Agriculture is about playing poker with God.

David McKinna, farming consultant

The value of Australian farm exports will in fact decline in the next five years, from a projected $35.9 billion this financial year to $33.7 billion in 2017-18, with increases in production in countries like Brazil keeping a lid on prices in the longer term, it says.

Although the global population is forecast to expand from seven billion to nine billion by 2050, the major increase in food prices – of about 12 per cent since 2007 – has already occurred.

The National Farmers Federation, the industry's main lobby group, points out there has been little growth in investment in agricultural research and development (R&D) since the mid-1970s. This has hit productivity and the capacity of Australian farmers to compete on global markets.

McKinna says most major farm produce exporting nations have a higher rate of R&D in agriculture than Australia. Current Australian agriculture R&D spending stands at 2 per cent, with the federal government providing about $490 million.

Another key problem is aversion in the $1.5 trillion superannuation funds industry over investing in a long-term future for agriculture.

Colin Bell, Australia's leading ram stud producer and a major figure in wool, lamb, wheat, barley, oats and rice production, points out the current reluctance contrasts with the situation decades ago when big insurance companies like AMP and CML were heavily invested in Australian beef production.

"Australian institutions supported Australian agriculture and invested in agriculture as an asset class," he says. Now institutional investment in Australian agriculture is coming from the US, Canada, Middle East, Asia and Sweden "but there's none of the [Australian] life companies".

One of the foreign fund investors in Australian land is the Swedish Forsta AP-fonden pension fund, which spent $100 million buying 15 agricultural properties in Australia. Recently, the Australian PrimeAg company sold $125 million worth of its properties to US fund manager TIAA-CREF.

Local farming "is a fantastic place to invest but the super funds don't know how to do it," Bell says.

"You can't take its temperature every day but in the long run it's a fantastic investment."

He has made up to an 18 per cent annual return on agricultural investments but only 3-4 per cent of this is based on net profit, while about 14 per cent comes from the increasing capital value of the asset.

According to the Farm Institute's Mick Keogh, figures for returns from agriculture are skewed by the fact that 40 per cent of broad acre farms earn $100,000 or less and 90 per cent of the income of the owners of those farms is earned off farm. They are Pitt Street or Toorak farmers.

"Some day some super fund manager or investor will work out how to channel money into land but at the moment they use the asset consultants or wealth consultants who kibosh the deals," Keogh says.

The result is that Australian super funds "are all about wealth aggregation and comparative returns" while "overseas super funds look on [agriculture] as a capital gain," McKinna says.

Rob Barry – co-founder of fixed interest investor Dominguez Barry, a former chairman of Snowy Hydro Limited, one-time deputy chairman of AWB and a former director of Queensland Cotton and Sugar Australia – says that for superannuation funds "one of the issues" is that consulting actuaries measure the performance of investment managers "over a relatively short period of time", so "no one [is] prepared to take long term investments".

According to Shears, "there's no obvious structure for the long term that would attract large amounts of money," like from superannuation funds, into Australian agriculture.

The current institutional structure is "too short term" and there is no existing corporate entity specialising in agriculture which enables investors to put in $50-$100 million each into a major corporate structure "that encompasses the security, the integrity and the delivery of returns".

However, Shears, who spends more than half the year in Rwanda, says it is possible to establish a major Australian agricultural investment house. This would not be a comprehensive agriculture company like an Elders of old, or a Dalgetys or Goldsbrough Mort. It would be an investment vehicle for Australian institutions and major players in primary production.

The new entity would, in turn, focus on investment.

It would be big enough, diverse enough and well enough run to provide a buffer against the vicissitudes of weather and commodity price variations, Shears says.

"There are a number of areas of Australian agriculture that could be brought together," Shears says. "They would be financed by participants such as the people actually running the enterprises, and they would be brought together in a major Australian organisation. There's a lot of people in substantial positions who would readily participate."

A well-funded structure like, say, a private equity group, where the owners "would have the ability to convert into a public company," could own "significant" shares in agricultural enterprises like a major dairy group or a major beef producer.

These would provide a geographic hedge against negative weather events like drought and flood, and, equally, through their diverse interests, a hedge against specific commodity price fluctuations.

Such a group could generate a long-term investment return of "10 per cent plus".

Another problem in securing a long term approach has been the rapid drop-off in ter-

According to **Professor Jim Pratley**, head of the academic deans supervising agriculture faculties at Australian universities, student numbers have been in decline since the '90s, falling about 40 per cent.

This drop-off coincided with the onset of one of the worst droughts in history.

However, there are also "some other problems with universities' funding" of agriculture studies, according to Keogh. Once places of learning where the "long view" was a mark of academic distinction, universities are now dominated by management models where a long-term approach – fundamental to agricultural research – loses out.

Under the current university management model, faculties like law, which have high student numbers and can charge high fees (particularly for foreign students) win out while faculties with low student numbers, and high infrastructure and research costs, like agriculture, lose out.

The perverse result is that at a time when Australia faces a national strategic economic imperative to improve its skill base in sophisticated, value-added areas, agricultural production and university agriculture faculties (the traditional seed beds for farm food professionals) are under siege.

The University of Sydney's agriculture faculty dates back more than a century and has a distinguished record in, for example, developing rust-resistant wheat. However, there is pressure to drop its prestigious bachelor's degree in agricultural economics. This would reduce it to a subject stream in a general economics degree.

This tertiary tightening in agriculture seems doubly dated because enrolments in Australian university agriculture courses rose 20 per cent this year.

"I don't know if it's the start of a trend or just a blip," says Professor Pratley, who is also Professor of Agronomy at Charles Sturt University in Wagga Wagga, NSW. Student numbers are increasing "because they have the message that there are good jobs".