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Official Committee Hansard

**HOUSE OF
REPRESENTATIVES**

STANDING COMMITTEE ON PRIMARY INDUSTRIES AND
RESOURCES

Reference: Assisting Australian farmers to adapt to climate change

WEDNESDAY, 18 NOVEMBER 2009

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HOUSE OF REPRESENTATIVES
STANDING COMMITTEE ON PRIMARY INDUSTRIES AND RESOURCES

Wednesday, 18 November 2009

Members: Mr Adams (*Chair*), Mr Schultz (*Deputy Chair*), Mr Champion, Mr Forrest, Mr Haase, Ms Livermore, Mr Perrett, Mr Sidebottom and Mr Windsor

Members in attendance: Mr Adams, Mr Forrest, Mr Haase, Mr Perrett, Mr Schultz, Mr Sidebottom and Mr Windsor

Terms of reference for the inquiry:

To inquire into and report on:

- Current and prospective adaptations to the impacts of climate change on agriculture and the potential impacts on downstream processing.
- The role of government in:
 - augmenting the shift towards farming practices which promote resilience in the farm sector in the face of climate change;
 - promoting research, extension and training which assists the farm sector to better adapt to climate change.
- The role of rural research and development in assisting farmers to adapt to the impacts of climate change.

WITNESSES

**THOMAS, Mr Geoffrey Neil, National President, Australian Institute of Agricultural Science
and Technology 1**

WILHELM, Dr Nigel, Member, Australian Institute of Agricultural Science and Technology..... 1

Committee met at 5.15 pm

THOMAS, Mr Geoffrey Neil, National President, Australian Institute of Agricultural Science and Technology

WILHELM, Dr Nigel, Member, Australian Institute of Agricultural Science and Technology

CHAIR (Mr Adams)—I welcome the witnesses and declare open this public hearing of the House of Representatives Standing Committee on Primary Industries and Resources for its inquiry into Australian farmers and climate change. Although the committee does not require you to give evidence under oath, I should advise you that this hearing is a formal proceeding of the parliament and warrants the same respect as proceedings of the House itself. Giving false or misleading evidence is a serious matter and may be regarded as a contempt of parliament. The committee has received your submission, which it has numbered 63. I now invite you to make an opening statement on the submission or some introductory remarks, after which the committee will probably have some questions for you on your submission.

Mr Thomas—In opening, I guess the core of our submission is that farming in Australia is not the easiest of enterprises at the best of times and farmers have been proven to adjust to all sorts of issues in the past. To us, given the speed with which these changes are likely to occur and the fact that many farmers had to adjust quite recently during the serious drought period to a number of similar things, then we are confident that they will do so in the future provided that government policies themselves do not get too much in the way. In fact, I think I make the statement in the submission that one of the risks is that the policies of government could have a greater impact on farmers than climate change itself.

CHAIR—I did see that comment.

Mr Thomas—And I think I made it when we met previously in about April, so you have a good memory.

CHAIR—Other industries have also said that.

Mr Thomas—Have they? Oh, dear, I thought we were the—

CHAIR—Yes, over the years.

Mr Thomas—As I said, with their capacity to respond it is about policy and it is about their farm financial management skills. Much of this is not just about technology; it is about the capacity to manage profitability and risk. That is what it is really about. That is over and above all of the other things like regional infrastructure and those sorts of things which are common to all rural areas. Our concern is in relation to policy, particularly in relation to the Carbon Pollution Reduction Scheme. There is argument at the moment as to whether agriculture is in or out. It seems to us that agriculture is in to a fair degree at any rate in terms of the impact on its input costs. I think it can make a real contribution in terms of carbon trading and carbon credits. Just because agriculture, we feel, is not in a formal policy at the present time does not in any way reduce the responsibility on agriculture to do its bit in terms of reducing the impacts. I think

that is something which will require quite careful management, and I make the offer here that this committee might even utilise the services of the institute as a body that is independent. We are not farmers. We are a professional body. I think we are in possession of the facts. We have a reputation for producing a balanced view. I think a forum which cuts through some of the emotion and the like on some of these issues in a way which is not attached, if you like, is important.

The other major thrust of the submission is our concern with regard to the profession itself. It is quoted in the submission that there is demand currently for about 2,000 agricultural science graduates per year. We are producing 800. Certainly the institute has looked at this as a major issue, as to why young people are not attracted into agriculture. We are working on that. That has an impact in two regards. The first is the capacity to provide farmers with and teach farmers the farm business and risk management skills that they will need. The second is to generate people like Dr Wilhelm, who is involved in research, and to continue to research solutions. Australia has what I believe is a very proud history in terms of our agricultural growth: two per cent per annum for God knows how long is a pretty good effort. But it has plateaued, and one of the reasons it has plateaued is we are living off our intellectual feedstock because we are not generating graduates. That is going to cost us dearly not only in relation to climate issues but also in relation to our capacity to trade and produce effectively. That is by way of an opening statement, thank you.

CHAIR—You comment in your submission—in our papers this is on page 28—about farm and rural adjustment and you talk about government policy. You touch on natural commercial forces and being able to let adjustments occur. We have had some of that through our evidence—people moving to the north of Australia and I think we have had one company do that through peanut farmers and whatever. You go into exceptional circumstances, which is probably about government policy over the years and there are changes taking place in that area, which has probably helped restrict some people who needed to change and move on or not move on—and I have experienced some of this in my own electorate. We have taken some evidence on the social issues as to how you change and how you help people come through and adjust. Would you like to expand a bit on that? I see under ‘Taxation’ you also mention taxation policy in relation to government policy. I think that farming might go to even bigger acreage and bigger areas, that capital units will probably become a bit smaller than they exist now and that there will probably be more corporates out there farming. Would you like to comment on some of those?

Mr Thomas—Yes. In terms of exceptional circumstances, it is an interesting one. I was part of the push some years ago to have the old drought relief schemes changed to exceptional circumstances ones. The only issue that happened with that is of course that political forces got in the way.

CHAIR—It played its role.

Mr Thomas—It played its role, but there is no question that it has caused less adjustment than there would otherwise have been. Even some of the people who have received it would admit privately that it probably has not done them a favour. It certainly has not done other farmers in the area a favour because it has reduced their capacity to adjust. So what does one do about it? We are not saying to chop them off at the socks. I might quote this, that we ran a program in the 1980s when I was with the South Australian Department of Agriculture with farmers on the Eyre

Peninsula who, because of drought and because of high interest rates and everything else, were in all sorts of trouble. There was an enormous amount of change that occurred. A lot of farmers left simply because we provided adequate services whereby they—not just the farmer but the farm family—could realistically analyse their real situation. We also did things like look at job opportunities in the cities and put them on track with those.

If you do those sorts of very practical things, people will change. The major restriction on that sort of change, of course, is the social pressure—knowing that, if the kids leave, the school closes and everybody suffers. It is a very difficult situation. That is the thing to do rather than continuing with the current system, which I do not think is doing anybody any good.

In terms of farm size, I know it is a common belief—and I am sure Nigel will comment on this—that it is about economies of scale, get big or get out. We have heard it for years. We do a lot of work in the low-rainfall areas, and I can tell you that there have been a hell of a lot of cases get big and get out around the place. It can readily suffer from the dinosaur effect, which is that the animal becomes so large in relation to the brain that is running it that it becomes extinct. It is just as healthy in farming as it is anywhere else. What we are now tending to see is not just corporates but companies like Glencore, in the Mallee area, in fact leasing property as a unit. What is happening in that situation is ideal because the farm family stays on the farm. They might well use the same plant.

CHAIR—It is risk management process, isn't it?

Mr Thomas—Yes. So Dick Adams can get a secure income; he does not have to worry about the bank. He might even sell the farm, as has happened at Condobolin and other areas, for argument's sake—selling out to Sydney people who think that it is still close enough to go for the weekend. Farmers say, 'What the hell are we going to do?' and I said, 'You're going to continue to farm it. Free up your capital; put the capital somewhere else. You don't have to worry about the bank manager ringing you up. Go for it.'

CHAIR—That is about people having a skill base or an understanding of how they can utilise their capital or skills in another way. We have long-term ties to some land, and that is generational, and it becomes a generational change, doesn't it—

Mr Thomas—It does.

CHAIR—and those difficulties confront.

Mr Thomas—It does, and it has happened since Australia was settled. I am sorry, but the current generation is no different.

CHAIR—Nigel, would you like to come in on that?

Dr Wilhelm—Only in the context that that is one of the almost unique features of the agriculture industry, where the home and the business are so closely linked and are in fact often the same entity. That of course makes business adjustment much more difficult and the emotional stakes far higher. I guess that is about the adjustment schemes and support schemes. It is hard to separate the business operation from the social side of things. That is the dislocate we

need to make. The businesses will adjust; it is softening the social impact, and the government has the best role.

Mr SCHULTZ—I was interested and, more importantly, gratified and heartened by the fact that your approach to the current climate that we live in is very refreshing. I say refreshing because you talk about agriculture and the management of agriculture by farmers as always being adaptable, regardless of whether you talking about climate change or climate variability. The point that I want to get to is this: two weeks ago, my wife and I, through a program that she started some six years ago, delivered some drought relief parcels, as we call them—in other words, non-perishable foodstuffs—to a significant number of farmers around Gunning, Crookwell, Binda and those areas. I have to say that it was highly emotional for me because I had not done that for quite some time. I left that to my wife. It was highly emotional for me because I did not realise—whilst I knew there were a lot of farmers still in strife—how destitute they were. One thing that was compelling for me it was the enormous sense of pride, where they will not tell people how destitute they are.

They are in a situation where they are not getting any income. Some of them are living on the money that they are getting through the EC assistance program. Many of them are living in poverty. They have no guarantee that they are going to be able to find the resources to restock their properties; that is, with those properties that run stock. It was a very compelling message to me that we need to look beyond EC or the way in which we administer EC—and I am going to take that up with the current agriculture minister—based on the experiences that we have been having. What do you feel we need to do that could be beneficial to farmers outside of the normal process that we have? Sure, we have these people that we fund to go out and counsel them and do all those sorts of things. I can tell you there are some very serious depression problems out there.

Mr Thomas—My word!

Mr SCHULTZ—I have sat down with grown men in their fifties and sixties who are crying because they are in total despair—and they do not want to talk to anybody. Can you give us some idea of what you really think we should really look at in terms of changing our attitude to the way in which we distribute well-intentioned money to assist people to get back on their feet?

Mr Thomas—If I knew what was certainly the right answer to that, I would probably be doing something else. There are a few principles. I believe one is that you have got to involve the family. There is still this culture within Australia where we believe that the farmer is the male. In many cases, as I can tell you, it is the farm partner who understands the finances a damn sight better than the farmer does. The farmer can retreat to the farm and go around the sheep and do those sorts of things where the wife can't. In that Eyre Peninsular—EP—program we ran into some horrific situations as to womenfolk and medical conditions.

Mr SCHULTZ—So have I.

Mr Thomas—Absolutely dreadful ones, so we put in medical services for these people. The husband had the farm to worry about and himself to worry about. The wife had the farm to worry about, the husband to worry about and the kids to worry about. We were providing too little support to those people, and we have put that support in there through departments of

health and the like. The other thing that we did was this. The two people that we used on Eyre Peninsula, Venton Cook and Glenn Ronan, were experienced farm management economists. They knew what they were talking about. They put it simply. They put it directly. They would say, 'Alby, I'm sorry but I don't think there is a future here. I can't see one. Here are the options.' They would go through the options very carefully and very slowly. As I said, we had some employment type schemes. There is more employment out there than we give credit for. It is difficult for livestock farmers, because somebody has got to be at home to look after the stock. Making yourself available for work takes on a whole new reason if you have got stock to look after. There is work out there, and farmers and certainly their wives are very capable of doing a lot of that work. But it is about identifying those opportunities and linking them together. I guess what I am saying, folks, is that it is not just about throwing more money at it. That will not do it. It is about working smarter.

Mr SCHULTZ—That is precisely why I asked that question.

Mr Thomas—It is about looking at those health things and the like.

Dr Wilhelm—There is another angle to that. Obviously, it is trying to avoid the situation getting that bad to cause that level of stress. We refer to it in the paper. There have certainly been some recent statements highlighting that there are farm businesses that have gone through some unheralded bad runs of seasons and are still financially intact and sound.

Mr SCHULTZ—Yes, but just.

Dr Wilhelm—Sure, but they have made it when the neighbours' ones have gone pear-shaped. I think there is a great opportunity to improve the business skills of our farming community so that a business does not get that bad to cause the level of stress and heartache.

Mr SCHULTZ—I think the point that you have made is a very significant point; that is, we need to get the people in earlier than we have in terms of giving them advice on management and what they need to do on farm.

Mr Thomas—I do counselling work myself in this area. I often use this analogy. I hate to think of the number of hours that I have lain awake at night worrying about things that never happened—and haven't we all? What really annoys me even more than that is this. If you had really analysed the situation sanely at the time they never were going to happen—and that is the problem and I try to get this through to these people: know your real situation and you can then deal with it. Frequently the real situation is not nearly as bad. When you are lying awake at three o'clock in the morning and thinking about it, it is pretty hard to come to grips with that.

Mr WINDSOR—We have spent a bit of time on the negatives. What is your organisation doing in terms of promoting some of the positives in relation to land management so that the situations that you talk about do not develop? What has your organisation been doing? That is the first part. The second part is about what your organisation has been doing in terms of soil science, particularly in terms of soil carbon, humus and organic matter. What have the professionals been doing in the last five years?

Mr Thomas—Nigel will now take the second part of the question.

Dr Wilhelm—I think the situation of climate change for agriculture is a double whammy. We have got the farmers themselves coping with a climate which is changing—so that is new ground—and what we have had with other adjustments that the industry has been through have included an R&D community which has been able to support them through that change. But we are scrambling to adjust to climate change issues, the new paradigm, as much as what the farmers are themselves.

Mr WINDSOR—But surely in drought there are some techniques. I think you made the point yourself that in these adverse times there are some farms that are in a healthy condition. Surely we should be marketing the reason why those guys are in a healthy condition.

Dr Wilhelm—But the clear message from those studies is that it was not the ability of the farmer to run his farm; it was his ability to run the business. They were the skills that made the difference between an intact business at the end of this dry period compared to the neighbours' ones which were in dire straits. It was not so much their ability to farm the paddocks; it was their ability to manage the business. That message is coming back time and time again. But obviously there will be changes which affect the landscape with climate change, and it is about adjusting our farming systems to cope with those new paradigms that we are investigating now. There is a lot of work going on with some major initiatives from the CSIRO. They now have a flagship that is devoted to sustainable agriculture. That is one of their major initiatives. A major thrust of that is to cope with the changed landscape and how farming businesses should respond to that. I guess the key message there is resilience and flexibility. We expect climate change to create generally more adverse conditions in southern Australia and there will still be good years and bad years. It is the ability to respond to those challenging conditions which will help those farming businesses survive. So it is about giving them the tools to make changes quickly in the right direction. That is the major focus.

Mr WINDSOR—That is exactly my point. We have had a drought for a decade. You people are the professionals. What have you been doing, irrespective of climate change and whether it is happening or not, in terms of getting those techniques and processes and technology out there? We are blaming a system for having failed. I am wondering what the people who have been telling us it has failed have been doing. The CSIRO have just started to drill their first holes to have a look at whether there is soil carbon down there. They had done nothing. I am just wondering what you have done.

Dr Wilhelm—‘Failed’ is a relative term as well in that Australia is going through one of its most rapid improvements in crop yields that it has seen in white settlement. So in those terms it has been very successful in recent times.

Certainly the recurring message we get from farmers is that, if they had gone through the same climatic conditions over the last five years 20 years ago, they would have been in a far worse condition, both financially and environmentally. There would have been far more widespread erosion, degradation and loss of livestock—all those natural resource impacts that those same conditions would have had 10, 20 or 30 years ago. So, in that respect, we have moved a long way. What we have not been able to move far enough is to protect some of those businesses from not being able to cope with those conditions. That percentage is far smaller than it would have been, say, even 20 years ago.

Mr Thomas—There is a specific viewpoint. Nigel and I and various professionals work in a program called the Low Rainfall Collaboration Group. What we have recognised through that is that it is not just the individual pieces of technology that count. What farmers are requiring us to do is put them together, because it is sometimes very difficult for farmers to do that in a way which pays or in a way in which they can afford the investment. Nigel and I have done a lot of work in that with groups of farmers. The other thing we did last year and the year before is put out a publication—only last year—on *Managing profitability and risk for farmers with limited finances*. We knew that a lot of them were facing the wall. So what do they do? Do they reduce fertiliser? What are the options? Twenty-three thousand of those went out through the Grains Research and Development Corporation. There was more positive comment to the GRDC on that particular document than there was on anything else, ever. We are trying to use our experience—the total of that.

Mr WINDSOR—Could we get a copy of that?

Mr Thomas—Yes, you certainly can. As an institute, we are addressing some of the more basic issues, such as agricultural education. That is substantially our role. We have run across Australia a series of climate change workshops but what we call carbon trading workshops. We are not interested in debating whether climate change is real or not. The government decided that it is real and was going to set policies, so let's make sure we get them right. That means that the first thing is to have people informed. We have had 200 to 300 people at those seminars—everyone from people dealing in agriculture to real estate, and accountants to lawyers to ag professionals to farmers. The aim is to make sure that people are informed as to what the facts are so that they can engage in the debate. I reckon that is the first part of wisdom.

CHAIR—The skill base.

Mr Thomas—Yes.

CHAIR—If you are going to trade in carbon, and there is sequestration. Mr Haase has a question.

Mr HAASE—Thanks for being here, guys. I am very interested in your inclusion of the comments on where our graduates are coming from, where our farmers are coming from. We seem to be turning out fewer and fewer. Climate change and the prevalence of drought conditions in many parts of Australia are probably negatively impacting on what would be the normal graduation process of ag students. What are we doing wrong? Do you have any guidance for us as to how we work better improve the rate of ag graduates and so forth? I add, before I shut up and let you answer, that you may not be aware that Curtin University in Western Australia is on the verge of shutting the practical Muresk Agricultural College on the outskirts of Perth. They are pontificating about—and I am not in favour of the decision, of course—how they might teach ag students at their metropolitan college and arrange field trips for practical experience. Amongst other things, I would like you to comment on that teaching application.

Mr Thomas—Two-and-a-half years ago, the institute ran a major conference/workshop on agricultural education and its future. This is very relevant to the Muresk decision. They are not on their own; plenty of other places have done that. There seems to be a belief around the place that the top end biotechnology and everything else, will solve all the problems. We would wish.

Don't get Nigel started on that, please, or we will have to stay for breakfast! It was very clear. What came out of that was a lack of practical skills and particularly a lack of farm business skills in the graduates that were coming out, as well as a lack of understanding of farm systems. Okay, you got some good people who knew a bit about entomology and a bit of this and a bit of that and a bit of something else, but putting it all together was a mystery.

So those graduates came out, such as they were. When Nigel and I joined the department of agriculture, we trained for number of years under experienced practitioners. We then went out and did our own thing—Nigel into research and myself into extension. Departments of agriculture do not do that anymore, because the extension services are virtually non-existent and their research services are heading the same way. Departments of agriculture are a shell. They do not count. Agriculture does not count anymore. I have this simple philosophy. There are three things that generate wealth in any society. One is agriculture, the other is mining and the other is intellect. Every other activity that we engage in actually spends the wealth. We seem to be spending a bit too much and not generating enough. So what you are saying is right. There is an institute in South Australia. Our division is now embarking on a mentoring program, where we are taking people who are in the undergraduate phase and the immediate post-graduate phase and placing them with experienced practitioners—consultants, who will not get paid. They are our members who are doing it for the good of the profession and will give these people experience.

Mr HAASE—A single comment on the practicality of taking them into the classroom in the city and not having them on the farm?

Mr Thomas—Nigel?

Dr Wilhelm—To a degree it depends on the purpose of the course. If it is to teach people to be research scientists in an agricultural field, you might get that model to work. If you are looking for people who are to work in agriculture and conduct research, you are going to really struggle.

Mr HAASE—I am a farmer's son and I am going to inherit the property. Where should I be schooled? At a university in a metropolitan area or on an agricultural college?

Dr Wilhelm—The latter.

Mr HAASE—Yes, okay.

Mr Thomas—The latter. And send them to Marcus Oldham, probably, in Victorian. And that is a tragedy. With respect, the farmers need more than they will frequently get at an agricultural college. I think they could do with quite a deal of the stuff which is taught at the university. It is really a mixture of both. You have got to be a bloody smart scientist to be decent farmer these days.

Mr HAASE—I think you might have warned us off against asking this question, but I will ask it anyhow: state ag departments have, I am sure, lost a little bit of sleep prior to deresourcing their agencies that provided extension services to cockies. In that decision, how much do you believe they relied on the idea, the suggestion, the theory, that corporate ag product scientists would lead the way and impart the knowledge that practical cockies need today?

Mr Thomas—Yes, it is a subject dear to my heart. There are two or three assumptions. One is that if it is in the private good, private should supply it and the public purse should not be required to supply it. ‘We do not provide extension services to the mining industry. Why do we do to agriculture?’ is a common sort of question. You can ask that question, but there is room for both. You cannot do the private-public argument sensibly to me unless you also understand market failure, because there will be circumstances where there is clear market failure where providing the services by the government purse is clearly in the public benefit.

Part of the market failure comes from the fact that I am a consultant in the Victorian Mallee region, where we actually farm, and the government said, ‘We are pulling out of the extension services. Geoff, how would Thomas Project Services like to take that on?’ I said, ‘That is fine, but will it make me a quid? Because I am in business too, mate. I will provide services to farmers who are happy to pay for them, but there will be other farmers who are not happy to pay for them; what happens to them?’ They say, ‘You need not bother too much about those; they might go broke anyway.’ My concern with that is: what happens to their families socially in the process and what happens to the soil and water resources while it is happening? That is clearly in the public good.

CHAIR—We have had the same argument in the fishing industry. We are going to regulate the fishing industry, but someone has to pay for it. So what is in the public good? We have been through this. The argument is to have the farmers pay for it unless it is for the public good.

Mr HAASE—Do you think governments should see private farmers, landowners, more in the vein of land managers on behalf of the state? Do you think there is an opportunity to respect and value their presence? They own the land. Presently city populations see cockies as moguls who have no right to have control over all that land even though they have paid for it and they ought to suffer if there is a drought and they are going broke. But I value them as land managers, because if they walk off then those properties will become a nightmare of ferals and weeds.

Dr Wilhelm—I think that is definitely true. There are aspects of land management that are not in the best interests of the business per se but are to the benefit of the community. There are downstream effects on river systems and those sorts of things. There are occasions where erosion is not an impediment to the farm business but obviously is an issue for the community, with real costs for cut roads et cetera. So it certainly is an aspect of public good. I still think it is one of the more cost-effective models to have a successful business with a responsible manager. In some of our districts, farm managing is more than 90 per cent of the landscape.

Mr Thomas—Tony asked a question before about what the institute is doing in regard to the natural resources management. We are certainly spending a lot more time now engaging with natural resource managers. People like Nigel and I do not see the separation between natural resource management and agriculture. They are the same thing.

Mr FORREST—I too was pleased to see your recognition of the determined resilience of agriculturalists. We started off with European ideas and we got smart very quickly. I am from the Mallee in Victoria, so I was pleased to see you quoting. I often think there is no more marginal place to try farming than down there, but they do. Yes, there is an attrition happening, but I am just continually impressed at what they can do. Climate change has been upon the north-west of Victoria since 1975. You can just see it in the precipitation outcomes. And they have well

understood it. They have not understood it as the big subject it is now but they have been working with it. Where once they could rely on maybe eight or nine inches of rain a year, they are now growing good crops with four inches and less. Provided it is the right time and they can get it in quickly—

Mr Thomas—They called it seasonal variability.

Mr FORREST—Yes. When your submission talks about the difficulties, my view is that farmers already know it is upon them. One of your suggestions was that there are more uncertainties created by the policy responses of government than by climate change, because they have been living with climate change and they know it is there. Did I get that right?

Mr Thomas—Yes. That is the reason I made that suggestion. I have run these workshops and seminars across Australia. They have been more than just simple seminars; they have been full-day events. The whole works and jerks of policy, the technical stuff and the whole thing, is to inform people so that they can make a contribution to that debate in whichever forum they elect. There is nothing that will destroy agriculture in this current climate debate more than a whole heap of hot-headed, ill-informed farmers. I do not care whether the farmer is debating it in the pub or wherever, but they need to be informed. Politics is politics. People will play to advantage. What we are trying to do out there is make sure that people understand the situation. I think the point that you make is correct.

Mr FORREST—That is not a seminar that presents the science of carbon dioxide or methane—

Mr Thomas—Yes, it is.

Mr FORREST—I will talk about that. It is a seminar that says, ‘This is what you’re going to have to cope with—four inches, not nine—and here are some solutions to achieve that,’ rather than trying to understand the meteorology and that sort of stuff.

Mr Thomas—We are doing that all of the time in the publication which I will send you, which Nigel and I worked on. It did just that. If you are going to cope with this situation, you need to control summer weeds, you need to seed early, you need to do these various things. I am about to embark on work across the low-rainfall zone to measure how farmers are adjusting to those things and why some people seem to adjust and others do not. Hopefully out of that we can then say, ‘Here’s how we need to adjust our programs,’ and it might be, ‘Here’s how we need to adjust even the tax response,’ for argument’s sake, so that we can make a positive contribution to fixing some of these things. I get sick of responding to the problems; I would like us to respond to the proactives. I think we understand enough; we just do not seem to get it right always. I hope this committee can cut through that and say, ‘If you’re going to have some positive responses, here are the sorts of practices which you should encourage.’

CHAIR—In a report a few years ago, under Alby’s chairmanship and with me as deputy, on skills in rural Australia, the issues that came out were about ag science, degree-level people and right down. An issue was that maybe we need to specialise in a couple of areas in Australia—two or three universities that specialise in ag science. There seemed to be a bit of ag science

everywhere and that was not doing much good in the sense of building mass. What you think of that?

Mr Thomas—You can do it that way. Australia is a small nation. There was about one-third of the number of universities when I went through, and you did everything at university: the soil science department, the entomology department, plant pathology and all those things were viable departments. You could do it all at one university. That is a luxury which we simply cannot afford anymore. The sciences which are specifically for agriculture have now become broader. They are broader in the science area. One of the issues that we need to look at is what I guess you could almost call a virtual course. Say Dick Adams wants to do an ag science degree and he wants to do entomology. He wants to do it at the University of Tasmania, but they do not teach entomology because they cannot afford it, so: 'I'm sorry, Dick, it looks like you're going to have to do go to Perth to get entomology.' With modern technology, of course, you can do half of the damn thing without going to Perth at any rate. You would go there to do your practical. That is the sort of thing which I think is necessary.

One of the things that you might even look at it in that regard is—and I do not know the full basis of this—whether it is the universities themselves that are reluctant to adopt that approach, because it is all about funding people on seats and who confers the degree, as if it mattered. It certainly would not worry me or you. I do not know what the constraint is. I guess that, if I were looking at the government funding, I would be looking at some positive encouragements to take those sorts of approaches. You are right: agriculture is a very expensive course to teach. There is no question about that. One of the responses to it is: 'We'll close Muresk annex.'

CHAIR—Barry Haase talked about the need to make sure that we do manage land, the natural resource management issues and the water management issues—that is, rivers, river flow, health of rivers et cetera. The issue that has also come up is that young people who do get a degree do not then have any experience, and the private sector says, 'We want someone with experience who can go back and make a dollar for us straight away.' The old extension services certainly gave us a great skill build-up in the process. Maybe there is a need for government now to fund extension in relation to a whole range of those land management issues plus the business sector level right through. Is that worthwhile considering?

Dr Wilhelm—I think that is already happening, to a degree. Several of the states now have restructured, and their departments of agriculture no longer exist in name. They have been combined with their other natural resource sections. So there very much is at least a structural change whereby agriculture, natural resources and environment are getting merged.

CHAIR—Are they your members? Are they science-based agricultural people with a broader—

Mr Thomas—Some of them, yes. I think the areas that miss out are the farm business and its systems that I was talking about before. That does require special training and, I guess, mentoring by people who have been out around the traps for a while.

Can I make the comment that it is interesting that we have a lack of people entering agriculture. Why is that so? Part of that is the image of agriculture. We are regarded as a mob of whingers. Farmers are always whingeing about something! In fact, you can even go on the—

Mr SCHULTZ—There is the dumbing down of agriculture in high schools.

Mr Thomas—Yes, I will come back to that. I said to a friend of mine the other day, ‘How’s it going?’ He said, ‘Thank goodness the grain prices have fallen.’ He comes from a very reliable area and they got some big crops. I said, ‘Good God, why would you say that?’ He said, ‘Because if they hadn’t, I’d have nothing to whinge about!’

I think it is time for government to look very seriously at this. We have apprenticeships for industry and the like. We are working on the image of the industry and everything else, looking at trying to get the courses more relevant and doing all that hard work. I think it might be time, in response to this thing, to say, ‘It doesn’t matter what policies we have; unless we have the qualified people out there, we’re going nowhere.’ This industry is just too damned important not to do that. We need to start in the schools and our profession and the PICSE scheme, which government has funded to promote science in schools.

CHAIR—Out of Burnie.

Mr Thomas—Yes, out of Burnie. There is also Dave Russell, who is fantastic. That is where you start. But that is science. If we are fair dinkum, I think we need to enter into something or other, because agriculture is sufficiently important.

I have a bit of a soft spot, I suppose, for encouraging agricultural people from the rural areas, partly because I reckon that, if they come from there in the first place, they are likely to go back and stay there after they have graduated, although Nigel is an exception. It would also assist with the matter you raised: giving some of these people hope for their children.

CHAIR—There is the skill base that we talked about. In farming these days you spend half the day in the office planning, doing costing and working things out. Therefore, you need a skill base. Do you think that is correct?

Mr Thomas—Yes, certainly. It is not only that skill base; it is also understanding the system sufficiently to know what you do not know and knowing where to get it. That is one of the reasons why more and more farmers are employing consultants—people like Danny Conlan, Dodgshun Medlin Agricultural Management Pty Ltd, AGRIVision and these people that are in your area.

CHAIR—Sure. We have some evidence to that effect.

Mr Thomas—They just cannot keep up. They are in trouble trying to get graduates too.

CHAIR—The other point is that technology is the way to keep up, especially in regions—for example, delivering knowledge through broadband and those sorts of processes.

Mr Thomas—In fact, one agribusiness company that I am aware of is providing their major clients with computers with access to it. So if Dick Adams wants to buy 150 star pickets he can log on and say, ‘Their price is so-and-so.’ He then asks, ‘What is the best rate you can do on this?’ or ‘I have just found this thing. I have taken a photograph of it with my mobile phone; I will squirt it down the line to you. Can you tell me what it is and what I do about it?’ That not

only requires farmers who are able to do that but, by hell, the fellow at the other end had better know what he is talking about too.

CHAIR—That is his business.

Mr FORREST—I am glad you mentioned Dodgshun Medlin, because one of their best agronomists is a farmer. He does not have a university degree. I do not think that is what you are saying. You are not saying, ‘All of our farmers have to have a university degree.’

Mr Thomas—No.

Mr FORREST—They just have to have access to somebody who has that broad ability to find knowledge. What I worry about is that those youngsters get snapped up by the fertiliser or chemical companies and their whole ability to give unbiased advice is destroyed. I am very worried about that. I see a lot of youngsters end up with Monsanto or Incitec Pivot.

CHAIR—That is about income, isn't it?

Mr FORREST—Yes.

CHAIR—It is about pathways.

Mr Thomas—It is about income. The greedy little blighters want to earn an income and pay off their HECS debt!

Mr FORREST—We know why it is happening, but it is happening and we have had to find a solution to give them a better alternative.

Mr Thomas—Nigel has been in that industry for a long time. Nigel, how many older people do you find have been in the fertiliser or chemical game for their entire career?

Dr Wilhelm—Currently, almost none—

Mr Thomas—Exactly.

Dr Wilhelm—but, historically, a lot.

Mr Thomas—They move on. They go into that as their first opportunity.

Mr FORREST—They get their deposit for their house.

Mr Thomas—They get a quid and they pretty soon move on. My experience is that those who are good say, ‘I want to do more than just be a fertiliser jockey,’ and they go and join somebody like Dodgshun Medlin. That is good, because they have some exposure and they have done some of that basic training. Okay, it might be in one product, but you can soon knock that out of them.

Mr FORREST—They do some exciting stuff too. That is the thing to turn them on.

Mr Thomas—That is right.

CHAIR—That is the intellectual process. If somebody has to chase what they want to do and they have a passion for it then they will come back to regional Australia. We know that in professions of all sorts if they come out of the regions that they will come back to the regions and stay.

Mr Thomas—That is right

CHAIR—Thanks very much. We do appreciate your time and helping us formulate our report and recommendations.

Mr Thomas—Thank you.

CHAIR—You are going to send—

Mr Thomas—I will send you the two publications.

CHAIR—And the email, please.

Mr Thomas—Yes.

CHAIR—We will send you a copy of the *Hansard*.

Resolved (on motion by **Mr Forrest**):

That this committee authorises publication, including publication on the parliamentary database, of the transcript of the evidence given before it at public hearing this day.

Committee adjourned at 6.09 pm