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# Official Committee Hansard

## SENATE

SELECT COMMITTEE ON AGRICULTURAL AND RELATED  
INDUSTRIES

**Reference: Food production in Australia**

WEDNESDAY, 4 MARCH 2009

BRISBANE

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**SENATE SELECT COMMITTEE ON  
AGRICULTURAL AND RELATED INDUSTRIES**

**Wednesday, 4 March 2009**

**Members:** Senator Heffernan (*Chair*), Senator O'Brien (*Deputy Chair*), Senators Fisher, Milne, Nash and Sterle

**Participating members:** Senators Abetz, Adams, Barnett, Bernardi, Bilyk, Birmingham, Mark Bishop, Boswell, Boyce, Brandis, Carol Brown, Bushby, Cameron, Cash, Colbeck, Jacinta Collins, Coonan, Cormann, Crossin, Eggleston, Farrell, Feeney, Fielding, Fierravanti-Wells, Fifield, Forshaw, Furner, Humphries, Hurley, Hutchins, Johnston, Joyce, Kroger, Lundy, Ian Macdonald, McEwen, McGauran, McLucas, Marshall, Mason, Minchin, Moore, Parry, Payne, Polley, Pratt, Ronaldson, Ryan, Scullion, Siewert, Stephens, Troeth, Trood, Williams, Wortley and Xenophon

**Senators in attendance:** Senators Heffernan, Nash, O'Brien, Trood and Williams

**Terms of reference for the inquiry:**

To inquire into and report on:

Food production in Australia and the question of how to produce food that is:

- a. affordable to consumers;
- b. viable for production by farmers; and
- c. of sustainable impact on the environment

**WITNESSES**

<b>BURKE, Mr Charles, Vice President/Treasurer, AgForce Queensland Industrial Union of Employees .....</b>	<b>31</b>
<b>JENSEN, Dr Nicole, Executive Officer, Grains Research Foundation Ltd .....</b>	<b>2</b>
<b>KRIEG, Mr Lindsay Robin, Grains Policy Director, AgForce Queensland.....</b>	<b>31</b>
<b>LEMON, Mr Robert Alan, Private capacity .....</b>	<b>49</b>
<b>PANTZ, Mr Mark James, Manager, Policy and Advocacy, Growcom .....</b>	<b>19</b>
<b>PEARSE, Mr Oscar Alan, Policy Director, Cattle, AgForce Cattle Board, AgForce Queensland.....</b>	<b>31</b>
<b>SCANLAN, Mr Damien, Chairman, Grains Research Foundation Ltd.....</b>	<b>2</b>
<b>van LIESHOUT, Mrs Joan Doris, Mayor, Tweed Shire Council .....</b>	<b>12</b>
<b>WAGNER, Mr Drew, Senior Policy Adviser, AgForce Queensland .....</b>	<b>31</b>



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**Committee met at 9.11 am**

**CHAIR (Senator Heffernan)**—I declare open this public hearing—by the way, it is the first one—of the Senate Select Committee on Agricultural and Related Industries. The committee is hearing evidence on the committee's inquiry into food production in Australia, and I welcome you all here today.

This is a public hearing and a *Hansard* transcript of the proceedings is being made. Before the committee starts taking evidence, I remind all witnesses that in giving evidence to the committee they are protected by parliamentary privilege. It is unlawful for anyone to threaten or disadvantage a witness on account of evidence given to a committee, and such action may be treated by the Senate as a contempt. It is also a contempt to give false or misleading evidence to a committee.

The committee prefers all evidence to be given in public but, under the Senate's resolutions, witnesses have the right to request to be heard in private session. It is important that witnesses give the committee notice if they intend to ask to give evidence in camera. If a witness objects to answering a question, the witness should state the ground upon which the objection is taken, and the committee will determine whether it will insist on an answer, having regard to the ground which is claimed. If the committee determines to insist on an answer, a witness may request that the answer be given in camera. Such a request may, of course, also be made at any other time.

[9.12 am]

**JENSEN, Dr Nicole, Executive Officer, Grains Research Foundation Ltd**

**SCANLAN, Mr Damien, Chairman, Grains Research Foundation Ltd**

**CHAIR**—A warm welcome. Mr Scanlan, if you would like to make an opening statement we would be delighted to hear it. Then we will ask you a few questions.

**Mr Scanlan**—With respect to an opening statement, we might make the point that whilst we do not have a submission to the inquiry we will be more than happy to furnish one, if that is suitable.

Firstly, I am a farmer from the Goondiwindi region on the Queensland-New South Wales border. I understand all things about state based border issues and am probably a federalist at heart, to a degree. I chair an organisation that is made up of progressive farmers that have a burning interest in research priorities—that is, what work gets done, how it gets done and whether it is enough. From that point of view, we set about recruiting younger farmers that have opinions on grains research. We cultivate, develop, train and give those growers an understanding of the research priority setting and the background that occurs for those determinations. We then try to provide pathways for that group of younger farmers—'younger' is a bit of a floating number but it is variously 35 to 55; it just depends on how old I am at the time—who are very much at the point of their decision making. We try to sponsor and champion them into positions in the industry that have capacity to get an outcome that is positive for growers in the grain industry with respect to research. So that is the background.

The point we want to make today is that food production with affordability and viability for producers, and how it fits into the environment, very much revolves around the level of research and development we do in Australia in the grains industry. In the industry from about the fifties through to the sixties we saw a significant amount of investment from governments—mostly state governments, and federal to a degree—where we had a real push, and that coincided roughly with the green revolution around the world. I guess we decided some years ago we were not going to be able to feed the world's nations—back in the 1970s—so the green revolution really came upon the whole world and Australia did its part. We took investment levels through the seventies and eighties up to probably something approaching five per cent of GDP. It was probably the zenith of agricultural and grains research. We saw enormous numbers of student intakes in various universities all around Australia. At the time, I fronted at university in a fairly haphazard manner, I have got to tell you, but it was difficult to get in—you had to get across the bar. There were 70 people in my intake alone. Today, it is five.

What we are saying is that in the seventies and eighties there was a significant input in research dollars—it was as high as five per cent of GDP—and since then we have just been cruising downhill. It came to the nineties and into the two-thousands, and the investment levels are heading back towards three per cent of GDP. All the good work that we did through the seventies and the eighties where farmers started to become zero till, carbon farmers, where we did away with disc ploughs and we moved into zero tillage, where we retained stubble and built

carbon levels up—all that sort of thing happened. We have been cruising downhill, just peddling, and now we have got to the situation where state governments are withdrawing from funding because they do not see it as their core business. We are being confronted by probably singly the biggest challenge, if you like, since the green revolution, and that is the carbon revolution, and where farmers are fitting into the carbon revolution?

It is both a threat and an opportunity. It is an opportunity for us because we understand, through the last 20 years of accumulating carbon in the soil through the practices we have moved to, that it can be done—and can be done easily. What we need to do is quantify the science. We need to have people understand that agriculture offers some significant benefits to climate change. It is something that is probably going unheralded at the moment. So we are saying that, yes, if you are going to do this you are going to need a new structure. The structure we have had in place is 30 to 40 years of age. If we were going to set up grains R&D again today, we would not do it the way we are currently doing it. It requires a quantum shift. While states are today in some way working together to rationalise, it is really a rationalisation; it is not a growth. What they are doing at the moment is just designed to crank a bit more efficiency out of a few less dollars. So what we are suggesting is that there is a capacity for growers to hit the till, as well as government, to have a much more increased effort. We currently give one per cent of our farm gate produce. There is a strong argument that says: over the next 10 years we ought to be going to two per cent, and taking government with us in terms of some sort of matching dollar amount. That is more than my five minutes, Bill. I am sorry to indulge you with that rant.

**CHAIR**—Would you like to introduce your colleague, or would your colleague like to introduce herself?

**Mr Scanlan**—She is extremely capable, Bill.

**Dr Jensen**—I am the Executive Officer with the Grains Research Foundation.

**CHAIR**—I think this inquiry is very timely and I also think it is very timely that people like you have made yourselves available. We are very grateful. It would be fair to say, in terms of understanding the science of farming and moving with technology, the GM debate et cetera and the emotion behind some of those debates, that educating the community to the facts rather than besotting them with the emotion is pretty important. So one of the great challenges that we see and this committee sees is: how do we continue to produce food that people think they can afford to eat and, at the same, have it from a sustainable environment and a farmer who is paid to get out of bed in the morning and do it?

I would be grateful if you wanted to put some notes on paper as a submission for us. One of the questions that has intrigued me in recent times—and I do not think anyone in politics has got the answer—is whether agriculture should be in or out of the carbon market. As you have pointed out, the science is very incomplete on what contribution agriculture makes now. Our farmers are being told, ‘In 2013, or sometime in the future, we will tell you whether you are fully or you are partially included or you are excluded.’ That makes it very difficult if you are trying to go to the bank with a financial plan, and you say to the bank, ‘Mate, I don’t really know, but we’ll know in 2013.’ Have you got a view on the carbon market effect on farming? Obviously, at \$40 a tonne, 35 per cent—I think—of the productive cost of cattle is the tax.

**Mr Scanlan**—Yes, we do. I guess we are in the business whether we like it or not because the costs that are going to come to the farming industry are going to come irrespective of whether we are in the scheme or not. In terms of agriculture, the grains industry—and I will only speak for the grains industry—is sitting in the box seat. We are seriously in the box seat; we are extremely low emitters. But what is going to happen is that we are going to pick up the cost of carbon, irrespective. The cost is going to come through energy, through the chemicals, through the fertilisers. So it is going to come through a lot of the inputs that come to us—we are a reasonably high input business. It is going to come all the way down the line. The problem we are going to have is that we are not going to be in a position to offset. I said earlier that we started carbon farming back in the eighties. Before that, we were discing the soil and it was running off. Contour banks were all the rage—and they were all the rage because we had disc ploughs.

**CHAIR**—And I have got a crook neck as a result, and so has Wacka!

**Mr Scanlan**—We have changed from that, and now we have an extensive zero till or reduced till system and carbon levels are building up. I guess one of the problems with all of that is that this start date does not recognise any of the effort of the grains industry. We did it for reasons other than the environment—well, we did it for our own environment, and whilst we were helping our own environment we, unwittingly, were helping everyone else as well. What I am saying is that the grains industry needs to be in it, that I appreciate that the grains industry is part of agriculture and that one cannot go without the other and all of that nonsense. But the fact of the matter is that we need to very clearly be able to enunciate how we benefit the community in the grains industry and what we might do if carbon is \$35, \$40, \$50 or whatever amount. We are essentially carbon farmers and if we are making more out of carbon we will adapt our practice to reflect the amount of carbon in the soil. Canada is expecting to sequester 75 per cent of their carbon through soil carbon. There are a lot of countries around the world that are expecting to sequester their carbon through soil. There is no reason why we cannot do it in Australia.

**Senator WILLIAMS**—One problem we have is that the Kyoto agreement does not recognise carbon in the soil. What is your comment on that?

**Mr Scanlan**—Well, that's just a problem, isn't it?

**Senator WILLIAMS**—I was pleased to see yesterday the Prime Minister come out with a \$1.3 million grant to research carbon in the soil. Because this is the issue: if we were to raise our carbon levels over the 450 million hectares of agricultural land in Australia by three per cent, that would equate to 100 per cent neutralising our carbon emissions for the next 125 years. So at last this drum that we have been thumping about carbon in the soil is starting to get some attention by those around. Would you agree with that?

**Mr Scanlan**—I would agree. The point of it is that Obama is not going to agree to it either, is he? The Kyoto protocol was put together as a first effort, a large compromise some years ago before people really understood where the issues were. To me, Kyoto is not going to be Kyoto forever; it is going to be mark one, two, three, four and five. So for us this argument of not doing anything because Kyoto does not say you can do it is just ridiculous. We have got science there. The Americans are going to do it; the Canadians are going to do it; and I believe the Brazilians

are probably going to do it—none of them are going to move—and at the end of the day if the science is there it cannot really be denied.

**Senator WILLIAMS**—You would be well aware as a farmer that if you talk to any soil nutritionist and carbon is referred to as ‘the cycle of life’ but of course now we are getting a carbon pollution reduction scheme. How do we grow and live without carbon, and yet there is this image publicly put out there that carbon is just a terrible pollutant. What is your opinion of that?

**Mr Scanlan**—Carbon if you are releasing it, but we are in the business of tying it up. We are seriously out there tying it up wholesale every day of the week through our practices. And the benefit—it is a no-brainer really. If a farmer is not building his carbon, it has a straight line relationship with his long-term profitability: no carbon, no profitability.

**CHAIR**—If I could go back to your initial statement in which you say ‘we are falling off the pace in research’ and delve down into that a bit. You will be pleased to know that on Thursday in Sydney, and I think this would be a good point of contact for your organisation, Dr Barry McGlasson of the Centre for Plant and Food Science at the University of Western Sydney is going to give evidence which sounds like he agrees with the problem that we have—the long-term decline in R&D in agriculture.

**Mr Scanlan**—Do you want me to talk about—

**Senator NASH**—Before you launch into that, can I just ask this: why do you think there has been the decline? Obviously you do not have to be Blind Freddy to realise that if we have not got the research we cannot go forward and if you have not got the funding invested in research and development it is very difficult to go forward sustainably. Why do you think it has fallen off? If you can start there and then go into your answer to the chair.

**Mr Scanlan**—I think it is just competition for scarce resources. Agriculture in the 1950s and 1960s was a big part of Australia, right through to the 1970s when the mining boom came into town. In the 1980s and 1990s we thought we were going to be a clever nation and everyone was going to do IT. We just got unfashionable.

**CHAIR**—Food was just going to be there.

**Senator O’BRIEN**—All of this begs one question and that is: what has the Grains Research and Development Corporation been doing, given that they have had the money that has been generated by the grains industry and government money all of this time? What you are saying is that they have failed to adequately predict the future needs of grains research. That is essentially what I take your evidence to mean.

**Mr Scanlan**—Not quite, but you are on the track. We started with one per cent of farm gate in the 1970s and we have not moved that in nearly 30 years now. Anybody that is contributing to their superannuation at the rate today that they were 30 years ago is seriously in trouble. We have not lifted that from one per cent and we need to. So we have not kept investing in the business. We got it up, we got it running and the wheels were really moving. Then we took our

eye off the ball basically and just sort of said, 'Well, one per cent was good enough last year,' and we did that for 30 years basically saying it is good enough.

To answer your question without getting a few people at GRDC too hot under the collar: one of the problems is that the GRDC answers to the minister and to the government of the day. If the government of the day took a view that climate change was not top of the loop, then that is probably what GRDC did. There were others of us that could see that climate change, whether or not we agreed, was going to happen regardless. That is the opinion, and I think the considered opinion today is that basically it is on. I think the problem is if it is not an issue—I mean, in the old days we looked at soils from a productivity point of view; we did not look at them for their ability to do things for the environment. The game has changed. They were not on top of it at the time because it probably was not a government priority. I have a strong argument that says—irrespective of the flak I will get—going forward growers need to step up and probably push up to two per cent of investment. We need a corporatised model and we need to have government involved in that corporatised model. I can hear everyone talking about AWI right now and saying, 'You don't want any of that,' but the guts of it is that we need a model that have some circuit breakers in there that allow growers to invest more in the industry and to have some ownership and direction of the industry as well. We recognise there is a place for government in there but at the rate that they put in at. So if the rate is 30 per cent or 40 per cent, that is their rate of say; if we are putting 70 per cent in, that is our rate of say. There are growers out there that would really like to invest more in the industry and have no vehicle to invest.

**Senator NASH**—Does that then fit in line with your earlier comments that there needed to be a quantum shift in grain research and development and if we were going to do it now we would not set it up in the way it had been set up?

**Mr Scanlan**—Very much. I generally am cautious about offending respective ministers but the fact is in many respects production is not a state priority. My take on it is: let us not try to fool each other. You want to be in the business or you do not want to be in the business. If you are not going to be in the business, leave it in such a way as that work can continue on in the hands of people that want to take the work forward. Do not just run it down bit by bit, sell pieces off here and there and gradually reduce morale throughout your research industry so that they basically find a better offer somewhere else. That is a really lousy way of withdrawing funding from a sector. They are better to stand up and say, 'These are no longer our priorities.' If that is the case and you cannot do anything about it, then we need to come up with a plan that says, 'How do we keep that productivity going in the industry and how do farmers position themselves to be major creditors in the carbon business?'

**Senator NASH**—That is one of the important points, isn't it? Here I declare my interest as a farmer. Whether you believe in global warming or not, farmers have been managing risk for a changing climate for a long period of time. It just seems to me that if you do not have the appropriate research and development and you do not have the appropriate funding for that, then it becomes very difficult for farmers to do that when it is arguably now probably more important than ever. Do you have a comment on that?

**Mr Scanlan**—I think we are running a maintenance budget at the moment. It is basically a maintenance arrangement. We are essentially just putting in what we put in last year. If there is a bit of a tough time we tighten the belt, and that is just going to nowhere. What we need to do is

re-assess and say: is the \$500 million to \$600 million spend enough or should it be \$1.2 billion to \$1.3 billion? The other side is that, depending on who you talk to, we have this world shortage of food, an increased population and all the rest of it. It seems a somewhat ridiculous idea to me to continue to drop product into developing nations at reduced values and therefore take away the incentive for their local farmers to be good farmers. I see it in lots of places around Africa. It used to happen in South America where the Europeans and Americans were going hammer and tongs at their subsidies and they would just drop corn, maize, into countries and it just ran the local farmers pretty well out of business.

In Somalia all you had to be able to do was just take it off the wharf, and the local farmers did not count because the local warlords can get it straight off the wharf. We just send it over there; and it is ridiculous. We should be training people here in this country. We have had a proud history of sending Australians all around the world running research institutions in Mexico and in India. Some of the leading researchers in the world have been Australians. They came through that period of the 1970s and 1980s. We need to be the country that provides the education in terms of how agriculture deals with climate for Asia and for a lot of the developing countries.

**Senator NASH**—You made a comment earlier when talking about carbon in the soil when you said that we would adapt practice to reflect the amount of carbon in the soil. Can you expand a bit on what you mean by that?

**Mr Scanlan**—In a former life I was an agronomist before I made my way bit by bit into the farming business so I have a little more understanding than most. But essentially what it means is in those good old days when we were knocking trees down hell for leather, which we were back in the 1960s and 1970s because that was the go—

**CHAIR**—I thought you were going to say when you were in ag college in the good old days.

**Mr Scanlan**—We did things a bit differently there. We had shade lines where as agronomists we would go along and routinely measure carbon around three to three and a half per cent in our shade lines. After people had say 10, 15 or 20 years—and I am speaking of the north because we were a bit younger in our farming—they were routinely down around one and a half per cent and we used to go into the shade lines and sample carbon there just to see what was happening. I only hit agriculture about the 1980s in any real, responsible fashion. That is when we started deciding that we were getting run-off, a loss of soil structure and shire roads were getting washed out—it was a multiple issue.

So then we went to this idea of retaining stubble. We had to invent new equipment to deal with the stubble. We had to modify headers to leave the bit that comes out the back in a shape that you can get through. So we had to change our system gradually bit by bit. I cannot speak for everyone but certainly in the north Australian farmers are very progressive, they are very keen, and they follow the dialogue pretty closely. They can see if they are conserving moisture. We used to go around doing the soil core tests checking moisture and neutron probes—we did the whole shooting match. Through the 1980s it just caught on like wildfire. So our carbon levels then from around one to one and a half started moving through—well, we are back in the twos but the important thing is that we are going up and that has been right through the 1990s, and the 1990s was pretty seriously dry. I have to tell you the 2000s have not been a lot better, but it is improving regardless. There has been a big story out there that says, ‘All right, if you are going

to get a price for your carbon going up, you have to wear it on the way down,' but I do not think our system is going to go down.

**CHAIR**—Changing now to zero tillage—I have to declare an interest in that I am trying to buy a zero tillage sower, which costs some \$¼ million, from John Deere and there are none in Australia available. They are not here. They have sold what they had. Senator Trood, would you like to have a crack?

**Senator TROOD**—Mr Scanlan, you said in your earlier statement 'We'd been going down hill,' and I was wondering whether or not when you said 'we', you were talking about the national collective effort in relation to research or whether you were talking specifically about the work that the foundation had been doing?

**Mr Scanlan**—I guess I was talking about the collective national effort. The foundation has been trying to bring to people's attention the importance of the R&D in the grains industry. National spend is reducing.

**Senator TROOD**—Can you explain to me a little more clearly where your sources of funding comes from for the work that you do. Do you seek outside funding? How active are you, for example, in seeking partnerships with other organisations around the country and perhaps overseas?

**Mr Scanlan**—Well, we are the original shoestring outfit. Nicole is our executive officer. We had an investment of \$1.2 million. We live off investment and we pitch for external grants here and there. We basically try to live within the means that we have. The foundation resided within the state government of Queensland up until 18 months ago and I, I guess, led an effort to corporatise that out of state government to give it a capacity for a farmer voice and farmer membership. Prior to that we operated under state legislation. So we have only really been out in the field 18 months and we are looking to develop a number of partnerships—you talk about global partnerships. We have a strong interest in trying to grab some American partnerships because some of these guys are particularly interested, and the Canadians are interested in the soil side of things. But it is early days. We have a young, vibrant—and I was going to say radical board but they are not quite that radical. We have a great mix of a young, progressive board of guys that are less than 45 years of age.

**Senator TROOD**—Are you limited in any way in access to Commonwealth funding? Are there restrictions on access you might have to research funds that might be available through various Commonwealth schemes etc?

**Mr Scanlan**—The short answer is we do not know—

**Senator TROOD**—So you have not explored that?

**Mr Scanlan**—We are just about to explore it. We had a significant project with GRDC that we were not able to procure again this year, which has put us under a little bit of strain. We have not, but it is on our agenda to do it. I do not know that we have been savvy enough in the past to understand where the resources are. I will be candid with you: it is a full-time job sometimes knowing where these bits and pieces are. We actually feel that we are probably better aligned

with the corporate world more because of the process we would like to operate under but that does not exclude—if you know of something, Senator, I would be more than happy to take it on board.

**Senator TROOD**—There are, of course, ARC fundings and various things. One of the things I am interested in is that organisations such as yours have the best possible access to sources of funding apart from the most direct funding that you have. If there are limitations, for example, on your access that are imposed by bureaucratic strictures then it seems to me that we ought to get rid of them so that you can compete freely in the market for funding and have an opportunity to build those partnerships. My experience in research, which is in a completely different field, is that the research that works is when you build cooperative relationships across organisations with universities, with corporations and with practitioners overseas. It seems to me that is a potentially important source—

**CHAIR**—I think you are being made an offer.

**Mr Scanlan**—I think I will follow it up.

**Senator TROOD**—Clearly you are just getting into the field, but it seems to me it is an important way of looking to the future to try to address some of these problems you are talking about.

**Mr Scanlan**—Look it is but, just on that point, it is very difficult for growers to engage at any significant level with governments or with RDCs and lots of other people. It is not an easy pathway. In the past I have taken the view that perhaps it is so difficult that you just do not do it. You go to somebody you can go first line to, and either they buy your idea or they do not.

**Senator TROOD**—I do not suggest that it is not difficult at all. What range of research are you doing? Is it mainly focused on technical improvements, or do you do any policy research as well?

**Mr Scanlan**—Ours would be pretty well now exclusively policy. In the past we have provided a level of funding for equipment, researchers and whatever else. With the scarce resources we have got now we have decided that there is a real absence of genuine policy in the grains industry in terms of R&D, and that in the future we would like to provide a high level of conversation about the direction in which we need to go. If you look at rural press there is very little journalism today and very little commentary, full stop. There is very little contribution coming out of the grains industry. I will not go into why or how, but that is fact. We see ourselves looking more at policy.

**CHAIR**—We have not published it yet, but the submission from the University of Western Sydney fits perfectly into the pocket that you are talking about. Later today we will publish it and then you can have it.

**Senator O'BRIEN**—It will be on the website when you get home.

**Senator WILLIAMS**—Is it true that carbon in the soil is difficult to measure and that it may vary a lot according to temperature and whether the soil is wet or dry at the time? And if that is

the case, is R&D being carried out to get a more accurate measurement of soil carbon? Is it difficult to measure?

**Mr Scanlan**—The degree of difficulty to measure things is about what degree of accuracy you require. It is probably difficult to measure under the current systems we have been using because we have never ever had to bloody measure it—we have never measured it in the context of environment before. If you have never had a system that you have had to call a tune to, why would you have a measurement? But will you have a measurement in five to 10 years? Of course you will have a measurement, because it is a high priority, and what gets measured gets done. So, 10 years ago—why measure it? We measure it from a very basic point of view and we understand it, but measured to the degree that some of the scientists talk about now, no we do not. Will we in 10 years? Yes, we will—it is just a process.

**Senator WILLIAMS**—Yes.

**Mr Scanlan**—To say some sort of rubbish that you cannot do it just simply states where you have been for the last 50 years, not where you are going to.

**Senator NASH**—You referred before to minimum tillage and zero tillage, and the chair often refers to the proposed reduction in run-off that is likely to happen. Are you aware of any work that is being done on making any kind of correlation with the change to those more minimum till/zero till practices and their relation to reduced run off?

**Mr Scanlan**—Studies—no. I cannot tell you of any studies, but then I am probably not the person who knows. Anecdotally, it is just phenomenal. I think back to somewhere in the nineties when we just had an avalanche of rain through that area. In the old days the cost was just phenomenal to roads—it just wiped out crossings, roads and you name it. I think we had some phenomenal amount of rain—five, six, seven inches of rain. That whole area was under zero till and it just hardly moved a fraction. The ABC ran something on it at the time and it saved the shire—literally millions and millions of dollars—because everything stayed where it should have.

**Senator NASH**—It may be something worthwhile for the committee to follow up, to see if any work has been done on that. In terms of the bigger water system and the impact that gets talked about, about reduced run-off, it would be interesting to see how much would actually be attributable to the change of farming practices.

**CHAIR**—I have to confess that it is not my wisdom that wants the zero tillages. It is that young, keen mob that you talk about—the bloke who works for me; he is on the money—and a neighbour that is the only one in the district. The moisture profile is just so much different when you put the probe in on a light year and it retains the moisture. The soils are friable and all the rest of it.

**Senator O'BRIEN**—I do not need to ask any questions. I am looking forward to the submission, and I am glad that we continue to find people in the farming community who are looking towards a positive future with the challenges that we face.

**CHAIR**—On a lighter note, how are things at Coolmunda?

**Mr Scanlan**—Coolmunda got about seven inches of rain the other day—you could call it a pond.

**CHAIR**—On an even lighter note, in the context of the Queensland election, do you think anyone will have enough guts to deal with the Lower Balonne water plan?

**Senator NASH**—That's light!

**Mr Scanlan**—That is not an area that I have expertise in.

**CHAIR**—I want to sincerely thank both of you for being here and for your enthusiasm. It is obviously the way of the future and we are keen to help. This is what this inquiry is all about; it is not only about the food task but also about giving the next generation farmers reason to get out of bed and to be paid to get out of bed.

[9.51 am]

**van LIESHOUT, Mrs Joan Doris, Mayor, Tweed Shire Council**

**CHAIR**—Congratulations Joan, on being recently elected the mayor of the Tweed. I remind all witnesses that in giving evidence to the committee, they are protected by parliamentary privilege. It is unlawful for anyone to threaten or disadvantage a witness on account of evidence given. Such action may be treated by the Senate as contempt. It is also a contempt to give false or misleading evidence. We prefer that all evidence is given in public. We can receive it in camera. If you object to answering a question, give the grounds on which the objection is taken and we will give consideration to that. You can of course give evidence to those answers in camera. We would be delighted to hear your opening statement and then we will ask you a few questions.

**Mrs van Lieshout**—Being the newly elected mayor of the Tweed shire, we have many challenges. In the five months that I have been there I have created a vision that, I believe, is a little bit different to what I thought in the beginning, because I did not know the shire very well. On the climatic changes that we are supposedly going through, I believe there is a natural change taking place. With the economic change, we have many challenges on how we are going to move forward. I personally believe we are going to see some very hard times. In view of that and in view of my own community, the people that I represent, we have a responsibility in council to consider which way we are going to move forward. As you are probably aware, the controversy in the Tweed shire is that we have been very much a shire that is fresh with development. We have had a lot of issues regarding development and we have a lot of people knocking at the door. We have a huge number of developers that want to develop but have been squeezed for different reasons, and so we have many challenges in that direction.

However, on viewing what we would let through, so to speak, I believe that the shire is a breath of fresh air for Australia. I personally believe that we can set the pace in the future for the nation on green initiatives in which development also encompasses food production. That food production can be not just for the Tweed shire but also for the whole of the Richmond valley area because the region has high rainfall and very fertile soil, which already allows many of the small farmers to grow organic produce, particularly in the Byron and Lismore areas, that is being used on a national basis.

So from the perspective of how do we grow economically and encourage development in the right way, I see an enormous opportunity for Tweed shire in particular to embark on a food production vision that encompasses development and also encourages industry that allows us not only to supply the region but also South-East Queensland initially as well as the nation and, I believe, in the long term provide export opportunities for international companies. On that basis, we have areas all the way inland from the beautiful coastline which are extremely natural. I remind you that the Tweed shire, having had no development as such, is very natural.

We are embarking now on how we would like to see the shire and are seriously looking at village type development that allows you to live, work and play in one area. We have transport issues because the shire is so diverse, wide and long. We would rather see development that

creates a village type atmosphere down the coast about every five kilometres and in the country areas about every 15 kilometres. We will see villages develop that have all their own facilities. Every development now has to have its own rainwater tank. For green initiatives, we have got a very vibrant green girl on board, Katie Milne, who is keeping us constantly on our feet. Being a conservative and pro economic development, I have probably come in with a lot of green issues and green ticks because I can see the enormous potential for the shire in that way.

From that perspective, if we look at the shire as a whole, the Cudgen area which is right along the coast, has very rich organic soil and beautiful red dirt. If you ever fly in over the coastline into the Gold Coast and look to the left, it is quite unique and you see this beautiful red soil and very green areas with our development staying only on the coast. We do not want to be like the Gold Coast, we want our development to be no higher than three storeys along the coast so that we allow the natural feel of the Tweed to come through.

The Cudgen area is already zoned for 100-acre lot, state significant agricultural land. We are already being pushed, in our the next council meeting, for a development to come through to put a huge supermarket and residential area right on the corner of one of those areas in Cudgen. We have another development that has been in and out of court for 15 years that has been surviving by the great tenacity of the developer and the owners. The Segal family who have pushed for an area in Chinderah to become a district centre have been pushed back because of other developers that want their way.

I personally believe that we should take hold of that Chinderah area and put a development in that area where we can put all our services along the highway as well. But to allow the Cudgen area and the inner area all the way through to Murwillumbah and South Clothiers Creek to become small growers, small farms and small lots, we would need planning initiatives to scale down our lot sizes to perhaps five acres. That would in turn encourage, across the board, small growers to grow small crops with vegetables, organic fruits or anything that we are producing now on a small scale with the farmer having a stall at his gate. I have approached the Southern Cross University to do a study and a workshop on the possibility of certifying our growers. Already the whole Tweed shire including the Richmond valley with Byron and Lismore is growing food.

The Richmond valley is huge and there are opportunities to grow not just small crops inland. We have a very large property at Kunghur where we could grow small crops and cattle. We have a piggery in the shire. We have huge sugar farming that is being used for fuel as well. Some of those areas, because they are low-lying coastal lands, can be used for rice. So the opportunity for me is to see that the future of the shire could remain green but have these initiatives and, I believe, feed the nation eventually in that particular area.

**Senator O'BRIEN**—It would be useful if you could supply us with a map of your district, with some notes going to it. I am a Tasmanian senator and I have been through the district. But putting it together from your evidence today does not give me the picture that I think you would like to create, so it would be useful if you could that.

**Mrs van Lieshout**—Certainly.

**Senator O'BRIEN**—In my state there is a debate about the size of rural allotments. I think the minimum size for subdivision is 50 acres, on the basis of maintaining land for the production of food. I am struggling to come to terms with the idea that a five-acre allotment would end up being productive, in any serious economic sense, for the production of food. Could you explain why you think that might work?

**Mrs van Lieshout**—I guess I used that one scenario because it was quoted to me that five acres of strawberries requires employment, so I am looking at employment generating land. A five-acre block allows a small Chinese man to grow lettuce which can supply a huge area. It also means that it can encourage lots of different small growers that would encourage employment, rather than the large lot. Once we get to the larger lots, certainly of 100 acres, we are competing with growing grain and other types which are not viable in our shire. Apparently there was a study done many years ago by our Tweed Economic Development Corporation and they had a report that has been growing dusty because they say it is not viable.

I am taking the tack of small crop growers that can attract tourism, because we also believe that tourism is going to be our main economic growth for the shire and for the region as well. By doing small crops and encouraging people to come over the border and pick their own fruit and veg—with many opportunities of different types of crops—then we allow tourism also to come. We can develop food trails that go all the way through the region. We are the gateway to northern New South Wales from the Gold Coast. We want to bring our tourists over—we have a Gold Coast airport that is sitting there, and they are all turning left. We want to bring them right, to get to know that we have a point of difference. Our main economic growth is tourism, but I felt that at the same time we could become a food bowl that is also a part of tourism because we want food trails; we want people to experience our food. We have fantastic organic growers which are already certified organic in some areas.

**Senator NASH**—It might be useful if you could provide to the committee a list of the type of produce that you can see grown on those five acres and also the work that you have done on costs per acre to grow it and potential profit per acre. While we are talking about five acres, it may well be that the profit per acre is the same, so it would be interesting to have the comparative figures.

**CHAIR**—If it would assist you, we could get some of the boys from Griffith to show you how a very small five acres of hoochie is very profitable. Be on your guard, because *Underbelly* is giving people some new ideas about small-lot farming.

**Mrs van Lieshout**—I think it has been pretty prevalent in the Tweed shire! I used probably five, but I personally felt 25 would be great. I personally shop at the local markets; we have markets in every different area. I was asked the question: 'Where do you go to shop?' I go around to the different markets because we have such fantastic veg that I do not buy in supermarkets, and it lasts longer because it is fresh.

**Senator NASH**—I suppose it is just a question of sustainability—of whether or not, at whatever level, it is sustainable. You can all the wonderful views in the world, but if Joe Bloggs on his farm is not sustainable, then it does not matter how much vision you have of people coming through buying stuff. They have got to be sustainable on that land.

**CHAIR**—Have you given thought to what they have at Guyra—20 acres under glass, a huge factory for tomatoes.

**Mrs van Lieshout**—Absolutely. Because our water is so high, it is a beautiful place to live. The community do not want development that is wrong. They want the least amount of development. It is a challenge to do that carefully, but certainly we need employment generation, and we need growth in order to sustain that. Any opportunity to present the community with growth that also allows the shire to remain green is fantastic—and not just for our shire but, as I said, for the region, the Richmond valley. I agree; it has been a new initiative, I have felt that in the new year this was a vision I wanted to run with. I had the opportunity to ask a woman in Southern Cross University to give me some notes today for you which would have been more particular, but unfortunately I have not been able to contact her—or perhaps because she is a Labor lady she did not want to give those facts to me, being a Liberal candidate.

**Senator O'BRIEN**—I can suggest to you that you go and talk to some of the farming community on the Sunshine Coast hinterland whose concern is that they are being priced out of the ability to buy land to expand their operations because of the encroachment of population. The more you put in small lots, the more you create the opportunity for the lifestyle inhabitant rather than the productive inhabitant. That is the reason that in Tasmania the argument is going on about the size of subdividable rural blocks, because there is a feeling that you are losing productive land if you cut them up too small because they become lifestyle blocks rather than productive blocks.

**Mrs van Lieshout**—I agree with that. We have a very difficult shire in terms of allowing any type of development to come in—it is very much sown in with being very green. But, as I said, it does not have to be five. A hundred acres is stifling; it is too hard. We are getting a new breed of people in the shire that want to come in there for lifestyle, a lot of baby boomers that still want to work very hard and start businesses, and there is the opportunity to use that land for cattle or growing. We, on our own property, have a thousand acres of trees, but we also can have cattle under those trees because we need the weeds to go. So there is lots of opportunity right across the board.

**Senator TROOD**—Does the border of the shire touch the Byron shire, or is there something in between?

**Mrs van Lieshout**—Yes. We border just under Worongary, Pottsville—that is the Byron shire—then Lismore is our next, and as much as Kyogle. So we have got a little bit of everything.

**Senator TROOD**—It is great that you have got a vision for the shire. I think it is a really important foundation for moving forward. My question is: how much would this vision, if implemented, reflect a fundamental change in the way in which the shire has been doing business now?

**Mrs van Lieshout**—We have not had any real business. The beauty of the Tweed shire is that we have been backward because we have had a sacked council for four years—we have only just come back in—so we have been treading water, so to speak. The opportunity now is: how to we move forward? Everything is on the table. Developers are coming in. They understand that we

have green initiatives. We have set our planning initiatives; we have tick boxes. Anyone coming in the front door has to satisfy what we want. Any development has to be green—as green as we can be in practical terms. We want to be known as that type of shire. So on the opportunity to have development, we can attract industry—certainly we do not want polluting industry, but the type of industry where we can produce food, supply food and also perhaps freeze food for an overseas market. I worked in the frozen food industry, where the gentleman was supplying frozen vegetables which we imported from Belgium and New Zealand to all the supermarkets. I know that fellow is just operating in Currumbin. The opportunity for that to be set up is very easy and very profitable.

**Senator TROOD**—Is this widely articulated at the moment, your view of the shire? Is it laid down in development plans et cetera, or is this just at the moment—

**Mrs van Lieshout**—On the need for us to change the lot sizes, particularly in the Cudgen area, which is close to the coastal land, we are being pushed, as I said, in next week's council meeting for a development that will challenge every one of us as to whether we want to keep agricultural land or go for rezoning. I personally would like to see that stay, because of this vision. So we have the challenge now on the board as to whether we go with a different type of development or whether we stay with what we believe the community wants—in keeping a low-key but productive shire.

**Senator NASH**—Using this idea as perhaps an example for other shires on how to go about it, the question is: how do you judge what it is that the community wants? At the end of the day it comes back to the decision from a handful of councillors.

**Mrs van Lieshout**—Absolutely.

**Senator NASH**—So how do you be sure that your reading of the community is the correct one?

**Mrs van Lieshout**—Interestingly, we had a meeting last night on how we consult with the community. One corporate strategy that we are putting forward is looking at ways that we have been consulting, which have not been good. The community felt like we have not been listening. We have a generational community in Murwillumbah and the country in the back of Kunghur all the way down Kyogle Road—generations of many farmers who are very adamant that they need their hundred-acre lots to change so that they can have another house on their property, because the farmers are ageing and cannot stay. They do not particularly want to move and they need to be able to bring their children in, or someone else in, to work the land. So there is a need for change in planning, particularly for that area. The other need is—

**Senator NASH**—Can I just delve a little bit deeper on that. Do they really want to be able to divide up their hundred acres to get somebody else to live in a house or because of the ability to subdivide?

**Mrs van Lieshout**—Both.

**Senator NASH**—I was just thinking, knowing the area, that everything is pretty close. You could get people to live nearby.

**Mrs van Lieshout**—I do not think they want to subdivide; I think they just want to be able to cut off. There is opportunity because it is changing. The people coming in—the baby boomers and young people—want to run cattle and make a business out of their land and live there. Because of IT—we are looking at optic fibre going throughout all our new developments—there is a need for towers, Telstra towers, to be set up first in any new development so that we can work from home. So we have that ‘live, work and play’ environment for new development. For the country blocks, which are down Kyogle Road running south, they are elderly people now wanting to have another home and cannot build another house. They want to encompass that, but we do not want to go too far down in that area. The smaller lots we want toward the coast because of the flat Cudgen land. It is already producing small crops.

The community are themselves very vocal. Certainly right across the board we have a very loud message: do not carve up our land with development. It is very antidevelopment. Hastings Point has just been designated with a two-storey limit. We have had to put a stake in the ground to keep it as natural as it is, a little bit like Fraser Island, because we had to take that message very clearly from the community. So from the perspective of the community, we have people wanting business, we want job generation, but we want business in the right way. Across the board, I believe, the community is screaming to keep it the way it is. They do not want to lose the jewel in the crown.

**Senator WILLIAMS**—Thank you for coming along today and congratulations on having your council back. It is wonderful. Have you had any interest in your district in MIS or carbon sink managed investment schemes? Are you familiar with what they are?

**Mrs van Lieshout**—I am not very well acquainted, but we have not had—

**Senator WILLIAMS**—Basically it is to allow usually the big end of town to come in and purchase land and to plant it down to trees for carbon credits or whatever. I was interested in the trees on your place as well as the grazing. I know in Northern Queensland a substantial amount of country has been purchased and planted down to trees—mainly sugar cane country. Have you had much of that in your area?

**Mrs van Lieshout**—No, mainly because, as I said, we are very much a green initiatives shire. Even to clear land to plant trees is against the rules. So it has been sort of a no-no. I would say there are probably 65 per cent against and 35 per cent for.

**Senator O’BRIEN**—How much an acre is the land there?

**Mrs van Lieshout**—You have got me there. I am not sure.

**Senator O’BRIEN**—I would suggest it is fairly expensive land.

**Mrs van Lieshout**—It is expensive land. That is why we are attracting those that want to come in and live there, as well as have cattle and grow trees. But, at the same time, we have a future that has to be sustainable. I personally believe that a lot of changes are going to have to be made. I often say to my husband that we may have to have our kids living on our property as well, if times get really bad—and I think they will. I am looking at the responsibility of being in

this position in the shire, with our budgeting, and looking very carefully at what we want to be. We have to decide that now, and which way we are going. It is a very big decision.

**CHAIR**—I understand what you are saying. One of my daughters has been made redundant and I said, ‘You can always come home and start a veggie patch.’

**Mrs van Lieshout**—That is right.

**CHAIR**—She was not all that impressed, I might say.

**Mrs van Lieshout**—She might be at the end of the day.

**Senator TROOD**—Are you discussing this plan with any of the adjoining councils? To what extent is there any kind of broader regional cooperation on this vision you have?

**Mrs van Lieshout**—As I said, I have had a pre-meeting with our Tweed Economic Development Corporation, tourism, our corporate services, the deputy mayor, looking seriously at this idea. It is 50-50 per cent. The Tweed Economic Development Corporation wants industry. We know that the shire does not want that, in particular just everything industry. But I believe that there is a combination of food and industry. There is room for both. I have asked the Southern Cross University to put together a workshop and a study on this basis, which I am very happy to furnish to you. Once I get that package, I will have a meeting with council as such, because we do have to set our future and our vision very quickly.

**CHAIR**—We can put you in touch with that crowd at Guyra also. That is a bit of an eye-opener.

**Senator WILLIAMS**—Just one important thing on Guyra. I live in Inverell. The reason that factory went to Guyra instead of Tasmania is that Guyra averages about three or four days a year over 30 degrees in temperature. One of the key factors of that huge tomato production is not to have too hot a temperature during the summer. It may be something to consider. But that is why the experts, the scientists, said they chose between one place in Tasmania and Guyra—they were the two—because of that maximum summer temperature. It was one of the issues there.

**Senator NASH**—It might have been the choice between getting you or Kerry as their senator!

**Senator WILLIAMS**—Of course that was a choice. Seriously, the scientific work which has gone into that huge factory at Guyra—it employs something like 170 people and produces literally millions of tomatoes that are picked by robots et cetera—is really something to look through. The temperature is a key issue, as well as availability of water, of course.

**CHAIR**—Thank you very much, Councillor.

**Proceedings suspended from 10.18 am to 10.43 am**

**PANITZ, Mr Mark James, Manager, Policy and Advocacy, Growcom**

**CHAIR**—Mr Panitz, if you would like to make an opening statement, we will then ask you some questions.

**Mr Panitz**—I work with Growcom. We are a fruit and vegetable industry organisation based in Queensland. Queensland is probably the largest fruit and vegetable production state in the country. We produce about a third of the country's fruit and vegetables. About 85 per cent of those are consumed domestically and about 15 per cent are exported to overseas destinations.

You have all received the submission we made. The broad issue that we are pushing is that food production in Australia and globally is facing some significant challenges. We have got huge increases in world population coming for the next 20, 30 and 40 years. We have got challenges with climate change. We have challenges with international market access—trade barriers and those sorts of things. We have got a burgeoning population particularly in the countries of Asia that have increased disposable income, and on their shopping list is a broader range of higher value fruit and vegetables, and food generally.

There are some impending threats in our capacity to feed the country of Australia and take opportunities internationally—there are also some significant threats there. We believe that it is a debate and discussion that has to be had with industry and governments at both a state and federal level to make sure that we maximise opportunities that have got a global dimension, as well as in Australia, and minimise any of the risks that are there—particularly from things like climate change and a reduced ability to access land and water for food production.

The detail of that I have provided to you in the submission. The range of recommendations and the way forward are towards the back of the submission—they are a mix of policy issues, research issues, trade issues, and capacity issues. To move forward on this issue is not just a matter of a single solution; it is a multitude of solutions that have to be worked on in a planned, cohesive manner.

**Senator NASH**—Congratulations on an excellent submission too. It was very useful. We have had a witness in this morning talking about research, and I note that in your submission you talk about opportunities for Australia 'may include investing in R&D and science' to go on about developing 'higher yields'. In your view, are we doing enough—as government—at the moment in terms of investing in research and development, probably across all agriculture and not just horticulture? Can you just perhaps give us your view on that?

**Mr Panitz**—My view is that we are not. There has been a slide in government investment in R&D over the last, I would say, 10 to 15 years. There has been greater emphasis put on industry contribution to R&D. That has happened and it is still happening—and that is happening at both a state level and a federal level. Most state departments of agriculture around the country have had their budgets slowly eroded, so their R&D capacity has been decreasing. Federally, an organisation like CSIRO has found it difficult to continue a major investment in agricultural R&D. We see that as a challenge in itself, but it also misses the opportunity that is coming in front of us for Australia to position itself as an agrifood producer into the future. We see it as a

real risk for the future, and also we are missing opportunities for the future, if there are not substantive increases in R&D.

**Senator NASH**—Absolutely. You raise the ever-present issue of market dominance of the retail chains, and I think this is something that as a farmer I am—and I know many other farmers who are—very concerned about this. Could you just expand a bit on what you have included in your submission and also what you see as the solution to it or a potential solution in how we address it?

**Mr Panitz**—How long have we got?

**Senator NASH**—Plenty of time. It is a very important issue, so—

**Mr Panitz**—There is good and bad with supermarkets. It is not all bad. I need to say that. The issue we have in Australia is the very tight concentration of two major traders or two major supermarkets. That makes it really difficult for our producers to get access and, when they do get access, they are open to the market power that those major chains have, and they have not got too many choices in terms of outlets so that limits their ability.

The flipside is that the supermarkets have got great access to a huge range of consumers and that is a really good thing. It is about maximising the opportunity out of the major chains and minimising any of the downward pressure that is put on growers in supplying them. From a public investment point of view, I think there should be strategies to encourage other major chains to participate in the economy in Australia, and there are some new players there. The ACCC's food-pricing inquiry that started around this time last year, in our view, missed a golden opportunity to dig a bit deeper on the strategies and activities of supermarkets and the effect on suppliers. We see that as an opportunity lost.

**Senator NASH**—Do you think the ACCC is well enough equipped to deal with the issues arising?

**Mr Panitz**—I think there are two issues. One is 'well enough equipped'; and the other issue is the willingness to really get stuck into some of this stuff. I am not sure which of those two is the prevailing one or whether it is a combination of both.

**Senator NASH**—How is the horticultural code going? I know there was some concern when it was coming in that, from a mandatory perspective, it would be almost impossible to enforce. How has that settled in? And I notice in your submission that you are asking for greater enforcement. Could you perhaps give the committee an idea of how that is progressing and how you would see that better enforced and what benefits that would bring?

**Mr Panitz**—It would be fair to say that the code is not being applied as it was designed or intended to across the horticulture supply chain. There are a couple of issues. Firstly, we do not believe that the ACCC have been successful in implementing the code, as it was designed. Secondly, there has been relatively poor information and education of the participants in the chain about how this is to work, the options people have to help people change practices, because that is what it is about—that whole educative process. There are a few design issues around the code that need to be fixed and there is currently Minister Burke's code committee

looking at those. My view is that it will be another 12 months before we see the code actually working, and then we can determine whether the code needs to be tweaked or not. But, certainly, the enforcement and the education issues are absolutely paramount in getting it working properly.

**Senator NASH**—One of the earlier witnesses made the comment around other nations, in terms of developing nations and that type of thing, and that cheap and inexpensive produce had been landed in those countries therefore stifling, if you like, sustainable productivity within those countries themselves. Is that something you have a view on?

**Mr Panitz**—I think the key issue is whether there is legitimate competition going on there or whether it is a case of a product being dumped on a market that is well below cost of production. I think there is a line there and it is a fairly difficult line to clearly identify at times. The issue of dumping is a key part there.

**CHAIR**—One of the curiosities for me is that at the present time we are importing peas from Zimbabwe. Two-thirds of the population are starving in Zimbabwe. Does your organisation know what is behind the pricing that allows a nation that is starving to export food to a nation that has got a surplus?

**Mr Panitz**—It is an issue that is hard to fathom. Obviously Zimbabwe would be a low labour cost country and labour, in terms of on-farm costs, is up to 50 per cent of costs—it probably would be with snow peas as they are very labour intensive. So a country like Zimbabwe with low labour costs could compete pretty well on the world market. The question then is why we cannot produce snow peas here, considering the distance. One issue would be labour and I think the other issue at the moment would be the weather conditions we have had. During the summer months snow peas would be grown in the southern states of the country—Victoria would be a good example—but the high temperatures and bushfires have stifled the vegetable production out of those regions in the last few months.

**CHAIR**—As you say, the labour costs are lower—and China has a 26 to 1 labour advantage over the United States—but on the back of that it is well known, and it is a serious problem for the planet, that Zimbabwe is in terrible distress, having gone from being a major producer of food to not being self-sufficient. How would we ever know that the people who are picking the snow peas are not actually going home and starving. I am referring to the moral compass aspect.

**Mr Panitz**—I cannot see a way that we would know other than from what we see on the television.

**CHAIR**—There is nothing we can do about it?

**Mr Panitz**—It is an international issue and from the media reports it appears that pressure is being applied on Zimbabwe to, in broad terms, get its internal activities together and look after their population.

**Senator O'BRIEN**—But there is no trade embargo.

**CHAIR**—No.

**Senator O'BRIEN**—The sanctions on Zimbabwe are about travel for officials and their families.

**CHAIR**—I guess it is more a moral issue than a trade issue. Could I take you to the subject of mangoes. Have you been to the Gilbert River?

**Mr Panitz**—No, I have not.

**CHAIR**—Do you realise that they produce mangoes out there?

**Mr Panitz**—Yes.

**CHAIR**—One of the things that intrigues me about being paid to get out of bed to farm to produce food that is affordable is the possible impact that MIS production of food, attached to consolidated retailing, could have on the general food cycle. In other words, to MISs that are highly subsidised through tax incentives—and mangoes are a good example because every time the MISs put them on the market they collapse the market—this is annual cropping as opposed to trees and they can get enough out of the fees rather than out of the production. That puts real pressure on everyone who plays by the normal set of rules. If you were a small consolidated retailer I would have thought that as a cheap supplier—and the customer is always right in the supermarket—eventually you would try to tie up your production if you could to someone who had a competitive advantage in the production market, and there is none better than an MIS. Is that a problem in the long term for the everyday producer?

**Mr Panitz**—Yes, it is. The introduction of MISs on a significant scale in horticulture is of concern to our people because their business is not based on getting a profit from their horticultural production. There are other ways of making a profit, so it is not market driven. Our people are very clear that they want market forces and competition in the market place. That is a concern.

The issue with supplying the major chains is that, whilst price is an issue, they also want consistency. Whilst they may get consistency for a few seasons in a row out of an MIS scheme, it may not be consistent for 10 years in a row. There are a range of other factors that might have an impact. The whole MIS issue has a significant impact on our sector on everything from strawberries to mangoes.

**CHAIR**—Have you got some advice for this committee in that regard?

**Mr Panitz**—Our view has been that there is no drama with people jointly investing in a horticulture enterprise; it is about whether or not those investors get that tax advantage up front, which is the separating of the difference issue.

**Senator WILLIAMS**—Water management: you say secure access to reliable supplies of good quality water is essential to horticultural businesses, and I could not agree more. Given the situation of Queensland over the last couple of months and the amount of rain, do you think there is need for more dams and more storage? Do you think the infrastructure at the moment is sufficient to keep your huge industry going?

**Mr Panitz**—In some areas of Queensland there is more water than we can deal with, particularly up north, and there are other areas of Queensland that have got much less water than they need. So that is the dilemma of climate and geography. In the main, where there have been poor water resources in the last five to 10 years, there have been areas in southern Queensland, such as the Lockyer Valley and Stanthorpe, that have not got major water infrastructure and there is a question mark, particularly about climate change, about whether significant infrastructure would be of benefit anyway, because there is no use building a dam when it is not going to rain and fill it up. The question then is: how do we best use the resource we have? The way forward is getting a very accurate picture of what the climate is going to be and where the rain is going to fall because that is the sort of thing that will sustain horticulture in the long term. There will always be calls for more water infrastructure and more efficient water infrastructure both from the agricultural perspective as well as a domestic, suburban perspective.

**CHAIR**—I might point out the Gilbert River irrigation area was picked out in 1957-59 and it is only just now being scratched upon.

**Senator NASH**—What is your view on the current management of water by this government and their approach to water and water sustainability?

**Mr Panitz**—The Queensland government or the federal government?

**Senator NASH**—I actually mean federal government. I would be quite happy if you would like to take that on notice if it is something you would like to give it bit of thought to, perhaps of the positives and negatives of what the government is putting forward at this point and how they are approaching the whole water sustainability issue through the basin, or feel free to have a crack at it now.

**Mr Panitz**—I will have a bit of a go on it now because what we have found with the federal government's initiatives in the Murray-Darling Basin is that that whole Murray-Darling Basin has dominated the water debate in the country. The reality is that, from a horticultural perspective, it is a very important part of irrigated agriculture and irrigated horticulture but it is not the only game in town. In Queensland, for example, horticulture is dominant along the eastern seaboard with quite a number of rivers draining east and that would be by far the majority of water use and horticulture in Queensland. The Murray-Darling bit, whilst important, is not the major horticulture component in Queensland. We do see this view that if it is not Murray-Darling it is not important or that nothing else happens outside the Murray-Darling Basin.

**Senator NASH**—A very good point.

**Senator O'BRIEN**—There is actually, because there is money committed to Tasmania for water resource issues, storage issues and the like. I suspect there are probably other potentials in Queensland. That is the perception and that is the news cycle. There is a big amount of money set aside, as there was under the previous government, to deal with problems of the Murray-Darling, but it is not the only game in town.

**CHAIR**—There is actually 6.2 per cent of Australia's run-off in the Murray-Darling Basin, and the north-eastern catchment, which has 85,000 gigalitres of run-off, is 23 per cent.

**Senator NASH**—Obviously you have got a very significant interest in those areas outside the Murray-Darling Basin. Is there anything in relation to water policy either state or federal that you would like to see happen that is not currently happening in order to lead to that greater sustainability that you are talking about for water infrastructure?

**Mr Panitz**—The infrastructure issue in terms of can we store more water for agricultural production is one issue and, then, can we use it as effectively as we possibly can? We have mentioned in this submission the Rural Water Use Efficiency program that we have been running in partnership with the Queensland government for the last seven years. It is a fantastic program where industry and government work in partnership to deliver better water usage and better economic gain as well. We see that needing to continue and that is a really good model for other agencies or other states or jurisdictions to pick up as well.

**Senator NASH**—Do you know if other states or jurisdictions have indeed looked at that particular model?

**Mr Panitz**—My understanding is the New South Wales government ran a similar program but it was a government-run program rather than an industry-government partnership. From the work that has been done in Queensland, we can show that an industry-government partnership has got a greater likelihood of success and greater runs on the board because you have got farmers working with farmers rather than just government saying, 'We are here to help you and this is the way you need to do it.' So it is a much more productive way of dealing with water issues and it takes a lot of the angst out of water.

**Senator O'BRIEN**—The evidence you give about labour needs of the industry raises in my mind the issue of the Pacific labour trial, which does not affect Queensland yet. How are the labour needs of the industry in Queensland being met? Is there still a shortfall? How do you perceive the current economic circumstances will impact upon the industry's labour needs?

**Mr Panitz**—There is still a labour shortage in the horticulture sector in Queensland. The magnitude and exactly where and what time of year changes based on seasonality and geography. The horticulture industry Pacific seasonal worker pilot scheme is really important to us, not necessarily to fill the labour requirement that we have now but as a trial, because the numbers are quite small as you would realise. So it is about running the trial properly to see whether the design is right and how to improve it for the future, which is critical. I do not think, in terms of the numbers, that the seasonal labour pilot will have any real impact on the sector.

In terms of labour availability with the economic downturn at the moment, firstly the labour market in our sector is different to the labour market of the suburbs of Sydney, Melbourne or Brisbane. They are different sort of skills and different sorts of people. We are hearing anecdotally that there are some people coming back from the mining sector to our sector. It is a relatively small number but usually they are more skilled people such as welders, mechanics and fitters and turners, those sort of people who are really critical not just for the farms themselves but also for the towns and services around farming areas. The second part that we are getting anecdotal information on is an increasing inquiry from grey nomads and, in particular, retirees who are looking to top up their reducing superannuation with some cash income of some sort. We need to let this process go through the system and this time next year we will get a better feel.

**Senator O'BRIEN**—I asked that because some people will suggest that perhaps we should not be having a trial because the economic circumstances are changing. You have answered the why should we have a trial or continue a trial, but it would be interesting to get some ongoing feedback about how the labour market is working in different economic circumstances where we do not have full employment or effectively full employment.

**Mr Panitz**—The issue around employment in our sector is not just about the volume but about making the labour market in our sector work, because we have got a moving marketplace based on geography and seasons and we have got a moving group of people who potentially could be linked up with it. So it is quite a complex labour market to work in and we really need to get better at making that work, otherwise there will be shortfalls in different regions.

**Senator O'BRIEN**—I have heard in parts of Queensland, and I am thinking particularly of the Sunshine Coast hinterland, that land values are putting pressure on the horticulture sector particularly. How is that progressing? Are there other horticultural areas opening up to which farmers are diverting, or what is the future?

**Mr Panitz**—There are two dilemmas there. One is the farmers who want to stay there and have a productive farm unit there. If they want to expand, they cannot afford to expand because the price of land is extraordinarily high. Then there is a greater influx of population from the city or wherever the tree changers—call them what you like—come from. They are putting pressure on the farming practice. A city-country divide is really happening there. The second issue is that, if they did want to shift, where would they go? That is not as simple a situation as moving, say, from the Glasshouse Mountains to Bundaberg because of different climatic conditions for the crops, which may not be compatible.

**Senator O'BRIEN**—Are there some areas where the current cropping operation is not as profitable as it should be and which growers perceive as future opportunities for horticulture, perhaps in some sugar areas?

**Mr Panitz**—There has certainly been expansion in the Burdekin region, which has traditionally been a major sugarcane growing area, but there is a lot more horticulture production there because of the availability of good land and good water, because they are on the Burdekin dam irrigation scheme there.

**Senator O'BRIEN**—What sort of operations are spreading there or is it very general?

**Mr Panitz**—There are already some mangoes there, but there has been a significant increase in vegetable production in that region because of the reliability of water. They are mainly winter vegetable production areas.

**Senator O'BRIEN**—Do they have labour issues there?

**Mr Panitz**—They will have. If it is a new area, they will have to have some strategies to attract labour there; otherwise, they will be out on their own and they will have difficulty.

**CHAIR**—Can I ask you a drop-dead question? Do you think it would be in Australia's better interests and in the interests of continuous, stable food production for the government to legislate

if they needed to ban annual crop MIS production? It has happened elsewhere. I was in a recent meeting in Berri in South Australia where there was a unanimous motion from 200 people that this should happen. It is a drop-dead question, I realise.

**Mr Panitz**—I think there would be a lot of support for that view from existing producers. The question is whether that would be good in the long term.

**CHAIR**—It is a question of: how do you determine the real cost of the annual crop if you have to add to the cost the hidden subsidy of the advantage of the upfront tax deduction?

**Mr Panitz**—The easy way of dealing with that would be if the tax incentive part of the MIS—I will call it—were not there. Then people would be competing on the same sort of playing field.

**CHAIR**—Do you think there is a danger that we will determine that there was not quite a clear answer on the drop-dead question—and I do not want to get you into trouble or get you the sack, nor do I want you to be the victim of a drive-by shooting. But do you think that an independent person standing at the back of this room could make out a case that you could in fact endanger long-term stable food production by those sorts of distortions in the marketplace?

**Mr Panitz**—My view is that it does distort the marketplace. As to whether that extends to a fall-off-the-cliff perspective that this endangers our long-term capacity, I think that is a pretty big jump from one position to the other. Our view—and this is a policy position—is that our people want to compete in a competitive marketplace. They do not want subsidies, they do not want a handout, but they want a good environment in which they can work and compete with each other. One of the positives of the MIS is that it has brought in significant economies of scale and management systems that have been useful in driving efficiency. That can be replicated by other business enterprises without that tax advantage issue. I think we have seen a lot of producers and family farms grow to very big and very professional outfits now without the tax incentive, so why have it?

**CHAIR**—One of the examples that I am constantly reminded of is the Douglas Daly area in the Territory, which is slowly converting from food production to African mahogany production because of the tax advantage. Given the global food task it is going to double in the next 40 years if we grow the population to nine billion and 30 per cent of the productive land of Asia goes out of production, where two-thirds of the world's population is going to live, allegedly, I reckon there is some long-term thinking that has got to be done on those sorts of planning decisions.

**Senator O'BRIEN**—On the other hand, Western Australian wheat farmers are using, or were using, an MIS to manage risk.

**CHAIR**—I think the Western Australian model actually is not an MIS, because they do not get an upfront tax deduction in the same way. They get a deduction—

**Senator O'BRIEN**—That is not the way it has been explained to me, but anyhow.

**CHAIR**—No, it is badly known.

**Senator O'BRIEN**—You are proselytising your case, rather than dealing with the evidence, Senator.

**CHAIR**—But it is an interesting phenomena, which obviously the independent observer can note, that every year when the MIS mangoes hit the market, it just goes kerfumph. Because the price does not matter to the promoter; it is the fee. Senator Trood, have you got some intrusive questions you would like to ask?

**Senator TROOD**—I do not know whether they are intrusive, but I have got some questions. Mr Panitz, I am interested in that part of your submission which focuses on the global dimensions of the food security problem. You rather nicely frame this debate in terms of the opportunities it presents for Australia, as well as the dangers that it may hold in relation to other competitors—the greater, larger countries. I would like to start with asking you just how aware, do you think, the industry is of the global food challenge and the opportunities and the dangers that it poses to Australia?

**Mr Panitz**—I think there would be a reasonable level of understanding amongst our sector of the opportunities and the risks. They may not be articulated in the same way that we have in this document, but I think there is a reasonable understanding of that and of the pressures facing the sector. I think the key positioning that we need to deal with is this is not an issue about farmers—this is an issue about food. I think they are quite different positionings.

**Senator TROOD**—You think that there is an awareness in the sector. How about within government, about the opportunities and the risks?

**Mr Panitz**—I do not see it manifesting itself in a significant way. I hear little bits of it, every now and then, but I do not see it coming together in a cohesive, whole-of-government—or between state and federal government—way. That is the key part that needs to be progressed, going forward.

**Senator TROOD**—You point to the food security portfolio within the opposition parties in Queensland. For any dimension of state government to have that appreciation, is that an unusual situation, or are state governments aware of it right across the country?

**Mr Panitz**—I have got a view that the Queensland opposition, who are currently in election mode here in Queensland now, have seen, in my view, the opportunity to position themselves a little bit differently from the normal department of primary industries and the department of agriculture. I think most state agencies around the country are still nominally called 'agriculture' or 'primary industries'. I think bringing in the food security label and the food security thinking is a significant step forward in where the sector and where the national and international food needs need to be.

**Senator TROOD**—So, at a federal level, you are not particularly impressed. I take it, from their appreciation or, at least, from a whole-of-government perspective there is a limited understanding of the problem or the issue?

**Mr Panitz**—I would say limited, but Minister Burke has made a couple of speeches that I have sort of picked up on. The language and some of the challenges and opportunities have come

through those sorts of speeches. It is sort of like a bit of a snowball that has started to gain a little bit of momentum, but it just needs another significant push to get it happening.

**Senator TROOD**—How well do you think we manage this through our exports—with an appreciation of the opportunities that exist, or are they far too fragmented and divided? You are calling for an overarching food and agricultural policy, which, on the face of it, seems like a good idea. But it sounds a bit to me like the argument that people frequently make for a population policy for Australia relating to immigration questions—which may be a good idea, I am not disparaging that. I am interested to know what a food and agriculture policy would actually look like. What would it do which might otherwise not be done?

**Mr Panitz**—I think the key part of it is the connectivity between the different parts of it. We need to have a really strong link between the R&D capacity and R&D investment and between market access and the trade negotiation work that needs to be done. We need to have a strong connection to climate change and what the climate is going to be over the next 20 or 50 years, and a strong connection to natural resource management, water issues and—particularly in our sector—those labour issues. We have got bits of stuff happening but I do not think they are connected and I do not think we are making as good use of all of them as we possibly could.

**Senator TROOD**—I can see what you are saying there but is that an argument for increasing both Australia's penetration of the international market as well as the opportunity to defend ourselves against the risks that might be out there?

**Mr Panitz**—Absolutely, yes.

**Senator TROOD**—Maybe this is beyond the area where you feel you are competent, but to what extent do you think Australia is behind other countries in realising that vision that you have put out? Are there countries that might serve as models—the Canadians, the Americans, the Europeans or somebody else—that you could look to and say, 'They are doing it rather better than we are. We ought to be thinking about how they are approaching these questions.'

**Mr Panitz**—I could not give a view on whether we are doing the same or are more advanced or more behind other countries.

**Senator TROOD**—But you want us to consider the possibility of whole-of-government—by which I gather you mean not just the departments of the federal government but state and federal connections—as well as the industry connections. Is that right?

**Mr Panitz**—Yes, because the state governments have got a major role to play—particularly with R&D capacity, for example. The federal government has got its role as well. It has got to be both levels of government as well as industry.

**Senator NASH**—The chair referred earlier to farmers wanting to have a reason to get out of bed in the morning and farm. Putting a couple of things together, one of the things you raise in your submission is an issue being discussed at the moment: the diversion of food crops into biofuels. What requirement do you see as necessary for farmers to actually produce food? To what extent should government or society be telling farmers what they should farm or for what

reason they should not make a choice to go into something that might be more profitable for them for the social good, if you like, when there is no recompense for that social good?

**Mr Panitz**—I think the issue there goes back to how people want to work in a free market situation. They do not want to be told whether to grow a crop for a fuel purpose or a food purpose. They have land, they have water, they have equipment et cetera, so they will need to make commercial decisions to grow what they see fit to make a profit for their enterprise. Any sort of external desire from government or others just needs to be put to one side, I think. Otherwise, we are not going to have that free market working properly.

**Senator TROOD**—The question that Senator Nash has raised is an important question about this overall food and agricultural policy that you are proposing. It sounds like a great idea and I can see how you might have some targets and some priorities in it and perhaps facilitate greater research in various areas and things of that kind. But it raises the question about how much we want to be prescriptive about the kinds of activities we undertake in the field, doesn't it?

**Mr Panitz**—I do not think I have articulated anything about government determining what people should or should not grow. I am not suggesting that at all. It is about getting broad policy settings that take full advantage of the opportunities that are out there and that also minimise the risks that we are facing.

**Senator NASH**—There seems to be a lot of public comment at the moment—to follow on from Senator Trood's question—about whether farmers who are growing food should use that production only for food and not for anything else. Yet there is no government policy concerning the issue, as I said before, of whether they are going to be required to do something for a social good—if there is absolutely nothing commensurate to that. There are even concerns for other industries in terms of the food for biofuels issue. For example, the lot feeders jump up and down because they have to pay too much for their input. But, again, it comes back to the question: what is the requirement for farmers to produce something for nothing so that everybody else up the food chain can for one reason or another benefit?

**Mr Panitz**—Why would the farming sector be any different to any other business person who invested in a factory, for example. I am not sure whether government wants to tell that factory maker to make plastic cup, plastic jugs, tables or whatever. We are still well and truly living in a free market world and it is clearly the view of our people that they want to continue to work in that type of market.

You asked a question earlier about the Horticulture Code. One of the key things that we want out of the code is to make the supply chain transparent so that the market can work properly—so that the farmer knows what the consumer wants and understands what the consumer is prepared to pay for and that matching can happen really well. That is one of the additional benefits that we are seeking out of the code.

**CHAIR**—Have you, on behalf of your growers, had a look at how loose or tight the model is around the importation of frozen vegies—whether they are sprayed with god-knows-what or whether at the back of 'changlangloo' in China they have the same regard for human health as in downtown Sydney.

**Mr Panitz**—There is continual concern in our sector that imported product does not meet the same food safety requirements that food producers need to meet. Our people are not happy that there is an unlevel playing field. The melamine issue in China brought to the fore the whole issue of feeling good about getting cheap product from another country, but if that cheap product ends up being quite expensive in the long term because of health issues it is not a very good position for us to be in.

**CHAIR**—Do you think it should be branded? Obviously if you value-add 50 per cent to an imported product like that you can put the map of Australia and the kangaroo in it and say that it is Australian manufactured even though it has come from China, as we do with bottled water.

**Mr Panitz**—One issue is the branding so that consumers have got choice, and the other issue is what regime—call it an inspection regime or a certification regime—the food comes in under to make sure that it does meet Australia’s food safety requirements.

**CHAIR**—The example I usually use is water. We import bottled water, believe it or not, from China and on the bottle it has got a map of Australia with a kangaroo in it. Down in very small letters on the side it says ‘Product of China’. Thank you for your evidence.

[11.30 am]

**BURKE, Mr Charles, Vice President/Treasurer, AgForce Queensland Industrial Union of Employees**

**KRIEG, Mr Lindsay Robin, Grains Policy Director, AgForce Queensland**

**PEARSE, Mr Oscar Alan, Policy Director, Cattle, AgForce Cattle Board, AgForce Queensland**

**WAGNER, Mr Drew, Senior Policy Adviser, AgForce Queensland**

**CHAIR**—Welcome. I am sure you are familiar with these proceedings, but please let me know if you would like me to read a statement about your rights before the committee. I invite you to make opening statements after which we will ask you some questions.

**Mr Burke**—Thank you. I have three of my colleagues here today, Oscar Pearse, Drew Wagner and Lindsay Krieg, all of whom represent various different portfolios within AgForce. They will hopefully be able to provide the answer to some of the more technical questions that you may ask.

I will take the opportunity to make a very brief opening statement. We certainly acknowledge the opportunity to provide a submission to this inquiry. Our submission takes the form where we have outlined a number of different areas which, to us, are certainly very important in the debate about food and food production. A number of those issues are topical at the moment and we are happy to expand on this through questions, but our submission outlines the perspective of Queensland broadacre agriculture and food production.

These issues we discuss are not in any marked order, but it is interesting that we have got emissions trading as our first point. I will not go into any of the detail because it is covered in the submission. The second issue that we raise is trade and trade infrastructure. We also talk about environmental laws and regulatory issues, including leasehold land rental, which probably has a more significant impact in Queensland than in some other states. We discuss at length a commitment to research and development—an extension—and we also talk about biosecurity, which is very important to food production not only in this state but right across the nation. We also discuss fuel, roads spending and transport infrastructure, labour and another issue which, particularly at the moment, has had and will continue to have a lot of relevance and impact in Queensland—that is, food versus mines and mining. We also discuss water and northern and north-western Queensland's food producing capacity. We look forward to your questions.

**CHAIR**—I think there is a certain logic to your 'No farmers, no food' message. It is pretty simple and it cuts through. We are looking at the global food production task that is forecast to double in the next 40 years and the serious reduction in the capacity of the planet, in area, to produce that food because of climate change. The challenge that faces our farmers is to produce food that is affordable and sustainable to the environment and viable to the farmer against the

background of things like global cartels and monopolies—you could mention fertiliser there. We are doing that as well—we are doing all right.

**Mr Burke**—I am pleased to hear that; it is a tough area.

**CHAIR**—And we are about to do fuel. Climate change is another challenge facing farmers, and we have seen a recent example of it. Then there are trade subsidies with the milk. We are sure that the public needs to get to the point where they do not take food for granted.

**Mr Burke**—Certainly I acknowledge that you think that our campaign of ‘no farmers no food’ is good. Its relevance is its simplicity. We have had three years of an advertising campaign through AgForce Queensland not to achieve anything other than to raise awareness for people. We built the layers. The first one was a fairly basic introduction, introducing farmers as reasonable citizens. In the second one we used Shane Webcke, a famous Queensland rugby league player, to sell the message. All the food off the barbecue started to disappear and somebody said, ‘What role do farmers have?’ It was a very simple message which had a lot of resonance here. The last one was with Lee Kernaghan, and now we have just coined that ‘no farmers no food’ thing.

We have certainly taken the view that, as far as food production goes, not only in Queensland but in Australia we can cope with certain aspects of the climate, we can cope with certain aspects of water and water scarcity and we can cope with a lot of those production issues, but some of the other issues throughout the food chain are starting to become more difficult to deal with. Firstly, they are totally out of our control and, secondly, none of us seem to be able to have any influence on that.

**CHAIR**—Would you like to put your hand on some of those issues now?

**Mr Burke**—We have touched on a number of them in our submission. There is a lot of regulatory burden that we have to deal with. For example, in the red meat industry there is a cost of compliance with health and safety issues within the processing sector. We have state and federal requirements which we have to adhere to through the food-processing chain and sometimes we also have to pay to have those same regulations, and those same commitments to those regulations, honoured throughout the trading nation that we are trying to send that product into. So there are three, sometimes four, levels of quality assurance throughout the system that do not recognise each other.

This is what we strike a lot with our federal system. We have a state law that does not recognise the interstate law and sometimes it does not line up with the federal law. So there is a certain amount of regulation within all sectors. Certainly here in Queensland we are experiencing great difficulty throughout the transport and infrastructure regime. Our grain producers tell us that they are \$20 per tonne worse off in Queensland than our counterparts across the border simply because if you entertain a contract with a grain trader here in Queensland they will pay you \$20 a tonne less because there is no guarantee that you can honour the commitment of a delivery time to port for that grain. As you would be well aware, you do not just have ships sitting at a port half loaded and waiting for a train to turn up when and if they see fit. They are two areas.

**Senator TROOD**—On that point, there is a premium there, but what is the evidence for the frequency of which producers have failed to meet contracts? Is it a justified impost?

**Mr Burke**—I will defer to my colleague Lindsay, who represents our grains industry. Obviously, he has those details, rather than—

**Senator TROOD**—I do not want to throw you off your—

**Mr Burke**—This is why we have brought these guys along—they have prepared the information to go into the submission. We obviously have evidence to support that \$20 a tonne. But it is not only that. It is the inconsistency of the whole infrastructure system in Queensland, which in many cases has gone down the minerals and the resource sector pathway, providing rolling stock there, and farmers just get a load when there is a short supply in that mining sector. Lindsay, you might be able to expand on some of those details.

**Mr Krieg**—Thank you, Charles, and thank you, senators, for the chance to have this input. We do have some serious problems with our rail infrastructure here in Queensland, and it seems to be, as Charles said, that the agriculture sector is playing second fiddle to the resources sector.

We have had a situation here in Queensland where Queensland Rail—obviously a government owned organisation—will only provide trains for grain on a best bets or best efforts situation. We have had a lot of situations, particularly in Central Queensland, where 30 per cent of the trains do not turn up or they arrive late with very little notice. So what we are really getting down to is a situation where the trade will just not take the risk of loading a boat here in Queensland. They would rather load it in Newcastle, for example, with the same quality grain in northern New South Wales as we have here in Queensland. So they are simply cutting that price. They do not want to pay the \$50,000 a day in demurrage to have a ship sitting in port. It is just a simple risk exercise for those traders to offer us less money. So the whole economy, essentially, is losing. Not only are the farmers losing the money; the whole of the rest of the economy loses as well.

**Senator TROOD**—Have you tried to quantify that figure?

**Mr Krieg**—I have, and I have come up with a figure that I am pretty sure—it is a little while since I have pulled it out, so this is just off the top of my head—was somewhere around \$130 million for this one crop that we have this year.

**Senator TROOD**—Sorry, \$130 million on an annual basis or—

**Mr Krieg**—That is lost from this crop, just in Queensland, at the farm gates. If you multiply that through the economy, it becomes a far larger figure than that. So, just at the farm gate, I am pretty sure it was \$130 million.

**Mr Burke**—I guess we could probably go on all day and find different things. There are other areas of competition as well.

**CHAIR**—Could I take you to something specific—and I apologise that I am asking a couple of questions but—

**Senator O'BRIEN**—Off you go, Chair.

**CHAIR**—One of the great vagaries for farmers at the present time, I find—and I declare an interest because you can tell I am a worn-out farmer—is whether we are in or out of the bloody carbon market. When someone goes to the bank to get their facility for the next five years and they say, ‘Well, we don’t really know, mate, because they haven’t told us, mate,’ it makes it very difficult. So what advice do you have for the committee? Farmers really need to know what the conditions will be—and I have asked my mob what they think, and the government, I suppose, is in the same position. We are standing at this precipice, not knowing whether we are going to get pushed over it or not. It is not so much whether we are going to be included; it is knowing what the conditions for our inclusion would be. What would have to happen? Would China have to be in? Would America have to be in? What are the conditions in which we would be included and what would be the impact? Would you like to comment on that?

**Mr Burke**—You were running to time, Chair; maybe we might run over now. It is a great frustration to the agricultural community simply because, at this stage, we do not exactly know what we are dealing with. It is like grappling with a column of smoke at the moment. What we do know, though, is whether we are or are not included in 2015 will remain to be seen. We are working with the government and within our own constituency and membership to try and work out what we could live with and what would work for agriculture. We want something that will work and will be sustainable. We want something that will not have a detrimental impact on production but will ultimately achieve the goal of reducing emissions. So I think most of us are comfortable with that.

What we do know is that when the Carbon Pollution Reduction Scheme is implemented in 18 months time we will bear a lot of cost straight up, whether agriculture is included or not. This is one of the frustrations at the moment for us—that there is all this talk about it not coming in until 2015 but we are like every other business, we are like every other individual in the community and we will experience those inflated costs. There will be inflated costs throughout the food production chain. We have had figures from the meat-processing sector—and it will depend on if they are to be considered to be a trade exposed industry and they get some relief because of it—that have talked about, at best guess, a possible extra production cost of \$8 per bovine carcass. Margins in that industry are already very tight. If it is going to cost the meat processor an extra \$8 a beast, I know where those \$8 will come off, and that figure will probably have a bit of interest on top of it, plus GST. So, boom, there goes 10 bucks off on an already skinny margin for a beast. For sheep, they are talking about—Oscar, remind me, is it about four or six? It is something in that vicinity.

We do not necessarily represent horticulture at our state level, but I would suspect that those figures would be indicative right across the processing sector for food processing, whether it be fruit or vegetables. So all that cost will be imposed onto agriculture, no matter whether we are included or not. At the moment, looking forward to 2015, there are a lot of things that we will have to get right before we will be comforted in the knowledge that it is a system that will work without basically seeing producers close up country and reduce production simply to meet their emissions reduction targets.

**CHAIR**—In theory, at \$17 a tonne irrigated dairy farmers are insolvent.

**Mr Burke**—That remains to be seen.

**Senator WILLIAMS**—The issue of costs to, for example, the beef industry and abattoirs et cetera, is one of the key issues. If America does not go down the same road as us then how do we maintain our markets into Korea, Japan, et cetera? You might be interested to look at my questions to ABARE on that issue during estimates last week. On those costs, you are saying there will be a 10 to 20 per cent increase in energy costs, whether it be electricity, gas, fertiliser, et cetera, even with agriculture excluded from the CPRS. How did you derive those figures?

**Mr Wagner**—A lot of that information came from research institutions like the Australian Farm Institute. There have been a lot of numbers in a lot of different media. For domestic energy use, for instance, a lot of those figures have ranged anywhere from 12 to 24 per cent but most pundits think it will be around 16 per cent. Most fertiliser costs have been around the same realm, so that 10 to 20 per cent in those energy intensive systems tends to bear out with most interrogation that we have seen. It is certainly backed up by a lot of research data that is coming through now.

**Senator WILLIAMS**—In your submission you make the point about the battle for prime agricultural land in relation to the resource sector. It is frightening; around 80 per cent of Queensland is targeted for exploration licences et cetera. I believe this is the situation in somewhere like the Haystack Plains near Dalby where prime agricultural land is under threat from mining.

**Mr Burke**—It is not only minerals either; it is gas as well. While some of those properties are not having a big hole dug in them they have a criss-cross checkerboard system of gas pipes, which virtually renders some of the country useless.

**Mr Krieg**—Calcium gas water is coming up. They are talking about Dalby Regional Council having 500 megalitres of water coming out of the ground every day and with that 2,000 tonnes of salt everyday. It is not like salt that is in the ocean; it is mostly calcium salts and far worse salts than your average sodium salts.

**Senator WILLIAMS**—We are facing the same problem in New South Wales in the Liverpool Plains where exploration licences are approved for BHP and Chinalco—the Chinese company. Can you give us your opinion? How can we mine this country with longwall mining? Surely that would have to have a negative effect on the lay of the land, especially on plains country. What are the long-term ramifications of that sort of mining to prime agricultural land?

**Mr Wagner**—Most of what we are seeing proposed for Queensland is not actually underground mining; it will be open cut strip mining. We are also seeing a very large propensity for that within particularly our Darling Downs region, which is considered one of the most productive landscapes in Australia. At least 80 per cent of that has already been ear-tagged for exploration permits. There are some extraction exploitation permits going on in that area as well. The problem we also have in Queensland at this time, particularly in the south-west regions, is one of coalseam gas. We are having massive issues, as my colleague mentioned earlier, about the tonnage of salt, let alone the megalitres of water, being removed from the ground, depending on what technical management practices they are looking at. Some of these systems need the hydrostatic pressure; therefore, the water is kept in the ground. But others of these systems do

not. Some of these systems also basically light the seam up. It is very difficult to stop a fire at a boundary gate when it is 200 or 300 metres below you.

That aside, a lot of the mineral or resource allocation is specifically for open cut or open strip; therefore, yes, there will be an impact from underground longwall mining but it is certainly not anything near what an open cut system is. Indeed, at this time the removal of this good agricultural quality land to an open cut system, regardless of whatever indemnities or bonds get put in place for remediation of those systems afterwards, a lot of studies are now coming back to say that it will never get anywhere near the productive capability it once was.

**Senator WILLIAMS**—It is frightening, isn't it?

**Mr Burke**—It is, but I guess at the end of the day it gets back to commercial reality. I am not privy to how mines run but I assume that they are run with a focus on the bottom line, and probably any alternative that may seem reasonable could have a cost effect that makes it not worthwhile. Even as farmers we have to acknowledge that we do have a natural resource here in some of our minerals, and our economy is underpinned by it. We have to realistically look at that. But it is all about making sure that we have checks and balances in place to make sure that there is a balance.

**Senator NASH**—Obviously there does need to be a balance but where in particular it is of interest to us is where it interferes with prime agricultural land. We do not have so much of an issue when it is not those areas, but that is a significant problem. You talk in your submission that there needs to be changes to exploration and mining permits to deal with that. What do you see those changes as being?

**Mr Burke**—One of the biggest problems we have had for a long time that was enshrined in the law was the right of a mining company to just walk onto your land and stake a claim, and that was it. You had no rights whatsoever. In Queensland we have certainly endeavoured to work with the government to make sure that there is a more open process and that there is an appeal process. In some cases there have been generations of ownership of the land through one family, living and working the land. You assume you have an asset and all of a sudden it is whisked away from you. They are the sorts of things that we need to address to make sure that it is transparent and that there is a better system of communication. Once upon a time—it is still happening—if a mining company wanted to reserve a right to mine your land it was just a notice in the local paper. Whether you saw that or not did not matter. There was no notification, no cooling off period, no third umpire, if you like. We have mining wardens courts in different states that are in some cases ineffectual. We need a system in place to make sure that there is an eye on commercial reality as well as protection of the rights of people who have in some cases freehold ownership of land, and if not freehold then leasehold. The law should enshrine some sort of control over what happens on that land.

**Senator NASH**—You are absolutely right. It is a case really of not getting too far down the track where we cannot unscramble the egg. If we allow the mining industry to get to a point in a particular area where you cannot reverse it and there is no possibility of remediation—you almost need to go back and revisit the construct around it, whether it is right or not. Mr Krieg, was it 500 megs a day of water coming out?

**Mr Krieg**—Yes, just in the Dalby regional council area.

**Mr Wagner**—Indeed there are lots of issues—there is a lot of discussion about it being death by a thousand cuts. At what point do you have the last cut that will destroy the industry within that region? A lot of the assessment processes, a lot of the impact statements, only ever take those individual items as individual items; they never look at what is happening regionally, both environmentally and economically. It comes to a point where that position can actually be, once again, death by a thousand cuts, unfortunately.

**Mr Burke**—The biggest problem we have is the inconsistency of regulations—even across different states. There are different acts of parliament which oversee mining in different areas. That in itself is a state of affairs that we really should not have to tolerate much longer, particularly with Australia so well placed with natural resources in minerals and energy.

**Mr Pearse**—Some of this legislation dates back to 1914, well before the advent of technology like coal seam gas. Some of the systems when legislation was put in place were tapping into an energy source, whether it be gas or oil, with one pump. Now there is a network with significant additional waste, such as the discharge water. The legislation is well overdue for review.

**Senator NASH**—So you would say that both state and federal legislation needs to be reviewed to see to determine if it is actually appropriate in the current environment. It would seem that certainly over the last 10 years we all know how much more focus there is on water and the water system and water sustainability, and yet there does not seem to have been the commensurate amount of work done on the impact of mining either at the exploratory stage or after and the effect on the water system. It is a little bit cart before the horse at the moment where we are at with water, and yet with something like mining, the impact on it, I do not think we are understanding it nearly clearly enough. Do you have a view on that?

**Mr Burke**—Certainly it is legislation in silos. We need to make sure that we do have a more structured pathway for that sort of thing, absolutely. Water, mining, agriculture, forestry, we could talk about MIS all day too, if you like. All of those sorts of things need to be considered in the one environment, because they are so closely linked, particularly in the food production chain and how those things affect what we are doing. I will reiterate the point: there has to be a balance. We need mining, we need the ability to harvest our resources which give us a competitive advantage in the world, but we need to do it in a sustainable way, as we do with agriculture.

**Senator NASH**—Do you want to make a comment on your view on MIS, seeing as you just raised that?

**Mr Burke**—There again, they have been implemented over the years. At first with an issue to raise the stocks of tree plantations, but certainly they have reached a point now where they have become so focused on the tax effectiveness of an MIS structure that it takes away any net benefit because it really is not looking at sustainability of forestry. It is not looking at the impact that that has. Quite simply, it is inequitable because it just provides a tax deduction. That is a difficult one to deal with.

**CHAIR**—I will not take the bait, because I am well and truly on the record. Can I get a technical explanation of that water? You say that is 1,750 gigs a year coming out of one mine at Dalby. Where is it coming from?

**Mr Krieg**—Drew, you may have more figures on how it actually comes out. I know that I just heard—

**CHAIR**—No, but is it the Great Artesian Basin?

**Mr Krieg**—Yes.

**Mr Wagner**—It depends on what depth the seam is going to. That is the proposed amount of water they are going to have to remove from the system because they cannot have the hydrostatic pressure within the mine pumps.

**CHAIR**—We know the Great Artesian Basin is a great water asset and we know we have been capping it, but what we do not know is what the recharge is.

**Mr Wagner**—How much is there and where it comes from and where it goes back into it,

**CHAIR**—This is pretty scary.

**Senator NASH**—It is!

**Mr Wagner**—Very much so. Because of the facility they are dragging it through to pump it out is where we then start getting some of the issues as far as salt and a few other problems as well that come out with that water.

**CHAIR**—The total extraction of ground water from the Murray-Darling Basin last year was 1,850 gigs, by the way, which produced \$360,000 worth of income per gig compared to \$7 million per gigitalitres of production in Carnarvon and \$190,000 per gig in the Ord. But I have to say, that it is the equivalent of the entire extraction of groundwater in the Murray-Darling Basin in one mine.

**Mr Wagner**—In one region. It is the Dalby region.

**CHAIR**—That is pretty scary.

**Mr Wagner**—The other issue too is that we have very much a sleeping giant here. Some of these exploration permits of upwards of 50 years old. Indeed, we actually have landholders who are not even aware that there are exploration permits already granted over their properties. Indeed, because of the variations of some of the gas and petroleum resources, rather than mineral resources, you can have multiple permits over your property, depending on the different extraction methods or different items as well.

**Mr Burke**—You could quite conceivably have two different extraction systems, which have two different types of legislation, two different types of requirements. It would drive an

individual quite mad trying to deal with all of the agencies that would be required to be involved in something like that.

**Mr Wagner**—Let alone the possible easement that may also then come onto the property as well.

**Senator NASH**—In a perfect world, should that be reversed? I know it sounds very simplistic, but should you not be able to simply walk onto someone's place and say, 'Here's my stake in the ground, I'm going to mine'?

**Mr Wagner**—It is even more than that. A lot of our landholders were not even aware until very recently that, through work that AgForce has undertaken, they can have some ground rules as to what walking on the property actually means.

**Mr Burke**—We have certainly been very proactive with the state government, trying to change that. But the simple answer is, yes, I think it should be reviewed. None of the rest of us within a community can go and do something quite as invasive as that, therefore why should it come to pass that one industry can do that because of what some would argue was a fairly antiquated law.

**Senator NASH**—Absolutely, because it is not as if it does not interfere with an existing practice.

**Mr Burke**—At the end of the day, there will be many of our members and members of other farming organisations around the country who would welcome the opportunity to realise there is a huge asset under their property and may offer them the opportunity to realise on that. We do not want to restrict the trade; we do not want to restrict the opportunities. What we do want to do is make something sustainable, equitable and, in the long run, manageable.

**Senator NASH**—You are quite right, but surely that should be a choice and not a right of a mining company to—

**Mr Burke**—Yes. At the moment it is the opposite; it is not a choice. It is the right of a mining company; it is not the choice of a producer.

**CHAIR**—Do you recall that one-page ad that was in the Queensland papers a couple of years ago, when Peter Beattie was still the premier, about pulling the water over the hill from Tully and running it inland?

**Mr Burke**—Yes, vaguely.

**CHAIR**—I was the chairman of the task force at a time. That was really about coal mining, not about the development of the north.

**Senator O'BRIEN**—I am interested in some of the arguments that are running through the community now about cost of agricultural land, rate of return, level of debt and where agriculture is heading given we are talking about food production. It seems to me that, from at least anecdotal evidence, most farmers are struggling to make a reasonable rate of commercial

return on their land investment. What does that say about agriculture and the price of agricultural land?

**Mr Burke**—Firstly, I would refer to some of those figures where it talks about average farm debt having increased significantly over the years.

**Senator O'Brien**—Conversion of equity into debt, which has been progressive. As the prices have gone up, there has been a conversion of equity into debt.

**Mr Burke**—That is a difficult one. It is always a bit of a worry, and at times, when it suits us all, we use averages to our betterment. But in this particular case—here in Queensland we represent a lot of producers and I suspect that a lot of our producers are still making a reasonable living.

**Senator O'Brien**—Yes, but that is not a rate of return. It might be a reasonable living, but if they have a \$5 million property and they are making \$150,000, that is not very good.

**Mr Burke**—Yes. If you look at that on your balance sheet though, then you have the capital appreciation, which, over the last six to eight months, an investment in a piece of agricultural land out in Dalby or Clermont or Emerald has been a far better investment than it has been to have your superannuation tied up in the stock market.

**CHAIR**—Babcock and Brown.

**Mr Burke**—I understand what you are saying. I am a fourth generation producer on our property, and we have this discussion all the time. Our country is worth more as real estate than it is to run cattle on. But we are still making an income that is sustainable for us and is adequate for our needs. We choose to do what we do because added to the economics there is a lifestyle choice in that. I guess what we have to be careful of is that we do not start setting parameters on what for one, as a rate of return, is acceptable as opposed to another. It is certainly a question that we all grapple with.

**Mr Pearse**—There is a considerable impact on the variability of return and the price of agricultural land in Queensland. It is a significant issue because of the impact of the leasehold schedules in this state. Sixty-five per cent of agricultural land is under a lease, but generally pastoral leases. The current policy settings, which are leading to an incremental increase in rents paid on those lands, is a very significant area in a number of regions of Queensland and particularly for the beef industry, where we are seeing a strange confluence of elevated land prices and, as Charles said, the fact that many producers and investments have been driven more by that appreciation of the land and less by the actual food-producing business. That has also been stimulated to a certain degree by mining, either directly or because of the fact that displaced producers then have a pretty large amount of cash that they want to spend, which is driving the prices up. Overall, though, what that means is that, on the current policy settings, as these unimproved capital values increase and as the percentage return on them to the state increases, there will be some areas where we risk potential market failure and producers not being able to continue sustainably producing cattle on that land. That will have some pretty significant NRM impacts because, in those last few years before people are forced to exit, they will cut their expenses, they will cut back on their maintenance and they will also probably try

and flog the land—they will overgraze—just to try and get those last few dollars. So it is a significant issue.

**Senator O'BRIEN**—The other issue—and it was running on the television news this morning—is affordability for young farmers coming into the sector. How do you enter a sector where the return on investment is not going to be anywhere near the cost of money to get into the investment? That is the real conundrum about the appreciation of the value of agricultural land. If it is not based on rate of return then ultimately it is going to become a barrier to entry for new entrants. Given we are talking about regeneration of the farming community and young farmers entering it, how do we rationalise the appreciation of land values against the commercial reality that that becomes a barrier to anyone but corporate farming in the long run?

**CHAIR**—Can you chuck in houses in Sydney and so on as well?

**Senator O'BRIEN**—No, you cannot. Let's forget about the diversions. I would like an answer to the question I asked.

**Mr Burke**—I understand the question. As I said, the value of our land is something that we grapple with even in my family. I often say: if we sold this place, I would not have to fix a fence ever again. But, again, it is a choice. While it is easy to sit here and say it, I think we are seeing a generational shift within agriculture. Certainly in discussions that I have regularly with the banking sector, it is certainly looking and encouraging people to view alternative ownership systems. Once upon a time, if you wanted to farm a piece of dirt, you went and put a huge noose around your neck and bought it. I think there are a lot of people now who are the average farmer age of 57 or 58 who perhaps have not got somebody coming along in the next generation who want to take it on. Traditionally, those people would have sold that block of land, realised the asset and then taken off. Now those people might view it as an asset because of its capital value. It is still appreciating as a capital asset and they are looking at alternatives in how to use it. We might see more leasing and we might see more sharecropping or share-farming arrangements. I certainly think that needs to be explored. I have always encouraged looking at alternative ways of ownership in our membership.

**Senator O'BRIEN**—What are the barriers? That is the question that arises from that. If alternative farm management arrangements are the solution given general unaffordability at point of entry for these enterprises, what are the barriers to the alternatives? You might want to take some of this notice, because I think this is an issue that probably does bear on the issue of food production in the long term.

**Mr Burke**—I think a lot of the barrier is cultural. I think it is the preconceived idea of what farmers should be, of what farmers quintessentially have been: they owned a block of land and they worked hard. Now we are seeing many more people farm with a quite different structure. We still see 97 per cent of Australian agricultural land owned by families, but they are not owned by mum and dad anymore. They are owned by such-and-such family trust or they are owned by a private company, and they are run a lot differently to when my father was a young grazier or farmer. I think we are seeing a generational shift. I see a lot of younger farmers who are part of a family structure that has a hierarchical system in place where that young farmer works his way up to become a director. They still go out and plough all day, fix fences and fall off motorbikes but at the end of the day they are seeing a different way to do business. I think we need to

encourage farmers to do that. Once upon a time simply being a farmer meant you produced something and once it left the farm gate nobody really cared too much about it. It is the whole food production chain now that they need to have a view on because at the end of the day they are not selling cattle, they are selling beef to consumers.

**Senator O'BRIEN**—Does that mean we are going to move away from the concept of the family farm—

**Mr Burke**—No, I do not think so.

**Senator O'BRIEN**—rather than the family corporation and those who work on it?

**Mr Burke**—It is still the family farm, though. There are a lot of families that still farm country and they farm it as a family unit. They have just become a little more clever in the way in which they have structured the entity that owns it. It is owned by a trust or a small family company rather than by mum, dad and the two boys.

**Senator WILLIAMS**—I have scars on my face from falling off motorbikes when chasing cows. Are you concerned that the MIS and the carbon sink tax deduction issue may force the price of land even higher to a false level because the big end of town may have a big cheque book and be able to get tax deductions and that will force the family farm to buy more land to genuinely grow food instead of trees?

**Mr Burke**—There is no doubt that certainly in parts of Victoria, New South Wales, South Australia and Queensland some properties have been bought by MIS companies. They were certainly bought at a rate that would not have been sustainable in the market for further agricultural use.

**Senator WILLIAMS**—Coming back to Senator O'Brien's issue and return on investment, the more that forces up the price of land then the less return there will be on investment for the genuine family farm.

**Mr Burke**—That is why we have always argued that it is a distorting policy that encourages the sale of land at an overinflated market price simply because of the tax deduction that is in place to support it. I would love to be able to get that upfront tax deduction—

**Senator WILLIAMS**—So would every other family farm.

**Mr Burke**—Yes. That is where it distorts things. At the end of the day we have a lot of members who have probably been in a position to sell to an MIS company—'Thank you very much.' It needs to be more market driven.

**CHAIR**—It is a cost to the public purse eventually whether you want hospitals or MISs. I think the issues that Senator O'Brien was raising are quite legitimate. There is an institution of family farming. It is well regarded. It does defy common sense at times, but we still get out of bed and do it. It is a great Australian institution. At some stage of the game if there are other forces like MISs in a market which appreciate the capital then, like some spectacular merchant

banks in recent times which learnt the hard way, eventually there will be a serious market correction.

**Mr Burke**—There perhaps will be a correction in the ownership in the next few years. I really do not know. We recently convened a meeting here in Queensland of all the major banks who have exposure to agriculture in Queensland because we wanted to talk specifically about how they were dealing with the floods in North Queensland. Unanimously they said that to them agriculture is a viable, long-term investment that they want to be involved in. It has its ups and downs, it has its speed bumps. They said the likes of the floods in Far North Queensland and the fires in Victoria are inherent in agriculture and that they take the bumps with the good. Most of the banks we spoke with are very positive about the long term because a lot of them these days not only take the capital value into consideration but will not lend on something that does not have a good cash flow.

**Senator O'BRIEN**—Can I just follow that up, because it raises an important point. We have seen corrections in banking in other countries and if that were to occur here I suggest to you that some accountants would look at the book on agriculture and say, 'Bit of an overextension here,' and what do they do then?

**Mr Burke**—Yes. I guess—

**Senator O'BRIEN**—It is an unanswerable question. I am doing what the chair sometimes does—

**Mr Burke**—I can appreciate that.

**Senator O'BRIEN**—and putting a position for the sake of putting it.

**Mr Burke**—Can I just say that what we might have to do is jump off that bridge when we get to it. But at this stage I would not expect that we will face that.

**Senator O'BRIEN**—You cannot say anything else, I know that, Mr Burke.

**Senator NASH**—I am very glad you did, Mr Burke.

**CHAIR**—Senator Trood is being very well behaved and I think he deserves a question.

**Senator TROOD**—Thank you, Chair. There are a couple of areas I want to explore. Mr Burke, Growcom, who appeared here before you, put the proposition to us that there was a need for an overarching food and agricultural policy, essentially developed at a national level. Do you have any view on that?

**Mr Burke**—I certainly do. I was involved with a group which wrote a paper a number of years ago. It was called the Agriculture and Food Policy Reference Group, and we wrote basically what was an overarching policy on food and food production. So I certainly support that concept. The difficulty is how to get it up and implemented, because from representing farmers I am aware that the issues are different everywhere you go. It is very difficult because once you start talking food and agriculture policy you get into all these other areas; you cannot

but get involved in infrastructure. Telecommunications is another area that has a huge impact on agriculture. Would telecommunications fit into a food and agricultural policy reference group? I do not know.

**Senator TROOD**—I do not think they were saying it was going to be easy. They nevertheless thought it was a good idea. What do you think should be included in that kind of policy?

**Mr Burke**—Certainly, all the things we have talked about here. It is the paddock to the plate, basically, because that is the way we are headed. That is the way we are encouraging our membership to look at their business. If you are producing cattle, you need to have a view on what market they are going to and what cuts of meat you are trying to produce to go on which plate in which country. It is the same with grain. Once upon a time there were one or two varieties; now we have got different varieties all across the nation that apply to different inner markets. Any food and agriculture policy has to be just that: it has got to be food/agriculture, and that is a fairly big spectrum.

**Senator TROOD**—I take it from your remarks that this would have both a national and international dimension. Is that correct?

**Mr Burke**—It would have a national dimension from its legislative reach, and that is what you would need to look at. You would need to look at how national legislation would impact on the ability for agriculture to perform its task in the food chain.

**Senator TROOD**—Is there a copy available of that document that you produced a couple of years ago?

**Mr Burke**—Yes, absolutely.

**Senator NASH**—If you could provide that to the committee, that would be very useful.

**Mr Burke**—Yes.

**Senator TROOD**—If you find it somewhere on your machine.

**Mr Burke**—It was commissioned by the then minister for agriculture, so it will be in the DAFF library, no doubt, but I have got a couple of spare copies at home.

**Senator TROOD**—I do not know that we have got the energy to go look for it at DAFF!

**Mr Burke**—It was convened simply because at the time the NFF had been pressuring the government to say, 'Let's look at agriculture and food policy and where we're headed.' It was just a snapshot and an overarching look at how we would do things. In the course of that, we read documents and reports from 20, 30 and 40 years earlier, and it was interesting that some of the same issues kept coming up.

**Senator TROOD**—If you could find it, that would be helpful, thank you. I was also interested in your remarks on issue 4. I have not had an opportunity to read it closely, but you have made this point about research and development, the decline in funding and the way in which it is now

being supported. I wondered if you had anything further to add, or perhaps you could just make this point a little more clearly to us. You have said it has decreased, and you have made a reference to the Department of Primary Industries and Fisheries in Queensland about the method by which it is funding its activities or at least topping up its funds. I would like some clarity on those things, please.

**Mr Burke**—From the state perspective we have seen over the years a reduction, not necessarily research and development as such, but more so in the extension and the delivery of what information is out there from a state base. I do not know whether you guys want to comment some more on the state one. I can elaborate on federal R&D as well.

**Mr Pearse**—I think one of the key issues is that there are areas which the state have chosen to focus on in the past which may not necessarily have led to productivity gain. There is a growing recognition in all states and federal jurisdictions that research needed to be better coordinated and there are steps underway to introduce that. For instance Queensland as we understand is going to be the new leader in beef research, which is obviously appropriate given that we have 40 per cent of the herd. There are some initiatives that will, hopefully, improve the efficiencies. I think you will see predictions are that we will have a fair bit more.

We are seeing a second trend, and Charles touched on the extension in the state, of the changing roles as we see DPIs phasing out their resources—both their R&D and extension—whether that is in real terms or in actual terms. We are seeing some areas where there are more resources, particularly Caring for our Country and HT funding coming through, and the increasing important of NRM groups in delivery of extension and best practice to producers. That is obviously focused on environmental aspects. I think there is a general consensus from producers that that needs to marry the environmental and productive factors up a little more. Again that is an area where better cooperation between the rural IDCs, industry groups and NRM groups as well as the traditional extension bodies like DPI&F can actually get some on the ground change. I think there is a key point that research that does not result in practice change on the ground is a waste of money.

**Mr Burke**—For many years we saw productivity levels increase on the back of research and development, particularly here in Australia, in agriculture worldwide. I think we had an average of four per cent plus for something like 20 years. A lot of that was borne out of good research and development in a lot of farming techniques and technologies, but I think we are probably seeing now a little bit of a movement away from that into areas of environment and other sustainability issues. We need to keep focus on keeping agriculture in its productive base going forward because, if we do not, then we will end up falling behind a lot of other production countries simply because we do not get some of the advantages that they do. It is important that we keep that R&D spend up and we need to make sure that the balance between levies collected from growers and government influence in R&D is still kept at a very high and sustainable level.

**Mr Wagner**—I could give one very quick example there. We talked about the extension capabilities of increasing production opportunities. We actually have some evidence at the moment that the entire state of Queensland does not have an agronomist on the state government books within that capacity at this point in time. Whereas, if you go back even half a generation ago, there were a very large number of agronomists directly employed by the state government

within that capacity. I do not have that substantiated but I have received that information from several sources at this point in time.

**Senator TROOD**—If it is true, do you mean in the sense that there is a position which is not filled or in fact the position has been phased out?

**Mr Wagner**—That capacity has just been lost within the departments within the state.

**Mr Krieg**—Funding has been moved to a commercial focus. Nearly all farms that are producing crops these days have a commercial agronomist who comes onto the property instead of a state government funded one. The state government has obviously jumped on that opportunity to get out and allow the market to do that. But there are significant areas in the R&D framework right through to the ESRC level of it that there is significant market failure. Things like the national R&D framework, where each of the states is going to concentrate on its biggest production area, is somehow missing that problem with market failure particularly from government funding perspectives.

We have crops here in Queensland like the summer pulses—even winter pulses—that are a very small crop in comparison to, say, wheat or sorghum, but we are going to see the DPIF pull out of any sort of investment in those because they are a small component of the production for the state. It is probably taking it completely the opposite to the way you should be going: leaving the commercial guys to look after the big crops and the state governments and the federal government to look after the smaller crops to make sure that we have rotations, to make sure we can keep ahead of diseases and pests and weeds.

**Senator TROOD**—You are concerned that the state governments will see this as an opportunity to pull out of the funding activities they are already engaged in in smaller areas of their state and those activities will fall through the cracks that no-one will be doing them anywhere across the country?

**Mr Krieg**—Exactly that. It is not just anywhere across the country; you do still need to do some of these things locally. The production of grain in South Australia and Western Australia is of no relevance to us here in Queensland, a northern subtropical grain production area. We are seeing a lot of the research effort head to South Australia. They have done a great job of building up their research base at the Waite campus, and we are being left behind. All of our pathology work is now done in South Australia, which has no relevance up here at all. That is a real worry for us. A lot of it is on the back of the state government getting out of the investment they have made in the industry over the years.

**Senator TROOD**—Is the quantum of their contribution declining or is it just a refocusing of the same amount of money?

**Mr Burke**—The reporting of government budgets can sometimes be a little difficult to follow! Therefore, I would not like to make a claim on whether it was one or the other. It sometimes is difficult to work out whether the net spend is reduced or increased, but basically the services are being wound back. Whether it is to go into another area, we are not exactly sure.

**Senator TROOD**—You would not be shy, Mr Burke, would you? It would be a reasonably safe bet to say that there has not been any significant increase, wouldn't it?

**Mr Burke**—That is probably a fair comment

**Mr Pearse**—I think another issue that needs to be highlighted in terms of looking at the research and extension elements and the services provided by the state is the flow-on effects for biosecurity. As Lindsay touched on, there is a severe shortage of pathology services in the state in terms of grains. But for the other industries the fact that you do not have DPIF staff on the ground providing either extension or biosecurity services means that the net of people able to notify the department when there are potential exotic animal disease incursions or problems—

**CHAIR**—citrus canker.

**Mr Pearse**—Citrus canker—exactly, Senator.

**Mr Burke**—Another one is anthrax on the Darling Downs, which is a legal case pending. There is a list of them.

**Mr Pearse**—We have a significant issue. This also relates back to DPIF budgets and the ability for us to track where those resources are actually being deployed.

**CHAIR**—There could be a generational piece missing out of your scientists. Have you finished? We are starting to fall off the clock. Could I refer you to submission 47, which is by the Centre for Plant and Food Science, University of Western Sydney. They are going to give us evidence tomorrow in Sydney. I think it will fit in with your aspirations. I have one final question—slightly out of context: did the NFF make a submission to the Beale inquiry?

**Mr Burke**—Yes, I think it might have been done through the Cattle Council, though, rather than NFF.

**CHAIR**—Was it written or face to face?

**Mr Pearse**—AgForce provided a written submission and a face-to-face. I believe the Cattle Council of Australia did the same, and I believe there was an NFF one, but I would have to check that.

**CHAIR**—The question that I am begging is: did the NFF recommend that we bring foot and mouth disease into the Beale inquiry?

**Mr Burke**—No—that is your answer.

**CHAIR**—Do you have a view on whether we should bring in foot and mouth? That is not cutting across anything we are doing, is it? It is a pretty important question.

**Senator WILLIAMS**—You are the chair.

**CHAIR**—It is to do with food production, given there are 800,000 feral pigs on Cape York Peninsula.

**Mr Burke**—I am not convinced—

**CHAIR**—You do not have to answer it here.

**Mr Burke**—Okay. I was going to. I will defer, then.

**CHAIR**—Well, do.

**Mr Pearse**—I will just refer you to some public statements which AgForce have made. The development of the policies on the importation of live virus FMD initially came from AgForce resolutions. It was one of the first formal resolutions on the AgForce Cattle Board which we took to Cattle Council and successfully passed in 1999, 2003 and 2007.

**CHAIR**—And what were they?

**Mr Pearse**—To oppose all importation of live FMD virus.

**CHAIR**—Are you aware that we have taken evidence during Senate estimates from the chief scientists at ARL that says we no longer need to for scientific reasons?

**Mr Pearse**—Absolutely. We have been in close contact with ARL through the Cattle Council of Australia and understand Greg Brown has taken those concerns forward as well.

**CHAIR**—Without any further ado, we thank you for your time and attention. I would especially refer you to the west, and we look forward to a continuing dialogue. Thank you very much.

**Mr Burke**—We look forward to your deliberations and what comes out of them.

**CHAIR**—If you want to come back and pay us another visit at some stage, there are big questions that have to be answered here.

**Mr Wagner**—Indeed, if there is anything more that you need from us, please do not hesitate.

**Mr Burke**—What is the proposed timing for your deliberations?

**CHAIR**—Certainly not before the end of this year.

[12.32 pm]

**LEMON, Mr Robert Alan, Private capacity**

**CHAIR**—Mr Lemon, if you would like to state your name, rank and serial number and make a short opening statement, we will then ask you some questions.

**Mr Lemon**—I have a little farm at Stanthorpe which has been in drought for six years. I started jackarooing in 1953. I have had a long career, I suppose you could say, in the bush. I had a farm in partnership with a bloke at Mareeba fattening cattle on irrigated pastures in the sixties. We had a special agreement to develop the property for animal grazing and a special arrangement to develop it for the Queensland government, but it failed for various reasons. I bought this farm at Stanthorpe about seven years ago because it always used to be a place where you could rely on water—but no longer. The fruit dropped on the ground there about three years ago and they lost pretty well the whole crop.

My submission is for jobs, jobs, jobs. It is water and it is continuity of production which we do not have in Australia. If you look at the submission I put in today, you will see I have included some maps of the Rhine. It might be of interest to you to know that the Rhine has a stream variation of two between high and low stream flow. It only varies by about two. The Murray has a stream flow variation of 15.5; the Darling has a stream flow variation of 4,700.

**CHAIR**—That is stream flow variation, not mean average flow?

**Mr Lemon**—Yes.

**CHAIR**—Because the Condamine-Balonne and the Warrego have an 850 per cent variation. The Murray has a 350 per cent variation. I am across the technical side of that.

**Mr Lemon**—Good. That is the point I am making. Isn't it about time we did something about this question of water? The government have spent millions or billions and they have not produced one extra gallon of water. They have bought a lot of water licences, bought properties that have water allocation, but they have not produced any water. My submission is that we need to have a constant stream flow. In Europe, because of the snow and the glaciers on the alps et cetera, they have a constant stream flow. We can have it by desalination. Desalination with very, very large schemes can give us a constant stream flow.

Interestingly, I see that in the state election the member for Mount Isa, who is a Labor person, is talking about mining uranium. Anna Bligh is not very happy with that, but it is amazing to see what people power can do. You can see the figures I have given in the paper I submitted today. If we started to market by leasing our uranium, we would have enough manpower to pay for the infrastructure of all of these things we need. The most common objection you get is, 'Oh, we cannot afford that; it costs too much,' and this, that and the other, but, if you measure it against the potential, if we put our thinking caps on, what can we do? It is not what this country can do for us but what can we do for our country? If you look at the figures and do your own number crunching, as I am sure you will, you will see that the ball is in our court. We are not making the

most of our opportunities. If we leased our uranium, if they had a hundred of these plants in China, it would reduce their pollution by about 50 per cent. If we put 25 in Australia, we could shut down our dirty coal-fired power stations and reduce our pollution by 50 per cent.

**CHAIR**—Can I just ask you a question. You are saying we should go to uranium power production?

**Mr Lemon**—The idea is to lease our uranium and to use the uranium ourselves to produce water. You understand that, when you have a solar plant, you only have eight hours of sunshine. That is the end of the story. If you put the helium gas through the solar still—look at page 8; you can see that that gives you the details of the still—it depends on the type of design. Just imagine that that was glass. That is four equilateral triangles. You are getting down to the costs of producing it. You would have a plant up there producing the glass, because you would need 100 square miles, on my number crunching, to provide 60 million acre-feet of water, so, if you had 25 plants, you would have 1,500 million acre-feet of water.

**CHAIR**—I have learned to get away from acre-feet into megalitres and gigitalitres.

**Mr Lemon**—Well, that is 1,850,000 gigitalitres, but I am in the old style. How many farmers are there in the four states—Queensland, New South Wales, Victoria and South Australia? I cannot get it off the internet; it is confusing. You would need 800 million acre-feet per annum to provide 16,000 farms with 500 acres of permanent irrigation. That is using a figure of about three inches per irrigation.

**CHAIR**—I do not want to interrupt you, but can you just convert that to gigitalitres or megalitres for me?

**Mr Lemon**—I cannot offhand, no. I do not think in that way. I am back in the old school. But it is not hard to do; I have got the figures.

**CHAIR**—It always used to be acre-feet—

**Mr Lemon**—I do not have it in the brain box. You have probably seen Professor Endersbee's *A Voyage of Discovery*. Have you never seen the book?

**CHAIR**—No, I have not. I had better not say what I would usually say.

**Mr Lemon**—That is an absolute must; you ought to read that because he was on the Snowy Mountains scheme. I have been to his talks several times. The thing that comes home is that there was tremendous esprit de corps. The Snowy Mountains authority was very good and they all cooperated. That is what we need now so that, if we can have this stream flow, we can do 1,500 million acre-feet. If you allocate the whole of it to farming, that is about 32,000 farmers, enough for 7,500 sheep permanently or 1,250 head of cattle. We are talking here about sustainability. That is what we do not have in Australia. About five or six of the grain crops of Goondiwindi and so on have failed, one after the other. What I am suggesting is that we should have continuity of production.

**CHAIR**—Could I just interrupt you—I apologise—because I am finding it hard to follow. What you are saying is that we should have continuous stream flow developed by desal.

**Mr Lemon**—Developed by the amount of money we earn from our export of uranium.

**CHAIR**—And then put that back into desalination?

**Mr Lemon**—Yes. You could do a barter system.

**CHAIR**—So you would hugely subsidise the price of the desal water? Can I just give you a—

**Mr Lemon**—At the end of the day, it depends how you want to do it.

**CHAIR**—But, as Senator O'Brien pointed out, even on the capital cost of farming land there is a point in the price of water where the only thing you could grow that would pay would be marijuana or something. I am aware that Kinhill did a study on the great dream of bringing water from the northern parts of Australia to Adelaide and it was 2½ times the cost of desal, and the cost of desal is several times the cost of free flow. There is a reality in what you can grow at what price with water, and once you go 300 or 400 miles down a pipe it becomes very expensive regardless of whether it is desal or whatever. Have you related any of this to some sort of subsidy requirement or commercial—

**Mr Lemon**—No, I have just said that we have the opportunity to market our uranium via leasing. If we do that we will have enough money and enough people. I suggested in the paper that every tonne of uranium would attract four construction workers. If you had 200 tonnes of uranium per plant you would have 800 construction workers per plant. You could get 20,000 construction workers here.

**CHAIR**—I hear your argument. I want you to go home and think about this because I am going to argue that we really should not mine any uranium necessarily for future energy requirements. We should develop thorium.

**Mr Lemon**—That has already been done and they gave it away because they decided it was better to use the uranium.

**CHAIR**—No, they have not completed the research on it. All it needs is a billion—

**Mr Lemon**—The Germans did it 30 years ago. Thorium is much more plentiful than uranium—that is true.

**CHAIR**—And it does not have plutonium as a by-product.

**Mr Lemon**—What I am saying is that if we did what we need to do we would have enough people. You could have a million construction workers here building all the things we need. We do not have enough people in this country to develop our country. The Victorians are crying out for water—they are out of water and there are bushfires. Doesn't it make sense to have some water? Doesn't it make sense to take off the blinkers, look around and say, 'What can we do?'

**CHAIR**—I am all for that.

**Mr Lemon**—Okay, that is what I am suggesting. If you do the research and do your own number crunching, you will see there is enough money from leasing. The uranium comes back, goes through our fast breeder reactor and is regenerated. We keep control of a dangerous product and we can supply. With Canada we have 70 per cent of the known quality reserves in the world of uranium, so that is Canada and Australia. I suggest that a group of countries, a COW group, could come together, much as we did with lend lease, and could turn things around and turn the economy around.

**CHAIR**—Would that require Australia to nationalise the uranium industry?

**Mr Lemon**—It would certainly require government to do something, but whether you go to Rio Tinto and say, ‘Look, we need 20,000 tonnes or 20 per cent of your—

**CHAIR**—You would have to change the ASIC obligations on directors if you were to do that. They have an obligation to maximise profit for their shareholders.

**Mr Lemon**—They do that, but whether you say to them, ‘Okay, we’ll charge you 20 per cent less tax if you supply us’ with so much uranium or whether the government does it itself. It is a matter for the government.

**CHAIR**—I have not had an opportunity to read today’s submission. But can I put it to you that as an alternative to that—while producing desalinated water for commercial farming, which I presume you are talking about—wouldn’t it be better to develop some of the untapped water resources of Australia?

**Mr Lemon**—Where? What untapped water resources?

**CHAIR**—I will take you through it. The Murray-Darling Basin has 23,000 gigalitres of run-off. It has about 17,000 gigalitres of available water and it is forecast to decline by somewhere between 3½ thousand and 11,000 gigalitres over the next 40 years. The Timor catchment has 78,000 gigalitres. The gulf catchment has 98,000 gigalitres. The north-east catchment has 85,000 gigalitres. There are 350 gigalitres diverted in the north-east catchment. There are 55 gigalitres in the gulf and there are 50-odd gigalitres in the Timor catchment. There are unlimited resources of soil types where the water is. The Fitzroy River with the top Margaret River, not the wine Margaret River, in Western Australia have a wonderful potential irrigation zone there. That is 63½ per cent of Australia’s water resources in three catchments for which we more or less just say, ‘Shit! There’s a lot of water there. Let’s go down to the pub and have a beer.’

**Mr Lemon**—Certainly you need to consider diverting all the water that falls on the eastern side of the Great Dividing Range to the western side, and you have got the revamped Bradfield scheme including the Reid scheme. I am not sure how much water you could get. There are various figures. You would certainly get 100 million acre-feet of water at least. Certainly you could do that, but at the end of the day what you are faced with is that Australia is the driest inhabited continent. The CSIRO did a survey. They took a core out of a coral polyp outside the Fitzroy on the Barrier Reef. They went back a thousand years. They found numerous gaps. One was for 30 years. There was not enough rain to run the river for 30 years. What are you going to

do if we get another drought? What if the scientists say things are going to get worse with more extremes? What if you get a 50-year drought? What are you going to do? That is where your argument falls down. You need to have desalination in conjunction with the other stuff.

**CHAIR**—I am happy to have the contest of ideas and we are very grateful for the contest of ideas, and I am sure there are questions that other people may wish to ask. But when it comes to production you have got to relate it to cost. Now take the fixed cost of desalinated water. There is a proposition by Sydney services. In Sydney 335 gigalitres of water goes out to three main outfalls. They want to put it into the top of the Wyangala catchment.

**Mr Lemon**—This will cost us \$1 a gigalitre. That is if you divorce the actual construction cost and you just have the running cost. It is 1c per 100 cubic metres of water. Anna Bligh had a bloke on the Brisbane River doing a desalination plant on a barge. He got into the cab I was driving. He said it was going to cost us \$1 for one cubic metre. I am talking about 1c per 100 cubic metres and about very large plants, and it is very cheap.

They would be funded by the lease of our uranium by a COW group, as I have in my submission, to come together cooperatively and turn things around. Have a look at what President Obama said in his inaugural address; I have put something on that in there. The first thing you have to do is think you can do it. If you do not think you can do it you will not do it. The first thing is you have to have water. I have been farming for a long time and, as I understand it, the grain farmers are on their knees. They have had five or six crops and no return, and the cost of buying more grain to replant and all the rest of it.

**CHAIR**—That is not quite accurate, but we hear what you are saying.

**Mr Lemon**—That is basically what I am saying.

**CHAIR**—The grain industry has been going through a pretty tough time.

**Mr Lemon**—Continuity of production.

**Senator TROOD**—I have a couple of questions. Mr Lemon, following on from the point that the chair is making, what is the justification for taking out the capital costs of this infrastructure in determining the overall costs? Isn't that a critical part of the overall cost to the community?

**Mr Lemon**—It is a question of trade. We know that there are about 3.5 billion people in the 20 countries around the northern rim of Australia. Who was the bloke who said we have been putting out billions and billions of dollars and none of it has relieved the poverty of these poorer countries?

**Senator TROOD**—But we have to get a cost price for the production. I do not see how you can do that without including the cost of capital expenditure, which in building these kinds of desalination plants, as we all know, is substantial—and you are talking about how many?

**Mr Lemon**—I work on the basis of 1,850,000 gigalitres of water per annum. It is a variable thing. Some years you get plenty of rain but quite often you do not. So it would vary according to how much you produce.

**Senator TROOD**—I think we are with you on that.

**Mr Lemon**—If you have the jump on power generation, you can shut down your dirty coal-fired power stations and reduce Australia's pollution by 50 per cent by 2020 and you do not need to have the tax that Penny Wong is talking about. One per cent carbon tax would be adequate. So it is a difficult equation. You have to put all these things in and it is beyond my ability to do it. It is a government thing. All I say to you is to have a good look at it; have a positive look at it. Do not be negative about it, and see at the end of the day—when you do your number crunching—if we can achieve it, because if Australia does not do something we will be the poor white trash of Asia. You go into the bush and have a look at all the towns. Have a look at what BA Santamaria said.

**Senator TROOD**—I think we are on common ground when we recognise the nature of the problem. The question is how we are going to find solutions to it.

**Mr Lemon**—Just think of the cost being set aside because it is paid by the income from the lease of uranium, or thorium—it would not matter.

**Senator TROOD**—How do we solve the problem in relation to uranium production and the uranium cycle, the difficulty of regulatory regimes and levels of expertise et cetera, which are absolutely critical to moving into a whole new industry which is not established in Australia at the moment?

**Mr Lemon**—India, China and Russia are the three big ones. We have been selling uranium for about 50 years to France. France produces about 90 per cent of their electricity from hydro and uranium—nuclear. You have to have a watertight deal. When you give them a fresh batch of uranium, you take back the other patch and reprocess it. The new fast breeder reactors are 100 times more fuel-efficient than the old ones. There is enough uranium there for the world for 10,000 years, according to the paper from Canada.

**Senator TROOD**—I suspect that may not be the problem. The countries to which we sell uranium might well be disposed towards the return of the waste. I think that is less of a problem than wider questions about regulation, expertise and the cost involved in the whole exercise.

**Mr Lemon**—The point is that if you lease it they have to give it back. We keep control of it. Australia has the ability to do that. It has a huge area, a safe area, where you can store it. With the fast breeder reactors there is very little waste and it is very benign waste—very low-level waste—which you can just put down a bore hole and store for a year.

**CHAIR**—I want to go to something just to give you something to think about tonight. You say you want to produce 1,850,000 gigalitres through desal?

**Mr Lemon**—That is just a figure that I worked out to do the Murray-Darling, the Lakes and the—

**CHAIR**—No—let me tell you: your figures are wrong. That is 4½ times the run-off of Australia.

**Mr Lemon**—What is the point?

**CHAIR**—What you want to turn into desal is 4½ times the entire run-off of the continent.

**Mr Lemon**—It is not very much when there is a drought on. You are talking about average figures.

**CHAIR**—Yes, but I am asking: where do you get that figure from? The Murray-Darling Basin has 6.2 per cent of Australia's run-off—that is 23,000 gigs. Let's make it 20,000 for easy work, so that is 4,000 gigs for one per cent of the run-off and 400,000 for Australia, and you want to produce 1,850,000.

**Mr Lemon**—I wrote to the Prime Minister and included, on page 23, the formula for calculating the amount of distillate you can get from a solar still. This is produced by a bloke in Turkey. I do not know whether—

**CHAIR**—I just wondered as a matter of interest. Is there something about the line on the map you have drawn?

**Mr Lemon**—This is about fast trains. You can go from Echuca and possibly get up to Darwin in seven or eight hours. You could have this food in Singapore in two days. If you just fed 10 per cent of the northern population, you are looking at about \$637 billion per annum. Those are the things you have to consider—the pluses and the minuses—and you will see if you work it out that there is enough money, but it requires an attitude of mind to bring it about.

**CHAIR**—We are grateful, but we have not had a chance to read the submission you brought today. We are thankful for your enthusiasm and presentation.

**Mr Lemon**—The other thing I should say before I finish is: the red tape—the green tape, the blue tape or whatever it is—as the previous fellow said, has clogged up the Australian farming industry. In the submission I wrote about the fact that you cannot subdivide and resell. I have a farm that I reconfigured. I sold two five-acre blocks. The council said, 'Oh no, you cannot do that because it's less than 40 hectares.' I said, 'Wait a minute. There's no water. Why haven't you provided any water? You can't do anything with it.' If I can do an eco-village or a group or community title—

**CHAIR**—That is a matter for you and the council; it is not a matter for us.

**Mr Lemon**—The farmers and graziers in Australia have lost their superannuation. They were counting on that. It is in the material anyway.

**CHAIR**—Thank you very much.

**Committee adjourned at 1.00 pm**