

lands using public assets, and we should insist that same treatment be applied to oil companies. Fees that are assessed from drilling oil on public lands are directed back to the federal treasury and these fees should reflect the true value of the benefit oil companies receive.

We have a responsibility, both as legislators and as public servants, to ensure responsible management of our public lands and a fair return to taxpayers. That responsibility includes determining a fair fee structure for oil drilling on public lands. Despite passage of this amendment which continues this moratorium for yet another year, I hope that we can reach a reasonable agreement to ensure proper payment by oil companies for utilizing public resources.●

RECOGNIZING THE MAY 13, 1999, SPEECH OF HANS W. BECHERER, CHAIRMAN AND CEO OF DEERE AND COMPANY BEFORE THE DES MOINES ROTARY CLUB

• Mr. GRASSLEY. Mr. President, I would like to recognize and enter into the RECORD a recent speech presented to the Des Moines Rotary Club by Hans Becherer, Chairman and CEO of Deere and Company. His remarks are insightful and provide a long term outlook from one of the leaders in our agricultural community. The speech is entitled, "All Farming is Global".

Today I'd like to discuss some of the major trends that will help shape agriculture as it moves into the new century and millennium. This is of particular importance to Iowa since almost one-fourth of the state's population works in the agricultural complex . . . and 90% of the land area is devoted to farms.

Farming remains critical to John Deere, as well. Although we've diversified a good deal in recent years, both in product breadth and geographic reach, farm machinery remains our flagship business . . . and the domestic farmer our number one customer.

Needless to say, the farm sector is struggling right now due to depressed grain and livestock prices. As a result, North American retail demand for farm equipment is expected to be off 25% or so this year with lesser reductions in Europe. Accordingly, we're making aggressive cutbacks in our production in order to adjust inventories and bring more balance to the market.

One farmer, on an Internet message board devoted to Deere, recently summed it up this way: "The quality of the green tractor is there," he said. "The quality of the green money to pay for it isn't."

Thus far, that seems to be a fair assessment of the situation.

Of course, the farm economy was in good shape heading into this downturn, from the standpoint of debt levels and land values, and will likely prove quite resilient. There's nothing to suggest this will be a rerun of the 1980s.

Moreover—the next year or two aside—the future of farming looks extremely promising for the long run.

That's what I'd like to focus on this afternoon—less the problems of the present, than the promise of the future.

Of the key forces dictating change in agriculture today, the most important ones concern increasingly open markets and freer

trade: the explosive growth in technology, which is transforming the entire economy these days; plus, the continuing importance of environmental issues.

Let's take a closer look at these issues now.

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As a first point, farming is becoming far more market-oriented.

Most of us, I suspect, believe in free trade and open agricultural markets. We feel farmers in Iowa have a lot to gain from such a situation. We have, after all, some of the world's best farmland literally in our backyards, plus an excellent distribution system for getting crops to market, and access to highly productive farm machinery.

Just what does an open market, increasingly free of controls and restrictions, mean to the farm sector?

Mostly, it will accelerate trends already under way—putting a premium on large, efficiently run operations that are able to make the most of today's technology and fast-moving markets.

Less-regulated farming will have a positive impact in terms of overall economic efficiency—and it's likely a plus for the nation's agricultural complex as a whole. It certainly gives U.S. farming a leg-up in a global market, something that works to Iowa's benefit.

As for the decline in smaller farms, this very definitely marks the passing of an era, which many find a source of regret. But it's a process that has been in motion for some time: Even in the robust economic environment of the last few years, Deere was selling less than half as many tractors and combines to the domestic market as in the early 1970s. The number of U.S. farms has contracted by one-third (from 3 to 2 million) over this time, with a similar pattern seen in Iowa.

I should point out that some small operators will do quite well in tomorrow's less-regulated market. These are the ones who devote themselves to a type of management-intensive, or niche, agriculture, such as growing organic crops. Still, it will take quite an entrepreneurial breed to overcome the economies of scale that are becoming more and more a part of farming.

Along the same lines, a more open agricultural climate means farming will become more internationally focused and geared to exports. Indeed, the farmer of the future will have to be a man of the world.

And that's definitely a plus for Iowa.

Agriculture has always been regarded as the most basic of local enterprises. And rightly so: What could be more a part of our communities than our own soil? Farming, moreover, has constituted the soul of rural life in our country for over 200 years, and been widely associated with the virtues of honesty and hard work that built America.

But in truth, ladies and gentlemen, all farming is global.

Every ear of corn, or pod of soybean produced in Iowa makes an impact on the world market . . . and affects farmers in faraway places such as Australia and Argentina.

Similarly, every drop of rain that falls on Brazil's credados . . . has an effect on Iowa's farms and fields.

Legislation approved in Berlin and Brussels . . . is felt by farmers in Burlington and Belle Plaine.

Soybean prices went into a nosedive awhile back . . . not because of a leap in supply or a lag in demand, but because the Brazilian currency lost one-quarter of its value overnight. Brazil, of course, is a major soybean producer and exporter. That action alone shaved roughly a dollar a bushel off bean prices.

Global trade, manifested by exports, has become a mainstay for our nation's farmers.

Roughly one-fourth of farm receipts today come from overseas sales. And Iowa is right in the thick of things, being the nation's number-two exporter of agricultural commodities (~\$4B year) after California.

Farm exports will drop this year due to the economic travails of the developing world and are down almost 20%—or \$10 billion—from their peak. But this is almost surely a short-lived phenomenon . . . and completely at odds with the long-range picture.

The world's fundamentals—namely, strong population growth, improved diets and more open trade policies—all point to U.S. farming, and Iowa agriculture, being an export-driven, growth-intensive business with solid prospects well into the future.

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Farming will get more competitive, too, as farmers scramble to add value to their crops and gain an edge in productivity, yields and costs.

Technology—my second point—will help them get there. Technology, of course, has been the story in agriculture since the days of Cyrus McCormick's reaper . . . John Deere's plow . . . and the Waterloo Boy tractor. Forerunners of modern-day combines and cotton-pickers weren't far behind.

The cultural effect of ever-more productive machinery goes well beyond the farm. It's what transformed our society into an industrial power since it takes so much less physical labor to feed our population today. The average farmer gets as much done by 9 a.m. now as in a full day in the post-war 1940s. Over this time, crop production has nearly tripled from virtually the same amount of farmland. Especially noteworthy, farm-labor's role in the agricultural process has dropped by more than two-thirds during this time.

What accounts for such improvements? Technology, mostly . . . in the form of better seeds and fertilizer, as well as—indeed—more sophisticated farm machinery.

As important as technology has been to farming's past . . . it's fair to say we haven't seen anything yet. Genetically modified seeds . . . plus precision, or satellite-guided, farming and other, almost unimaginable, advances in information technology . . . put farming on a truly exciting, high-tech plain for the new century.

Going forward, in fact, a farmer's biggest problem will not be having access to technology, but figuring out how to apply it to his best advantage. "What we're trying to do here," one farmer recently said at a precision-farming conference, "is create knowledge out of chaos."

Meeting this need—helping farmers bridge the gap between information and intelligence—may constitute a promising business opportunity in its own right. Deere recently formed a new business unit—John Deere Special Technology Group—to help supply solutions to these challenges.

One of the unit's most exciting new ventures is the VantagePoint network, a kind of silo in cyberspace. More to the point, VantagePoint is an Internet-based data-warehouse subscription service that allows farmers to collect, store, and reference a full array of data about their farming operation—such as yield and seed population. Subscribers can also see aggregated data from neighboring areas. VantagePoint functions as a server to contain this information . . . and, as an interface, to organize and present the data in creative and useful ways.

As for the Internet itself, we believe it adds an important new dimension to the selling process, which should work to the benefit of our John Deere dealers . . . by helping them provide even more responsive service and counsel.

A number of dealers have their own websites. Many more are listing used equipment on a company-sponsored site called MachineFinder-dot-com, launched late last year. Roughly 6,000 pieces of equipment, mostly tractors and combines, are presently available over MachineFinder . . . and about 15,000 users have registered for the site.

What ever the future of MachineFinder and other emerging Internet-related services, one can safely assume that technology will play as big a role in the success of tomorrow's farmers as the weather or government policies.

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As technology makes farmers more productive, it's also helping them be good stewards of the soil, the air and the water. That's the third area I'd like to touch on today.

Outside of large hog lots—which is certainly a newsworthy issue in Iowa—the environmental side of farming doesn't grab many headlines. But it's quite a factor in the farming process . . . and seems likely to stay that way.

Regulation, for one thing, will see to it that farmers remain serious about limiting emissions . . . preserving the soil . . . and controlling the run-off of chemicals and waste. Some of the proposals you hear about would even limit the hours farmers spend in their fields, based on dust restrictions. Noise abatement is an emerging concern. And water quality seems likely to be the next big area of regulatory focus.

All this, of course, adds cost and complexity to the farming process. But many of the very things that make farmers environmentally sensitive . . . are actually fiscally sensible. That is, they help farmers become more productive and profitable.

New engines are cleaner-burning and more efficient. Precision farming helps farmers cut down on input costs. New sprayers apply herbicides with laser-like precision, cutting down on waste and over-spray.

All that's good for the environment, of course. But it's also beneficial for the farmer's bottom line.

Iowa's farmers are truly among the unsung heroes in today's environmental movement. For without modern fertilizers, herbicides and machinery . . . without high-yield production practices . . . and without the tremendous yield gains we've seen over the years . . . an additional one-million square miles of our nation (all the land east of the Mississippi River, in size) would need to be plowed under and made into cropland, merely to equal present levels of grain production.

That's no less than three miles the amount of land currently devoted to farming. It's fair to say, moreover, that these new fields would come at the direct expense of forested areas and other land now serving as wildlife habitat or as part of our natural watershed.

Clearly, farmers have done quite a job of safeguarding our natural resources, while meeting the world's growing need for food. Nevertheless, tomorrow's increasingly formidable environmental pressures will require an even more intensive commitment on their part.

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Regardless of the challenges ahead for agriculture, I assure you that Deere remains firmly committed to providing solutions to our customers' needs and customers in our case go far beyond the farm.

Over the last several years, John Deere has worked hard to achieve a good deal of diversification in our operations. We've done so not by plunging into altogether-new businesses, but by applying the lessons learned from generations of dealing with farmers to a broader range of customers.

Our view is that the characteristics of our Waterloo-made tractors, or Des Moines cotton pickers—such as durability and reliability—work just as well for construction equipment, such as Dubuque-made backhoes.

The same goes for our new skid-steer loaders, Gator utility vehicles, golf and turf equipment or the full range of lawn-care machinery now being offered in green and yellow.

Similarly, our Des Moines-based credit operation owes its success not to the fact that the money it lends goes farther than anyone else's . . . but because of the integrity and service that has long been associated with the John Deere name. (John Deere Credit, incidentally, is quite a successful enterprise in its own right, normally adding 20% or so to the company's overall net income.)

Moreover, it is these non-ag operations that have been the focus of major investment programs of late . . . and which we're counting on to help us achieve more consistency in our profits whenever the farm economy weakens.

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None of which, in any way, dampens our enthusiasm for farming.

Because despite some of the challenges I've mentioned—and the current downturn is very real and painful—the future for agriculture looks good.

Darned good, in fact.

Regardless of Indonesia's financial problems . . . the world still has 10,000 new mouths to feed every hour, and, again, will need three times today's grain output within 50 years.

No matter what's ahead for Brazil's real or Russia's ruble . . . a good deal of money will be spent on the increased consumption of meat—which is a primary driver of demand for grain.

Beyond the Third World's growing pains . . . the global farm population, now over 40%, will shrink as industrial growth creates new opportunities and higher living standards. This will make Iowa's contribution to the world food supply all the more important.

True, these things may take shape more slowly than we expected, but the fundamental trends are headed in the right direction.

All point . . . to a promising future . . . for a globally attuned . . . technologically astute . . . environmentally aware . . . agricultural sector—such as exists in Iowa and surrounding states.●

EXECUTIVE SESSION

EXECUTIVE CALENDAR

Mr. ROTH. Mr. President, I ask unanimous consent that the Senate immediately proceed to executive session to consider the following nominations on the Executive Calendar: No. 231 and 233; and the nominations on the Secretary's desk in the Air Force, Marine Corps, and Navy. I further ask unanimous consent that the nominations be confirmed, the motions to reconsider be laid upon the table, any statements relating to the nominations be printed in the RECORD, the President be immediately notified of the Senate's action, and the Senate then return to legislative session.

The PRESIDING OFFICER. Without objection, it is so ordered.

The nominations were considered and confirmed as follows:

DEPARTMENT OF DEFENSE

The following named United States Army officer for reappointment as the Chairman of the Joint Chiefs of Staff and appointment to the grade indicated while assigned to a position of importance and responsibility under title 10, U.S.C., sections 601 and 152:

To be general

Gen. Henry H. Shelton, 0000.

NAVY

The following named officer for appointment in the United States Navy to the grade indicated under title 10, U.S.C., section 624:

To be rear admiral

Rear Adm. (lh) Joseph W. Dyer, Jr., 0000.

NOMINATIONS PLACED ON THE SECRETARY'S DESK

IN THE AIR FORCE, ARMY, MARINE CORPS, NAVY

Air Force nominations beginning Michael L. Colopy, and ending Eveline F. Yaotiu, which nominations were received by the Senate and appeared in the Congressional Record of August 3, 1999.

Air Force nomination of Thomas G. Bowie, Jr., which was received by the Senate and appeared in the Congressional Record of September 13, 1999.

Air Force nominations beginning James W. Bost, and ending Grover K. Yamane, which nominations were received by the Senate and appeared in the Congressional Record of September 13, 1999.

Marine Corps nomination of Michael J. Dellamico, which was received by the Senate and appeared in the Congressional Record of September 13, 1999.

Marine Corps nomination of Charles S. Dunston, which was received by the Senate and appeared in the Congressional Record of September 13, 1999.

Navy nominations beginning Thomas K. Aanstoos, and ending Robert D. Younger, which nominations were received by the Senate and appeared in the Congressional Record of July 26, 1999.

Navy nominations beginning David M. Brown, and ending Paul W. Witt, which nominations were received by the Senate and appeared in the Congressional Record of August 4, 1999.

Navy nominations beginning Anibal L. Acevedo, and ending Steven T. Zimmerman, which nominations were received by the Senate and appeared in the Congressional Record of September 13, 1999.

Navy nominations beginning Daniel A. Abrams, and ending John M. Zuzich, which nominations were received by the Senate and appeared in the Congressional Record of September 13, 1999.

Navy nominations beginning Marc E. Arena, and ending Antonio J. Scurlock, which nominations were received by the Senate and appeared in the Congressional Record of September 13, 1999.

LEGISLATIVE SESSION

The PRESIDING OFFICER. Under the previous order, the Senate will return to legislative session.

EXTENSION OF AIRPORT IMPROVEMENT PROGRAM

Mr. ROTH. Mr. President, I ask unanimous consent that the Senate now proceed to the immediate consideration of S. 1637 introduced earlier today by Senator LOTT.

The PRESIDING OFFICER. The clerk will report.

The legislative assistant read as follows: