Changing landscape: why worries surround rural America's biofuels surge

Doug Cameron. But as stockpiles shrink, there are fears that a rise in food prices could lead to a consumer backlash

Merlin Bartz used to work diligently during the week for the conservation service at the US Department of Agriculture (USDA) in Washington and then head for his farm at weekends in the heart of the corn belt in Grafton, upper Iowa.

This month he abandoned commuting and became a full-time farmer. "With corn at $4 [a bushel] and [soya] beans at $8, I'm leaving the department and going back," he told colleagues.

His is still a rare move. The past 80 years have seen many millions migrate from rural America to the cities. But Mr Bartz's decision points to the renewed confidence in the US arable farming sector. It is no longer just about feeding an expanding global population: crop prices are also at record levels because of demand for grains and oilseeds to produce biofuels.

As Mike Johanns, agriculture secretary, joked at his department's annual conference this month in Arlington, Virginia: "You know, I grew up on a farm in Iowa and I sometimes wonder, did I zig where I should have zagged?"

The globalisation of agriculture, an investment boom in corn-derived ethanol production and technological advances all promise to alter the physical and economic landscape of America watched, with com planting expected to show the biggest increase for more than a century, resulting in the largest area under cultivation since 1946.

Dick Bond, chief executive of Tyson Foods, the world's largest protein producer, has called on Washington to recognise the competing claims of the food and energy sectors when drawing up a proposed farm bill. "If left unaddressed, the bigger long-term issue will be the availability of US and global grain for protein and other foods," he warns.

The USDA predicts that farm cash receipts will this year be 22 per cent above their average over the past decade. Yet Mr Bartz and others should not expect too much of a bonanza. After taking into account higher costs for fertiliser, feed and seeds, the department forecasts that farm expenses will be an even sharper 24 per cent a the 10-year average. That leaves American farmers sharing an a g income of $67bn (£34bn, €50bn), b changed from 2 0 0

Certainly, the US agricultural s the world's largest, has seen many p ods of optimism give way to s e t In the 1970s, agriculture was the f commodity segment to see rapid p rises - preceding the surge in oil p r In particular, grain was boosted b large and unexpected Soviet demand late 1990s put paid to that. So Mr Collins is sanguine. "While I am hesitant to say it is different this time round, the ethanol phenomenon is having a dramatic effect for the rest of the agricultural sector," he says.

Demand for ethanol is gobbling up US corn stockpiles, which have shrunk to 25-year lows relative to consumption and are predicted to decline further, to less than 5 per cent of total US supplies by the end of the decade. That is about one-quarter of the size they have traditionally been. American corn exports, which accounted for about 70 per cent of last year's global corn trade, are also predicted to fall for the next three years, although Argentina and Brazil are boosting their output to replace the expected drop in US shipments abroad.

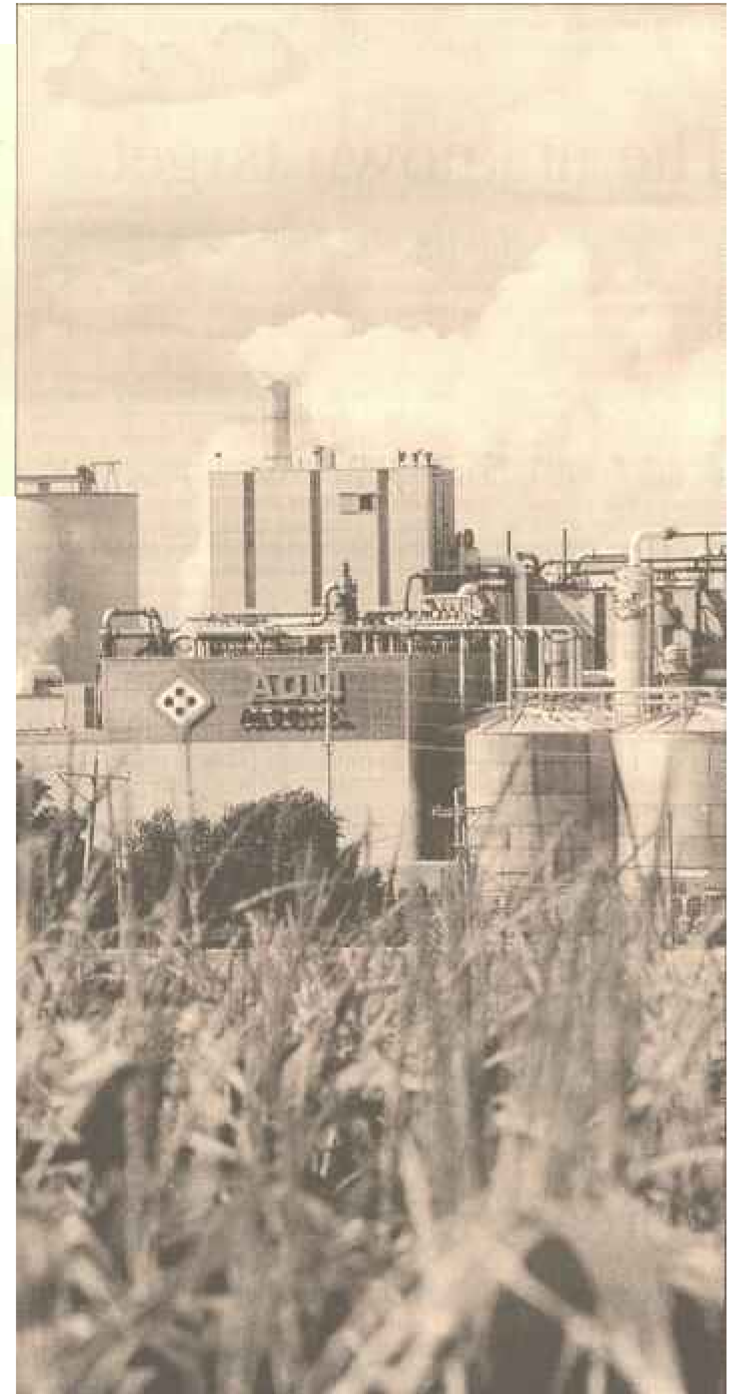
Improved seed technology could help h o v e W i t

> 'I have hardly seen a hedge fund at the USDA annual conference before. Now they are all looking to become grains experts'

Government requirements on blending biofuels with petrol are driving the increased demand. In his State of the Union speech in January, President George W. Bush set a new target for US production of alternative fuels - 35bn gallons by 2017, a multiple of the 7.5bn gallon target for 2012 laid down in the 2005 Energy Act. The European Union meanwhile decided this month that a minimum of 10 per cent of transport fuel should come from biofuels by 2020.

Yet to reach his goal Mr Bush is relying on technology that is not commercially available today and that few expect will be ready within the next five years. For its part, the EU will have to rely on imports of feedstock such as palm oil from Indonesia and Malaysia and soya oil from Argentina and Brazil to achieve its target.

h the economics of ethanol and its environmental credentials still open o debate, and government policies sub- t to change, the longer-term outlook s unclear. Yet the emergence of bio- l s has still transformed how banks d investors look at agriculture. g a n Stanley and Goldman Sachs, e two largest commodity traders in e banking world, have started to n d their agricultural trading oper- s during the past 12 months, having spent the past two decades focusing



exposure of rural America to more volatile market forces - as agriculture becomes more closely intertwined with the energy sector - also contains the seeds of a potential future blight.

Ethanol is expected to swallow one-quarter of US corn production this year and food producers warn of a ripple effect on global prices as grain-based animal feed prices increase and farmers grow more corn and less of other crops. This could force livestock farmers to reduce their herds, a move that would push meat prices up.

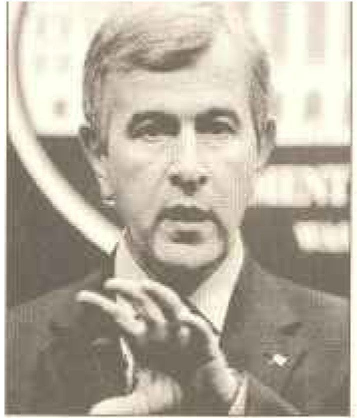
The annual acreage report from the USDA, due on Friday, will be closely

But that fed through to inflation in America and in the early 1980s the Federal Reserve put up interest rates. This brought "a lot of defaults - farmers couldn't meet their payments, much like what is happening in the subprime [residential mortgage] sector today", says Keith Collins, chief economist at the USDA.

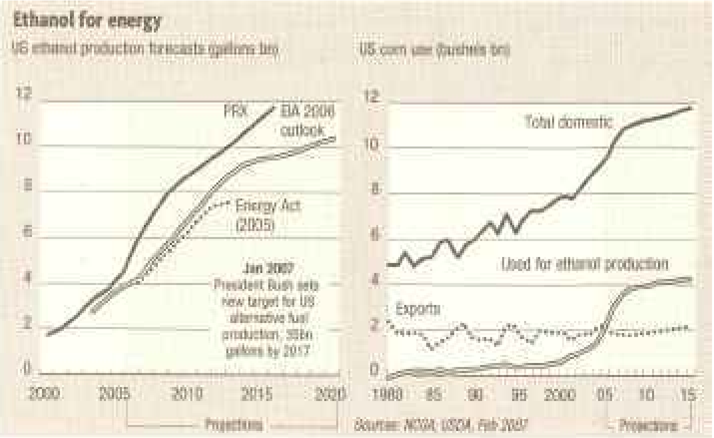
Farmers left the land and it was not until the first half of the 1990s that prices for corn, wheat and soya beans, the three main US crops, started to rise again on the back of strong exports to the emerging Asian economies. But not for long: Asia's currency crisis in the

prevent shortages inside the US but it will take many years to bring about the increase in yields required to meet the competing demands. Monsanto, the world's largest biotechnology company, last week unveiled a joint venture with Germany's BASF which promised to create a 20 per cent improvement in yields of corn and other crops, though the new products are not expected to arrive for at least five years.

"The real dilemma in the next decade is, how do you grow more with less?" says Hugh Grant, Monsanto's chairman and chief executive. "It's going to be the focus for the planet."



Mike Johanns: 'Should I have zagged?'



Bryce, head of fixed-income securities and commodities at Morgan Stanley, says the attraction of the sector stems not just from biofuels but also the financial services that banks can offer.

Mr Bryce says industries that rely on agriculture are looking for more sophisticated ways of hedging their exposure to commodity prices. He points to the food and beverage sector, which has traditionally bought its raw materials through deals with large agribusinesses such as Cargill, Louis Dreyfus and Archer Daniels Midland. "It is a bit like the oil business in the early 1980s, where a company like BP would have sold jet fuel to the airline and provided the customer with risk management services too, but that all changed when the banks came into the market. I see a similar trend happening with agriculture," says Mr Bryce.

Barclays Capital, the investment banking arm of the UK-based Barclays, is also expanding in the area. Joe Gold, head of commodities at Barclays North America, says that besides serving the hedge funds and pension funds that are investing more of their money in agricultural commodities, Barclays is also financing biofuel plants and arranging the long-term purchase of feedstock and sale of the fuel. "Weather and the next crop report are still, and will remain, very important to the agricultural markets, but there are more factors driving prices – in particular,

Growth view: an Archer Daniels Midland ethanol plant rises behind an Iowa cornfield Alamy

energy demand. Energy has become an integral part of the agricultural markets and it has changed the structure of agriculture," says Mr Gold.

The USDA's March annual conference normally brings together farmers, government officials, agricultural lobbyists, seed, fertiliser and farm machinery suppliers, and the merchants from groups such as Cargill. But this year in Arlington another group was also in evidence: potential investors.

"I have been coming to this event for more than 10 years and I have hardly seen a hedge fund here before. Now they are all looking to become grains experts," says one farm machinery analyst. A hedge fund manager, explaining

his presence, says: "If there is any risk to biofuels on agriculture, it is on the upside [for grain prices], because the US government wants more biofuels, not less."

But John Johnson, chief executive of CHS, a large US farming co-operative, says the industry should be cautious about the ethanol-driven surge. CHS owns 22 per cent of BioEnergy, one of America's biggest ethanol producers.

"We could have unintended consequences from this," he warns. "If grain prices go too high too quickly, it could push up food prices and we could see a consumer backlash against biofuels. Consumers will be upset that their food bills are rising sharply." Rural boom could, in other words, turn to bust once again.