

**Kansas City Food and Fuel Forum
Agricultural Business Council of Kansas City
October 23, 2008**

**Thomas C. Dorr
Under Secretary for Rural Development
Luncheon Remarks**

Thank you, Mike, for that very generous introduction. I'd also like to thank Bob Peterson and the Council for hosting this very timely discussion. I appreciate the opportunity to participate.

I've been invited to discuss the Administration's view on the food and fuel debate. I'm happy to do that. But I am also aware of the clock. There is an election less than two weeks away.

So ... while I am happy to discuss the record of the Bush Administration on food and energy policy over the last eight years ... and it's a good record ... I understand that what you really want to hear is what the NEXT President is likely to do, starting in January.

Unfortunately, I can't tell you that. I don't speak for Senator McCain, or Senator Obama. But what I CAN do is step back and discuss some of

the strategic considerations, pressures, and long-term opportunities that we face in this area.

These factors have driven policy in this Administration, and they will not disappear after November 4. I don't know what the next President may choose to do, but we can anticipate the choices he will face.

The first of those choices, and perhaps the most important, is whether to sustain the commitment to energy security, including renewable energy that has been in place for the last eight years.

It is true that renewable energy is just beginning to move the needle. It is building out from a very low base. But the rate of growth is dramatic.

Because of the leadership and focus brought to this issue by President Bush, more has in fact been accomplished on renewable energy in the last eight years than in the previous 30 years combined:

- **In 2000, we produced 2 million gallons of biodiesel. Last year we produced 450 million.**

- **In 2000, we produced 1.6 billion gallons of ethanol. This year we will top 9 billion gallons with a Renewable Fuels Standard that will drive us to 36 billion gallons by 2022.**
- **The United States has led the world in new installed wind capacity for three years running. U.S. wind capacity is up over 700% since 2000. Shipments of photovoltaic units are up more than tenfold.**
- **In other sectors, the United States leads the world in solar thermal power ... in geothermal ... in waste to energy ... and last but certainly not least for our discussion today ... in bringing cellulosic ethanol to market.**
- **This of course will dramatically shift the terms of the food and fuel debate as we begin to move to non-food feedstocks, beginning on a large scale possibly within the next 5-10 years, if not sooner.**

This is a tremendous record of progress in eight years. Renewable energy of one form or another now accounts for 10% of the energy generated in the United States, and over 7% of the energy consumed.

At USDA Rural Development, we have been involved with renewable energy because renewable energy ... thanks to its feedstock and siting requirements ... is largely rural energy.

Renewable energy, in fact, is probably the greatest opportunity for wealth creation in rural America in our lifetimes. I don't believe I am being Pollyannaish. We are working hard at it, and the new Farm Bill gives us important new authorities to accelerate our efforts to transition to second generation fuels, especially on cellulosic ethanol.

There is a second strategic factor that needs to be recognized. There is a great modeling debate underway on the impact of biofuels on food prices. Many of the estimates now circulating were developed this past Spring and Summer, when we were looking at \$6-7 corn and oil prices approaching \$150 a barrel. Today we're looking at \$70 oil and corn back under \$4. I imagine the economists need to rerun their figures.

But underlying the volatility of commodities prices is a more fundamental, and permanent, development. Since the fall of the Berlin Wall, almost 3 billion people have joined the world market system. This is the greatest explosion of economic freedom in world history.

It is true that many of those 3 billion people have turned out to be smart, hard-working, and formidable competitors. But as hundreds of millions of people work their way into the global middle class, they will also become valued customers.

This is already happening in agriculture, where U.S. farm exports, farm income, and farm equity are at or near record highs. When people move from poverty to modest affluence, the first thing they do is eat better.

Then they buy televisions, washing machines, and eventually cars ... but first, they eat better.

Every farmer in this room, myself included, is seeing the results in our bottom line.

The world is a vastly wealthier, more productive, and more competitive place than it was 30, 20, or even 10 years ago. The surge in demand for both food and fuel is just one of the results.

Commodities ... not just food and fuel, but commodities across the board ... and productive assets are being revalued in world markets. There are winners and losers in this process. There will be adjustments in relative prices and market share. Some of these may be painful. But I believe we need to remember that this is ultimately a story about growth, opportunity, and a rising standard of living for hundreds of millions of people. This is a success story. We won the Cold War. This is what victory look like.

Third, it is vital that policymakers remember that the technologies underlying the food and fuel debate are dynamic. Straight-line extrapolations of current technology tell us very little. The real discussion is about iterative technology driven productivity gains.

Taking corn as an example, consider that the United States has about 20% of the world's total of land devoted to the production of corn ... yet the U.S. produces 40% of the world's harvest. A handful of countries approach U.S. levels of productivity, but most do not. China has 18% of the world's corn acreage and produces 17% of the harvest.

World corn production could approximately double ... on the existing acreage base ... if the current U.S. productivity level became the norm.

That should be the goal. This is a question of technology transfer and investment, not of an expanded acreage base.

Nor should anyone suppose that current production levels, even in the U.S. are a ceiling. At the end of the Second World War, U.S. producers averaged 40 bushels an acre. Today we average about 155. But we are still in the early stages of the genomics revolution.

The Farm to Market Sustainability Alliance is a recently formed private sector group devoted to studying agricultural sustainability issues. Farm to Market estimates that we could reach 290-300 bushels an acre by 2030.

The authors of that analysis believe this is a conservative estimate.

The point is this is not wishful thinking. It is based on an assessment of the potential from full deployment of current technologies, primarily better genetics supported by the aggressive use of spatial technologies like GPS/GLS.

This estimate of course is not a guarantee, but it is a serious, credible assessment by technology leaders in the field.

Apply those figures globally and the raw multiples imply a potential, admittedly theoretical quadrupling of yield on the existing acreage.

The world has an insatiable and growing demand for both food and fuel. Agriculture is responding. Very large productivity gains are within our reach if we get 21st century technology into the hands of farmers. As the economists say, these are “non-trivial changes.” They are game changers. This is an extraordinary opportunity.

The sustainability debate has a similar logic. No one is more committed to sustainability than American farmers.

Over the last two decades, from 1987-2007, U.S. corn yields increased 30% per acre. In the same period, energy input per bushel, including nitrogen, has been reduced 30%. Soil erosion has been sharply reduced. Greenhouse gas emissions have been cut 10% per bushel.

I use corn as an example, but one can perform the analysis for other crops as well. We can produce more ... sustainably ... if we invest in the technology and allow markets to work.

Again, I can't predict what the next Administration will do. But clearly, the Bush Administration ... for national security, energy security, and environmental reasons alike ... has been committed to the aggressive deployment of renewable energy technologies. At the same time, and partly as a result, agriculture is transitioning from food, feed, and fiber to food, feed, fiber, and fuel.

Faster than anyone imagined, we have transitioned from a farm economy dominated by chronic surpluses and depressed commodities prices to a farm economy challenged to produce as much as we can.

There are some who would reconsider these commitments and walk away from these opportunities. I am not one of them. We will see what happens on Election Day. But in the meantime, we remain committed to seizing the opportunity.

Thank you.