

**Iowa Land Development Expo  
Des Moines, Iowa  
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**Thomas C. Dorr  
Under Secretary for Rural Development  
“Renewable Energy and Wealth Creation”**

**Thank you, for that very generous introduction. It is a distinct pleasure to be with you today.**

**I understand that this is a mixed audience. Some of you are from Iowa. Others are from out of state. I trust that our brisk and invigorating winter weather will inspire you come back.**

**USDA Rural Development today is essentially an investment bank for rural America. We passed a milestone last month, as our outstanding loan portfolio ... for the first time in history ... passed \$100 billion.**

**We administer over 40 programs that provide a wide range of grant, loan, and loan guarantee assistance for rural infrastructure, technology development, housing, community facilities, businesses, and renewable energy development.**

**Our mission is to increase economic opportunity and improve the quality of life in rural communities. I am often accused of being an incurable optimist, and there is probably a good deal of truth to that accusation, but I truly believe, no more than ever, that the future of rural America is bright.**

**So what is in store for rural America in the years ahead? There's a lot on the table as we head into 2008. I wish to visit about it for a minute.**

**Obviously the Farm Bill is important. If I had a crystal ball I'd make a prediction. But I don't, so I won't. What I can say, however, is that the principles President Bush enunciated a year ago, at the outset of the debate, have stood the test of time:**

- **We need to modernize Title I to recognize that the safety net can and should be WTO compliant at the same time stop subsidizing the wealthiest of the wealthy including the Park Avenue millionaires. The house proposal has made progress.**
- **We need to facilitate the entry of young people into farming. Today there are extraordinary opportunities in rural America, including but certainly not limited to farming. There are far more young**

**people today who would like to farm than will ever get the opportunity.**

- Yet farming has become an aging occupation. I've been farming for more than 30 years ... but if I attend a farm meeting back in Cherokee County, I'm still one of the young guys. The barriers to entry and the obstacles to young people need to be addressed.**
- We also need to invest more in conservation, rural development, rural health care, and renewable energy ... all key components of the President's proposal.**

**The President a year ago offered strong proposals in all these areas. He did so within the context of a fully costed-out, balanced budget plan, and without any new taxes. The House and the Senate both came up with very different plans. There are some areas ... notably the support for conservation and renewable energy ... where the positions are fairly close. Elsewhere there remains a lot of work to do to find a consensus. For example, it may have changed but there are \$15 billion new taxes, \$22 of**

**budget gimmicks, the question is do we need to continue payment to the wealthiest of the wealthy.**

**Part of the difficulty, frankly, is that the old-fashioned, tidy, self-contained world of farm policy ... the old paradigm you and I and most Members of Congress grew up with ... has gotten a lot bigger and more complicated.**

**That of course complicates the Farm Bill. When my father started farming you could still say “rural” and mean “farm.” Today 60 million people live in rural America. 58 million of them don’t farm.**

**Over 95% of rural income is earned off the farm. Out of 2 million farming units, about 150,000 produce three-quarters of our farm output. Farm households, as a group, earn 85-95% of their total income from non-farm employment. So rural policy is much bigger, broader and more complicated than just farm policy. Some of the folks in Congress are still scrambling to adjust.**

**We’re also debating this Farm Bill in the context of an economy that has been structurally transformed by globalization, distributed computing, the internet, and an extraordinary productivity boom.**

**Yes, I know there are uncertainties and challenges. There always are. I also understand that this is a political season. Some in politics and the media will play the doom and gloom game for partisan reasons. That's nothing new. But I believe some perspective is important.**

**Seven years ago, President Bush inherited a recession, the dot-com collapse, the corporate accounting scandals, and the biggest stock market drop since the Great Depression. Then came 911. But despite all that ... when you step back from the day-to-day, sound bite politicking:**

- The U.S. economy has now enjoyed six straight years of uninterrupted economic growth. The current expansion has beaten the historical averages for longevity.**
- Through December of last year, jobs had expanded for 52 straight months ... 8.3 million new jobs since August 2003. That's the longest period of uninterrupted job growth on record. After 52 months of growth, there was a loss of 17,000 jobs based on the preliminary figures for January. That of course is a concern, but unemployment remains low at 4.9%.**

- **For the year, real GDP grew at a solid 2.5% in 2007. There was a slowdown in the fourth quarter, to a 0.6% growth rate, after a 4.9% rate in the third quarter. The figures are volatile, especially in the short term.**
- **But longer term, real after-tax personal income has increased an average of \$3,600 per person, or 12%, since January 2001.**
- **Productivity growth has averaged 2.6% a year since President Bush took office. That's higher than in the 1970's, 80's, or 90's.**
- **Farmers have certainly shared in the boom. We have record farm income, record farm exports, and net farm equity of more than \$2 trillion. Farm equity has more than doubled in this decade.**

**These things haven't happened by accident. They've happened because the American economy remains the most flexible and creative in the world. And they've happened because the President's tax cuts and economic policy have kept us on a strong, pro-growth path.**

**That doesn't mean there won't be bumps in the road. Growth clearly slowed in the fourth quarter of last year. High energy costs and the real estate correction are continuing concerns. I can't predict 2008.**

**But fundamentally, the U.S. economy remains the greatest engine for growth the world has ever seen. And the future is bright. We are living in an era of new and unprecedented opportunity.**

**Since the fall of the Berlin Wall, nearly three billion people have joined the world market system. This is the greatest explosion of economic freedom in world history. The world is a much richer, more productive, and more competitive place than it was a generation ago.**

**By the way ... before we complain, we need to remember that this is what victory looks like. For the 45 years of the Cold War, we preached to our adversaries that they ought to drop their barriers, embrace market economies, and make trade, not war. Now they're doing it ... and a lot of them are turning out to be very formidable competitors.**

**Some things we bargained for; some we didn't. There have been surprises. There are growing pains and adjustments to be made. But in**

**fundamental ways, a new food-fuel economy is remaking farming and the rural economy, not only in the United States but around the world.**

**Farmers and Ag economists used to talk about food, feed, and fiber. It's now food, feed, fiber, and fuel. We're discovering that calories and BTU's are fungible. This changes things in ways we are still struggling to understand ...**

**... And if food, feed, fiber, and fuel aren't enough, we may soon be adding carbon sequestration to the rural development mix as well.**

**Frankly we didn't foresee this even a decade ago. When the Iron Curtain and the Bamboo Curtain fell, we anticipated ... among other things ... that American agriculture would be one of the beneficiaries.**

**As predicted, rising living standards quickly produced a rapid growth in food demand. Hundreds of millions of people are earning higher incomes and enjoying a better diet. This means new markets for American farmers. It is also reflected in rising food prices for the consumer. This, at least, was anticipated.**



**What we largely failed to anticipate, however, was the even more explosive growth of demand for energy. For example, China is now the world's leading coal and steel producer, with more than double U.S. coal production ... and remember, we're the Saudi Arabia of coal. China, by the way, is also the world's leading CO<sub>2</sub> emitter.**

**China has also passed Japan as the world's second largest automotive market ... and the second largest oil importer. It will be the largest automotive market in the foreseeable future. India is making similar strides. That's a lot of people graduating from busses and bicycles.**

**As a result, energy is being revalued in world markets. Oil has topped \$100 a barrel. Natural gas prices have soared. We see the impact every time we pull up to the pump or pay the monthly heating bill. I've been growing corn for more than 30 years ... and I've watched the cost of inputs double in the last 5. These are real challenges.**

**But challenge is another word for opportunity. This isn't news to you. Iowa is Ethanol Central. You see tangible effects of the change when**

**you drive down the road. The benchmarks tell the story. Since the beginning of this decade ... since President Bush took office and made a comprehensive national energy strategy a central policy goal:**

- We have tripled ethanol production and are on track to double it again in two years.**
- The President a year ago proposed a goal of a 35 billion gallon Alternative Fuels Standard by 2017. The Congress in December finally passed, and the President signed an energy bill with a 36 billion gallon Renewable Fuels Standard by 2022. That means a five-fold increase in ethanol production over today's levels in the next 14 years.**
- Cellulosic ethanol is moving from the labs into production. The first commercial scale demonstration plants are being built now. This isn't a done deal. We still have to demonstrate that the technology is cost competitive on an industrial scale ... but if the current plants hit the mark, second generation biofuels will take off in the next decade.**

- **Installed wind capacity in the U.S. has increased seven fold since 2000. We led the world in new capacity the last three years running. Germany still leads in cumulative capacity, but at the current rate we will overtake Germany by the end of next year.**
- **The United States also leads the world in waste to energy, geothermal and solar thermal power. We are the world's second leading producer of biodiesel. We lead the world in total biofuels.**
- **Solar is still building out from a very low base, but shipments of photovoltaic equipment have increased tenfold since 2000 in the US. Solar is gaining market share for a wide range of off-grid applications, and there are some extraordinary technologies now in the labs or in commercial development that may slash costs even further.**

**From a rural development perspective, your perspective, renewable energy ... because of its feedstocks and siting requirements ... is inherently distributed and predominately rural in character. The**

**potential is very large. Stop and think... if we displace even one billion barrels of imported oil with biofuels ... with oil at \$100 a barrel ... that's a new market larger than net farm income.**

**That's just biofuels. The potential from wind and solar may be as large or larger. Carbon sequestration may become another opportunity because it will turn organic capture of CO<sub>2</sub> into a paying proposition. My point is simply that the ethanol boom that is so apparent in Iowa and elsewhere in the corn belt is the tip of the proverbial iceberg. We are clearly in the very early stages of a very large transition.**

**Our energy economy will remain dominated buy coal, oil, and natural gas for years to come ... but at the margins renewables are beginning to build out at an accelerating rate.**

**Again, we didn't anticipate this extraordinary energy demand as recently as a decade ago. I don't know if we fully anticipate the effects even now, as we scramble to adjust to the new food-fuel paradigm.**

**But what IS clear is that for rural America, this presents an historic opportunity, as well as challenges. Feedstock demand will drive prices. The livestock industry will have to adjust. So will consumers. We're not going to stop eating hamburger and chicken ... food in the U.S. will remain a bargain by historic standards ... but it will cost a little more.**

**At the same time, not one but several major new industries are being built out, largely in rural America. This is driven by energy demand and enabled by distributed computing. The synergy between broadband and distributed computing and inherently distributed rural resources ... including but not limited to renewable energy ... is very powerful. It's transformative.**

**This is a big deal. To take just one example, the ability to sell Adirondacks or offshore wind power in Boston or New York isn't just a matter of putting up windmills and plugging in the air conditioner.**

**What is required is the ability to integrate distributed generation seamlessly with a regional and national grid that balances loads across a continent ... plus the ability to measure and appropriately price**

**distributed generation ... plus the availability of transmission corridors to gather and move a highly distributed resource to new markets.**

**Connectivity plugs everyone into the game. It empowers distributed production. It also allows dispersed, networked systems to achieve economies of scale ... something that has been very important, for example, in the build out of a highly decentralized biofuels complex that is dependent on localized sourcing of feedstocks.**

**Put all of these things together and the result is literally a “Rural Renaissance.” This won’t happen overnight. It will be the work of decades. It will pose challenges to the scientists to identify new feedstocks and progressively increase energy yields.**

**It will pose challenges to rural investors and traditional lenders to stake an equity claim to these new industries being built out in our own backyards. There are opportunities at every point ... production ... transportation ... conversion ... distribution and marketing ... banking, finance, and insurance. The spin-offs are endless.**

**It will pose challenges to State and local governments to resolve the tax, regulatory, and logistical issue affecting renewables. We need to resolve the blend wall issue for ethanol. We need more E85 blender pumps and flex fuel vehicles on the road. We need new transmission corridors for large scale rural wind and solar production. And we need a regulatory environment that facilitates the necessary investments.**

**For you, and for your counterparts around the country, the challenges and opportunities are real.**

- Traditional rural lenders need to step up and help grow these new industries. That may include leveraging some portion of that \$2 trillion in net farm equity that I mentioned earlier.**
- At USDA Rural Development, we are exploring a wide range of business and investment models to facilitate the aggregation of local capital and to encourage local investment and ownership.**
- State and local governments will need to address siting and environmental permitting ... water rights ... job training ... tax**

**and regulatory policy ... and pipelines, transmission corridors,  
and other logistical issues.**

**I don't have a magic formula. But I do know the train has left the  
station and is picking up speed. There's a lot of work ahead. But the  
potential is enormous, limited by your imagination ... and when we look  
back 10 and 20 years from now, I am confident that we will be  
astonished at how far we have come.**

**It's going to be quite a ride. Let's get to work. Thank you.**