THE ECONOMIC IMPORTANCE OF PASSING A COMPREHENSIVE FOOD, FARM, AND JOBS BILL

Executive Office of the President

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The Economic Importance of Passing a Comprehensive Farm Bill

“We need to focus on what the majority of Americans sent us here to do – grow the economy, create good jobs, strengthen the middle class, lay the foundation for broad-based prosperity, and get our fiscal house in order for the long haul. … [That’s why] we should pass a Farm Bill – one that America’s farmers and ranchers can depend on, one that protects vulnerable children and adults in times of need, and one that gives rural communities opportunities to grow and the longer-term certainty they deserve.”

– President Barack Obama, October 19, 2013

Today, the U.S. rural economy faces an important crossroad. Rural America suffered during the Great Recession, but driven by the innovation and smart business decisions of America’s farmers and ranchers, it also shared in the economic recovery. Farm income is currently near a record high level—notwithstanding a record drought in 2012 and many other natural disasters. At the same time, rural America faces unique challenges to further economic growth, including facing lost population in real terms for the first time.¹

Recognizing the need for innovative and proactive steps to revitalize the rural economy and continue creating jobs in our small towns and rural communities, the Obama Administration has identified a number of key areas for growth. The U.S. Department of Agriculture, working with Federal partners through the newly-created White House Rural Council, aims to continue its record level of investment in expanding opportunity in rural America. This work includes focusing efforts to grow markets for production agriculture; strengthening new local and regional marketing opportunities for

producers; providing new growth in outdoor recreation activities and wildland conservation; and spurring advances in the bioeconomy.

Virtually all of these efforts require Congressional passage of a Food, Farm and Jobs Bill.

In June of 2010, the Obama Administration began providing input to Congress regarding the prospective features and policy of contents for a reauthorized Farm Bill. Traditionally reauthorized every five years, Farm Bills govern an array of programs including farm commodity price and income supports, farm credit, trade, private lands conservation, research, economic development, renewable energy, food aid, and domestic nutrition assistance. These programs provide a cornerstone for supporting U.S. agricultural prosperity, conserving the nation’s natural resource base, as well as supporting the research and investments for the future of the nation’s food system, the production of alternative energy, and our food assistance safety net.

Over a period of more than three years, the Executive Branch has supported reauthorization efforts aimed to help build a better safety net for farmers and families, and to build a better farm, food, and energy policy for the nation. However, 43 months later and despite the best efforts of many in Congress, work on the Farm Bill remains incomplete. While some programs have been simply extended, others remain either unfunded, unauthorized, or without enactment of needed reforms.

The President’s Budget provides a strong safety net for farmers, that protects them from losses, while reducing budgetary outlays by more than $37 billion. This is accomplished by eliminating unnecessary direct payments, reducing crop insurance subsidies to companies and for farmer premiums, by streamlining conservation programs, while providing assistance for dairy and livestock producers as well as providing assistance for specialty crops, bioenergy, and beginning farmers. The Administration would like to work with the Congress to achieve crop insurance and commodity program savings consistent with the President’s Budget, while at the same time strengthening the farm safety net in times of need and supporting the next generation of farmers.

The Administration has made clear that the Farm Bill is important for every American. For our farmers and ranchers, a comprehensive Farm Bill would provide a reliable safety net, including a strong crop insurance program, a long term extension of disaster programs and retroactive assistance for livestock producers. The Farm Bill is also a job creation bill that will expand new opportunities for American agriculture, increase manufacturing potential and support Main Street businesses across rural America. It’s a research bill that continues our long history of agricultural innovation. It’s a conservation bill that would continue Federal efforts alongside a record number of farmers and ranchers to conserve our soil and protect our water. The Farm Bill is a trade promotion bill that would honor our trade commitments and assist our farmers and ranchers to export a record amount of product around the world. The Farm Bill is a nutrition bill that would adequately protect those among us who need help putting good food on the table – an effort that is critical for millions of people, including hardworking families, senior citizens, people with disabilities who are unable to work and returning veterans. And it is a deficit reduction bill that would enact reforms saving billions of dollars in the coming decade.

This report highlights the economic benefits – for the domestic agriculture sector, its workforce, rural
American communities, and families and businesses across the country – that would result from these changes, and the imperative to passing a comprehensive Food, Farm, and Jobs bill as soon as possible. Specifically, a comprehensive reauthorized Farm Bill would:

I. **Build on recent momentum of the U.S. agriculture economy and rising farm income:** In recent years, the agriculture sector has seen strong growth, with farm income and agriculture exports both reaching historic highs. The U.S. agriculture sector is a key engine of economic growth: not only does it put food on the table of American families at affordable prices and provide raw material for a range of vital purposes—it also supports one out of every twelve jobs in the economy, and is a key economic driver in many rural communities. The Farm Bill offers an opportunity to build on this progress, providing long-term certainty about the next five years of U.S. farm policy for America’s farmers, ranchers and producers.

II. **Contribute to a strong rural economy through investments in rural communities and local and regional food systems.** The importance of the Farm Bill goes well beyond the role of agriculture. The Farm Bill authorizes and directs the work of USDA-Rural Development, which provides technical assistance and financing for long-term investments in the future of rural communities. From basic water and wastewater infrastructure to hospitals, business development, and affordable housing, Rural Development works with municipalities, businesses, and individuals to create prosperity and increase the quality of life in rural areas. A comprehensive Farm Bill would also commit to investing in local and regional food systems, and the development of economically-important local markets and food hubs.

III. **Support and invest in the bioeconomy.** The Farm Bill represents a key opportunity to provide new and expanded investments in renewable energy, biofuel, and bio-based product manufacturing, all of which can create jobs in rural areas. A comprehensive Farm Bill would support and invest in the bioeconomy, recognizing that renewable energy, biofuels, and bio-based product manufacturing all create jobs, economic opportunities, and contribute to sustained economic growth.

IV. **Support vulnerable families by protecting our vital food and nutritional assistance programs:** Congress should approach the reauthorization of the Farm Bill in a comprehensive manner. The Supplemental Nutrition Assistance Program (SNAP) is one of our country’s strongest defenses against hunger and poverty, and a crucial support for families during tough economic times. The program assists a broad array of Americans who are struggling to make ends meet, including working families with children, senior citizens, veterans, and adults who are still looking for work. In addition to helping families put food on the table, SNAP also benefits farm and rural economies. The Farm Bill should protect our vital food assistance programs, which benefit millions of families and individuals – in rural, suburban and urban areas alike – and reauthorize them on the same schedule as the agriculture programs. In addition, reforming our largest international food aid program would provide a much greater impact, helping up to 4 million more people each year in emergency food crises abroad, without additional budgetary resources.

V. **Encourage wise risk management through a secure and reliable safety net for producers:**
The Farm Bill offers an opportunity to provide an adequate safety net for those producers who most need it, while making meaningful reforms and generating budgetary savings. By eliminating Direct Payments – which have historically been made whether or not a producer suffered a loss – the Farm Bill would save billions of taxpayer dollars while continuing to provide a strong safety net for producers. Volatile input costs and markets with the ever present threat of natural disaster have made agriculture a historically high-risk business, which is why producers need a reliable safety net that both provides assistance quickly during times of need and encourages producers to use prudent risk management strategies. The new Farm Bill offers an opportunity to appropriately reform the safety net to reflect the diversity of American agriculture, allowing farmers to make necessary investments while avoiding needless risks and expenses. This reformed and modernized safety net would include a strong crop insurance program, as well as reauthorized disaster assistance programs for producers. In addition, the Farm Bill presents an opportunity to renew much needed disaster assistance for American’s livestock producers.

VI. Enhance conservation and provide funding for clean energy. The production of food and fiber for the future is dependent upon a sustainable land base and healthy natural resources. Our farmers are making great progress in using environmentally friendly farming practices. In the last 30 years, producers have reduced soil erosion by more than 40 percent, and agriculture has now become the leading contributor to restoration of wetlands – whereas previously, it was the leading cause of wetland loss. The Farm Bill is an opportunity to build on this progress, by streamlining conservation programs to make a more efficient and effective use of limited conservation funds while building on record conservation efforts underway today. In addition, the Farm Bill represents an opportunity to help protect working lands for the future, as farmers and ranchers face land ever increasing encroachment from development and increased strain on the availability of productive farmland. A new Farm Bill would allow USDA to continue conservation work with a record number of U.S. farmers, ranchers and forest landowners.

VII. Promote markets at home and abroad while meeting our global trade commitments: Vibrant, fair, and diverse markets at home and abroad benefit our farmers, ranchers, producers, and consumers of all types and sizes. This Administration has consistently focused on expanding markets for American goods abroad, working aggressively to break down trade barriers with our global partners while meeting our trade commitments, as well as by reaching out to producers and enterprises of all sizes to facilitate trade financing and promotion. These efforts have a real impact: after doubling over 5 years, U.S. agricultural exports have remained close to record levels since 2011. With the help of Farm Bill programs, including the Market Access Program and Foreign Market Development Program, U.S. producers have achieved the strongest five-year period for agricultural exports in our history. At the same time, a comprehensive Farm Bill will support efforts to expand opportunities here at home for producers. Local food marketing is one of the fastest growing segments of agriculture: in the past decade, direct sales to consumers have doubled. A new Farm Bill should build on this progress to support our specialty crop producers with improved risk management tools and expanded market promotion.
VIII. Promote innovation and productivity by supporting key research: Agricultural research and development generates high payoffs for farmers and the public. A substantial body of literature on investing in agricultural research and development shows that the social benefits from public research in agriculture have been large, with social rates of return usually falling within the range of 20 to 60 percent annually. Research programs today address a broad array of problems facing U.S. agriculture including addressing food supply and security, developing new sources of bio-energy, responding to increased climate variability, addressing plant and animal health issues, water availability and quality, food safety, and nutrition and childhood obesity. A comprehensive Farm Bill will support these goals by investing in key research initiatives.
I. A Comprehensive Farm Bill Will Build on Recent Momentum of the U.S. Agriculture Economy

- The U.S. agriculture sector is a key engine of economic growth: not only does it put food on the table of American families at affordable prices and provide raw material for a range of vital purposes—it also supports one out of every twelve jobs in the economy, and is a key economic driver in many rural communities.

- In recent years, the agriculture sector has seen strong growth, with farm income and agriculture exports both reaching historical highs not witnessed in decades.

- After adjusting for inflation, net farm income – at $120 billion for 2013 – now stands at its second-highest level since 1973.

- Farm asset values are expected to rise 7.1 percent in 2013, as farmland values are expected to continue rising; farm equity is expected to increase by 7.6 percent in 2013.

- Since the President took office, agriculture exports have had the strongest five-year period of growth in our nation’s history, and hit a record level in the last fiscal year:
  - In the 2013 fiscal year, exports reached over $140 billion -- exceeding the previous high of $137 in FY2011, and setting a new record.
  - The average volume of bulk commodities exported increased by nearly four million tons per year over the past five years.
  - U.S. farm exports have supported about one million American jobs.

- Between 1948 and 2011, total farm production more than doubled, and U.S. total agricultural output grew at an average annual rate of 1.49 percent over this period. Almost all of this growth in U.S. agricultural output was due to increased productivity growth.

- The Farm Bill offers an opportunity to build on this progress, providing long-term certainty about the next five years of U.S. farm policy for America’s farmers, ranchers and producers.

Home to some of the most industrious and productive Americans, rural communities and our nation’s agriculture sector are important contributors to employment and America’s competitiveness. From dairy owners to ranch workers to nursery operators to fruit and vegetable growers and pickers, participants in the U.S. agriculture sector serve as a key engine of economic growth. The hard work done on the farm ripples throughout our economy and helps to create jobs, particularly when agriculture is thriving.

Though the farm sector has experienced booms and busts over the course of its history, in recent years, the agriculture sector has seen strong growth. This strong economic footing has been made possible in part by the agricultural policies and key investments made over the course of many decades.
Today, inflation-adjusted farming income is at its highest level in nearly 40 years, and farm equity is growing. In 2013, net farm income is forecast to total $120 billion, which would be the second-highest level since 1973 after adjusting for inflation. Much of this growth is due to the demand for American agriculture exports: the value of agriculture exports has steadily risen in recent years and is projected to reach $135.8 billion in 2013, which would establish a new record.

In addition, farm equity is growing. Farm asset values are expected to rise 7.1 percent in 2013, as farmland values are expected to continue rising; farm equity is expected to increase by 7.6 percent in 2013.

At the same time, the farm sector's debt-to-asset ratio is expected to decline 0.5 percentage points in 2013, to 10.2 percent by the end of the year; the debt-to-equity ratio is expected to decline from 12.0 percent to 11.4 percent over the same period. If realized, these changes would result in new historic lows for both measures, confirming the strength of the farm sector's solvency. With such historically low levels of debt relative to assets and equity, the sector is better insulated from the risks associated with commodity production (such as adverse weather), changing macroeconomic conditions in the U.S and world economies, and any fluctuations in farm asset values that may occur due to changing demand for agricultural assets.

Over the past 60 years, yields per acre of major crops—such as corn, soy, wheat, and cotton—have doubled, tripled, and in some cases, even quadrupled. At the same time, livestock production and specialty crop production have become far more efficient. According to USDA’s Economic Research Service’s productivity statistics, total farm production more than doubled between 1948 and 2011, and U.S. total agricultural output grew at an average annual rate of 1.49 percent over this period. Almost all of this growth in U.S. agricultural output was due to increased productivity growth.

However, while the agricultural economy on the whole is strong, there are still many producers that rely on USDA programs to make ends meet. Crop insurance was essential to help crop producers

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manage losses due to the 2012 drought. Livestock producers, though, were not protected from adverse conditions in 2012. In addition, many farms are not profitable even in the best farm income years, and a majority of farm households now earn the majority of their income from off-farm sources. A new Farm Bill will help raise farm income through a variety of farm programs and through the many investments it makes in rural development projects, which benefit the local communities of farming families.

The Broad Economic Reach of the U.S. Agriculture Sector

The U.S. agricultural sector extends beyond the farm business to include a range of farm-related industries. In 2011, the output of America’s farms contributed $139 billion to the nation’s gross domestic product (GDP). But the overall contribution of the agriculture sector to GDP is larger than this figure represents, as the wide range of sectors related to agriculture—including forestry, fishing, and related activities; food, beverages, and tobacco products; textiles, apparel, and leather products; food services and drinking places—rely on agricultural inputs in order to contribute additional value to the economy. Together, these sectors contributed $743 billion to U.S. GDP in 2011, accounting for nearly 5 percent of economic output. In this way, a new Farm Bill affects more than just domestic agriculture, it also benefits the economy at large.

The productivity of American farmers and ranchers help American families stretch their paychecks, giving our families more freedom and flexibility to spend or invest in other parts of the economy. Americans spend, on average, 10 percent of their disposable income on food—less than other families around the world have to spend on food. In addition to putting food on the table of American families at affordable prices and providing raw material for a range of vital purposes, the broad U.S. agricultural sector also supports one out of every twelve jobs in our economy, and is a key economic driver in many rural communities. In 2012, over 16 million full- and part-time jobs were related to agriculture, about 9.1 percent of total U.S. employment, and 2.6 million of these jobs provided direct on-farm employment.

The linkages between rural America and agricultural producers are often national or global in nature. Farm production inputs (such as machinery and fertilizers) benefit from strong farm incomes and

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increasing demand for expanded production. Farm services and food processing, which are disproportionately located in non-metropolitan counties, are near historic levels, having rebounded by 17 percent since 2009.
II. A Comprehensive Farm Bill Will Invest In Rural Development

- The Farm Bill authorizes and directs the work of USDA-Rural Development, with a mission of improving the quality of life in rural America by financing long-term investments in the future of rural communities through loans, loan guarantees, grants, and technical assistance.

- While there is a vibrant agricultural economy today, rural America continues to face a number of unique challenges:
  - Eighty-five percent of persistent poverty counties in America—counties where poverty has been high for at least 30 years—are in rural areas.
  - Additionally, rural America faces a growing demographic challenge due, in part, to lowering birth rates and an aging population: between 2010 and 2012, rural areas experienced the first recorded period of population loss.

- A comprehensive Farm Bill with funding for water and wastewater investments would help tackle the $2.1 billion backlog of shovel-ready water/wastewater infrastructure projects in small towns across the country:
  - Since 2009, Farm Bill rural development programs have financed 3,898 rural water and wastewater projects, putting people to work and providing clean water for nearly 14 million rural Americans.
  - During the same period of time, investments that farm bill programs authorize have supported improvements to 276 hospital and medical clinics, 166 schools and 401 libraries in rural America; the agency has awarded 15,727 grants and loans to aid 65,636 businesses expand opportunity and create jobs.
  - The Farm Bill also will help keep rural communities safe and connected, through the expansion of 911 access and by supporting access to broadband telecommunications services in rural areas through project loan guarantees.
  - Between 2009 and 2012, Farm Bill authorized programs helped create new market opportunities for rural producers and businesses by supporting over 800 local and regional food projects, including new product development and critical infrastructure like food hubs.

- A comprehensive farm bill will allow USDA-Rural Development to work in partnership with local governments and organizations to align public investments, leverage private dollars, and respond to local priorities.

Strength in agriculture production supports other parts of the economy, particularly in rural communities. Farms and ranches buy fertilizer and seed, invest in farm machinery, contract the services of custom operators, and support the many local businesses that serve farms and farm families, including restaurants and retailers. Agricultural production also benefits supply-chain businesses like grain elevators, biofuel refineries, processed food manufacturers and distribution networks.
These strong ties between agriculture and the rural economy, however, are far from the only reason the Farm Bill is important to the growth of rural communities. The legislation also authorizes and directs the work of USDA-Rural Development, with a mission of improving the quality of life in rural America by financing long-term investments in the future of rural communities through loans, loan guarantees, grants, and technical assistance.

While there is a vibrant agricultural economy today, rural America continues to face a number of unique challenges. In many respects concerning economic development, urban areas enjoy a number of structural advantages over rural areas, including economies of scale, labor market pooling, forward and backward linkages, network effects, and knowledge spillovers. Economic growth in the rural economy currently lags behind national trends, and income inequality between rural and metro areas has risen in recent decades. USDA research has found that eighty-five percent of persistent poverty counties in America—counties where poverty has been high for at least 30 years—are in rural areas. Additionally, rural America faces a growing demographic challenge due, in part, to lowering birth rates and an aging population: between 2010 and 2012, rural areas experienced the first recorded period of population loss.

Taken in partnership with an understanding of the critical role rural regions play in overall national economic growth (see box), these challenges underscore the importance of making the key investments supported by a comprehensive Farm Bill. This legislation represents one of our best opportunities to strengthen rural economies by supporting the key investments that promote growth and shared prosperity—with benefits well beyond rural America.

**Strengthening Rural Economies By Investing in Communities**

Through the work of USDA-Rural Development, the Obama Administration has made long term investments in rural infrastructure, small businesses, and emerging sectors to help realize rural America’s economic potential. With an active portfolio of loans and loan guarantees, USDA-Rural Development invests in improving utility infrastructure, and affordable housing, and helps businesses and cooperatives create jobs, build rural economies and increase the quality of life in rural areas. A comprehensive Farm Bill can support key programs and policies that will ensure investments in rural America continue to advance the foundations of a strong rural economy from broadband infrastructure and renewable energy development to business development, entrepreneurship, and strategic investments for long-term prosperity.

Since 2009, Farm Bill rural development programs have financed 3,898 rural water and wastewater projects, putting people to work and providing clean water for nearly 14 million rural Americans. During the same time period, 487,938 technical assistance visits were made to help rural systems and communities with maintenance and care of existing water and sewer systems benefiting more than 6.2 million residents—a critical service for small, cash-strapped towns and municipalities during tough economic times. A comprehensive Farm Bill with funding for water and wastewater investments would help tackle the $2.1 billion backlog of shovel-ready water/wastewater infrastructure projects in small towns across the country. The Senate-Passed Farm Bill would authorize $30 million in annual grants through the Rural Water and Waste Disposal Loan and Grant
Program, and would support small rural communities by including a priority for rural communities of 5,500 or fewer permanent residents.

The Farm Bill authorizes the community investment and capital access programs that help rural businesses grow and entrepreneurs get their start. During the same period of time, investments that Farm Bill programs authorize have supported improvements to 276 hospital and medical clinics, 166 schools and 401 libraries in rural America; the agency has awarded 15,727 grants and loans to aid 65,636 businesses expand opportunities and create jobs.

A comprehensive Farm Bill will also help keep rural communities safe through the expansion of 911 access. The legislation authorizes expanding the emergency telephone service of 911 in rural areas by using any funds otherwise made available for telephone loans. The Farm Bill keeps rural communities connected by supporting access to broadband telecommunications services in rural areas through loan guarantees for projects that build broadband infrastructure in these areas.

Today, USDA is working directly with local governments, economic development districts, and community-based organizations to help strengthen regional collaboration and identify industry clusters that maximize local assets to accelerate economic and job growth across rural regions. The desired outcome is vibrant rural communities with durable and strategic economic growth models centered on long-term prosperity. For example, USDA’s Rural Development agency has launched the Strike Force for Rural Growth and Opportunity initiative, an effort to increase coordination and leverage partnerships in rural areas of concentrated poverty to ensure that every community has equal access to USDA programs.

Key policy improvements in a comprehensive Farm Bill would make it even easier for USDA-Rural Development to work in partnership with local governments and organizations to align public investments, leverage private dollars, and respond to local priorities. These are policy changes that don’t cost taxpayers a dime, but will yield tangible results for rural communities and the rural economy.

Rural Development programs authorized through the Farm Bill are also helping create new market opportunities for rural producers and businesses; strong consumer interest in “buying local” is driving innovation and diversification in the farm economy. The number of farmers’ markets has increased nationally by 67 percent since 2008, while food hubs – facilities that aggregate local farm products and market them to large-volume buyers such as grocery stores – have multiplied nationally. Between 2009 and 2012, Rural Development supported over 800 local and regional food projects, including new product development and critical infrastructure like food hubs. Research suggests that farmers and ranchers selling into local markets take home a greater share of the food dollar than do producers in traditional wholesale markets. Research also suggests that revenues from local food sales tend to stay in the local economy, creating multiplier effects. For example, a recent study finds that the average food hub generates nearly $4 million in sales and employs 20

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workers.\textsuperscript{7}

\section*{THE IMPORTANCE OF RURAL REGIONS TO AGGREGATE ECONOMIC GROWTH*}

The Farm Bill is the signature piece of legislation affecting not only the farm economy, but also the larger rural economy. Rural America is rich in natural assets and holds the answers to many of the nation's most important challenges related to food security, energy security, and environmental sustainability.

Beyond the resources the Farm Bill provides directly to the agricultural sector through commodity and conservation programs, it also provides resources and policy direction in other related and essential facets of the rural economy, such as community and economic development, infrastructure investments, and natural resources research and development. Because the Farm Bill includes this broad scope of policy and resource direction, it is a crucial piece of legislation to ensure that the national economy benefits fully from the resources and potential of rural regions. These positive developments are not possible without sound infrastructure, access to capital, and a workforce capable of responding to market opportunities. The Farm Bill will help firms and families in rural America reach their potential and contribute to national economic growth.

A new report by the Organization for Economic Cooperation and Development (OECD), \textit{Promoting Growth in All Regions}, provides new analysis that explains the importance of dynamic urban hubs to the nation’s economy.\textsuperscript{6} The bulk of aggregate economic growth, though, actually occurs outside of these hubs. Across the OECD, rural regions have, on average, enjoyed faster growth than urban regions. Overlooking the growth potential of rural economies may constitute a missed opportunity for significant economic growth. In this time of economic challenges, the nation cannot risk leaving these opportunities untapped.

When we invest in human capital through education and workforce development, we drive economic growth. Today, rural children are nearly as likely to be enrolled in public elementary or secondary schools as are urban children. But college enrollment rates for 18-to-24 year olds in rural areas are lower than the enrollments for that age group in suburban areas or cities. Our community colleges are critical to linking rural students with education while our land grant university system has educated 20 million students since its inception and produces cutting-edge research to keep America competitive. Moreover, distance to health care centers, a shortage of rural health providers, and other factors make equitable access to health care a challenge in rural America. Investment in rural health care improves quality of life and worker productivity, a crucial factor for economic growth that benefits our nation as a whole.

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III. A Comprehensive Farm Bill Will Invest In the Bioeconomy and Clean Energy

- The Farm Bill also is a key opportunity to advance the bioeconomy through continued investment in the next generation of advanced biofuels, construction of advanced biorefineries, top-notch research, support for farmers establishing new biofuel crops, and the manufacture of biobased industrial products.

- In recent years, biofuels have grown to constitute 9.7% percent of the nation’s fuel supply, displacing 307 million barrels of oil in 2012.

- A strong bioeconomy means producing manufactured goods, fuels, and power using plant materials, rather than petroleum, chemicals, or other extracted materials as the fundamental building block. More than 3,000 companies produce bio-based industrial products – everything from chemicals, to auto parts and beverage bottles – from homegrown, plant-based materials.

- The Farm Bill includes several energy programs that correspond with the various components of the energy chain—from the field and the research lab to the factory and the generator. A comprehensive Farm Bill would:
  - Reauthorize and fund the Renewable Energy for America program, which provides grants and guaranteed loans to agricultural producers and rural small businesses for the purchase of renewable energy systems and the implementation of energy efficiency projects. Since 2009, 9,166 awards have been made through this program, saving or generating a total of over 9.8 million megawatt hours of energy
  - Jumpstart the production of the next generation of advanced biofuels by helping communities and companies invest in building advanced biorefineries, funding regional research, and continuing to help farmers to establish those biofuel crops.
  - Continue USDA’s BioPreferred program, which has helped to create thousands of new jobs in rural communities and added jobs across the value chain even in larger manufacturing cities by using agricultural and forestry commodities as the base feed stock for everyday products.
  - Support domestic investment, development, and production in the emerging bio-based industrial products industry through expanded eligibility for loan programs and directed research.
  - A strong bio-based economy will improve the bottom line for farmers while creating good manufacturing jobs in rural America. At the same time, these investments reduce our use of foreign oil, reduce the trade deficit by replacing imported crude oil with home-grown, fuel, and contribute to a healthier planet by reducing emissions.

A new Farm Bill should continue prudent policies that encourage continued growth in the biobased economy with a particular emphasis on renewable energy, biofuels, and biobased industrial products. In recent years, biofuels have grown to constitute 9.7% percent of the nation's fuel supply, displacing 307 million barrels of oil in 2012. Continued investments in these sectors can promote
rural job creation and stimulate economic growth not just in rural America, but across both the nation and sectors of the economy. A strong bio-based economy will improve the bottom line for farmers while creating good manufacturing jobs in rural America. At the same time, these investments reduce our use of foreign oil, reduce the trade deficit by replacing imported crude oil with home-grown, fuel, and contribute to a healthier planet by reducing emissions.

Renewable Power: The Farm Bill includes several energy programs that correspond with the various components of the energy chain—from the field and the research lab to the factory and the generator. The Renewable Energy for America program is a popular and important energy program that a comprehensive Farm Bill would reauthorize and fund. Created in 2002, the program provides grants and guaranteed loans to agricultural producers and rural small businesses for the purchase of renewable energy systems and the implementation of energy efficiency projects. Since 2009, 9,166 awards have been made through this program, saving or generating a total of over 9.8 million megawatt hours of energy.

Renewable Fuels: Biofuels are a key part of the Obama Administration’s “all of the above” energy strategy, helping to reduce our use of foreign oil, reduce air pollution, and create jobs. While the growth in biofuel production and the declining demand for motor fuel has created new challenges, and the nation’s fuel supply is approaching the limit of how much biofuel it can easily absorb into the fuel supply, a new Farm Bill can reinforce the measures the Obama Administration has already taken to promote the use of blends of gasoline that contain more ethanol. In 2010, for instance, EPA approved a blend of gasoline containing up to 15 percent ethanol for use in vehicles newer than model year 2001, and developed labeling rules to enable retailers to market E15. In addition, since 2011, USDA has made funding available through the Renewable Energy Assistance Program to support deployment of “flex-fuel” pumps that can dispense a range of ethanol blends.

A new Farm Bill can jumpstart the production of the next generation of advanced biofuels by helping communities and companies invest in building advanced biorefineries, by funding regional research, and by continuing to help farmers to establish those biofuel crops. If funded, Farm Bill energy programs will support development of new energy production technologies and new, non-food feedstocks, which are essential to expanded production of the next generation of advanced biofuels. It is Farm Bill investments like these that have enabled USDA to partner with the Department of the Navy and the Department of Energy to build a drop-in fuel for aviation from nonfood feed stocks that will be grown and created in rural America. The Navy has agreed to purchase the fuel from feedstocks that will be grown in rural America and biorefineries built here at home.

A new Farm Bill also can help promote the use of biofuels by continuing efforts to install more new blender pumps and other fueling infrastructure to introduce the entire nation to these home-grown fuels. In short, Congress's effort must continue to offer strategic support to the farmers, ranchers, and businesses taking risks to pursue those new opportunities, and establish the infrastructure to put more renewable fuel in all of America’s gas tanks.

Bio-Based Industrial Products: Through expanded eligibility for loan programs and directed research, a comprehensive Farm Bill would support domestic investment, development, and production in the emerging bio-based industrial products industry. Today, more than 3,000 companies produce bio-
based industrial products – everything from chemicals, to auto parts and beverage bottles – from homegrown, plant-based materials. With a handful of policy changes, a comprehensive Farm Bill will help to ensure this burgeoning sector of the economy is located in America—and so are the jobs.

Finally, a Farm Bill would continue USDA’s BioPreferred program, which has helped to create thousands of new jobs in rural communities and added jobs up and down the value chain even in larger manufacturing cities by using agricultural and forestry commodities as the base feedstock for everyday products. Harnessing the purchasing power of the Federal Government, thus far USDA has identified more than 10,000 individual products in 97 categories for preferred Federal government procurement. Simultaneously, hundreds of private companies, from small businesses to global brand owners are seeking voluntary biobased product certification from USDA. These commercial, industrial and consumer bioproducts feature a “USDA Certified Biobased Product” label now appearing on retail shelves across the nation. This growth in using agricultural and forestry materials to create industrial products needs to continue so America farmers and rural communities can reap the results.

A comprehensive Farm Bill can advance the bioeconomy through continued investment in the next generation of advanced biofuels, construction of advanced biorefineries, top-notch research, support for farmers establishing new biofuel crops, and the manufacture of biobased industrial products. Investments in the bioeconomy are investments in the rural economy—and in the overall economic health of the nation.
IV. A Comprehensive Farm Bill Will Support Vulnerable Families By Protecting Our Vital Food And Nutritional Assistance Programs

- For the past 40 years, the Farm Bill also has authorized the Supplemental Nutrition Assistance Program (SNAP), one of our nation’s strongest defenses against hunger and poverty. SNAP helps families and seniors put food on the table, while also benefitting farm and rural economies.

- In 2012, SNAP kept nearly 5 million people, including 2.2 million children, above the poverty line.
  - SNAP benefits led to an average annual decline of 4.4 percent in the prevalence of poverty from 2000 to 2009, and led to even greater reductions in the depth and severity of poverty.
  - Program benefits are targeted to those most in need: the vast majority of SNAP participants are children, the elderly, or people with disabilities.
  - Over 91 percent of SNAP benefits go to households with income below the poverty line, and 55 percent go to households with income of less than half of the poverty line (about $9,500 for a family of three).
  - Most SNAP recipients who can work do so. Among SNAP households with at least one working-age, non-disabled adult, more than half work – and more than 80% work in the year before or after receiving SNAP.

- Administrative costs for the program are very low: about 95 percent of federal spending on SNAP goes directly to helping eligible households purchase food.

- In addition to helping American families during tough economic times, SNAP provides a fiscal boost to the economy during economic downturns.
  - The independent Congressional Budget Office estimates that every new SNAP dollar generates up to $1.80 in economic activity.
  - Every $5 in SNAP benefits generates as much as $9 of economic activity for the over 230,000 retail food outlets – supermarkets, grocers and farmers’ markets – that participate in the program

- In addition, reforming our largest international food aid program would provide a much greater impact without additional budgetary resources, helping up to 4 million more people each year in emergency food crises abroad.

Any Farm Bill must also continue the nutrition programs that are vital to our strength and competitiveness as a nation, and which complement our investments in the farm economy. The Supplemental Nutrition Assistance Program (SNAP), authorized as part of a comprehensive Farm Bill for the past 40 years, is one of our nation’s strongest defenses against hunger and poverty. SNAP helps families and seniors put food on the table, while also benefitting farm and rural economies. The program has become one of the main anchors of the social safety net, offering nutrition assistance to millions of eligible low-income individuals and families and providing economic benefits.
to communities.

It is essential that the Farm Bill reauthorize nutrition programs, which benefit millions of Americans — in rural, suburban and urban areas alike. SNAP is a cornerstone of our Nation’s food assistance safety net, and should not be left behind as the rest of the Farm Bill advances. In addition, reforming our largest international food aid program would provide a much greater impact without additional budgetary resources, helping up to 4 million more people each year in emergency food crises abroad.

Impact of SNAP on Families and Individuals

SNAP has helped low-income families and individuals weather tough times during the recent Great Recession and has lifted millions out of poverty. In 2012, SNAP kept nearly 5 million people, including 2.2 million children, above the poverty line. SNAP benefits led to an average annual decline of 4.4 percent in the prevalence of poverty from 2000 to 2009, and led to even greater reductions in the depth and severity of poverty.

SNAP provides critical assistance to help families get through tough times and back on their feet as soon as possible. Even as the economy recovers, SNAP remains a critical support to children, the elderly, and low-wage workers who struggle to put food on the table. Over 91 percent of SNAP benefits go to households with income below the poverty line, and 55 percent go to households with income of less than half of the poverty line (about $9,500 for a family of three).

SNAP is effective in reducing extreme poverty (people earning less than $2 a day). Furthermore,

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8 2012 SPM release.
a recent academic study looked back at the babies who benefited from the introduction and expansion of food stamps in the 1960s and 1970s and found that they grew up to be healthier and more likely to finish high school than their peers born in counties where the program had not yet been instituted. 12

Program benefits are targeted to those most in need. The vast majority of SNAP participants are children, the elderly, or people with disabilities. In FY2011 (the latest year for which age-specific data are available), nearly half (45 percent) of all SNAP participants were children, and households with children received nearly 70 percent of SNAP benefits. 13

Additionally, the vast majority of SNAP households do not receive cash welfare benefits. Less than 8 percent of all SNAP households received Temporary Assistance for Needy Families (TANF) benefits. When welfare reform was enacted in 1996, about 37 percent of households getting SNAP benefits also received cash assistance and only 10 percent had no other source of income besides SNAP. In FY 2011, only 8 percent of SNAP households were receiving cash assistance and nearly 20 percent had no other source of income.

![Severity of Child Poverty, 2000-2009](image)

Most SNAP recipients who can work do so. Working families that join SNAP continue to work, and the share of SNAP households that are working is rising. Among SNAP households with at least one working-age, non-disabled adult, more than half work — and more than 80 percent work in the year before or after receiving SNAP 14. In fact, the program is designed to incentivize work. Each additional dollar SNAP participants earn results in only about a 24 cent reduction in benefits—allowing SNAP recipients to stretch their dollars further as they get back on their feet.

SNAP benefits help low-wage working families make ends meet. For a family of three with one wage earner who works at $10 an hour, SNAP increases the family’s take-home income by roughly 10 percent to 20 percent, depending


on the number of hours worked. The Administration is working to help these families work hard and earn self-sufficiency by raising the minimum wage, directly boosting wages for 15 million workers, and cutting taxes for low-income working families.

SNAP is an efficient and effective program; administrative costs for the program are very low. About 95 percent of federal spending on SNAP goes directly to helping eligible households purchase food, and SNAP has one of the most rigorous quality control systems of any public benefit program. Over 99 percent of participating households are eligible to receive SNAP benefits, a historic high. The Administration has also worked hard to improve program integrity in SNAP, which helps contain costs. The SNAP payment accuracy rate is at its highest in history (96.6 percent), which also puts it among the best in the federal government.

With SNAP touching so many American’s lives, it also presents a unique opportunity for USDA to provide nutrition education resources to millions. The Healthy, Hunger-Free Kids Act reformed the structure of the nutrition education provided through SNAP by establishing a Nutrition Education and Obesity Prevention Grant Program that increases flexibility for States to help SNAP recipients make healthy choices on a limited budget. The new and improved program requires a greater emphasis on evidence-based, outcome-driven interventions, with a focus on preventing obesity and coordinating with other programs for maximum impact and cost-effectiveness.

USDA is also supporting a range of strategies to support and encourage healthy eating, including testing incentives to purchase fresh fruits and vegetables using SNAP, improving access to fresh produce by expanding the availability of SNAP card readers at farmers markets and farm stands, and providing free shopping and meal planning advice to help low-income families serve more nutritious, affordable meals.

Economic Impact of SNAP

SNAP is one of our most important automatic stabilizers, designed to expand to help meet increased demand when the economy is weak, and then contract when the economy is strong.

For most of the program’s 40-year history, SNAP participation has roughly tracked with the unemployment rate, rising as unemployment worsened and falling as employment picked up. USDA research indicates that since 1980, a 1-percentage-point increase in the national unemployment rate has been associated with about 1 to 3 million additional SNAP participants. During the 2001 and 2007-09 recessions, changes in the SNAP caseload were consistent with that pattern.

In addition to helping American families during tough economic times, SNAP provides a fiscal boost to the economy during economic downturns. Every new SNAP dollar generates up to $1.80 in

economic activity\textsuperscript{18}—which means that while SNAP is providing temporary grocery help to low-income families, it is also giving America’s retailers a temporary economic boost.\textsuperscript{19} The non-partisan CBO rated an increase in SNAP benefits as one of the two most cost-effective methods for boosting growth and jobs when the economy is weak. An increase of $1 billion in SNAP expenditures is estimated to increase overall economic activity (GDP) by $1.79 billion.\textsuperscript{20} In other words, every $5 in new SNAP benefits generates as much as $9 of economic activity, as these benefits are used to purchase food from one of the more than 230,000 retail food outlets such as supermarkets, grocers and farmers’ markets that participate in the program. Additionally, USDA’s Economic Research Service estimates that $1-billion in SNAP benefits supports an additional 8,900 to 17,900 full-time-equivalent jobs. On average, $1 billion in SNAP benefits generates 3,000 farm jobs.

**Making International Food Aid More Effective**

By reforming international food aid, Congress would allow the same resources to have a much greater impact without a significant impact on U.S. agriculture. Allowing less than half of our largest food aid program funding to be used for flexible interventions such as local and regional procurement and cash vouchers, would allow the program to modernize in line with other major donors, make U.S. responses more effective, and permit up to 4 million more people each year in emergency food crises abroad to be helped without additional budgetary resources. Recent crises in Syria and Somalia and most recently Typhoon Haiyan in the Philippines have highlighted the importance of this flexibility.


V. A Comprehensive Farm Bill Will Provide A Reliable Safety Net For Producers To Effectively Manage Risk

- The Farm Bill represents a key opportunity to further reform and improve farm programs to provide assistance to those that need it and to restore much needed disaster funding for livestock producers, while also providing deficit reduction for the American taxpayer.

- While crop insurance is a critical component of the farm safety net, the Government’s cost of providing crop insurance has increased dramatically over the past decade as the subsidies for crop insurance and the prices of commodities have increased.
  - In 2012, farmers paid about $4.3 billion to insure almost 282 million acres through the Federal crop insurance program.
  - Elimination of direct farm subsidies, as proposed by the Administration, would save taxpayers $5 billion per year.
  - The Farm Bill also is an opportunity to reform adjusted gross income limit provisions to prevent producers that do not need assistance from receiving aid.

- Due to Congressional inaction on the Farm Bill, some of the programs that could have helped mitigate the impacts of the severe drought conditions in 2012 and more recently during the South Dakota blizzard this past October are expired or currently have no funding – particularly safety net programs for livestock producers.
  - In 2012, had Congress acted to reauthorize the Farm Bill, the Livestock Forage Program (LFP) payments alone could have totaled between $500-$600 million, double the 2011 levels. A new Farm Bill would retroactively extend LFP payments to producers to cover those losses.
  - Continued delay of the Farm Bill not only leaves these producers on their own to cover their losses from the 2012 drought, but also renders essential programs unavailable to USDA in its work to provide assistance for new disasters, such as the October blizzard in South Dakota, Nebraska, North Dakota and Wyoming, which killed a large number of livestock.
  - Because Congress has not acted to reauthorize the Farm Bill, USDA is unable to assist producers and can only ask producers to keep accurate records for when a Farm Bill reauthorizes the LIP program.

- Lack of action on a Farm Bill ultimately would result in the U.S. reverting back to dairy policy from the New Deal era, leading to the potential for milk prices to double for domestic consumers. This also would carry significant cost for the federal government of at least $12 billion per year.

America’s producers and the American people deserve an agriculture safety net that provides assistance when farmers are in need, not a safety net that provides payments to producers when times are good. Similarly, all producers – new, established, organic, and conventional – need risk management tools such as crop insurance in order to grow their business and protect themselves
from low prices and natural disasters.

The Administration believes that crop insurance is a critical component of the farm safety net. However, over the past decade, the Government’s cost of providing crop insurance has increased dramatically as the subsidies for crop insurance and the prices of commodities have increased. Currently, the Government pays on average roughly 62 percent of farmers’ crop insurance policy premiums and there is no dollar limit on the premium subsidy that farmers can receive. The Administration has proposed to reduce subsidies to farmers as well as crop insurance companies. These spending reductions reduce the generous level of support provided to farmers and crop insurance companies at a time of National belt-tightening, while providing sufficient funding to maintain a robust crop insurance program.

The Farm Bill is an opportunity to reform farm programs to provide assistance to those that need it and to restore much needed disaster funding for livestock producers. Currently, producers receive Direct Payments regardless of whether prices are high or low. Direct Payments should be eliminated and replaced with a program that provides assistance to producers when prices are low and producers are economically distressed. Similarly, adjusted gross income limit provisions should be reformed to prevent producers that do not need assistance from receiving aid. In addition, as highlighted by the recent Atlas Blizzard in South Dakota, much needed disaster programs for livestock producers need to be reauthorized in order to ensure that ranchers can survive when a natural disaster occurs.

A comprehensive Farm Bill can better align safety net programs to the increasing diversity of US agriculture and to the new climate challenges facing producers while improving the allocation of scarce federal financial resources.

**Crop Insurance**

Wide swings in farm income can result from changes in weather, yields, prices, government policies, global markets, and other factors. Managing risk is an important aspect of the farming business, and crop insurance is one of the tools used to manage risk. Crop insurance is a tool that helps producers manage their risk while allowing them to respond to market signals. Producers can purchase federally subsidized insurance policies prior to planting their crop. After harvest, when losses occur those insurance policies make indemnity payments to producers based on losses related to either low yields (crop yield insurance) or low revenue (revenue insurance).

Farmers paid about $4.3 billion in 2012 to insure almost 282 million acres through the Federal crop insurance program. In 2012, large swaths of our nation experienced severe drought. Participation among most row crops was high last year. Roughly 85 percent of corn, wheat, and soybean acres, almost 80 percent of rice acres, and over 90 percent of cotton acres were enrolled in the program, which contrasts sharply with participation at the time of the 1988 drought when only 25 percent of insurable area was enrolled in the crop insurance program. As of August 2013, $17.4 billion in indemnity payments had been made to producers of 2012 crops suffering crop or revenue losses partially compensating them for significant losses.
While crop insurance protects producers’ economic livelihood by helping them continue with planned business investments and household spending following a natural disaster, its benefits extend beyond the farm by protecting jobs in rural and surrounding urban communities. A recent study\(^{21}\) found that, for the 2012-2013 growing season, the Federal crop insurance program had an economic impact of $2.1 billion in the states of Iowa, Nebraska, South Dakota, and Wyoming. Approximately, 20,900 jobs in the region were preserved as a result of indemnity payments made due to the historic drought. Agriculture-related jobs were not the only jobs preserved as the indemnity payments helped preserve jobs in the healthcare, entertainment, and restaurant industries in both rural and urban areas.

The upcoming Farm Bill presents an opportunity to help the next generation return to agriculture. A number of factors such as limited experience, limited capital, and low debt repayment capacity often prevents beginning farmers from receiving the credit necessary to grow their business. The Farm Bill addresses this problem by making crop insurance more affordable for beginning farmers, which should raise participation rates. Credit institutions may view loans to beginning farmers as less risky if they know that these farmers are protected by the Federal crop insurance program.

Another benefit of crop insurance is the requirement to exercise good farming practices in order to be eligible for coverage. The new Farm Bill presents the opportunity for crop insurance to provide even more environmental benefits by requiring any producer enrolled in the crop insurance program to comply with conservation compliance activities that help protect highly erodible soil and wetlands. Coupling crop insurance with conservation compliance is an opportunity to continue protecting producer’s bottom line while also protecting our natural resources.

Other Programs

USDA has a number of other programs that help form a safety net for crop and livestock producers. However, some of these programs that could have helped mitigate the impacts of the severe drought conditions in 2012 and more recently during the South Dakota blizzard this past October, are expired or currently have no funding—particularly safety net programs for livestock producers. These are (1) the Livestock Indemnity Program (LIP), which compensates ranchers a portion of market value for livestock mortality caused by a disaster; (2) the Livestock Forage Disaster Program (LFP), to assist ranchers who graze livestock on drought-affected pastureland or grazing land; and (3) the Emergency Assistance for Livestock, Honey Bees, and Farm-Raised Fish Program (ELAP), which compensates these producers for disaster losses not covered under other disaster programs.

Farmers who grow crops that are not currently covered by a crop insurance product can apply for a
direct payment under the Noninsured Crop Disaster Assistance Program (NAP), which functions similarly to catastrophic crop insurance. NAP payments for 2011 crop losses totaled over $260 million and to date have totaled almost $100 million for losses to the 2012 crop. In 2011, payments from those programs totaled more than $500 million. Preliminary analysis suggests that in 2012, the Livestock Forage Program payments alone could have totaled between $500 million and $600 million, roughly double the 2011 levels.

For example, in 2012, 31 percent of all livestock produced (by value) was in areas with minimal drought, 18 percent was in areas with moderate drought, and about half was in areas with severe or worse drought. A new Farm Bill would retroactively extend LFP payments to producers in order to cover drought losses suffered in 2012. Under the House proposal, the 2012 drought payments would have totaled between $500 million to $600 million, and under the Senate Bill they would have totaled between $250 million to $300 million.

Continued delay of the Farm Bill not only leaves these producers on their own to cover their losses from the 2012 drought, but it also renders essential programs unavailable to USDA in its work to provide assistance for new disasters, such as the October blizzard in South Dakota, Nebraska, North Dakota and Wyoming, which killed a large number of cattle, horses, and sheep. In South Dakota alone the estimated number of cattle lost due to the blizzard has been estimated to be as high as 30,000, which could result in losses of as much as $27 million or even more. Because there is not a livestock indemnity program (LIP) available at this time, USDA is unable to assist producers and can only ask producers to keep accurate records for when a Farm Bill reauthorizes the LIP program. At this point, USDA has offered a special signup through the Natural Resources Conservation Service’ (NRCS) Environmental Quality Incentives Program (EQIP) to help South Dakota producers address the impacts of the storm. EQIP assistance has helped producers dispose of livestock carcasses, replace destroyed fencing, and rebuild shelterbelts and other conservation practices that were damaged by the storm.
VI. A Comprehensive Farm Bill Will Enhance Conservation

- The future of food and fiber production in the U.S. depends upon the availability of productive farm and ranch land and abundance of healthy natural resources. Towards this end, the Farm Bill represents the nation’s largest investment supporting the voluntary and successful conservation, restoration and management of America’s working lands.

- Conservation compliance and sound conservation practices to commodity programs has been a successful tool in reducing soil erosion by more than 40 percent and preventing impairment of natural resources.

- A comprehensive Farm Bill will improve, simplify, and strengthen key land conservation, protection, and wildlife habitat enhancement. The Farm Bill authorizes or makes changes to:
  
  - Working-land programs that provide technical and financial assistance to farmers who install or maintain conservation practices on land in production. These programs have enrolled 60 million acres of agricultural and non-industrial private forestland (through the Conservation Stewardship Program) and obligated nearly $1 billion in financial assistance for over 44,000 active and completed contracts (Environmental Quality Incentives Program).

  - Comprehensive conservation and habitat programs that help farmers, ranchers and private landowners protect and conserve environmentally sensitive land and produce wildlife habitat from agricultural production in exchange for rental or easement payments.

  - Agricultural land acquisition programs like the Farm and Ranch Lands Protection Program, which provide assistance to cooperating partners to purchase land rights, helping sustain the ranching and farming way of life and their surrounding rural communities.

  - Linking crop insurance participation to conservation compliance, as supported by the Administration, could bring an additional 17 million acres into compliance practices, and ensure an additional 141 million acres remain in a conservation practices.

  - A comprehensive Farm Bill also supports the restoration of our nation’s forests and ecosystems, for example by authorizing critical forest management tools, and providing funding for local governments to install high-efficiency, biomass-fueled heating systems that reduce energy costs, support rural income and employment opportunities, and address the risks of severe wildfire.

The Farm Bill represents the nation’s largest investment supporting the voluntary and successful conservation, restoration and management of America’s working lands.

Seven out of every ten acres of our Nation’s land is privately owned. Healthy working land is the foundation of a prosperous U.S. agricultural industry and the cornerstone of environmental quality and the core of healthy communities. The Farm Bill conservation programs are critical for securing and maintaining the benefits of healthy soils, clean and safe water supplies, abundant wildlife and an enhanced natural resource base to support continued economic development and strengthen our quality of life. Since the 1930s, when severe drought coupled with years of overworked farms led to severe soil erosion and the Dust Bowl, USDA has partnered with farmers, ranchers, and private
landowners to help them voluntarily adopt conservation practices that help farmers to enhance the long-term productivity of their operations, while providing environmental benefits that all Americans can enjoy.

The Farm Bill’s conservation title has offered a range of assistance through voluntary conservation efforts that provide long-term benefits:

- Working-land programs like the Conservation Stewardship Program (CSP) and the Environmental Quality Incentives Program (EQIP) provide technical and financial assistance to farmers who install or maintain conservation practices on land in production.

- Comprehensive conservation and habitat programs like the Conservation Reserve Program (CRP) and the Wetlands Reserve Program (WRP) help farmers, ranchers and private landowners protect and conserve environmentally sensitive land and produce wildlife habitat from agricultural production in exchange for rental payments (CRP) or easement payments (WRP). These programs contribute to improving the environmental health of the land while providing economic benefit to the farmer or rancher.

- Agricultural land acquisition programs like the Farm and Ranch Lands Protection Program provide assistance to cooperating partners to purchase land rights from willing sellers to prevent conversion to more intense non-agricultural uses, and help sustain the ranching and farming way of life and their surrounding rural communities.
• Conservation Technical Assistance (CTA) provides ongoing technical assistance for installing environmental practices like riparian buffers.

While past conservation efforts have achieved many significant environmental benefits, we cannot afford to let up. The Farm Bill provides continued, as well as innovative opportunities, to encourage locally driven farming and ranching activities that provide natural resource benefits while facilitating creative conservation partnerships that focus on large landscape-scale conservation outcomes. In particular:

• CSP has grown into a major force for conservation, and continues to strongly inspire others with the desire to go the extra mile to conserve and protect America’s natural resources. The program started in 2009 and through only five sign-ups, more than 59.5 million acres of agricultural and non-industrial private forestland have been enrolled into the program. CSP helps farmers and ranchers who are already taking action to conserve natural resources do even more to benefit the soil, water, air and other resources on their operations.

• Annual EQIP financial assistance obligations total nearly $1 billion in over 44,000 active and completed contracts covering 19.9 million acres. In addition to regular EQIP projects, these funds also support projects in resource based initiatives such as water and air quality, drought, on-farm energy audits and energy conservation, migratory bird habitat, and the Mississippi River Basin, and projects in initiatives, such as organic production, seasonal high tunnels, and America’s Great Outdoors focused on environmental benefit and agricultural production as compatible goals.

• In its two decades of existence, the Wetlands Reserve Program has restored more than 2.6 million acres of wetlands habitat across the U.S, creating prime wildlife habitat and helping the environment by holding and cleaning water. More than 11,000 landowners across the U.S. have participated in this voluntary program. Landowners can receive financial assistance to restore wetlands on the saturated and flooded portions of their property that are difficult to farm, focusing their agricultural efforts on more productive soils.

• In its nearly two decades of existence, the Farm and Ranch Lands Protection Program has preserved more than 1.1 million acres of the Nation’s most productive lands for the production of food, feed, and fiber by private landowners. More than 4,200 landowners across the U.S. have participated in this voluntary program. State and local governments, soil and water conservation districts, Indian tribes, and eligible non-governmental organizations can receive financial assistance to purchase conservation easements to protect the agricultural use of the nation’s prime farm and ranch land.

The Farm Bill represents an opportunity to consolidate programs to allow for more flexibility, simpler applications, and a streamlined enrollment process to enable USDA to target our resources effectively and efficiently.

Conservation payment programs
Voluntary conservation payment programs are the foundation of U.S. agricultural conservation policy. In 2011, 374,000 farms (18 percent) including 284 million acres (30 percent) of all farmland and 145 million acres of cropland (36 percent) received USDA conservation payments. Farmers in every state participate in these programs, and use the payments from USDA to support the adoption of a broad range of conservation practices that help offset the negative impacts of farming on water quality, air quality, wildlife habitat, and more.

The Conservation Reserve Program (CRP)—our Nation’s largest land conservation program—has almost 26 million acres enrolled today. Without funding for CRP, a whole range of environmental benefits would be lost. CRP targets the enrollment of fragile and environmentally sensitive cropland, and the protective covers planted on these lands has reduced more than 8 billion tons of soil erosion since the program began in 1986. In FY2011, other conservation practices that farmers agreed to install on CRP land to improve water quality reduced the amount of nitrogen (N) and phosphorus (P) leaving fields by 95 and 86 percent, respectively, decreasing adverse water quality impacts. The CRP is also the largest private lands carbon sequestration program in the U.S. In 2012, CRP enrollment resulted in carbon sequestration equal to taking almost nine million cars off the road. The populations of ducks, pheasants, sage grouse and many other birds have increased due to the over 30 million acres of grass, trees and wetlands protected by lands enrolled in CRP.

A partial accounting of CRP benefits shows that the program generates at least $1.3 billion annually by reducing soil erosion and providing wildlife habitat. A majority of the benefits that could be estimated in monetary terms ($970 million in 2013 dollars) flow from improved hunting and wildlife viewing opportunities. The balance of estimated benefits come from reducing soil erosion, including preservation of soil productivity and a long list of downstream or downwind benefits that comprise reduced water treatment costs, decreased silt loads to reservoirs, better aquatic habitats, and many more.

Since crop insurance is becoming the cornerstone of the agricultural safety net, extending compliance requirements to Federally subsidized crop insurance, the only large USDA program not currently subject to environmental compliance, is another important way of providing producers with incentives adopt conservation practices. Conservation compliance means that producers who participate in most Federal agricultural programs must implement soil conservation plans on highly erodible cropland and refrain from draining wetlands for agricultural production, or risk losing most
farm financial assistance. By reducing soil loss due to wind and water erosion and protecting wetlands, the conservation compliance requirements result in less sedimentation flowing into rivers and streams, which in turn improves water quality for both agricultural users and for the communities in which they live. As the soils erode, they carry nutrients and other agricultural inputs with them. Keeping these valuable inputs in the crop fields and out of our water supplies and natural habitats protects food production and benefits everyone. The compliance provisions also protect the nation’s long-term capability to produce food and fiber and, through good stewardship of the soil resources, producers are able to better sustain droughts and floods.

Prior to 1985 when the conservation compliance provisions came into effect, it was estimated that cropland in the U.S. was losing soil at an unsustainable rate on between 40 million and 65 million acres. Erosion on vulnerable soils (or highly erodible soils) totaled over 1.7 billion tons per year in 1982. By 2007, soil erosion rates on these vulnerable acres dropped by almost 49 percent or to less than 0.9 billion tons per year. Estimates have shown that conservation compliance has generated at least a quarter of the reduction in soil losses from croplands.

Both the House and Senate versions of the Farm Bill have proposed eliminating Direct Payments, the largest of Title 1 commodity programs. Direct Payments (DPs) are an effective compliance incentive because they are substantial (roughly $5 billion per year), cover a large share of cropland (71 percent), and are paid annually regardless of crop production prices. Though the House and Senate Farm Bills would retain conservation compliance in other Title 1 commodity programs, an end to direct payments could reduce the incentive to maintain environmentally beneficial practices required through the current conservation compliance program because different producers tend to participate in conservation programs than commodity programs (see figure).

The Senate bill has proposed extending compliance requirements to federally subsidized crop insurance, the only large USDA program not currently subject to environmental compliance, which would help maintain those beneficial conservation practices while also increasing the regulatory certainty for producers under other environmental compliance statutes. The extent to which crop insurance can fill the gap left by an end of direct payments, however, depends on the extent to which premium subsidies go to the producers who also received direct payments under the 2008 Farm Act. In 2010, 181,000 farms (9 percent), operating on 141 million acres of cropland (36 percent), received direct payments and also purchased crop insurance, but were not participating in conservation programs. For these farms, making crop insurance subject to compliance sanctions could compensate for environmental benefits lost if direct payments end. Also, attaching compliance requirements to crop insurance could provide new environmental benefits on an additional 53,000 farms operating on 17 million acres of cropland - farms that traditionally participate in crop insurance but had not received direct payments.¹²

Restoring Our Nation’s Forests and Critical Ecosystems

Restoration of our nation’s forests and ecosystems benefits the environment and creates jobs in rural communities. Forest restoration projects provide significant returns in avoided costs, and are leveraged with investments across USDA, other federal agencies, and external partners.

The Forest Service supports the economy by protecting clean water and by supporting the forest restoration economy. A forest restoration economy is one based on work in the woods with the intent of restoring the health of our forests and watersheds. Using wood from hazardous fuels and restoration treatments to support the wood products industry and the bio-based economy makes forest health treatments economically viable while accomplishing complementary goals of restoring resilient forests and rangelands, reducing fire risk, and improving water quality.

- Recent studies estimate an average of 23 jobs created per $1 million invested in forest restoration; this is a much higher return than that of more conventional forms of infrastructure investment such as mass transit, roads, and energy production.

- Forest Service natural resource investments and the use of national forest and grassland resources support jobs and income across the country, but especially in rural areas where consistent sources of employment and economic growth are generally limited. Activities...
contributed over $36 billion to the national economy, supporting nearly 450,000 jobs (FY 2011).

- The harvesting of timber and other forest products from NFS lands contributed to more than 44,000 full- and part-time jobs with labor income totaling more than $2 billion in 2009.

A new Farm Bill could provide re-authorization of a critical forest management tool known as Stewardship Contracting. This authority enables the Forest Service to apply the value of timber (or other forest products) from stewardship sales as an offset against the costs to accomplish resource projects. The authority provides flexibility and efficiencies for projects such as hazardous fuel removal, which can be expensive and would otherwise be covered by annual appropriations. Long-term stewardship contracts support local economies and provide incentives for removal of low value biomass, while improving forest conditions and reducing the risk of catastrophic wildfire.

Additionally, a new Farm Bill could fund for the first time, the Community Wood Energy Program (CWEP). Authorized under section 9013 of the 2008 Farm Bill, CWEP is a competitive grant program that would assist local governments with the capital costs of installing high-efficiency, biomass-fueled heating systems—systems that can reduce energy costs, support rural income and employment opportunities, and address the risks of severe wildfire.

A number of opportunities exist within the Farm Bill to improve efficiency and provide for process improvements that would save time and money for the Forest Service, leaving more resources available for on-the-ground forest restoration.

**Targeting Conservation Investment Dollars Through Reforms**

USDA has taken approaches to more effectively target a portion of conservation investments. Guided by science, these approaches can make more assistance available for appropriate conservation in the right places to benefit resource concerns of national or regional interest. Generally, these efforts:

- Are applied based on the geography of a natural resource concern such as the boundaries of a watershed, the range of a species like Sage Grouse, or the extent of an ecosystem like Longleaf Pine, rather than administrative boundaries.

- Are based on findings from the Conservation Effects Assessment Project (CEAP) which indicate that the most effective way to address natural resource concerns is to target conservation to the most vulnerable or important areas and to apply a systems approach to fully treat the resource of concern.

- Accelerate conservation outcomes by focusing on priority small watersheds or other areas. The acceleration of conservation through initiatives can highlight the effectiveness of agricultural conservation. Both the National Water Quality Initiative (NWQI) and the Illinois River and Eucha-Spavinaw Lake Initiative (IRWI) have been associated with successful delistings of impaired water bodies.
• Provide predictability. NRCS cooperation with the US Fish and Wildlife Service has enabled producers to receive predictability under current and future Endangered Species Act regulations. This is made possible by the consistent, science-based approach provided by the Working Lands for Wildlife Initiative, including the Sage Grouse and Lesser Prairie Chicken Initiatives.

• Are supported by agricultural producers. The Iowa Farm and Rural Life Poll in 2009 found that 76% of farmers showed significant support for the statement “Conservation funding should be higher for land that is most vulnerable to soil and water quality problems.”

• Build on and reinforce partnerships to increase the reach and effectiveness of conservation efforts. A recent review of projects in the Mississippi River Basin Healthy Watersheds Initiative found that there was an average of over 9 partners per project helping to deliver conservation. Through the National Fish and Wildlife Foundation Conservation Partners grant program, a fiscal year 2012 investment of $10 million in NRCS funding was leveraged to provide nearly $41 million in conservation projects, all of them aligned with NRCS Landscape Conservation Initiatives.

As we anticipate lower funding levels we can find mechanisms to enable the private sector to more easily invest in conservation. When we can measure and verify the positive results of conservation, we can provide certainty to meet regulatory standards and encourage the development of markets for ecosystem services, diversifying the revenue stream for landowners and providing incentives for conservation practices. Leveraging private sector resources will help avoid a decline in conservation practices in the face of fewer dedicated federal resources.
VII. **A Comprehensive Farm Bill Will Promote Markets At Home And Abroad While Meeting Our Global Trade Commitments**

- The agriculture sector and farm exports have been one of the brightest points for the U.S. economy.
  - The current value of U.S. exports is more than $140 billion, with the past five years representing the highest agriculture sales levels in the nation’s history.
  - U.S. agricultural exports have out-paced U.S. agricultural imports since 1960, generating a surplus in U.S. agricultural trade.
  - Trade promotion provisions in a new Farm Bill and continued commitment to developing markets at home and abroad will be key to maintaining strong farm incomes over the next 5 years.
    - The Farm Bill authorized USDA’s trade promotion efforts, which are estimated to generate a return of $35 in economic benefits for every one dollar invested. These programs help approximately 70 U.S. agricultural producer organizations, each representing hundreds or thousands of producers, expand commercial export markets for their goods abroad.
    - The Farm Bill also facilitates export financing of U.S. agricultural exports, which helps generate sales of more than $4.1 billion of U.S. agricultural exports in 2012 – including high-valued products like port, forest products, almonds, fish and fresh fruit.
  - A comprehensive Farm Bill will support the growth of global and domestic organic market opportunities by providing critical data, research and program supports for organic farming, sales of which doubled from 2002-2012. These investments also provide valuable information about drought-resistant and soil-conserving practices, which benefit all U.S. agriculture.
  - Farm Bill-authorized programs support the development of physical infrastructure and technical assistance to locally-based organizations engaged in marketing, food safety and production research and training. Between 2009 and 2012, USDA supported over 2,600 projects nationwide to build new market opportunities in local and regional foods.
  - Passage of comprehensive Farm Bill also is necessary to resolve the Brazil WTO dispute, which if not resolved is likely to result in trade retaliation against the United States.

Fueled by improved trading opportunities abroad and new markets at home for innovative products, US agricultural producers have realized record farm incomes since the Great Recession. Trade promotion provisions in a new Farm Bill and continued commitment to developing markets at home and abroad will be key to maintaining strong farm incomes over the next 5 years.

**Promoting Markets for U.S. Agriculture Abroad**

Farm incomes have been strong, in large part due to robust agricultural exports. With the productivity of U.S. agriculture growing faster than domestic food and fiber demand, U.S. farmers and agricultural firms rely heavily on export markets to sustain prices and revenues. Historically, U.S. imports have increased steadily, as demand for diversification in food expands. U.S. consumers
benefit from imports because imports expand food variety, stabilize year-round supplies of fresh fruits and vegetables, and temper price fluctuations.

U.S. agricultural exports have outpaced U.S. agricultural imports since 1960, generating a surplus in U.S. agricultural trade. That surplus currently stands at approximately $30 billion, but is expected to narrow to $22 billion in FY2014 and to around $16 billion by 2022. This surplus helps counter the persistent deficit in nonagricultural U.S. merchandise.

Due to the world economic slowdown, between 2008 and 2009, U.S. agricultural exports fell from $115 billion to $98.5 billion. Total economic activity generated through farm exports fell from $273 billion in 2008 to $228 billion in 2009.

Fortunately, this decline was short-lived. As the world economy recovered, agricultural commodity prices rose and U.S. economic activity supported by farm exports soared to new heights.

The economic benefits of America’s rapid farm export recovery are far greater than generally appreciated by non-farm sectors. The nearly $136 billion worth of U.S. farm exports in 2011 generated an additional $176 billion in related domestic economic activity. The direct and indirect effects together accounted for a total $312 billion of U.S. national income. That larger number reflects the additional economic activity and employment opportunities that exist in concert with the agriculture sector. For example, products such as bulk grains require a large transportation system as they are moved from the farm to an elevator, to train cars or barges, and then to the port. In addition to the transportation system, high-value agricultural products create jobs in the processing and/or manufacturing sectors. All this direct and indirect economic activity generated by farm exports supported 923,000 jobs in 2011. In FY 2013, total agricultural exports reached a record level of $140.9 billion – continuing the strongest five-year period for agricultural exports in our nation’s history.

These record-breaking achievements are a testament to the hard work, and productivity of America’s farmers and ranchers. They also point to the importance of market access and development programs funded through the Farm Bill. Through USDA’s trade promotion efforts (i.e. Market Access Program and Foreign Market Development Program) we see a return of $35 in economic benefits for every one dollar invested. These programs help approximately 70 U.S. agricultural producer organizations – each representing hundreds or thousands of producers – expand commercial export markets for their goods through the Market Access and Foreign Market Development Programs.
The Farm Bill also facilitates export financing of U.S. agricultural exports. These guarantees help generate sales of more than $4.1 billion of U.S. agricultural exports in 2012 including high-valued products like pork, forest products, almonds, fish and fresh fruit.

The Farm Bill will continue to tap into the growing demand generated by fast-growing emerging markets abroad.

**Brazil cotton and the WTO**

In 2005 and again in 2008, the World Trade Organization (WTO) ruled in favor of Brazil and found that certain U.S. agricultural programs are inconsistent with WTO commitments. These included:

1. payments to cotton producers under the marketing loan and countercyclical programs; and
2. certain export credit guarantees under the GSM-102 Program, a USDA program used to provide guarantees for credit extended by private U.S. banks to approved foreign banks related to purchases of U.S. agricultural products by foreign buyers.

On August 31, 2009, WTO arbitrators issued arbitration awards in this dispute, which prescribed the methodology that Brazil could use to impose countermeasures against U.S. trade. The authorized annual amount of countermeasures consists of two parts: 1) a fixed amount of $147.3 million as a result of the violation of U.S. commitments in connection with the domestic support programs for cotton and 2) a variable amount that is calculated as a function of usage of the GSM-102 program in each year. The arbitrators also provided that under specific circumstances Brazil could impose cross-sectoral countermeasures *(i.e., countermeasures in sectors outside of trade in goods, specifically intellectual property and services)*. If the level of the authorized countermeasures in any year exceeds a threshold, calculated annually, Brazil may impose cross-sectoral countermeasures. Such cross-sectoral countermeasures would likely have a harmful impact on both agricultural and non-agricultural exports from the United States to Brazil.

On June 17, 2010, U.S. and Brazilian trade negotiators reached a framework agreement for moving forward in the dispute settlement case. The Framework agreement—which lays out a number of “steps and discussions”—represented a path forward toward the ultimate goal of reaching a negotiated solution to the dispute, while avoiding WTO-sanctioned trade retaliation by Brazil against U.S. goods and services. Among other concessions, the United States agreed to provide monthly payments that total $147.3 million per year to Brazil. The Framework agreement was formally accepted by Brazil’s Foreign Trade Council of Ministers (CAMEX) on June 17, 2010.

Key to the framework agreement is recognition that a resolution of the dispute would likely require changes in cotton programs in the Farm Bill. This has become evident in our negotiations with Brazil. At the time the agreement was signed, the expectation was that the Farm Bill would be concluded by December 2012. In the meantime, the United States has suspended payments to Brazil, due in part to the budget sequestration. CAMEX has created a special task force to study possible trade retaliation against the United States.
Although the United States has certain administrative flexibility to reform the GSM-102 program and may require only modest statutory changes to that program to facilitate reforms necessary to achieve a negotiated solution to that element of the dispute, such flexibility does not exist with respect to the cotton programs. As resolution of this dispute necessarily requires resolution of both the cotton domestic support and GSM-102 components, Congressional action on a Farm Bill is absolutely necessary to reach a full and final agreement with Brazil.

Throughout this negotiation, the United States has tried to preserve a reasonable safety net for American cotton growers and protect a valuable export program in GSM-102. Those efforts could be lost if Congress fails to act on a new Farm Bill.

**Supporting Growing Organic Markets**

A comprehensive Farm Bill will continue supporting the growth of global organic market opportunities and expansion of domestic organic production options. Farm Bill investments provide critical data, research and program supports for improving organic farming performance, economic success, and job creation. These investments also provide valuable information about the availability of drought-resistant and soil-conserving practices, which benefit all U.S. agriculture²³.

![U.S. Organic Food Sales, 2004-2012](chart.png)

Consumer demand for organically produced goods has shown fast-paced growth for well over a decade, providing market incentives for U.S. farmers across a broad range of products. Organic food sales captured over 4 percent of total food sales in 2012, more than double their market share in 2002 when USDA implemented national organic standards. While natural food stores are still an important market channel, most organic food sales now occur in conventional grocery chains and superstores²⁴.

Americans economized on their food purchases during the 2007-09 recession but organic sales continued to grow – the only retail food category to not experience negative growth in that period.²⁵ Growth in demand for organic

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²³ See e.g., [http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1051&context=usdaagresmag](http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1051&context=usdaagresmag).


products then rebounded quickly following the recession. According to estimates from the Nutrition Business Journal, U.S. organic food, fiber, and agricultural product sales were over $31 billion in 2012, up 11 percent from 2011, and nearly double the annual growth of conventional food sales in 2012.\textsuperscript{26}

Fresh produce is the top-selling organic retail category, comprising 10.3 percent of all U.S. produce sales in 2012\textsuperscript{27}. Organic dairy is the second largest organic sector in retail sales. USDA estimates that the volume of organic milk sales has increased almost continuously since 2006, climbing from under 2 percent of total sales in 2006 and to over 4 percent of sales in 2012.\textsuperscript{28}

Domestic organic specialty crop production continues to grow but certified organic field crop acreage remains a small fraction of U.S. production (under 1 percent of top U.S. field crops)\textsuperscript{29}, despite strong demand. The resulting shortage of feed grains sharply limits the potential of U.S. organic dairy and livestock sectors to respond to domestic and international growth opportunities.

Partly in response to the shortages in organic supply, Congress enacted several program and policy provisions in the 2008 Farm Act. Those investments have generally been successful but their long-term benefits are at risk without continuation by Congress. Research Title provisions (USDA Organic Agriculture Research and Extension Initiative, the Organic Production and Market Data Initiatives) have greatly increased the national capacity for science-based and data-driven decisions about organic production and marketing. The National Organic Certification Cost Share Program has helped small and mid-sized organic growers in every region offset the annual cost of certification and reach high-value organic markets.\textsuperscript{30}

Policy instructions in the 2008 Farm Act regarding integration of organic agriculture by the Risk Management Agency and the Natural Resources Conservation Service were implemented and have begun to improve management options for many organic and transitional producers. These effects would continue to increase with further policy refinements by Congress. The overall increase in Farm Bill support for the organic sector has also been crucial to new international trade agreements\textsuperscript{31} and a wide increase in trade activity\textsuperscript{32}.

\textsuperscript{26} Organic Trade Association/ Nutrition Business Journal, 2013 Organic Industry Survey
\textsuperscript{27} Organic Trade Association/ Nutrition Business Journal, 2013 Organic Industry Survey
\textsuperscript{28} USDA-ERS, 2012a
\textsuperscript{30} USDA-ERS, 2012b
\textsuperscript{31} International trade arrangements for organic products since 2008 include Canada, the European Union and Japan. See http://www.ams.usda.gov/AMSv1.0/ams.fetchTemplateData.do?template=Template1&navID=InternationalTradePartnersNOPCertifyingAgents&rightNav1=InternationalTradePartnersNOPCertifyingAgents&topNav=&leftNav=NationalOrganicProgram&page=NOPInternationalAgreements&resultType=&acct=nopgeninfo.
\textsuperscript{32} U.S. International Trade Commission harmonized trading codes for selected organic commodities were first established in 2011. Monthly trade data since that time can be tracked here: See http://www.fas.usda.gov/http/organics/organics.asp.
Together, these USDA programs have filled substantial organic research and data gaps in livestock, grain and specialty crop sectors, creating reliable data and marketing tools for farm planning and decision-making. The need for these programs is likely to increase as the competition for the U.S. organic market intensifies.

Creating New Market Opportunities in Local and Regional Foods

Growing consumer demand for locally-produced food is creating new opportunities not just for producers and the rural economy, but for urban communities as well. The value of the local food market was estimated by USDA at $5 billion in 2008, while industry sources sized the market at $7 billion by 2011.

Although demand growth for local foods is promising, significant barriers remain to translating demand into sustained economic activity. Getting food from the farm to the consumer requires infrastructure, technical expertise and marketing savvy, particularly as local farms seek to meet demands of higher-volume buyers like grocery stores and institutions.

To help producers take advantage of this multi-billion dollar marketing opportunity, USDA has made historic investments to support these expanding markets. Through Farm Bill-authorized programs, USDA supports the development of physical infrastructure, often in partnership with private lenders, and provides technical assistance or support to organizations engaged in marketing, food safety or production research and training, and other areas. Between 2009 and 2012, USDA supported over 2,600 projects nationwide to build new market opportunities in local and regional foods.

In addition, Farm Bill-authorized conservation, credit and risk management programs are supporting producers as they venture into these new markets. For example, since 2009, USDA has provided assistance to create more than 10,800 high tunnels – low-cost greenhouses that extend the growing season and conserve soil and water – on farms around the country through the Environmental Quality Incentives Program of the Natural Resources Conservation Service. A longer growing season allows farmers to provide their communities with fresh, local food later into the year.

By increasing economic activity in food-related sectors of the economy, USDA will help communities build and maintain prosperity. The development of local and regional food systems also helps expand access to healthy, local foods in underserved communities through farm to school programs, EBT at farmers markets, and other innovative approaches (e.g. farm to corner store). The number of farmers markets that accept EBT rose by 100 percent between 2011 and 2012.

The long-term result of these investments is job growth driven by a maturing market and accessible infrastructure to aggregate, process, and distribute local and regionally-produced foods.


Supporting the next generation of farmers

The family farmer has always been a cornerstone of America. Farm Bill programs have assisted beginning family farmers and invested in services that help already existing family farmers stay prosperous and stay on their land. In 1945 the average age of the American farmer was 49; today it is 58. However since 1945, farmers are living longer and aspiring farmers are often spending more time in college or working in an off-farm job before beginning farming. This is because modern farming requires more expertise and more financial resources to begin farming in today’s agriculture. That means now more than ever Farm Bill programs that support new and existing family farmers are essential to sustaining our nation’s food supply. For example, those programs have provided farm operating and ownership loans to help over 35,000 small and medium sized businesses.

In 1982, 38 percent of farms were beginning farms and by 2011, 22 percent had an operator with 10 years or less of experience. Now, some of these farmers want to slow down or retire; but they have no one to take over their operation. That challenges us to find new ways to help transition farms to the next generation. Beginning producers – along with an increasing number of veterans returning to the land – need technical assistance, credit and affordable crop insurance to get started and keep farming. This is especially important as we seek to increase opportunities for America’s next generation of farmers. Startup requires access to land, capital, and equipment, as well as the operator’s time.

Beginning farmers often report that their biggest challenge in getting started in farming is access to enough capital and farmland to operate at a size capable of earning a sufficient profit. The average beginning farm was 200 acres in 2011, compared to 434 acres for established farms. It is not until farms are in the $25,000 to $30,000 range of gross sales that the majority of farms have positive net cash returns and the average asset based for farms in this size class is over $800,000. Less than one-quarter of beginning farms exceeded $25,000 in sales in 2011. The Federal Government recognizes the need to support and develop new farm operators. Through the Farm Service Agency, the USDA helps beginning farmers who are unable to obtain financing from commercial lenders by targeting a portion of its direct and guaranteed loan funds to farmers and ranchers who have not operated a farm or ranch for more than 10 years.

Over 40,000 young and beginning
farmers in 48 states have received training and assistance in business planning, farming and marketing practices through the Beginning Farmer and Rancher Development Program of USDA’s National Institute of Food and Agriculture. More than 80% of participants who completed surveys after training events said they increased their knowledge or gained a new skill. Of participants surveyed one year after training, over 60% had developed a farm plan or changed farming practices and over one-third had started a farm. Funding for this Farm Bill mandatory program expired at the end of September 2012. As an addition to the Conservation Reserve Program, the Transition Incentive Program has provided more than 1,700 contracts which encourage exiting CRP enrollees to rent or sell their land to beginning farmers. These contracts allowed beginning farmers to farm over 275,000 acres of farm or ranch land in 26 states. It, too, expired at the end of September 2012.

The Farm Bill represents an important opportunity to provide enhanced support for new and beginning farmers and ranchers. It also is an opportunity to prioritize assistance for new and beginning farmers. Of particular note, both the House and Senate farms bills under consideration would provide additional preference and priority for U.S. veterans seeking assistance under USDA programs.
American farmers have continually found a way to grow more with less: new seeds are less susceptible to disease and yield more crops; new tractors are guided by satellites and spread fertilizer optimally across the field; and animals’ diets are precisely calibrated to grow larger animals with less feed. In fact, according to ERS’ productivity statistics, U.S. agricultural total output grew at an average annual rate of 1.5 percent from 1948 to 2011, and total farm production more than doubled between 1948 and 2011—with productivity growth, driven by innovation, accounting for most of this growth in U.S. agricultural output.

Increasing productivity on US farms stems largely from the rapid and widespread adoption of an ongoing series of biological, chemical, mechanical, and organizational advances. Formal research and extension programs are carried out in universities—especially the Land Grant system—government labs, and private firms. Similarly, most agricultural innovations that build off that research are developed by input
suppliers in the private sector or by public institutions.

Agricultural research and development generates high payoffs for farmers and the public. A substantial body of literature on investing in agricultural research and development (R&D) shows that the social benefits from public research in agriculture have been large, with social rates of return usually falling within the range of 20 to 60 percent annually.\textsuperscript{35} Research programs today address a broad array of problems facing U.S. agriculture including food supply and security, the development of new sources of bio-energy, the response to increased climate variability, plant and animal health issues (see box on colony collapse disorder), water availability and quality, food safety, and nutrition and childhood obesity.

Despite those expected returns, expenditures on public R&D programs have recently flattened and trended down. Those programs provide much of the impetus for new technological innovations. Total public and private R&D spending in agriculture reached $11 billion in 2007, or nearly 8% of the value-added in the sector Annual public R&D spending, through universities as well as government laboratories, rose by 70% between 1970 and 2002 (after accounting for inflation), and played an important role in driving productivity. Private R&D expenditures doubled (after accounting for inflation) between 1970 and 2007.

A new Farm Bill can recommit to targeted public sector investments in agricultural R&D. Entities from across the spectrum, including the American Enterprise Institute and the President’s Council of Advisors on Science and Technology, have underscored the critical commitments taxpayer dollars make in the food and agricultural sciences. These investments in agricultural research and education through a Farm, Food, and Jobs bill are crucial to the innovations that will not only improve productivity but also spur our economy.

The Agriculture and Food Research Initiative (AFRI) is the National Institute of Food and Agriculture’s (NIFA) largest competitive grants program, and funds research, education, and extension activities that provide science-based solutions to address major agricultural challenges of national, regional, and multi-state importance. In addition to other areas of research, from 2008-2012, 20 AFRI-funded Plant Genetics and Genomics Coordinated Agricultural Projects (CAP) combined with other funding

\textsuperscript{35} See also Fuglie and Heisey (2007) for a recent overview, and Alston et al (2010) or Evenson (2001) for extensive surveys.)
sources to develop 45 bean, potato, tomato, wheat, and barley cultivars and improved over 130 lines; received 27 patents; provided training to 208 undergraduate and 172 graduate students; and spread the word of their research through workshops, webinars, 171 publications, and Web-based outreach materials that have been accessed over 374,500 times. Food safety has been another AFRI science priority area. The produce industry is continually seeking improved ways to kill bacteria in processing fresh fruits and vegetables, including salads. With the help of a NIFA AFRI grant, University of Illinois scientists combined ultrasound and chlorine washing treatments to reduce the number of E. coli 0157:H7 in spinach to 99.99 percent. This approach reduces pathogen loads and enhances safety while preserving the freshness of the produce.

NIFA research is critical in establishing sustainable regional biomass feedstock systems for the production of biofuels, biobased products, and bioenergy. The Biomass Research and Development Initiative (BRDI), before mandatory Farm Bill program funding expired in September of 2012, helped increase the availability of alternative renewable fuels and biobased products to diversify the nation’s energy resources. A NIFA-funded BRDI project partnered Domtar Paper with North Carolina State University, the U.S. Forest Products Lab, and others to produce power and chemical products from an existing pulp and paper mill. The project leverages assets and infrastructure and has protected at least 100 jobs in North and South Carolina.

Before funding for this mandatory program expired in September 2012, the NIFA Specialty Crop Research Initiative (SCRI) maintained and enhanced the competitiveness of the US specialty crop industry. For example, the Citrus Research and Development Foundation in Florida received a $9 million grant to work to eliminate citrus greening by blocking the ability of insects to move the disease from infected trees to healthy ones. Citrus greening threatens to destroy over 1 million commercial citrus acres that have an annual production value of approximately $3 billion across the nation. Yearly losses could reach $10 billion if citrus greening is left unchecked.

The Organic Research and Extension Initiative (OREI) focuses on helping producers and processors grow and market high quality organic agricultural products. OREI’s priority concerns include biological, physical and social sciences – with an emphasis on research and outreach that assist farmers and ranchers with whole farm planning. Prior to the expiration of mandatory funding at the end of September 2012, researchers at the University of Minnesota received funding to develop sustainable, whole-farm management programs for the brown marmorated stink bug (BMSB). Scientists at the University of Tennessee are working to improve alternative post-harvest washing treatments to enhance the microbial safety of organic fresh produce.

The United States is a superpower in agricultural sciences. Capacity programs like Smith Lever, Hatch, Evans-Allen, 1890s Extension, and the Expanded Food and Nutrition Program will ensure that the Land-Grant University System maintains the capacity to conduct research and extension activities. University leaders decide which specific projects an institution’s capacity-building grant allotment will support. These decisions are informed, in part, by stakeholders who both conduct and use agricultural research and extension. Between 2008 and 2011, NIFA partners leveraged agency research capacity-building programs with more than $1 billion in industry grants and agreements.

Finally, we need to educate and recruit the talent today to ensure we can address the food and
environmental challenges we’ll face tomorrow. The workforce needs professionals with multi- and trans-disciplinary research skills, but also those who can translate or transfer research to the end user. We need to start educating students at a younger age, give them hands-on experience, and find ways to attract the best and brightest into agricultural careers. NIFA Farm Bill-based competitive grants programs supported more than 1,300 students and post docs in FY 2013 and built infrastructure capacity across the country to train the future workforce in agricultural sciences.

**COLONY COLLAPSE DISORDER**

A new Farm Bill can help identify priority areas for new and continuing USDA research. For example, Colony Collapse Disorder (CCD) is a serious problem threatening the health of honey bees and the economic stability of commercial beekeeping and pollination operations in the United States. In October 2006, many beekeepers began reporting losses of 30-90 percent of their hives. While colony losses are not unexpected, especially over the winter, the magnitude of loss was unusually high. In the years since the initial spike in overwinter hive losses, progress has been made in identifying factors that contribute to CCD; however, hive losses are still about 30 percent and a cure remains elusive.

Bee pollination is responsible for more than $17 billion in increased crop value each year. Commercial production of more than 100 crops, including many specialty crops like almonds and other tree nuts, berries, fruits and vegetables are dependent on honey bee pollination; Bee-pollinated foods enhance the diversity, flavor, and nutritional value of our diets.

Honey bees are not native to the North America; they came from Europe with the first settlers. There are native pollinators in the United States, but honey bees are more prolific and easier to manage, on a commercial level, for pollination of a wide variety of crops. In California, the almond industry requires the use of 1.4 million colonies of honey bees, approximately 60 percent of all managed honey bee colonies in the United States. The 2008 Farm Bill required USDA to investigate CCD and report on the findings.

The Agricultural Research Service (ARS), USDA’s internal research agency, is leading several efforts into possible CCD causes and striving to enhance overall honey bee health by improving bee management practices, as well as studying honey bee diseases and parasites and how best to control them. The National Institute of Food and Agriculture Specialty Crop Research Initiative also funded extramural research in this area, before funding for this Farm Bill program expired at the end of 2012. This includes a Penn State project that focused on assuring quality apple production in Pennsylvania and the rest of the Mid-Atlantic tree fruit industry. In addition, a number of other Federal agencies and State departments of agriculture, universities, and private companies are conducting studies to seek the cause or causes of CCD.
IX. Conclusion

As shown in this report, passing a comprehensive Farm Bill is needed to keep pace with the changing needs of agriculture, addressing the challenges that face rural America, and strengthening the safety net for farmers and families.

This legislation will help provide certainty to agricultural producers and empower them to select a path forward over the next five years. Farm Bill programs would allow farmers, ranchers, and decision makers in rural America to choose efficient management strategies and investment decisions. A new Farm Bill will also help provide an adequate food supply for our nation and the world. It will play a crucial role in determining the source of our renewable energy supply. In short, the Farm Bill will help to positively shape the future of agricultural, food, energy, and rural development policy and communities.

The Farm Bill is an opportunity to simplify existing programs; reduce redundant provisions; promote innovative solutions to address our current and future problems; and encourage wise choices for managing risk. Farm Bill goals can be accomplished while recognizing the importance of making targeted investments to keep agricultural productivity high and our rural communities vibrant. A new Farm Bill can also help realign our farm programs with our trading commitments, which will increase opportunities for marketing our products abroad. Additionally, a new Farm Bill can re-establish and strengthen the safety net for ranchers and specialty crop producers.

The alternatives to full reauthorization – either delay or reversion to permanent law – would result in continued uncertainty for farmers and rural stakeholders that count on a stable policy environment in order to make decisions that have lasting implications for farm income and economic development, particularly in rural economies.