

An Outlook on Global Agriculture and Food Security
With U.S. Secretary of Agriculture Thomas Vilsack
The Chicago Council on Global Affairs
Monday, June 29, 2009

Vilsack's Opening Statement:

(In response to the introduction given by Tom Jennings, Director of Illinois Department of Agriculture.) Tom thanks very much; Tom and I have been spending the last couple of days together. Tom and I were at the Rainbow Push Coalition meeting yesterday, and I will tell you the people at that conference really appreciated the director being there, and learning more about agriculture in Illinois. I don't think they appreciated the role Thomas plays in their lives in urban centers, and the important job he is doing for the state of Illinois. Sometimes those of us from Iowa wish he wasn't so effective in the job he is doing, but we are happy to be here this morning and I am happy to discuss a topic that I think is extremely important to the president, and extremely important to the United States and the rest of the world.

It really began to be a topic of interest to me when Dan Glickman and Catherine Bertini came into my office to discuss the study that had been concluded by The Council entitled, *Renewing America's Leadership in the Fight against Global Hunger and Poverty*. These are two people that I have tremendous and profound respect for, who were literally passionate and excited for this study and believed that there was an important role for the United States to play in combating global hunger and poverty. They obviously had an impact on me, obviously had an impact on the president and Secretary of State Hillary Clinton. Because shortly after their visit, I got a call from the Secretary of State and she said, "ya know we need to get together and develop a more comprehensive and holistic approach to this issue of how we're going to fight global hunger and poverty". And she believed, and I believed, and the president believes, that agriculture is a key component to that strategy.

So we began the process of developing a new approach, a different direction for the country. Our approach for the previous number of years had been focused on emergency food assistance, the opportunity for us to take our surplus and provide that surplus to countries in need, and allowing those countries to distribute that food to their citizens in an effort to combat hunger. But the reality is that system is not as effective as it needs to be in developing a much stronger effort in Sub-Saharan Africa and South Asia in particular.

So we began to ask the question, what is it that food security involves and how do we approach it? And we discovered that there are three components. First and foremost, food has to be available, and we need to extend beyond the notion of food assistance to the notion that we in the United States have the knowledge, information, experience, training, and experts that would allow countries in those parts of the world to be far more productive with their own agriculture than they

have been, and that is a key component to food security, key component to hunger, key component to reducing poverty. If we can help countries become more productive for themselves, then they will be in a better position to feed their own people.

The second component was that if we can help them be more productive than they might, in addition to feeding their own people, they might be able to generate surplus products that can then be used for trade in turn to promote wealth opportunities. So the key component of our effort was first and foremost what we could do to make food more available. But then we realized that even if food is available, even if we increase productivity, even if we provide for trade opportunities, even if we continue in an aggressive emergency food assistance outreach, it wouldn't be enough because in many countries food is available but not accessible. And we began to think about what does that mean, it means the capacity to maximize the available food by making sure it gets to people who need it, and that's about investments in infrastructure. Someone once said, that "where the road ends terrorism begins". And if you think about it, there is some truth to that. When the infrastructure is not in place to get food, and services, and goods to people, then it becomes an opportunity for those who want to create mischief in a country. So it is important for us to focus not just on increasing productivity, not just on creating trade opportunities, but having investments in the infrastructure that will allow available food to become accessible.

And even if it's available and even if it's accessible, it may not be utilized properly. Because people may not understand what they need to do to properly store, cook, and prepare food, and so part of our strategy has to also be focused on proper utilization. Proper ability to store, refrigerate, and cook, which means power sources. So it's a more comprehensive, holistic view that focuses on the notion that we want to make food more available, more accessible, and we want to make sure that it is properly utilized.

And so we have begun the process of putting this three-pronged approach together. Now the Secretary of State at a recent comment at the World Food Price Announcement laid out seven keys that we think are extremely important within this framework of availability, accessibility, and utilization.

First, is allowing us to use our agricultural productivity, and taking the knowledge we have and making sure it translates correctly to developing nations. And one of the challenges for us here in the United States is that much of our research and much of our thought process is based on agriculture as we see it, which is in fairly large agricultural tracks. Most of our farms are several hundred acres and some cases several thousand acres in size, but 95 percent of world farmers are dealing with farms that are one to two hectares. And so we want to make sure, as we talk about productivity, that we make sure that it translates properly from large operations to small operations. And that we need to adjust our thinking to make sure that we focus on those small operations. I will give you an example, in just a few minutes, in Afghanistan about that.

We are going to focus on agriculture related infrastructure, specifically as it relates to post harvest. You can be as productive as you can possibly be, but if you have nowhere to store what you have

grown, much of it becomes wasted, much of it becomes spoiled. And so it will be helpful to us to figure out ways in which we can create storage structures, and again transportation and distribution systems that will allow proper and full utilization of food. At the same time, we want to make sure we maintain the natural resource base of the countries that are increasing their productivity. Some of the technologies that we provide can sometimes tax the soil; can sometimes create issues with water, as opposed to solving these issues. So we want to make sure that as we provide technical information, as we provide our knowledge and experience, that we don't do it in a way that jeopardizes their natural resource base. We obviously want to make sure that we expand knowledge and training, we want to create trade flows and have folks in other countries understand where they can trade, what they can trade, how they can trade, what they can do in their regulatory systems to make sure that trade happens. We want to encourage good governance and reform, because that is many times critical to that capacity to trade. And finally, we want to recognize that a vast majority of people in the world today who are farming and providing for their families are women. We need to make sure that we support with our programs women and children. And encourage other countries to do the same.

Taking this concept, we then applied it to the values that the Obama/ Biden administration has suggested, that ought to be the hallmark of anything we do, which is transparency with our systems that are collaborative and participatory. We began this system with Afghani and Pakistani ministers. We had a tri-lateral meeting several weeks ago to focus on how agriculture can play a role in those countries, to play a role in those two countries to create greater stability in utilizing these same principles.

In discussion with the ag-ministers of those three countries, we discovered that there were three things in particular that they needed help with. They need help with regulatory structures that would allow trade to take place not just within their own countries, but also allow those countries to be used as routes to Central Asia and India for goods that could be produced in Afghanistan and Pakistan.

Water is a serious issue in those countries, so they need help and assistance in understanding water flows, irrigation systems. And in this particular situation, it is one where we need to be sensitive to the size of the farming operation. When we think of infrastructure in this country we think of large, fairly intricate infrastructure, but what may really only be needed in Afghanistan, in particular, is something relatively simple, and something inexpensive, and something actually they themselves could construct with very little money in investment to provide some kind of control over water flow.

And finally, we wanted to make sure that we focused on ag productivity, which is why we used some of the tools at USDA. The Borlaug and Cochran Fellowships that we have, the availability of sending people to Afghanistan and Pakistan, or as importantly, having those folks come to America and spending either a short or long period of time learning about specific issues that are important for agricultural productivity. We put together a team at USDA, which we think has a unique set of talents to help promote this framework of availability, accessibility, and utilization with the seven

points that the secretary outlined, within the framework of the value system of the administration. We got Raj Shah [nominee for Under Secretary of Research, Education and Economics and Chief Scientist at USDA], who at one time was affiliated with the Gates Foundation, who will be in charge of our research, economics, and education mission area. And [Burnham John “Bud”] Philbrooke [Deputy Under Secretary for Farm and Foreign Agricultural Services, USDA], who ran Global Volunteers, which is a service group that runs operations in thirty different countries, is in charge of our Foreign Ag [Foreign Agricultural Service, USDA] and Mike Michener is administrator of our Foreign Ag[ricultural Service]. He comes from the State Department and USAID, and he is the person on the ground, who is putting the team together to begin this process with Afghanistan and Pakistan, in particular, and we’ll expand that as Secretary Clinton and I travel to Africa later this summer to meet with ag ministers from twenty-eight countries in Africa. We are going to be promoting this concept of a more holistic, a more comprehensive food security program.

We think this is important to put a different face of America to the rest of the world. The president himself, just by his very personality, by the speeches he’s given... these policies follow up on what he personally has been able to do. The president also understands the necessity of putting recourses behind this, which is why his budget contains additional recourses. And we are pleased within the USDA to make sure of the additional resources in the McGovern/Dole program, and the Food for Progress, all of which can help provide assistance and direction. The McGovern/ Dole program, in particular, has been extraordinarily successful in helping young people have food. It is sort of a School Lunch kind of program that has been extraordinarily effective in a number of countries. All of this is an aggressive effort, additional resources behind it, well-educated and committed people, basically putting it together. And I think that it is much more holistic, much more comprehensive than just simply providing food assistance. And we think that it provides a real opportunity for America to change the dialogue around food security. And we think it will be far more successful, far more successful. So let me stop with that, I would be glad to answer questions in the time remaining.

Q & A Session

Vilsack: Marshall, I am told that you have the first question.

Question- *Marshall Bouton (President of the Chicago Council on Global Affairs):* Thank you Mr. Secretary. You’ve laid out a very seamless view of agriculture as a great enterprise in our country and globally, but yet as you know very well there are real tensions between our domestic agricultural activities in one hand, and ours internationally on the other. Most obviously with protectionism, with U.S. markets widely received as highly protected. We share that sin with our European and Japanese colleagues, but it is most certainly a problem. Most recently, biofuel mandates are perceived to have contributed to food price rises elsewhere in the world. Could you talk about the role of USDA, in particular, in resolving over time the tensions in the concerns, interests, and perceptions of your domestic constituencies, and what you want to accomplish with Secretary Clinton internationally?

Vilsack: First of all, let me say that the problems with trade and structures are not confined arguably to the United States and Europe. I would make a strong case today that our Chinese and Russian friends, particularly in regards to pork with the H1N1, have created some problems that in a sense were created to protect their own markets, rather than being open to science-based markets about what the nature of this flu is, and the fact that it is not transmitted through the consumption of food. So it isn't just one country, I think we all are involved in all of this. So the question then becomes...let me start with Doha because that is one place where conversation is taking place along the lines that you have outlined.

I think that the United States is prepared to be cooperative in those discussions, but the hope is that in exchange for the very specific steps that the United States has indicated that they are willing to take, that there is as much specificity and as much detail from developing nations as they expect from us, in terms of market access. In other words, if we are going to have a trade deal where we're required to reduce some of the subsidies, which we currently provide, that is something you can calculate with a degree of specificity, it's easy, it's mathematically calculated, you can actually figure it out. When you ask what are we getting in return, market access becomes extremely important, that is a little more difficult for some to define exactly what they are able to do. And we are asking in this discussion to be able to determine whether or not we got a fair deal and a reasonable deal, whether or not we can basically balance the scales. And that is tough to do if the other side is not willing to commit to what their commitments are. So I think that this discussion starts there.

I think that in terms of the biofuels issue, we have to do a better job of educating people about what precisely did in fact cause food price increases. Because if it were the need for, and the demand of biofuels, one wonders why food prices didn't go down recently. Because certainly biofuel producers have seen a drop in activity and they are now in a stressed condition. There were reasons for food price increases; one of them was the fact that oil prices went up rather dramatically, it wasn't so much biofuels, it was the cost of putting a cost in. Weather patterns had significant impact on food production in parts of the world, whether it was drought or floods. Changing diet patterns, particularly in developing nations, with the rise of the middle class, more protein consumption, more livestock being feed, more grains being used in other parts of the world, created some competition. So I think there are many reasons for why we started creating a far more independent America when it comes to energy sources.

Frankly, I think this is a good thing for the country. Over time, I think we have to break our addiction to oil, I think we have to break away from our dependence on fossil fuels, I think the climate change discussion that took place last week in the House indicates that we are prepared as a country. The president needs to be armed to go to the rest of the world to be able to say that America is serious about creating more job opportunities, breaking addictions to foreign oil, and impacting the climate in a positive way. We are serious about this; we are going to take the lead on this. And as we make these kinds of statements, I think the concerns that came over the past seven years will dissipate. I think the world was looking for American leadership; the world was looking for American movement on the issue of climate change. And I think the House taking the action it

took, is the first step in saying to the rest of the world, “we are serious ‘bout this; we are willing to make commitments”. And I would say this about agriculture; I think it is an opportunity for agriculture specifically. Now this is a little farfetched from your question. When agriculture is 7-10 percent of the green house gas emissions, and it can be 20-25 percent of the solution, I like that equation, in terms of opportunity. And the question is, do we structure this system properly, and make sure they are verifiable, and that the steps taken by American ranchers are appropriate and how do we give them the opportunity to benefit? And I think there is benefit there. And that is why I am hopeful that USDA can work with other federal agencies to make sure that that benefit is protected.

Question: Thank you. You talked about a three-point plan that sounds very similar to the Millennium Development Goals, with looking at good governance, investing in people, and economic growth. We haven’t really seen the kind of funding that we would like to see for the Millennium Challenge Corporation that we would like to see, that could be the answer to lifting people out of poverty and hunger. Can you address if that is something that you will be paying more attention to?

Vilsack: Well I think it is more than funding, and I think that folks need to realize that within the existing budget of the State Department and USAID there are resources that can be redirected, reallocated, and or used more effectively. So for example, within our Foreign Ag Department, we have offices in ninety different countries; we have all these fellowships, all these opportunities. The question is how have we been directly using them in a way that makes sense? When the focus has been predominantly on providing emergency food assistance that really limits how you use your resources. If we now say, no that is not what we’re going to do; they are going to do something more expansive than that, we are first and foremost going to focus on availability. We’re going to go to countries like Afghanistan, we are going to go to countries in Sub-Saharan Africa and say how can we help you be more productive? And they will tell us, they know what they need. And we can say, well we have four to five people at USDA that can provide assistance and help, how about if we team you up with our folks. How about if you come to our place? How about if we come to your country? And if we don’t have the expertise, we certainly have land-grant universities that have extensive personnel and resources.

So I don’t think it’s just about resources... although in the presidents funding you will see increased funding for various international programs, certainly in our programs. But you will also see a better utilization because there is a framework. For example in Afghanistan we are talking about irrigation, so right now we are looking at irrigation systems that can cost thirty to forty dollars. That’s not an elaborate infrastructure project that involves millions of dollars and consists of getting contractors that spend and send teams over. And we have seen pretty significant abuses of our money when we contract out these services, when we end up sending eight engineers to repair one road. Maybe it doesn’t take that. The reality is, despite this Stimulus Package, resources will be more limited in the future. We can’t continue to maintain large deficits. The president is beginning to put pressure on departments to utilize our resources; he has asked us to come up with a list of savings; we have to be smarter with the dollars we use. And that is my goal at USDA, is

basically let's set up the framework, match the assets we have, and use them as effectively as we possibly can. And I think we are going to do a better job of that. And if you use the resources you have effectively, then I think you can make a more effective case for increasing resources. I think it is really hard to ask appropriators to put more money into something unless you can show them that the money they have given you has been successful. And that is what we are going to try to do at USDA.

Question: As you are aware, the number of human beings in the world who are hungry today is at its highest level and is continuing to grow. Right here in the Chicagoland area, lines for food pantries are endless and growing by the day. As a member of Rotary International, one of our priorities for the coming year is the alleviation of hunger. How can the Department of Agriculture work with service organizations like us to tackle the problem now and find a long-term solution?

Vilsack: We have an office within our department, which is designed to link up with faith-based organizations, non-profit organizations to maximize our resources. Let me give you an example of how this might work, you mention the fact that we have hungry children and hungry people here in America. And naturally, the Stimulus Package provided for food banks, but we are also working with the Department of Agriculture to try to create more local production and more local consumption. So Rotary could take it upon itself the goal of encouraging planting of gardens in every school in your Rotary district. With a small packet of seeds and a little sweat equity, you could actually create an amount of fruits and vegetables grown right here, a tremendous learning opportunity for young people.

Part of the problem today, is that young people are disconnected to the way their food is produced and the result is they think the food is by the grocer, but it is produced by farmers, ranchers, a lot of hard work. We find that when kids are involved in the producing and growing of their own food they actually consume it. They think, "Geez, it's pretty neat to eat a tomato I grew!" Now all of a sudden you have created an ethic, a better understanding of nutrition. And, you've created an expansion of food supplies with very little investment and money and just a little time. Great learning lesson.

We have a created a new program within USDA called Know your Farmers, Know your Food. And it is designed to create more local production and more linkage between the institutional consumers like schools, hospitals, anywhere there is food consumed in large quantities. We think that if we can create more infrastructures, a better understanding of local production capacities and link them with the markets that exist, we can maintain wealth in rural communities in particular, and urban inner-cities in particular. The second thing is not necessarily something Rotary can help us with unless you have grocers in your club. We think it is important for the Grocers Association and those selling food to be more sensitive to this notion of food deserts. As you well know, there are places in this city where a significant population is centered, but there is nowhere they can get fruits and vegetables on a consistent basis. Convenient stores thrive, fast food stores thrive, but for some reason grocery stores do not. We want to figure out why that is so. And ways in which we can encourage them locate stores that may not be a particular big profit center for them but a way in

which they can contribute back to a community. Advocacy from Rotary and non-profit organizations for those kinds of thought processes can address the issue of hunger here.

The president has been very clear; his goal is to eliminate child hunger by 2015 in this country. There is a tremendous opportunity this year with Congress trying to reauthorize the school breakfast and lunch programs. The Rotary can be a partner in encouraging schools to participate in the School Lunch, which they already do, and Breakfast Program. And the reality is that kids that don't eat, or don't eat well, cannot possibly learn well. And one of the strategies for better performance is making sure that youngsters go to school with a good start and they get a healthy meal while they are at school. So there are lots of ways in which clubs can advocate and articulate the need for food and hunger.

And I will just end with this, there is a twin problem. It is not just hunger; it is also obesity. They come out of the same circumstance. Often times because you have food deserts, folks only have access to highly processed foods, which are fairly high in caloric intake and not so much nutritional value. We are going to begin to look at nutritional intensity for calories. Ya know one calorie is not the same as another calorie. And so to the extent that Rotary can be involved in education, which I know is an important part of the Rotary mission, education about nutrition, especially to young families would be helpful.

Question: On the same subject, what will the USDA be recommending. Right now we have these wonderful local, organic, farmers markets that are crammed with people. We don't have enough farms to meet the demand for local healthy food. And the ones that are supplying it are not getting support from USDA; it is those empty calories that are. What do you propose for the future?

Vilsack: Well let me take issue with your question. We are making a concerted effort to provide assistance for all kinds of farms. Let me start with the Ag census that took place that was published a couple months ago. You might find it interesting that in the last five years there were 108,000 new farming operations in the category of sales less than 10,000 dollars. 108,000! That's a great message in response by people who have four, five, ten, fifteen acres who are growing fruits and vegetables, and nuts and basically selling them through community support through farmers markets. Most of those farmers markets receive assistance and help from the USDA. We have a Farmers Markets Assistance and Promotion Program, which has expanded. We just announced fifty million dollars in equipment money for organic farming; we are now beginning to institute our conservation programs to support organic operators. The Deputy Secretary, who is in charge of Know Your Food - Know Your Farmer, is focused on how we can provide additional resources. The Specialty Block Grant that the Bush administration was going to ax, we brought back, providing millions of dollars of support for these specialty crops. So you are seeing an expanded support from USDA, because we like the idea that 108 thousand folks decided to get into the business of farming, we would like to see them succeed. We would like to see another 108,000 in the next five years. To do that, it isn't so much more farms, it is making sure there are markets for the products that can be produced, and it's not just farmers markets.

In order for this to take off you need to have institutional purchasers who purchase these products on a consistent basis. The idea that a local school would be a consumer of local production is exciting to me, because that is a big market. That is a huge opportunity. And if you can create cooperatives of these smaller farming operations, you develop storage and distribution process locally, you create jobs in local communities and you provide markets through these institutional purchases. Now you have something going that encourages more and more people to take five or ten acres of their land and commit to a different type of farming. You are still going to need production agriculture. I mean the reality is the top 5 percent of farmers in this country produce 75 percent of what we consume. But you are seeing a movement here, and we want to encourage that movement. We don't want to discourage any type of agriculture in my view. It's like asking me which two of my sons I love the most. I love them all. I love them both. I want everybody to succeed. So there are strategies and we are seeing a much more aggressive effort both in terms of trade, we just established a trade agreement with Canada to establish organic standards. So I think if you really read the USDA website, you are going to see a lot of action in these areas.

Question: Shifting gears, I have a question regarding one of your comments on the desire to increase oil and gas in the imports from foreign sources. Segue in to the recent Waxman Cap and Trade legislation, which has a significant impact on the issue of domestic fertilizer. Where today 60 percent of Urea is imported, which is a form of gas, from China and other locations. And I am just wondering from an agricultural perspective focusing on that 60 percent that comes from a very small group of producers, and the impacts on the nutrients needed to increase that production, how this legislation impacts the value chain of nutrient supply?

Vilsack: Ya know one of the great things about this bill and one of the great things about your question, it has been asked in a variety of forms is...please let me know if I have interpreted your question wrong...is it's a question of concern. Ya know, you can't assume a static condition. And the problem with this debate so far is that everyone is looking at the world as it is today, and not understanding and appreciating that we are actually going to improve the world as it is tomorrow. And the issue of fertilizer is we are going to learn a lot more about fertilizer in the next ten or twenty years than we have in the past ten or twenty years. We are going to see ways in which people are going to be incentivized to use it differently, to use it in different quantities and different places, at different times of the year, in different methods. We are going to see a whole discussion of what precisely do we grow, where do we grow, and how do we grow it. We are going to look at how this bill will impact and affect that. There is going to be a dynamic energy and an innovation spirit that is really going to revolutionize everything we do. So I don't see, if everything remains the same, there will be some impact on the cost of fertilizer, but I am not willing to concede that everything is going to remain the same.

I think it is going to spur people to think differently, which is precisely what Americans need to do. We have been thinking in this same lane for far too long, about a lot of things; what the president's vision is, is a new American economy. An economy that moves away from pollution and waste to an economy that really focuses on clean energy, clean jobs, reducing waste, greater efficiency, and more conservation. What enormous opportunities. Again, if we think about this, I think about

livestock operators, I have been talking to livestock operators a lot about it; they're very concerned about it. But to me what we're talking about is how do we create new feed additives or new feed that will reduce methane? And create less input costs that what you see two or more effective uses than what you see today. We have always been an innovative economy, until today. We have let the world catch up with us. In some cases, in some industries, we have allowed the world to surpass us. And I think what the president suggests is that America always does best when it is the innovator, when it is the leader. And I think what this bill will enable us to do, assuming that it is structured right, it will encourage us to be innovators. It will stretch our thinking; it will challenge conventional wisdom. And when that happens, America does well in my view. I think American agriculture is going to do well. And I see the offset issue as a tremendous opportunity for American Agriculture.

We spend 4.7 billion dollars today on conservation programs to support agriculture; these offsets could be substantially greater than that. They could produce additional income opportunities, they can create opportunity for greater diversity in agriculture, they can produce more people interested in agriculture, they can help support not just those large operators, but also those midsize operator which we have been losing a lot of, and maybe even those smaller operators who are involved in conservation, to continue to grow and to expand, and with more people getting involved. And I just see an exciting time for agriculture. And I think this climate change bill is a challenge to us to think differently. And so I think our challenge is that whatever input costs are increases, that we have income opportunities that will equal or exceed those input costs. So at the end of the day, the bottom line is improved; at the end of the day, more people are encouraged to get into farming.

Here is the problem folks, the average age of farmers is rapidly increasing. In the last five years, we have gone from the average age being fifty-five to fifty-seven, because there is a 30 percent increase in farmers over the age of seventy-five, and 20 percent decrease in the age of farmers under the age of twenty-five. That's not a good dynamic. Ninety percent of families require off-farm income of some sort. Almost 50 percent of farmers require themselves to work 200 days off the farm to keep the farm. What you are going to see is a further consolidation on the large farm side and you'll see these large farm operations, but you won't see anything in the middle. I think what we want for rural America, all of America, is to have a healthy percentage in all three of those categories. I think this climate change bill, and the complimentary energy aspects of it, creates opportunities for us to enhance bottom-line opportunities for mid-sized and smaller operations. I understand there is a challenge there. I understand it's going to be difficult. I understand there are going to be additional costs. But I think that it is going to cause farmers to think differently, it's going to cause fertilizer producers to think differently, it is going to cause us to think differently about what we farm, how we farm, where we farm, what we produce, when we plant, how we plant it. I met with one of the CEOs from one of the major seed companies, and he believes that we can increase productivity by two fold and reduce inputs by a third in the next year because of seed technology. If he is half-right, that's a better opportunity for farmer. And I am not being poly-issue about this. We are challenge folks and I think that we respond best to challenges. And this climate change bill is a challenge.

Question: You've mentioned the Waxman bill and how you think it is a good thing. It was a result of a number of compromises, are there some things that you think could be done to improve it even more, so that it has a more positive effect on food supply and food cost?

Vilsack: My flippant answer is for the Senate to pass it and the president to sign it. It's going to go through the process and I think this was a positive first step. And the reality of legislation is that it's not static. My view...the Senate is going to pass some form; there is going to be a discussion between the Senate and the House. And they will articulate whatever differences they have and then the President will sign the bill. And then we'll go about implementing the bill, at which point we may find that fertilizer is a huge problem, at which point we will have to make some adjustments. There is no such thing as a perfect bill. You're constantly trying to make improvements on structures. But what we don't want is for people to believe that we can do nothing. This isn't a situation where it is a really comprehensive bill, where and it really has lots of challenges and lots of unanswered question, and maybe we shouldn't do it, because what we do know is that if we do nothing, the problem is not going to go away. Here is what happens if we do nothing; first of all, the president goes to Copenhagen in December and absolutely nothing to show that the greatest nation on earth was capable of putting together any sort of meaningful climate change legislation. What message does that send about American power? What message does that send? And if you are another nation, and another significant nation, what do you take from that? Do you take from that that America is positively looking at their future, that America is prepared to continue world leadership? Or do you take from that that this is a country that is receding from its responsibility. So that was number one.

Number two, the climate is not going to improve on its own. If you've got developing nations, that are currently taking steps to improve their economies, but doing it in such a way to not necessarily respond to climate change. How are we going to be in a position to articulate to them how to do the right thing, if we haven't done anything. And if we don't do anything, and the climate continues to have omissions, most studies I've seen see the temperature increase anywhere from two to seven degrees. There are major natural consequences for temperature increase. If you happen to live in developing nations along an ocean or waterway, you are likely to see the water table increase and rise and you are liable to see massive migration, outmigration from those areas. Where are those people going to go? Changing seasons and growing patterns will alter what we grow and where we grow it. Are we prepared to say in the Midwest that we are not willing to be a grain producer anymore because the growing season has moved north? What about disease? A hotter climate results in a more significant opportunity for animal and human disease. Are we prepared for that consequence?

Doing nothing is not an option in my view. If we do something and we don't get it right the first time, you change it, you adjust it, you modify it. I think this is a positive first step and I think it will be up to all of us to be up to the challenge, by using energy more efficiently, by thinking of ways to conserve. And there is economic opportunity in that. There is extraordinary economic opportunity that will occur right here, can't be outsourced, has to be done here. And there are new jobs, new industries, new businesses that are going to be started that will provide a dynamic that we have not

seen here for quite a long time. And it is going to challenge the old industries, i.e. the auto industry, agriculture, to think differently. And that is not a bad thing. It's a hard thing. It's a tough thing. I wish we didn't have to do it, but that's how we grow. That's how we succeed. And that is what this president is doing for this country. He has a very clear vision of a stronger, greater, world leadership for this country. And the amazing thing about this man isn't the confidence he has in himself; it is his confidence in us that spurs him on to believe that yes we can have all this happen. The idea that we can have both health care reform and climate change all in the same year, the notion that, boy, "I don't know, these are two really big things". What are you talking about? This is America! That's what the president is saying. And I think we should accept the challenge and say, okay Mr. President, if you think we can do it, by God we are going to show you that we can. And that's why America has always been the innovator; it's why it's been the creative center for so long. And I think the world is looking again to us to lead. And at USDA we like to say were in everyday, everyway, USDA. We believe we are going to be right in the middle of all of this. And we are prepared to be innovative and creative and we are excited about the future and all the challenges we face. Thank you all.