

Statement of the American Farm Bureau Federation

TO THE SUBCOMMITTEE ON BIOTECHNOLOGY, HORTICULTURE, AND RESEARCH

FOCUS ON THE FARM ECONOMY FACTORS IMPACTING COST OF PRODUCTION

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Presented By:
Richard Guebert, Jr.
President, Illinois Farm Bureau
Member of the Board of Directors, American Farm Bureau Federation

Chairman Davis, Ranking Member DelBene and members of the Subcommittee, thank you for this opportunity to provide testimony to the Subcommittee as you focus on the costs of agricultural production and factors that have an impact on those costs. My name is Richard Guebert, and I am President of the Illinois Farm Bureau. I am pleased to testify this morning on behalf of both Illinois Farm Bureau and the American Farm Bureau Federation.

My wife, Nancy, and I with our son, Kyle, operate a corn, soybean and wheat farm in Randolph County. As we got down to planting corn last week, naturally lots of thoughts raced through my head, including the stark fact that we are planting a crop that will most likely return a price below our costs of production. Just in case, like any farmer I check the markets -- regularly. At times when I'm ready to sell, I may check the markets 15 or 20 times a day.

We're not alone. My neighbors and other farmers I represent across the state are faced with the same reality. Last year was a great production year in Illinois, but the dollar has been strong. Exports are down, and competitors in Brazil and Argentina seem lately to have the upper hand.

As I reflect on changes in farming I've seen over the years, commodity prices used to be more predictable. They were primarily influenced by regional and national factors. It is a world market today with much greater volatility. Just in the past two weeks we've seen a \$1.30 a bushel increase in soybean prices because of rain during harvest in Brazil. And then overnight on April 22 a drop of 22 cents a bushel. Farmers and ranchers are price takers whether on the input or commodity side of the equation.

I recently went back through my records and discovered that in 1985 it cost \$110 in inputs for an acre of corn, not counting land costs. This year I estimate it will cost \$475. Our seed costs averaged \$72 a bag in 1985. This year it will average \$340 a bag. We are paying for the technology that makes us more productive given what Mother Nature throws at us. Despite some resistance – especially in our area of the state --our ability to control weeds is still far better than it ever was in the past. And I can tell you that our environment is better for it.

Recently, we had some excellent years. Kyle and I invested in new equipment and a new grain storage system. In some respects, some of our costs like rent, seed, and machinery seem to follow the market. They go up, up, up. It seems when prices go down, our input costs – what we pay for land, seed, fertilizer and crop protectants – don't fall quite as fast. Again, comparing to when I started in farming in the mid 1980's, nitrogen has increased from \$150 to \$625, DAP and urea costs are 3x higher. Fortunately, interest rates are much lower. I was paying 15-18% on my loans in the 1980s. While it's not our biggest cost, the recent and sustained drop in fuel prices has also helped.

I also spend significantly more time on filling out paperwork for permits, licenses, and applications.

In 1985 when I started farming, 400 acres could support a family. Today our farm is much larger and supports three families. Revenue from our farm goes to pay down debt and pay for inputs. We need to pay for repairs – while hoping to make improvements in equipment, technology and infrastructure.

All told, Illinois Farm Business Farm Management reports that over the past four years, farm income has dropped six percent a year, while costs have fallen at half that rate. Over the last 18 months we have seen our working capital erode over 25%. Our equity is fading into the sunset. Illinois farmers are paying taxes this year on a more valuable 2014 crop. Some are faced with the challenge of paying big tax bills at the same time they are buying inputs. Indexed to inflation, the economic return for Illinois farmers after family expenses is currently at its lowest level since 1972.

All of this has proven to be a very steep learning curve for a new generation of younger and less experienced farmers – like my 40 year old son Kyle - who entered the business when times were better.

When I started farming, I borrowed money over the phone. Not today. We know that farm lenders are being closely monitored. In turn, they pay close attention to their farmer customer's financial situation. Lately there has been some reluctance to lend to younger farmers who have not built up any cash reserves. It hasn't been a good time to get into corn and soybean farming and that does not bode well for agriculture.

To the consumer, it might seem reasonable that when prices fall, farmers should back away and plant less. That's counterintuitive for a farmer. Our job is to produce. We have fixed costs to cover. And if we give up land we rent, we may never get it back.

We are eternal optimists. At this time of year, as we sit in the planter, each of us hopes that we will produce our best crop ever.

While farming has changed over the past 35 years, one thing hasn't changed. Farming is risky, riskier than most enterprises. I farm in the Mississippi River bottoms. In 1993 we planted 1750 acres of corn, soybeans and wheat. We invested in inputs to raise the crop. And because of flooding we harvested 17 acres in the Fall of 1993. It is tough to recover from that.

In fact, we would not have survived without programs like federal crop insurance and commodity programs. The farm safety net doesn't make us whole, nor should it. But it does help us recover from weather-related disaster and multi-year price declines. Crop insurance and commodity programs help farmers manage risk, recover some costs and get next year's crop planted while protecting consumers from sticker shock at the grocery store. I can't imagine what farming, food production or food prices would look like in the absence these essential programs.

But today, I want to speak about the challenges and opportunities that affect farmers and ranchers across the country, not just my own state. We are facing stiff headwinds on commodity prices, as AFBF President Zippy Duvall testified before the General Farm Commodities Subcommittee just two weeks ago. He laid out those challenges in detail. Naturally, no individual farmer or even a large organization like Farm Bureau can dictate or predict what will happen in markets. So we are continuing to do what we have done for generations – adapting to more challenging conditions, using the resources and tools at our command to make the most of our investments and provide high quality food and fiber to American consumers and others around the world.

At heart, every agricultural producer is a risk-taker. If they're not, they should probably be doing something else. Our livelihood isn't guaranteed. We don't expect it to be. But when it comes to legislation and regulations, we would ask that policymakers follow the old adage: Primum non nocere. "First, do no harm."

There are bright spots now in Federal policymaking, and I would like to touch on those first and to express our appreciation for the help and support of the members of this Committee. Then, I would like to make you aware of issues where we are facing and potentially costly challenges.

Policies that Have Helped or Can Help to Restrain Production Costs

Transportation

In recent years, Congress has taken some significant steps on Federal transportation policy that are important to producers. These efforts have been bipartisan, and we want all the members of the Committee to accept our gratitude for their hard work in making important changes to Federal transportation policy. These include:

- Regulatory relief for covered farm vehicle drivers in MAP-21
- A WRRDA bill that made significant improvements to our waterway systems
- An increase in revenues for the Inland Waterway Trust Fund
- Additional regulatory clarity for agricultural drivers in the FAST Act
- The Surface Transportation Board (STB) Reauthorization Act that updated the STB that we hope will benefit all shippers and agricultural producers particularly

Unfortunately, in the energy and transportation field we are increasingly concerned about the reluctance of EPA to fully implement the Renewable Fuel Standard (RFS). Renewable fuels have been a tremendous success story for the nation as a whole and to rural economies in particular. Thousands of farmers and individuals in rural communities have invested millions of dollars in infrastructure to meet the goals Congress has set out. The EPA should adhere to Congress' intent and fully implement the volumes specified in law.

Food Safety Modernization Act

Providing a safe food supply is a unified goal for farmers across the country and we believe farmers share the responsibility to work to meet that goal. Farm Bureau worked actively with the Food and Drug Administration as it developed its regulations to implement the Food Safety Modernization Act. We were heartened that, in many ways, FDA actively engaged the farming community. While the rules are not perfect, we do believe that FDA attempted to find solutions that balanced the need for public safety with farming realities. Regardless, FSMA requirements certainly place increased costs and burdens on farmers and open up farms to yet another Federal agency. We will continue to work with FDA in the implementation of FSMA so that we see limited increases in production costs and the benefit of a safer food supply.

Crop Protection

While Farm Bureau is concerned about EPA's approach on some crop protection tools, we are encouraged that EPA is now soliciting public comment on the use of dicamba formulations for deregulated dicamba-tolerant soybeans and cotton. Weed and pest management for farmers is an ongoing challenge, particularly as some weeds develop resistance to common herbicides. There is a growing need for new technologies to counteract weed resistance, and Farm Bureau supports EPA registration of these uses of dicamba without onerous restrictions relating to tank mixes or buffer zones.

State Managed Pollinator Protection Plans (MP3s)

AFBF policy supports the continued use of neonicotinoids as well as the development and implementation of state-managed Pollinator Protection Plans (MP3s). These plans hold the prospect of greater communication between growers and beekeepers – an outcome that could help the bottom line for beekeepers while allowing crop farmers to manage their lands effectively.

Research

Agricultural research is critically important to solving some of society's greatest challenges, including improving human health, maintaining our global competitiveness and enhancing our national security. While it is true that a dollar of research money spent today might not translate immediately to the bottom line of farmers, these are truly investment dollars. They make a difference, and a vigorous, effective research program holds the promise of keeping more farmers more productive in the future.

In this past year alone, the vulnerability of our food system and the necessity of additional research was put on stark display with an estimated \$3.3 billion in economic losses from a new strain of the avian flu and unprecedented drought in places like California. Yet 2015 also showed the strength of our agricultural research system with the development of vaccines and new products like the allergy-free peanut. These innovative discoveries are just the tip of the iceberg of what agricultural science and technology researchers can deliver with sufficient support.

Apiculture is a sector of agriculture that clearly needs research support. The long-term health of the managed honeybee sector has been the focus of much attention over the last several years. Farm Bureau members include not only dairy producers, corn and soybean farmers, fruit and vegetable growers but beekeepers as well. We are working to protect their interests and want to do all we can to help the beekeeping industry meet the challenges it currently faces.

As the President's Task Force mentioned last year, overwintering losses for beekeepers have been exceptionally high for a number of years. While some activists wish to pin the blame entirely on pesticides (especially neonicotinoids), the science and the facts point to other factors – most prominently the varroa mite – that most likely have a greater impact on hive health. Farm Bureau supports ongoing research to assist the honey bee industry, and it is unquestionably true that a healthy beekeeping industry is important to agriculture and it affects some farmers' bottom line. For example, California almond growers are critically dependent on pollination services

from managed honey bees to pollinate their crop; estimates are that approximately 2 million hives annually support the almond industry in California. And the price of pollination services, while it has moderated in more recent years, has risen appreciably over the last decade.

American agriculture needs a healthy bee industry and we should all continue to work constructively to surmount the challenges beekeepers face while assuring that farmers retain access to critically important pesticides.

In fact in Illinois, we are working hard with our Department of Agriculture and other stakeholders to begin the process of developing a Pollinator Protection Plan. We feel strongly that farmer stakeholders should be at the table and that we collectively arrive at reasonable solutions that protect both crops and pollinators. We in Illinois will continue to promote communication between neighbors through old fashioned face to face conversations, as well as with technology such as DriftWatch, an online platform for farmers and beekeepers to share location information. We will also continue to educate our members on the pesticide misuse complaint process through our Illinois Department of Agriculture, as well its apiary inspection process.

Policies that Can Increase Costs to Growers

Unfortunately, the number of issues where policies actually increase cost pressures are more numerous. But I want to draw the subcommittee members' attention to a few of the most urgent.

Mandatory Labeling of GMO foods

Probably our greatest concern at the moment is the failure of the Senate to take up and pass legislation to prohibit mandatory labeling of GMO foods. This failure may well lead to a patchwork of state labeling requirements that will be costly and difficult to sort out. If Congress cannot solve this problem, there is no question the long-term outlook for farmers is higher input costs, potentially lower yields, a more challenging environment in controlling pests – and higher costs for consumers.

Farm Bureau is tremendously grateful to the bipartisan leadership of this Committee in crafting H.R. 1599, the Safe and Accurate Food Labeling Act, and steering its passage through the House. Unfortunately, this issue has been stalled in the Senate by our opponents. No one who supports American agriculture should pretend that mandatory Federal labeling of GMOs will not have a significant impact on our bottom line in the future. But let it also be clear that a smattering of state labeling requirements is not an acceptable outcome either. It is extremely disappointing that some individuals claiming to be seeking 'compromise' are pressing for policies that will stifle innovation, hurt agriculture and raise consumer food costs.

H2-A processing delays

Although an increasing number of fruit and vegetable growers use the H2-A program, it still accounts for less than ten percent of hired labor in the agricultural sector. A major factor in this low utilization rate is the high cost of the program. Typical of the unworkable nature of the program are the delays faced by growers due to inefficiencies in the US Department of Labor, which processes labor certifications. These delays can be devastating to a grower, who depends on his workers being present and available to plant, tend, and harvest his or her crops.

Additionally, we have seen increased delays at the United States Citizenship and Immigration Services (USCIS) processing center. Both agencies could make the program more efficient but have so far declined to do so. For example, both agencies refuse to process key forms and documentation electronically, insisting instead that these documents be sent by standard mail – a process that often causes complications and delays that could be easily avoided.

Worker Protection Standards Rule (WPS)

Last year, EPA imposed a wide range of new obligations on farmers – more frequent training, record-keeping, designation of 'applicator exclusion zones' and others – nearly all of which will mean greater costs for producers with very little, if any, real benefit for workers (in fact, EPA said repeatedly in its original proposal that it could not quantify the benefits of many of the new demands it was proposing). Even more significantly, however, EPA made a last-minute insertion in the rule that could have very pernicious impacts on growers.

Under the new EPA rule, anyone who shows up at a farm gate claiming to be a 'designated representative' of a worker can demand a farmer's pesticide use information merely by showing a signed piece of paper that is supposedly signed by a worker or former worker. The 'designated representative' can then turn around and publish that information in the community, put it online or even start up a petition against the farmer.

We see great potential liability in this provision, with no added protections for workers. And we are greatly distressed that EPA did not share that provision with this Committee, as it was required to do by law. But we want to thank Chairman Conaway and Ranking Member Peterson, who are now working on this matter and we hope it can be resolved.

Property Rights and Grazing

While Illinois might not have much grazing of cattle on public land, our colleagues out west have pointed out two significant Federal initiatives that could impose tremendous new costs on western growers:

• The decision by the Department of the Interior not to list the Sage Grouse under the Endangered Species Act is bringing with it wholesale changes to Federal land planning in the West. For ranchers who have grazing allotments and whose livelihood is dependent on public lands, we have great anxiety that this step by DOI could mean greatly increased costs to producers. • Until it was stopped by a Federal court, the US Forest Service had proposed requiring some holders of Federal permits to transfer their state-adjudicated water rights to the USFS. Although the Forest Service has withdrawn the proposal, we remain concerned that the Federal Government, through the USFS as well as the Bureau of Land Management, could revisit this matter and attempt to coerce permit holders, such as ranchers who graze on public lands, to hand over their own property rights under threat of losing their permit.

National Pollutant Discharge Elimination System (NPDES) permit for pesticide applications

Today farmers are facing a nearly unprecedented situation in which a normal pesticide application that is perfectly legal under FIFRA can be challenged by environmental groups as a violation of the Clean Water Act. The House of Representatives passed legislation (H.R. 897) to correct this regulatory 'double-jeopardy' and we commend the House Agriculture Committee, which played a major role in shepherding this bill to a strong bipartisan vote. We are working to have the Senate take up the House bill. If we don't succeed, farmers could face potential legal jeopardy and uncertainty over their ability to manage their crops to prevent infestation of their crops from pests or disease.

In Illinois, we have a General NPDES permit for pesticide application. In addition, we have general pesticide applicator certification and licensing requirements where farmers must take classes and pass exams. Farm Bureau supports the certified applicator process because we view it as one way to assure society that people who handle these products are trained and knowledgeable. Frankly, that's one reason why Farm Bureau is concerned about the changes EPA is proposing to the certified applicator program. We are not convinced the changes they are requiring – in mandating continuing education credits and increased licensure requirements – will result in meaningful changes; yet we know they will increase costs and put a real strain on extension services and others who often provide training. It's important to note the several different agencies, both state and federal, and statutes that impact the single act of applying pesticides.

Spill Prevention and Countermeasure (SPCC) rule for farms

Farmers are now facing higher costs due to EPA's new SPCC rule as it applies to farms. Storage of oils, including fats, is captured by these regulations and the proposed revisions will broaden the regulation to more agricultural operations. These regulations impose secondary containment requirements, burdensome paperwork requirements, and penalties associated with failure to comply. Like the NPDES rule, the SPCC will also be directly affected by EPA's WOTUS rule should it be implemented.

Pesticide and Pollinator issues

As mentioned earlier, AFBF is working actively to further the interests of the beekeeping industry. In this effort, we want crop producers and beekeepers to work together in a mutual effort to assure each other's success. In fact in Illinois, we are working hard with our

Department of Agriculture and other stakeholders to begin the process of developing a Pollinator Protection Plan. We feel strongly that farmer stakeholders should be at the table and that we collectively arrive at reasonable solutions that protect both crops and pollinators.

Unfortunately, some activists want to divide us from each other because they have a totally separate agenda – which has nothing to do with agriculture but everything to do with eliminating pesticides. We in Illinois will continue to promote communication between neighbors through old fashioned face to face conversations, as well as with technology such as DriftWatch, an online platform for farmers and beekeepers to share location information. We will also continue to educate our members on the pesticide misuse complaint process through our Illinois Department of Agriculture, as well its apiary inspection process.

We are concerned that EPA has been reading too many inflammatory press releases from environmental groups and not enough science. Just in the past year, we have seen the agency take a number of actions that are troubling for growers. If the agency continues along this path, we are greatly concerned that it will eventually impose higher and higher costs on producers by depriving them of the crop protection tools they need. To cite just a few examples:

- When the 9th Circuit recently invalidated the registration of sulfoxaflor, EPA essentially said it would not defend its own decision to register the pesticide.
- EPA abruptly withdrew its approval of the Enlist/Duo herbicide on corn and soybeans and has delayed the approval review of that same chemistry for cotton.
- In November, EPA proposed to revoke all tolerances for chlorpyrifos and despite its reliance on questionable epidemiology studies that are not publicly available and overwhelming requests from the stakeholder community, the agency refused to extend the comment deadline past January 5. Last week, EPA held a Science Advisory Panel (SAP) despite requests from Farm Bureau and others to postpone the panel.
- EPA is under increasing political pressure to use agenda-driven science to limit use and pesticide availability under the guise of protecting pollinators despite the fact that the primary culprit lies elsewhere. In fact, in the "Report on the National Stakeholders Conference on Honey Bee Health" held in 2012, it was noted that "The parasitic mite Varroa destructor remains the single most detrimental pest of honey bees, and is closely associated with overwintering colony declines."

Health Care Costs

Fruit and vegetable growers are heavily reliant on seasonal workers to harvest their crops. For those over the large employer threshold in the Affordable Care Act (ACA), the requirement to offer and administer health insurance increases the cost of doing business.

Although the ACA grants an exemption for small seasonal employers, the rules are burdensome and confusing. The definition of a seasonal <u>worker</u> used to determine if an employer is required to offer health insurance is four months. The regulation that determines if a seasonal <u>employee</u> is considered full time and therefore must be offered coverage is six months.

Farm Bureau believes as long as the ACA remains in place, it should be made as easy as possible for employers to comply with the law. This is why AFBF supports H.R. 863, the Simplifying Technical Aspects Regarding Seasonality Act (STARS), a bipartisan bill that would create a single definition for seasonal workers and seasonal employees in order to streamline and reduce compliance costs associated with the Affordable Care Act.

Policies that Can Affect Future Costs

Future Ag Innovation, Part 340 and OSTP Review of the Coordinated Framework

To remain internationally competitive and lead the world in achieving the productivity and efficiency gains required to meet the food, fiber and fuel demands and environmental challenges of the twenty-first century, U.S. agriculture must stay on the cutting edge of technology. Therefore, Farm Bureau membership has a strong interest in maintaining and improving access to new input technologies, in fostering continued public confidence in the U.S. regulatory system and in preserving U.S. access to international markets, all while preserving and enhancing the coexistence of diverse crops and cropping systems.

The Animal and Plant Health Inspection Service (APHIS) of the U.S. Department of Agriculture (USDA) recently requested public comment concerning the notice of intent (NOI) to prepare a programmatic environmental impact statement in connection with potential changes to the regulations regarding the importation, interstate movement, and environmental release of certain genetically engineered organisms. We are supportive of APHIS's efforts to take a hard look at its regulations, to ensure that they are up-to-date with the best-available science and utilize the more than 20 years of experience APHIS has in reviewing the safety of these crops. However, because the options APHIS is considering include potential major departures from the current regulatory framework, it is critically important that APHIS does not lose sight of the importance of agricultural innovation.

In agriculture, the value of research, science, and innovation cannot be underestimated given serious challenges that lie ahead. Between today and the year 2050, farmers will be required to grow twice as much food to feed a rapidly growing global population. The U.S. government must consistently promote policies that encourage agricultural innovation to enable American farmers to confront serious food security and environmental challenges for U.S. agriculture to remain competitive.

Biotechnology has demonstrated significant potential for improving food and energy security, enhancing food safety and nutrition, and making agricultural and energy production systems more sustainable. The current set of biotechnology-derived plants have an impeccable record of safe use. During 30 years of research on these plants and 15 years of their wide-scale production globally, not a single instance of actual harm to human health, animals, or the environment has ever been demonstrated. In the United States, more than 90 percent of corn, cotton, canola, soybeans, and sugar beets grown in our soil contain at least one biotechnology-derived trait.

For two decades, the United States has been viewed as the global leader in agricultural biotechnology innovation. Our past success was attributable, in part, to a science-based

regulatory system, known as the Coordinated Framework for the Regulation of Biotechnology that has facilitated the development of safe and beneficial products. An appropriately-designed, well-functioning regulatory system, working in conjunction with government policies that encourage investment in agricultural innovation, has provided U.S. farmers and ranchers with the tools they need to produce the safe, affordable food supply we enjoy today.

Despite the impressive record of safety and accumulated body of scientific knowledge about the technology, the requirements and costs of obtaining regulatory clearances for biotechnology products have grown and at times have been burdensome and unpredictable, subject to delay, and duplicative.

Irrespective of the cause, the loss of predictability and timeliness in the U.S regulatory system carries a high price that is paid by many. As timelines lengthen and the rate of approval of safe GE crop products slows, the potential benefits of the new crops are withheld from U.S. farmers and society at large.

Farmers need access to new tools for controlling weeds, for withstanding insects and plant pathogens, and for coping with environmental stresses such as drought, in order to maintain a sufficient global food, fiber and fuel supply. The agricultural biotech industry employs tens of thousands of individuals across the country and invests millions of dollars each day to develop new technologies that farmers can use to help feed a growing global population.

Recouping the costs of agricultural biotech product discovery and development, which currently averages \$136 million per product, is difficult under the best of circumstances. The direct cost of biotech product development is exacerbated by delayed product approval timelines and the trend of increased legal costs associated with environmental litigation, diminishing the incentive for further investments in product discovery and agricultural innovation, especially for small acreage crops. Furthermore, the opportunity costs from not using biotechnology tools to improve these crops are disproportionately born by small farmers and consumers.

The market for agricultural biotech products is global and growers in other countries have adopted biotech crops as quickly and decisively as U.S. growers because they are eager to reap the economic and environmental benefits provided by GE crops. Not surprisingly, countries with consistent, transparent, science-based regulatory systems that drive predictable decision-making processes provide opportunities for growers to gain access to new biotech products and are thus attractive to agricultural biotech companies looking to recoup their R&D investments.

Agricultural biotech companies can and do seek regulatory approvals to sell biotech seeds in other countries. However, U.S. farmers are totally dependent on the functionality of the U.S. regulatory system to support their current and future needs for breakthrough technology traits to support their farming operations. U.S. growers cannot retain their prominent position in the increasingly competitive, global agricultural commodity markets if growers are denied access to the best available products, which they clearly need and demand. Regulatory hurdles at U.S. agencies that slow reviews for much-needed, safe products, such as new herbicide tolerant traits, companion herbicides, and new pest resistance traits, ultimately put U.S. commodity producers at a competitive disadvantage relative to growers in other countries.

Regulatory hurdles at U.S. agencies have also deterred the diffusion of proven traits into small acreage crops and have severely impeded the development of new, innovative "second generation traits" with broad consumer and environmental benefits, such as fresh fruits and vegetables that last longer, staple crops with improved nutritional value, and animal feed that would reduce the amount of pollution.

A series of studies charting the diffusion of proven traits and research and development of new traits has shown that the loss of interest in developing these products is attributable to disincentives posed by the regulatory system. In addition, a report from the President's Council of Advisors on Science and Technology has also acknowledged the detrimental effect of the current regulatory system on product development by public sector scientists and small companies.

Breeders have historically integrated the latest discoveries in biology and genetics into their methodologies to fully exploit existing, and to induce new, genetic variation. Some of the latest breeding methods provide new ways to make similar genetic changes. They can also make very specific changes in existing genes in a way that mimics the changes that occur in nature. By applying these newer methods, breeders are more efficient and precise at making the same desired changes that can be made over a much longer period of time through earlier breeding methods.

Reviews of the regulatory system, broadly, and proposed changes to specific USDA regulatory functions must be science based. The level of agency oversight for products of biotechnology ought to be proportionate to the actual risk posed by the organism. Policies should promote innovation and advancements in plant breeding throughout the agricultural economy – in both public and private sector settings. Minimizing unnecessary regulation will allow small and medium sized companies and universities to move forward in developing innovative products for specific regions of the country.

Definitions of biotechnology that are too broad don't make sense scientifically and will also stifle innovation by 1) erecting pre-market regulatory barriers that are difficult for small and medium sized companies and universities to overcome; and 2) classifying newer breeding methods as "Genetically Modified Organisms" in the eyes of regulators and the public (thus making it more difficult for them to be commercially acceptable for a broad range of crops).

We support a regulatory environment that will enable all kinds of plant breeders, including those who grow fruits and vegetables, to utilize the broad range of modern breeding methods and advance innovative products to the commercial marketplace without facing burdensome or non-risk based regulations and stigma.

Today, with an increased understanding of genetics, the capability to sequence plant genomes and the ability to link a specific gene to a specific characteristic, plant breeders are able to improve a plant's performance more precisely and efficiently by focusing on the plant's underlying genetics. Breeders can make very specific changes in existing plant genes in a way that mimics the changes that occur in nature.

The development of any new plant variety requires the evaluation of thousands of plants, over many years and many locations. The scrutiny breeders routinely apply to new variety development is well established and has been the foundation for a food supply that is safe, nutritious, and diverse.

These precise techniques help breeders achieve the same result that could be achieved via more traditional plant breeding methodologies. "Gene editing" is one of the more common and important techniques being utilized.

Importantly, the U.S. government must approach this process mindful of international implications. While the regulation of these products should be based purely on science, this is an opportunity for the U.S. government to lead an active dialogue with international governments to ensure that mutually beneficial policy goals are met.

Throughout the process of considering a new pre-market agricultural biotechnology regulatory system, APHIS should work closely with a broad range of scientific experts, stakeholders, and other government agencies to clarify, improve, and (as needed) modify and supplement the regulatory alternatives the agency is considering before publishing a proposed rule, with an eye to improving clarity, transparency, predictability, and ease of implementation.

If I may leave one thought with you today...our world population continues to grow. Farmers must expand markets through exports, new markets like biofuels and expanding our livestock production. Trade agreements – like the Trans-Pacific Partnership are vital. The world population will continue to grow. American farmers have proven time and time again we produce the food, fiber and fuel the world needs. Please don't restrict, limit or constrain our ability to provide what consumers around the world need.

Farm Bureau appreciates this opportunity to provide this testimony to the Committee and we look forward to working with you on these issues in the future.