public good.
Conservation and Environment

Farmers, ranchers, and private forest landowners own and manage two-thirds of the Nation’s land and are the primary stewards of our soil, air, and water. While the cost of stewardship on that land is borne by land managers, the benefits accrue to society at large. Meeting society’s demands for improved environmental quality requires a broader definition of “output” to include environmental amenities—such as rural landscape amenities, wildlife habitat, wetlands, and improved water and air quality—along with food, fiber, and timber production.

Conservation policy evolved from a primary focus on keeping productive topsoil in place. Reducing soil erosion once was an overriding concern, and a primary accomplishment. We now realize that the off-farm costs of farming include a wide variety of environmental quality measures. Conservation policy thus has come to include broader measures of water quality, as well as protection of wildlife habitat and wetlands. Moreover, emerging issues gaining public attention include nutrient runoff from livestock production, water conservation, energy production, and reduced greenhouse gas emissions.

As the scope of environmental concerns has expanded, a wider range of conservation policy instruments now are needed to address them. Traditional land retirement (the Conservation Reserve Program) has dominated Federal spending on conservation since 1985; 92 cents of every dollar spent on direct conservation payments to farmers pays for rental and easement payments for idling environmentally sensitive cropland and cost sharing for management practices that enhance the environmental benefits from retired lands. However, considerable conservation activities are carried out on vast stretches of working lands due to voluntary actions and to comply with conservation compliance and other regulatory requirements.

The current imbalance favoring land retirement suggests an untapped potential for achieving cost-effective environmental benefits from conservation spending on working lands. Further, many emerging agri-environmental problems can be addressed only by changing management practices on working land. Similarly, improved private forest management practices can better protect watersheds, provide improved habitat for threatened and endangered species, and guard against non-native invasive species.

Conservation policy must continually balance competing concerns and a “portfolio” approach is essential—employing coordinated land retirement, stewardship incentives, conservation compliance requirements, and regulatory assistance. Use of each where most appropriate can accomplish agri-environmental protection most efficiently. In addition, increased cooperation with local and State governments and others in implementing conservation programs will ensure funds are spent effectively and leveraged.
Principles for Conservation

- **Sustain past environmental gains.** Improvements in losses from soil erosion and wetlands benefit farmers and all Americans. These and other gains resulting from existing conservation programs should be maintained.

- **Accommodate new and emerging environmental concerns.** The need for sources of renewable energy and the potential for reducing greenhouse gas emission are emerging environmental issues. In addition, reducing nutrient runoff from livestock production, addressing conflicts over scarce water supplies, and protecting open space have gained momentum as issues to be addressed. Conservation policy should adapt to emerging environmental and community needs and incorporate the latest science.

- **Design and adopt a portfolio approach to conservation policies.** Targeted technical assistance, incentives for improved practices on working farm and forest lands, compensation for environmental achievements, and limited dedication of farmland and private forest lands to environmental use will provide a coordinated and flexible portfolio approach to agri-environmental goals.

- **Reaffirm market-oriented policies.** Competition in the supply of environmental goods and services and targeted incentives ensure the maximum environmental benefits for each public dollar spent. In addition, permitting the private sector to invest in the provision of environmental goods and services leverages Federal resources and facilitates a transition to a fully functioning private market.

- **Ensure compatibility of conservation and trade policies.** Producer compensation for conservation practices and environmental achievements should be consistent with “green box” criteria under WTO obligations.

- **Coordinate conservation and farm policies.** Conflicts may exist between farm program incentives to increase production and conservation programs seeking to reduce environmental problems from expanded production. Extending conservation compliance will help coordinate environmental objectives and Federal programs.

- **Recognize the importance of collaboration.** Non-Federal governmental agencies, including State, local, and Tribal governments, as well as private for-profit and not-for-profit organizations, are playing an ever-increasing role in the delivery of technical assistance and incentive programs for conservation. Encouraging these efforts and developing public-private partnerships and joint programs leverage Federal resources and improves program access and implementation.
Rural Communities

Farming no longer anchors most rural economies as it did in the early 20th century. Seven out of eight rural counties are now dominated by varying mixes of manufacturing, services, and other nonfarming activities, and commodity-based farm policies do not address the complexities of rural economies and populations. Rural America is diverse, and the challenges facing rural communities are wide-ranging, varied, and defy homogeneous solutions. This diversity presents opportunities for the creative application of programs and policies, and calls for unique partnerships across the spectrum of institutions serving rural America.

Jobs and incomes are declining in many areas dependent on natural resource-based industries, but other places, often associated with rural amenities, are thriving. Creating an environment that will attract and sustain private investment, job growth, and income generation activities in rural America, including regional development initiatives and creative pilot programs, is an important goal. Policies that find alternative methods to increase rural income from the natural resource base, such as energy production, are also important.

Rural areas are well situated as sites for the development of renewable energy as well as for more traditional fossil-fuel production. Wind and solar energy are most economically generated in rural areas due to the openness of rural spaces. Dedicated crops and agricultural residues can be used to produce fuels, such as ethanol and biodiesel, and to power turbines to produce electricity. While ethanol output is growing rapidly, biodiesel and biomass electricity generation could benefit from research and development efforts and pilot projects to overcome barriers to expanded commercialization.

Both urban and rural youth need unprecedented education and technical skills to compete in the increasingly high-skill “new economy” of the future. In the past, many rural areas hosted industries that required a reliable pool of low-skilled, low-cost workers. Employers are now more attracted to concentrations of well-educated and skilled workers. Education and worker training are essential in helping rural communities cultivate high-performance, knowledge-based companies, while human capital and earnings potential are improved by strengthening classroom instructional quality and facilitating school-to-work transitions.
Telecommunications, electricity, water and waste disposal systems, and transportation infrastructure are essential for rural development, but many rural communities face financial challenges because of a limited tax base and high cost associated with their small size. Information and communication technology — abetted by financial and technical assistance — can help smaller communities enjoy the same benefits that at one time accrued solely to cities, such as higher standards of health care and virtually unlimited educational opportunities. Options include Federal financial assistance for deploying broadband access or incentives for State, private, and public partnerships to develop fiber optic or wireless capabilities.

Principles for Rural Communities

- **Recognize the diversity of rural America.** The opportunities and challenges facing rural America are as diverse as rural America itself, and there is no single recipe for prosperity.

- **Recognize that rural development policy is not synonymous with agricultural policy.** Traditional commodity support and farming-oriented development programs play an increasingly limited role in the improved well-being of rural Americans.

- **Understand the importance of the nonfarm economy in rural policy.** Farming no longer anchors most rural communities and economies. Instead, the nonfarm economy anchors much of agriculture, and rural policy for the 21st century must recognize the increased importance of nonfarm jobs and income as the drivers of rural economic activity.

- **Create an environment that will attract private investment.** Rural communities must adopt creative strategies to diversify the economy, attract new businesses, and sustain their successes.

- **Emphasize the need for greater education and technical skills.** Today’s youth, regardless of where they ultimately live and work, will need an unprecedented level of education and technical skills to compete and succeed in the increasingly high-skill “new economy.”

- **Capitalize on the natural resource base.** Rural areas are well suited as sites for the development of renewable energy as well as for more traditional fossil-fuel energy production.

- **Protect lives and property in the wildland-urban interface.** Rural citizens in rural communities near large areas of forested land need assurance that their lives and property are safe from wildfires. Innovative, coordinated, and aggressive approaches to the reduction of fuels in forests and rangelands are needed to extend protection across the greatest possible area.

- **Expand infrastructure, community facilities, and technology.** Such improvements will help rural communities connect with the “new economy” and realize an enhanced quality of life. New information and communication technologies can help smaller communities enjoy the same benefits that at one time accrued solely to cities.

- **Coordinate involvement of all stakeholders.** Rural community issues are often most effectively addressed at the local and State levels, but the Federal Government can provide an important coordinating role. A new look at the Federal role in rural development activities, with the goal of streamlining programs, targeting resources, and improving program coordination, is needed.
Nutrition and Food Assistance

Food and agricultural policy long has sought to ensure that all Americans have access to a healthy and nutritious food supply, regardless of income. This policy has encompassed a wide array of food assistance and nutrition programs that have humanitarian, investment, and agricultural support goals. These programs provide aid to the needy, helping alleviate short-term hunger and hardship; represent pragmatic investments in human capital that yield a better educated, stronger, and healthier workforce and families; and support the agricultural sector.

Core efforts include the Food Stamp Program, child nutrition programs, the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), and commodity distribution programs.

Today, these programs serve one in every six Americans at some point during the year. In addition to ensuring access to adequate food, the programs promote healthy diets for all Americans.

Our Nation’s food assistance programs have been successful, but the environment in which they operate is changing. Most of these programs were started in response to problems of underconsumption and undernutrition among the low-income population in the 1960s and early 1970s. While these problems remain significant, important new challenges are emerging related to diet quality—the proper variety and quantities of foods and nutrients in an individual’s diet to promote health and well-being.

Principles for Nutrition and Food Assistance

- **Continue commitment to a national nutrition safety net.** A well-nourished population is healthier, more productive, and better able to learn. No child or needy family should be left behind for want of food.

- **Guarantee stable funding of the nutrition safety net.** The national nutrition safety net, including WIC, should be supported and targeted to those most in need.

- **Simplify program rules.** Program rules must strike a balance between targeting, client access, supporting work, and administrative burden.

- **Support modern technologies.** Electronic Benefit Transfer (EBT) and other technologies are crucial to the improved delivery of benefits, client access, administrative efficiency, and program integrity.

- **Ensure a commitment to outcome-based performance measures.** Outcome-based performance measures will be crucial to deciding the future direction of the nutrition assistance programs.

- **Encourage healthy and nutritious diets.** American consumers must be made aware of the link between diets, health, and physical activity, and motivated to make appropriate changes.
Importance of Integrated Programs

Changing circumstances strongly suggest the need for contemporary reflection on the program delivery needs of the future. USDA remains organized as a traditional hierarchy, with authority and responsibility flowing directly through each agency, from the Secretary to administrators to State and regional levels and to field operations, where they exist.

The issues facing the modern food and farm system today are so multifaceted and complex that they cannot be solved by any one program or approach. Protecting against plant and animal pests and diseases, or eliminating emerging foodborne pathogens, or overcoming the barriers to producing bioenergy efficiency, or ensuring nutritious food for low-income households, or encouraging cost-effective carbon sequestration on farms and in forests – none of these can be accomplished by any single agency.

Increasingly, the technology available to solve many program and policy problems also requires resources from multiple agencies. While the multidimensional nature of the issues, and the technologies needed to address them, cry out for more integrated program delivery, customers also are demanding more comprehensive service. A customer today often has an interest in more than one USDA or other Federal program, and can be thwarted in obtaining efficient service if the organization is inflexible.

A number of approaches can be taken to substantially improve service, even without major, additional restructuring. These include: one-stop shopping for delivery of services; sharing data, information, and computation environments across agencies and programs; and new flexibility for increased coordination of resources. Advances in information technology may allow agencies, at very low cost, to share key data so that customers can be spared the burden of providing the same information to multiple Federal offices.

Assurance that data being collected meet contemporary decision-making needs across the many functions of the Department can only come from a review that crosses all lines of the organization. This supports a comprehensive effort to inventory current data collection efforts and to align them with an assessment of future data requirements. Integration of databases across agencies and programs then would be easier.

Principles for Program Integration

- **Support collaboration to solve problems.** Recognize that the complexities of many contemporary agricultural issues cross the bounds of traditional program areas.
- **Encourage a coordinated view of functions and services.** Institute a range of practices, including “one-stop shopping” for USDA services, common electronic work environments, consistent data convention across agencies, data sharing, and increased resource flexibility among agencies, that encourage a “corporate” rather than a fragmented view toward program implementation.
- **Pursue partnership opportunities.** Continued and increased cooperation and partnership opportunities need to be sought with program beneficiaries, Congress, consumers, industry, NGOs, Federal and non-Federal government agencies, universities, and others.
- **Sustain capacity for integrated responsiveness.** The latest technologies are needed to support integrated programs and “corporate” systems. A cadre of highly trained and actively practicing scientists, economists, and other analysts provides a necessary foundation for rapid response across subject areas and programs.