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Official Committee Hansard

**HOUSE OF  
REPRESENTATIVES**

STANDING COMMITTEE ON AGRICULTURE, FISHERIES AND  
FORESTRY

**Reference: Rural skills training and research**

WEDNESDAY, 31 MAY 2006

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**HOUSE OF REPRESENTATIVES**  
**STANDING COMMITTEE ON AGRICULTURE, FISHERIES AND FORESTRY**

**Wednesday, 31 May 2006**

**Members:** Mr Schultz (*Chair*), Mr Adams (*Deputy Chair*), Mr Martin Ferguson, Mr Michael Ferguson, Mr Forrest, Mr Lindsay, Mr Gavan O'Connor, Mr Secker, Mr Tuckey and Mr Windsor

**Members in attendance:** Mr Adams, Mr Martin Ferguson, Mr Forrest, Mr Gavan O'Connor, Mr Schultz and Mr Secker.

**Terms of reference for the inquiry:**

To inquire into and report on:

- The availability and adequacy of education and research services in the agriculture sector, including access to vocational training and pathways from vocational education and training to tertiary education and work.
- The skills needs of agricultural industries in Australia, including the expertise and capacity of industries to specify the skills-sets required for training, and the extent to which vocational training meets the needs of rural industries.
- The provision of extension and advisory services to agricultural industries, including links and coordination between education, research and extension.
- The role of the Australian government in supporting education, research and advisory programs to support the viability and sustainability of Australian agriculture.

**WITNESSES**

**McCOLL, Mr James Karvel, Board Member, South Australian Division, Australian Institute of  
Agricultural Science and Technology ..... 1**

**THOMAS, Mr Geoffrey Neil, President, South Australian Division, Australian Institute of  
Agricultural Science and Technology ..... 1**



**Committee met at 5.04 pm**

**McCOLL, Mr James Karvel, Board Member, South Australian Division, Australian Institute of Agricultural Science and Technology**

**THOMAS, Mr Geoffrey Neil, President, South Australian Division, Australian Institute of Agricultural Science and Technology**

*Evidence was taken via teleconference—*

**CHAIR (Mr Schultz)**—I declare open this public hearing of the House of Representatives Standing Committee on Agriculture, Fisheries and Forestry on its inquiry into rural skills training and research. This is the 19th public hearing for this inquiry and it is part of an extensive program of public hearings and visits designed to gather information from the people directly involved with the main issues of the inquiry. Today the committee will be hearing from the South Australian Division of the Australian Institute of Agricultural Science and Technology.

I welcome the witnesses. Although the committee does not require you to give evidence under oath, I should advise you that these hearings are formal proceedings of the parliament and, consequently, they warrant the same respect as proceedings of the House itself. It is customary to remind witnesses that giving false or misleading evidence is a serious matter and may be regarded as a contempt of parliament. Do you wish to make some introductory remarks?

**Mr Thomas**—As some background, the Australian Institute of Agricultural Science and Technology is the peak professional body representing the agricultural and related consulting professions in Australia. We have divisions in each state, each with its own membership. Traditionally, the institute has been a balanced and objective voice on agricultural issues, and it is in that regard that we welcome the opportunity to come before you today.

The failure of agricultural education to keep pace with the changes in the industry is of very serious concern to the institute, and the South Australian division has taken this issue on board with the total support of the national board of the institute. The reason for our concern is that agriculture in recent years—and when I say ‘recent’, I mean 15 to 20 years—has undergone enormous change. We will not go into all the detail of that because it is in the submission, but agricultural operators are now managing a very complex mix of technical, financial, environmental and social aspects, and there is probably less emphasis on production per se and more on profit and managing risk. The other thing on which there is greater emphasis is the management of the natural resources on which agriculture depends. It is fair to say that many farmers and others, even those who advise them, are having difficulty coping in this very complex environment.

Therefore, we are saying that the training of tomorrow’s farmers, those who advise them—such as consultants—and those who do the research for them is one of the most critical issues facing the industry today. In that regard, we are no different from some other industries that we hear about in terms of the skills shortage. The difference in the case of agriculture is that it is unlikely that we will be able to import properly qualified people from overseas. In fact, the opposite is true—that is, if we get it right, we can export our skills. In short, we have a dynamic

agricultural sector relying for its training on rigid tertiary institutions, which we believe have an inadequate understanding of the industries that they are meant to serve.

Without going into the detail of the submission, I would like to turn to some issues, and we can expand on those at your request. We must research demand and get away from a supply driven approach. At the moment, we are working in the dark. The paper you have before you is not based on a large amount of research, simply because those of us who wrote it are each pursuing our own careers. What we do have is a hell of a lot of experience and a lot of networks. We believe that what we are saying is very sound, and we certainly have not had any objections from any of the other state divisions that this submission has gone to.

It is fair to say that this area still needs research to determine just what the needs are, and it is not going to be one size fits all. We must research and be able to tailor the training needs for the industry in four principal areas: firstly, research, and then agricultural management, enterprise management and systems management. That is the sort of training you do if you want to become an extension officer, a consultant or a commercial farm manager or if you want to deal with the agricultural management systems and advise on policy and the like, such as natural resource management boards and those sorts of things. You have research on the one hand and management on the other. We believe that to be able to get on and do this research and to have a structure which will not only manage that research but see the job through is the most urgent issue facing the industry today, the rationale for which we provide in our paper. Thank you.

**CHAIR**—Mr McColl, do you want to make any introductory comments?

**Mr McColl**—Only a short comment to support what Mr Thomas has said. The material that we have placed in front of you is based on experience and judgment and is not the outcome of research. We believe, and I emphasise this, that we do need proper research, or a bit of market research, to sort out the demand and the best ways in which to deliver what is required. You are probably aware that I was involved in the last comprehensive review back in 1991. That was 15 years ago and there has been a lot of change since then. That is what I wanted to add.

**CHAIR**—Thank you very much for your input. I will ask the committee to go to asking questions now.

**Mr SECKER**—To give you some background, I went to Braewood, which I think you would all know, in South Australia. Some of my friends have gone to Roseworthy, others have learnt from field days. There is a whole lot of VET in Schools going on at the moment, certainly in my electorate, such as horticulture in the Riverland, ag and forestry courses at the Lucindale Area School and a whole range of other areas. In South Australia, for example, where you would have the greatest expertise and experience, where do you think we need to expand? And you might go on to Australia wide if you have that experience. In what areas do you think we need to increase or bring in more expertise?

**Mr Thomas**—It is sometimes difficult to answer these questions. We tend in these situations to say, 'We need to change,' and we recommend a whole lot of changes and then we are concerned that they are not adopted. That is the reason why we are saying that we need to do some decent research. What is the rate of transfer of people from high schools to VET to the degree system? How do you create those linkages better? How do you give credits to people who



might have done a VET course when they enter university? Should we be having university people teaching within the VET or the TAFE system? What is the standard of excellence of agricultural teaching in the high schools? As we say in our submission, one view is that the teaching in high schools tends to attract students of lesser academic ability and may be in fact be militating against further studies in agriculture.

There are two issues here. One is that linkage; the other is the rationalisation of courses at the universities and between the universities. When Jim McColl and I went to university we had a very complex, broad-ranging offering of subjects, almost all of which were offered by university staff themselves. That no longer exists. Somebody was saying the other day that it is now very difficult in Australia to find a competent training course in, say, plant pathology. That capacity seems to have dwindled. One of the reasons is that the universities themselves are under resource constraints and they tend to make offers which they have the capacity to supply rather than basing them on demand. So there is a big issue, based around this research that we are talking about, of rationalisation of courses. Using modern-day technologies, of course, I believe it is quite acceptable to say that you might have your primary base in Adelaide, for argument's sake, but you could be studying soil science out at Perth, which has a major in that area, or plant pathology at Brisbane—whatever the case may be.

**Mr SECKER**—Are you trying to tell us that we cannot really find the right answers because we do not have enough research to find out what the real problems are?

**Mr McColl**—Yes. We are saying that, for us to be on firmer ground, we do need some sort of review and research of the situation, similar to that which I was involved in 15 years ago. The positions that we are taking now are based, as I said before, on our experience and on our understanding and beliefs as to what is happening. On that basis I think it is fair enough to say we are looking for something more positive that we can rely on. There is a difference between, for instance, student demand on the one hand and industry demand and need on the other, and we must be very aware of those two issues. We believe that for a range of reasons the student demand for tertiary education in agricultural science et cetera really is not understood or being developed as it should be. For instance, I have always felt that not enough effort was being put in by universities in the rural areas, because sons and daughters of farming families are the ones we should be really trying to encourage to move into those sorts of courses for the benefit of the whole industry. I believe that that really is not happening effectively at all.

**Mr Thomas**—In short, much of the planning—certainly at Adelaide University and, we understand from our divisions, interstate—has been driven by what universities see as student demand and the sorts of things which will, to put it crudely, put bums on seats, because that is what drives the system. In trying to meet what they see as that demand, they have created a supply in a very fickle market in which the actual industry demand—the people who are going to employ these people—is not well understood. That is what Jim is saying. There is a difference between student demand on the one hand—some of the student demand is in fact driven by the low entry scores—and industry demand on the other hand.

That sounds very critical of the universities, and we should not be because industry itself has not necessarily stepped up to the plate and said, 'Here is what we want out of the system.' Now, that might be because nobody who knows what they are really talking about has gone and asked them in the right way, and that is the sort of research that we are suggesting. Research in itself is

not enough. The research needs to have with it—call it a committee, call it whatever you like—a group of competent people who are charged with the responsibility of not only overseeing that research but also driving the process so that we do not end up with the situation which followed Jim McColl's report of 1991. Whilst it was an excellent report and some of it was adopted, tragically, the areas where it was not adopted tended to be the hard bits, and they are areas that we are suffering in today.

**Mr FORREST**—My question relates to the former work done by Mr McColl, because other submitters have made reference to the 1991 report, which the committee has a copy of. The fact that other submitters are saying that—and I hear you saying it—says two things to me. One is that your recommendations of 15 years ago were either ignored or not implemented correctly; the other is that things are timeless and nothing ever changes. Which one is it? Do you think your 1991 work has been ignored or did not have adequate resources thrown at it? Why is it still relevant 15 years later?

**Mr McColl**—Having done a few of these sorts of reviews and reports over the years, I find this an interesting question to try to answer. There have been some changes, and I cannot say that in any detail because I am not in a position to have done the research on what was recommended and what was implemented and what was not. Like a lot of other things there was considerable institutional resistance to many of the recommendations. There was a strong thrust in that report for rationalising the delivery of tertiary courses and trying to bring institutions together. That happened in some places. It did not happen in others. There were a few marriages that occurred, and a few divorces subsequently. I think the demand trends were identified in that report, and I think they certainly evolved as was anticipated. But I think, institutionally, there is probably a better climate now than perhaps there was in the past to get some rationalisation of the delivery of the appropriate courses. There is certainly the technology: information technology and so on has advanced enormously, so there are greater means available for drawing upon a range of skills among institutions to deliver appropriate courses. But we must not ignore the fact that there is and has been considerable institutional rigidity in the system. We have a dynamic agricultural industry and some pretty rigid institutions.

**Mr Thomas**—Could I add a couple of points? Institutions will not change, of course, unless they have to or unless the level of pain has reached the point where they cannot bear it any longer. They will not change, despite there frequently being rational reasons for doing so. I believe that the McColl report of 1991 still provides an excellent platform from which you can do the research of which we are now speaking. If I were doing it, I would be taking that report and saying: 'Righto, what has changed in the environment out there? What hasn't been adopted and did it matter? How could we have done that better?' But to do that needs drive. I not know whether or not it is possible for the committee to achieve this. I think it needs a very firm message which says, 'We are going to make some major changes in agricultural education, we are going to base it on good research, we are going to involve the major players in doing it, but there are going to be some winners and there are going to be some losers.' Government, as a matter of policy direction, I believe, needs to say that, because we in the South Australian division of the institute believe that the issue is that important.

**Mr FORREST**—We have heard before the reference to rationalising delivery, and that is a tough ask. Could you tease out a bit more what you mean by that? Is there anybody willing enough to look into a crystal ball and say, 'That is what agricultural training is going to look like

in 10 years time,' after what you have euphemistically called 'rationalising' has been done? Does anybody have a vision of what it might look like or has nobody been bold enough yet to—

**Mr Thomas**—I think there are plenty of visions around. Whether they are right or not is another question. I know I must sound like a cracked record saying that you need to base it on a well-researched understanding of the circumstances that you face. At the moment everybody is guessing and everybody has a different vision, many of which are not based on firm evidence and which tend to meet the requirements of the individual organisations rather than anything else. I believe that, having done that work and with the right sort of management group, committee or whatever you like to call it, driving it, to decide on what it ought to look like down the track, if you are wrong, you will not be wrong with all of it and you can change as you go along. It is not as if you make a decision today and you cannot shift; you can shift.

But rationalisation is what we are talking about. At the moment it seems to me that many of the institutions are trying to be all things to all people. We see very few cases where, using electronic technologies or whatever—it does not matter—you might accept that you can do part of your degree here but if you want to specialise in soil science, as I said before, you would do it in Perth. You would still take your degree from Adelaide but you would do your soil science in Perth, if that were what you wished to specialise in, or you might do your farm management economics out of New England and create the course that way.

At the moment in South Australia, for argument's sake, at the University of Adelaide, if you wish to do horticulture, tough. You can do a bit of viticulture but there is no training at the moment in horticulture. If ever there were an industry that needed a leg up in terms of improved technology and risk management, it would be horticulture, and yet we do not have those courses. What is more, I think that applies to a number of the universities across Australia. We need to decide what needs to be done and who is going to do what. You are right: it is a big ask, but it is not going to get any easier as time goes on. We cannot just rely on saying, 'That's okay, all the people that are currently in there have retired; let's bring in some from overseas,' because that is not really an option in many of the subject areas.

**Mr FORREST**—Just to follow on from that, we are politicians, and this inquiry has come about because some of this rationalisation has already occurred and has created considerable uncertainty and pain. Is the best way to achieve it to let market forces let it happen and then try and pick up the pieces afterwards, or is there some pre-emptive stuff that we might be able to recommend?

**Mr McColl**—I think it is a mix of market forces, exercised perhaps through the funding processes, and a bit of straight, direct policy decision making and direction coming from governments, as I said, supported by an institutional reaction to what is in fact happening to resource provision. There is pain, yes, and the politics of it can be very difficult. I am well aware of that, but I think that has to be accepted as an inevitable price that needs to be paid if we are going to really deliver what is needed for the future.

**Mr Thomas**—What I read, from the farmers that I talk to and that I have as clients, is that there are a large number of farmers who are pretty smart and who are going to be in agriculture in the future. I have three boys, all of whom are involved in agribusiness, and I understand that area pretty well. Politically, there are a lot more brownie points, I can tell you, in taking a

proactive stance on this one and providing some direction than there are in saying, 'Let nature take its course.' I believe that letting nature take its course will be a disaster. Many of the faculties will disappear. They will disappear for all the wrong reasons and we will slowly end up with major gaps in the service provision.

We have an anomaly here: we have the research corporations funding research, much of it on a short-term basis—most of those contracts are for three years—and that does not encourage people to stay within the tertiary institutions. You do not have any succession planning. Like everywhere else, the current staff at universities is getting older, and God knows where we will get the replacements unless we move fairly quickly. The research corporations do not see themselves as having a role in teaching, and yet in order to conduct the research that they fund you need people who are trained. The question is: unless we do something about the education bit, how do we achieve that? Much of this discussion has been talking about farmers and consultants and the like, but much the same thing applies in research. It is difficult to get—

**CHAIR**—Can I just interrupt to say that I am conscious of the time and there are a couple of members who want to ask some questions. Could you try and be as brief as you can in your answers. I know it is difficult sometimes when the subject matter that you are trying to get across is complex. Mr Ferguson wants to ask a question and then Mr Adams.

**Mr MARTIN FERGUSON**—Just listening to you talk about the 1991 report, do we need a further report and, if so, what would you be suggesting should be the terms of reference? Alternatively, do we need to do an audit of the recommendations of the 1991 report to see what ought to be pursued?

**Mr McColl**—I think probably the best approach would be to do an audit of that report and what was recommended, what has happened, and perhaps what changes have occurred and so on. Do an audit before deciding whether it is necessary and beneficial to go to a more elaborate approach and a full-scale review. I would suggest it be a two-stage approach.

**Mr Thomas**—With one body to drive it.

**Mr ADAMS**—You do not think we need the federal minister and the state ministers and a COAG decision to drive a major report, or would we do that after doing an audit?

**Mr Thomas**—Yes, I believe you need to check where we are up to at the moment and get some basics. In that way you develop some very firm terms of reference for further research. And it is not just further research in terms of fact-finding but also further research in terms of providing some firm recommendations to where the future goes. And that needs to be driven by a properly constituted group; whether that comes out of COAG or the standing committee, I think Jim and I would agree that it requires authority at that level.

**Mr McColl**—I cannot quite remember the detail of setting up the review that I was involved in, in 1991, but basically it was federally funded by two ministers, the minister for primary industries and the minister for education and training—Kerin and Dawkins at that stage. So it was a joint review funded by both those areas and it reported to both ministers.

**Mr Thomas**—I think perhaps the weakness of that review, on reflection, is that it did not have the buy-in of the states. I think that is going to be absolutely necessary in a future study, so the COAG line that you suggest is an attractive one.

**Mr ADAMS**—I just want to touch on the other issue which I see there. The research and the teaching used to occur at university, with a lot of people learning as they did research. With the research corporations funding the CRCs—and somebody just touched on this, I think—they want professional people straightaway but there do not seem to be ways that people can get these skills that they used to get. That seems to be emerging as one of the major problems out there.

**Mr Thomas**—Correct. No question about that. And it is not just the broadly rounded skills and an ability to analyse and synthesise that you should get out of a university degree; it is all of the other detailed research technologies which one requires. There is this situation where the research corporations and others just expect, it seems to me, these properly trained research people to appear from nowhere. I believe that those organisations need to have a buy-in to this process too.

**Mr ADAMS**—That is a problem with employers all over the country, whether it is tradesmen or whatever; they want people instantly and I guess this is why this committee is meeting. Thank you.

**CHAIR**—Can I just take you in another direction. Your submission raises the question of whether the institute should play a more direct brokering role in the provision of training and maintaining professional standards. Just two questions on that: do you intend to explore this with your members, and under what circumstances would the institute decide to take a more active role in training and maintaining standards?

**Mr Thomas**—We are already taking a more active role at the request and with the support of industry in terms of the accreditation of scientists, particularly those who are involved in the consulting and advisory areas but also as it applies to research. There is a trial program about to be launched by the institute in that regard, working closely with the industry. In terms of being a broker, you could be a training organisation and pull together various courses. That would be quite a task, I would think. It would require a hell of a lot more resources than the institute currently has.

There is an area, though, that we believe the institute should be involved in and we have not touched on that to date in these discussions—that is, continuing education. Just because you come out with a degree does not mean you do not need updates in various subject areas—because technology is moving at the speed of bloody light. There was a time when universities and colleges provided that update training for farmers, advisers, researchers and everybody else, but they do not do that much anymore. Certainly the institute could see itself pulling together the various types of expertise and offering courses on a fee-paying basis, obviously, for those people who wished to update, if you like, their training. In fact, that will be a critical part of the accreditation program. You cannot have ongoing accreditation without ongoing updating of skills. That is the area where I think the institute could play a part. We would have difficulty playing a part in pulling together undergraduate courses and that sort of thing. I frankly do not see that as our role, and neither do our other divisions.

**CHAIR**—Thank you for that. We have heard evidence about the lack of training facilities in universities for some industries and, in particular, the beekeeping industry—so much so that, if the beekeeping industry is looking for beekeepers, it is accessing them from Third World countries. Do you consider migration as a viable option to address the skills shortage, or do you think that we have to look at what we are offering and make ourselves a little bit more professional in that regard to address the skills?

**Mr Thomas**—In some specialised areas, yes, you can use skills from overseas, and beekeeping might be one of them. I mean, bees are bees, although the environment in which they operate might be different. But you can probably do that. The skills of plant pathologists, entomologists, agricultural economists and climatologists—those sorts of people—spread widely. But, when you come to the business of what we are calling the training for management type operations, we believe that that training ought to be, by and large, home grown within this environment. We have a fairly unique environment here and I think we ought to be training our own people. That is a benefit not only to our agriculture but also to that of others: my colleague Jim McColl was responsible, I recall, many years ago for setting up an organisation called SAGRIC International, in which we exported our dry-land farming skills to the world. It is damn difficult now because, in doing all of that, we seem to have lost sight of the ball and we are losing them ourselves. So it is not just dealing with it for our own purposes; there is, I believe, a substantial export opportunity there if we get it right.

**CHAIR**—Mr Thomas and Mr McColl, I thank you very much for your contribution to this hearing today. It is very important that we hear from as many people as we can. We are getting to the stage where the evidence taking is finally coming to a conclusion. I thank you for giving us your very valuable time today in answering the questions put to you.

Resolved (on motion by **Mr Martin Ferguson**):

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 5.44 pm**