

Submission to the  
Education, Employment and Workplace Relations Standing Committee

on

***Higher education and skills training to support future demand in agriculture and agribusiness in Australia***

from the

**Isolated Children's Parents' Association  
of NSW Inc**



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## **Introduction**

The NSW State Council of the Isolated Children's Parent's Association, (ICPA-NSW), welcomes the opportunity to provide input into the Senate inquiry into higher education and skills training to support future demand for agriculture and agribusiness in Australia.

ICPA-NSW is a voluntary parent body dedicated to ensuring all geographically isolated students have equity of access to education. It encompasses the education of children from early childhood through to tertiary. Member families of the Association reside in rural and remote NSW and all share a common goal of access to education for their children and the provision of services to achieve this.

ICPA-NSW believes that all students, irrespective of where they live, should have the opportunity to receive the education they require to participate to their full potential in the economic, social, political and cultural life of the community.

For forty years ICPA-NSW has had 'Access to Education' as its single focus, from early childhood to tertiary. That single focus still remains strong with equality of access as important now as it was forty years ago. Education and skills are central to a modern economy so equal access to education is more important than ever before.

ICPA-NSW believes that the recommendations contained in this submission will enhance students' engagement in agricultural education and training that will allow Australian agriculture to take advantage of the opportunities flowing from growing global food demand.

**David Cameron**  
**President ICPA-NSW**

## **Recommendations**

1. That the Government improves student income support for regional and remote students who relocate to study agriculture and related higher education and training.
2. That the Government acts to improve the extension of skills and training into regional and rural areas by increasing extension services of Government Departments located in those areas.
3. That the Government restores financial support for agriculture-related VET courses.
4. That the Government invests in developing quality distance education of agricultural skills and training suitable for web based delivery in rural areas.
5. That the Government continues to provide and encourage school based agricultural Vocational Education and Training, and that where possible school students be given options to complete Certificate III agricultural VET courses during the final years at school so that upon leaving school they may possess qualifications that are more highly valued in the workplace.
6. That the Government reinstates funding for training along the lines of the previous FarmBis program to reach large numbers of the existing workforce with short course skills training.
7. That the Government promotes extension and research roles and reinstates secure and fulfilling career paths for persons holding qualifications in agriculture in anticipation of growing global demand for agricultural produce.
8. That the Government urgently reviews the types and nature of skills and training most required by the agriculture sector region by region, and builds a base of knowledge so that training delivery can become better aligned with training needs on a regional basis.
9. That the Government increases uptake of post-school VET in rural and remote areas by further developing and encouraging a system of rural and remote traineeships and apprenticeships in agriculture, in which rural and remote employers receive support in return for providing young workers with educational and training opportunities that integrate with employment opportunities.
10. That a study assessing demand for a senior residential college of agriculture in southern NSW and other areas of rural Australia be undertaken.
11. That a senior residential college be established which focuses on agriculture and agriculturally related industries without the restrictions of a formal HSC program, preferably at the site of the previous Murrumbidgee College of Agriculture, Yanco, NSW.

## **Future Agricultural Production and Workforce Demands**

### ***Global demand for agricultural produce will greatly increase in the next 20 years***

It is widely reported that global demand for food is forecast to increase significantly over the next few decades as the world population grows from 7 billion today to an estimated 9 billion by 2050. The global challenge is to feed 80 million new mouths every year. As income levels in developing countries increase, total calorie consumption increases. Whereas average daily kilocalorie consumption is 2150 in the least developed countries, it is around 2,800 in developing countries and 3,500 calories in advanced countries. (*Food and Agriculture Organization, United Nations*).

Therefore, as populations grow and incomes in less developed countries rise, so demand for agricultural produce increases. By 2030 the United Nations forecasts that demand for agricultural products will be 60% higher than it is today. In contrast, the importance of agriculture in Australia had been reported to be in decline (*Productivity Commission, 2005*), but with the current shifting of global growth from the developed to the developing world, agriculture's importance in the Australian economy will be re-established, requiring an educated and skilled workforce to meet the need for improvements in productivity.

### ***International competition in global agriculture***

Australia is well placed to take advantage of the huge economic opportunities arising from the expected growth in global demand for agricultural produce. Compared to competitor countries, Australia boasts world leading farming practices and management.

However, other countries will rigorously compete with Australia to capture the increase in demand for farm produce. Australia's agricultural productivity is already high, exhibiting more than twice the rate of growth of Australia's market sector as a whole over the last 3 decades (*Productivity Commission, 2005*). Competitor countries such as South America, Eastern Europe and parts of Africa have much lower rates of productivity. For these countries, increasing productivity from a low base is relatively easy compared to Australia's task of finding productivity improvement from a high base.

Australia will have to be clever to find productivity improvements that are lower cost than its competitor countries to be able to increase agricultural production and take advantage of the opportunities. In Australia, the productivity improvements will have to arise from finding ways of producing more food from fixed or declining land and water resources.

### ***Developing new farming practices and technologies key to improving productivity***

Australia has limited ability to bring more land or water into agricultural production. To increase production it will have to rely on growing more food from fixed or declining land and water resources through innovation – the development of new practices and technologies.

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Other countries can increase production by catching up to Australia's best farming practices, while Australia will need to find new means of increasing its production.

### ***Educating the agricultural workforce***

Increasing productivity in agriculture and agribusiness will need to be based upon creating a workforce with the education, skills and capabilities to further enhance farm management practices to increase yields and the efficiency in the manner in which land, water and other farm inputs are utilised.

### ***Agricultural research and development and extension services***

Despite the growing pressure to increase global food supplies and food security, there has been a global shift away from investment in agricultural research and development which is retarding productivity growth. There has also been a decline in the provision of extension services to farms and the agricultural sector.

The opportunity exists for Australia to take a lead in properly funding and targeting agricultural education and training so as to increase its productivity faster than its competitors and take a larger share in supplying the increasing global demand for food. Australia will need to quickly and comprehensively develop and refocus government policy to enhance agricultural education and training and capture the large opportunity on offer.

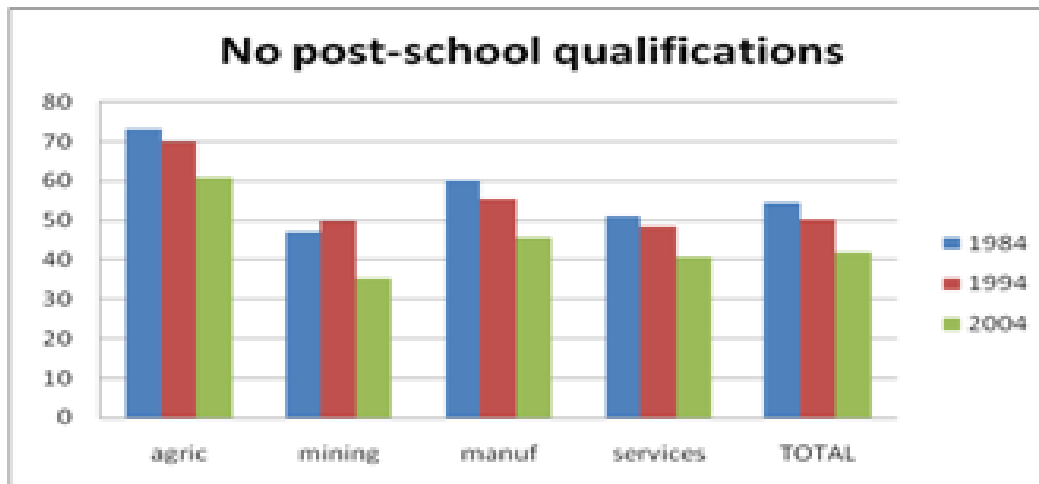
### ***Tertiary qualifications in the agricultural workforce***

*It is reasonable to assume, increasingly in the future, that more complex sustainable management practices will be more easily grasped and integrated into farming systems by those with higher levels of formal education. (Productivity Commission, 2005).*

In 2007-08, there were approximately 305,763 people working in the agricultural sector (*Australian Farm Institute, 2010*). Under base case assumptions, this demand for labour is forecast to grow to 551,000 by 2030 (*Taylor, 2011*).

A large proportion of the workforce in agriculture, about 50%, are owner-operators who are the chief source of knowledge and innovation in their own businesses. Increasing managerial skills across agricultural businesses will thus require the provision of skills to a very large proportion of the agricultural workforce.

However, the levels of post-school qualifications in agriculture are lower than in other sectors. The Productivity Commission determined that in 2004, the proportion of the agricultural workforce without any post-school qualifications was 61%, compared to 42% of the general workforce.



Productivity Commission 2005

Based on 2006 statistics, 15.9% of all agricultural workers possessed university qualifications compared to 28.1% of the general workforce and 3.5% possessed postgraduate qualifications compared to 10% of the general workforce (*Australian Farm Institute 2010*).

These figures indicate that the agricultural workforce has generally relied on acquiring skills through experience on the job. However, the agricultural workforce has aged to a point where the following decade will bring significant succession issues, with 34.5% of the workforce aged 55 or older.

### ***Replacing skills leaving the agricultural sector***

It is estimated by the Australian Farm Institute that 50% of the agricultural workforce will retire or otherwise leave the sector in the next 10 years, which will result in an exodus of skills from the industry and an influx of new workers that will not have the luxury of time to develop skills progressively through experience. The industry will require skills more quickly than might be obtained through the course of working. Education and training will provide the quick upskilling needed for the next generation of farm managers.

The Australian Farm Institute (2010) states:

*It is highly likely there will be a heavy net loss of base knowledge and skill from the sector over the next 10 years. This suggests that the attainment of formal qualifications and availability of formally trained employees will become increasingly important to agriculture if, at a minimum, current aggregate industry skill levels are to be maintained. In this environment, the supply of appropriate and effective education and training services that meet sectoral demands and expectations is crucial if agriculture is to remain prosperous into the future.*

For the reasons mentioned above relating to capturing growing food demand, it is submitted that Australia should be aiming to do very much better than simply maintaining current aggregate skill levels, and the growing demand for increasing skill levels will further raise the need for the availability of formally trained employees.

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Reports are common that the supply of workers with agricultural qualifications and skills is already falling well below demand. For instance, Australian universities and colleges are turning out just 800 agriculture graduates a year, whilst estimates for demand for graduates range from 2000 to 6000 per year (*Hunt, Weekly Times 19/4/2010*). Unless government policy regarding education is altered, the growing divide between supply and demand for agricultural skills will increase. The demand for agricultural skills will in future be based around the need to replace those skills exiting the industry, as well as to provide the innovation and management to make the productivity improvements necessary to increase supply of agricultural produce.

### **Key Issues in the Current Provision of Agricultural Education and Training**

ICPA-NSW submits that key barriers to uptake of agricultural education and training largely relate to lack of access to opportunities for agriculture-based education and incentives to seek out higher qualifications.

#### **Access**

Students that seek agricultural education and training are largely from regional and remote areas and the difficulties of those students in accessing higher education has been the subject of recent government reviews. Regional and remote access to higher education and training can be improved in the following ways:

##### ***Relocation assistance***

Students can be further and better assisted to relocate to attend tertiary institutions. A primary factor hindering regional and remote students accessing higher education is cost. Government policy assisting in reducing relocation and attendance costs for students, so as to reduce barriers to undertaking education and training will result in higher uptake of opportunities. Satisfactory student income support is a vital and necessary pre-condition for increasing regional and remote access to educational and training in agriculture.

**ICPA-NSW recommends that the Federal Government improves student income support for regional and remote students who relocate to study agriculture and related higher education and training.**

##### ***Improving agricultural extension services and career pathways in agriculture***

Educational and training opportunities can be further extended into regional and rural areas so students and workers do not have to travel as far to participate. Particularly in relation to skills and training, the diminishing government support for agricultural VET courses, coupled with the reduction of agricultural extension officers in relevant government departments, hinders the local provisioning of agricultural skills and training. Government policy assisting

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in the extension of training and skills into regional and rural areas will result in uptake and upskilling of the agricultural workforce.

**ICPA-NSW recommends that the Federal and State Governments act to improve the extension of skills and training into regional and rural areas by increasing extension services of Government Departments located in those areas.**

### ***Better financial support for agricultural VET courses***

Even with extension of training opportunities in regional and rural areas, cost is a barrier to access. Employers will only sponsor workers to participate in VET if the benefits outweigh the costs of the course fees, travel and lost time to the workplace which can be considerable due to distances in rural and remote areas. To assist in this regard, VET opportunities in rural and remote areas can be better financially supported. As an example, Rural Skills Australia (RSA) states that NSW Government support for Agricultural Certificate II training has declined to \$1,200 per year, which is only 35% of the funding levels of 2 years ago. The current funding level of this course is now \$900 less than for lower level horticultural traineeships (at \$2,100), despite having similar delivery requirements in respect of both course content and cost.

Rural Skills Australia reports that this dramatic decrease in financial support has been matched by an equally dramatic decline in Agricultural Certificate II commencements in NSW. Financial support for Certificate III and IV Agriculture courses has also declined in the last two years, despite the growing awareness of skills shortages in the agricultural industry as indicated in the findings of the NSW Standing Committee on State Development's *Inquiry into Skills Shortages in Rural and Regional NSW (2006)*.

**ICPA-NSW recommends that Governments restore financial support for agriculture related VET courses.**

### ***E-learning in agriculture***

Education and skills can be delivered remotely if there is access to sufficient technology at the delivering and the receiving end. E-learning opportunities can be delivered flexibly at a place most convenient and at a time when the cost of having workers absent from the workplace is at a minimum. Employers only need to release workers for training time and not for the additional travelling time, which, in the case of rural and remote workplaces, can be considerable. However, development of web based distance education and training will have to be sympathetic to rural internet speeds.

ICPA-NSW supports innovative use of distance delivery services as exemplified in the NSW TAFE Western Connect concept introduced by TAFE Western. This concept of introducing wireless broadband capability at each campus, mobile delivery units and new online courses will enable more rural and remote people to have access to training possibilities.



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However, distance education should not be used to mask any withdrawal in face to face higher education and training delivery. Some students attending TAFE are not well suited to the self-discipline required by Distance Education, and redirecting funding from face-to-face teaching towards distance education may lose these types of students to training altogether.

**ICPA-NSW recommends that the Federal and State Governments invest in developing quality distance education of agricultural skills and training suitable for web based delivery in rural areas.**

### ***School-based VET, more opportunities for Certificate III courses***

ICPA-NSW supports government initiatives to extend agricultural VET opportunities to school students. Although commencing from a low base, the number of NSW school students participating in school-based agricultural VET has increased by 159% in the 5 years to 2007, indicating the success of the program.

Certificate III VET courses are treated by employers with far more credibility than Certificate II courses.

**ICPA-NSW recommends that where possible, school students be given options to complete Certificate III agricultural VET courses during the final years at school, so that upon leaving school they may possess qualifications that are more highly valued in the workplace.**

### ***Increased funding to agricultural businesses to access training***

Increasing managerial skills across agricultural businesses will require the provision of education and skills to a very large proportion of the agricultural workforce. Achieving this penetration of skills training into the agricultural workforce will inevitably require Government funding of private trainers capable of capturing large numbers of farmers in training programs. The FarmBis model of funding between 1998 and 2005 provided extensive coverage of a diversity of training opportunities to the agricultural workforce. The FarmBis funding operated in 3 phases:

<b>1998-2001</b>	82,000 producers attending in excess of 155,000 training activities
<b>2001- 2004</b>	95,000 producers attending in excess of 146,000 training opportunities
<b>2005-2008</b>	29,000 participants attending approx. 48,000 training opportunities (NSW excluded)

Since 2008, this funding has been redirected towards helping farmers adjust to climate change, and the diversity of training opportunities no longer exists. Whilst ICPA-NSW does not have the information to determine the efficiency of government spending on this type of training, the high numbers of producers that participated in FarmBis indicate that reinstating

similar types of funding has the potential to reach extensive sections of the agricultural workforce.

**ICPA-NSW recommends that the Government investigate the opportunities in reinstating training funding along the lines of the previous FarmBis program so as to be able to reach large numbers of the existing workforce with short course skills training.**

### **Incentives to take up higher education and training**

In order to undertake commitments in time and cost of education and training, students and workers need sufficient reason to be motivated to participate. This includes

- a clear purpose in undertaking the education or training
- clearer career paths
- earning potential linked to acquisition of qualifications and skills.

#### ***Promoting skills training and higher education to agriculture***

ICPA-NSW suggests that there is a perception that agricultural qualifications and skills training are not sufficiently valued by employers and that there is as a result insufficient incentive to invest the personal time, effort and cost into obtaining that agricultural education and training. Promotion of qualifications, skills and training as a useful adjunct to a career based on agriculture may help address this perception, and inform potential students and trainees of the advantages of study and training.

#### ***Reinstating agricultural R&D and extension services***

Because of widespread publicity regarding the winding down of agricultural research and extension in relevant government departments, there is a perception amongst youth that careers in agriculture offer poor employment prospects and security. In view of the future opportunities, it is to be hoped that government employment in agriculture will in future provide a more fulfilling and secure career path for its workforce.

**ICPA-NSW recommends that in anticipation of the future opportunities to supply growing global demand for agricultural produce, the Government reinstates secure and fulfilling career paths for persons holding qualifications in agriculture, and perceptions of the opportunities for agriculture graduates will improve.**

#### ***Assessing local demand for skills and reviewing local VET courses to improve relevancy***

Many farm businesses consider that post school VET programs are not sufficiently relevant to agricultural work (Australian Farm Institute, 2010). The National Centre for Vocational Education Research has found that agricultural employers tend not to require vocational qualifications when recruiting, and few farm businesses provide VET training opportunities

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to employees when compared to other industries. As a result, workers are insufficiently motivated to complete VET courses.

VET curricula must be redesigned to be more relevant to skills required in farming businesses located in the vicinity of the training facility. In order to design course curricula on a regional basis, good and reliable evidence is needed of the particular skills in demand in farming enterprises and practices in that particular area.

ICPA-NSW believes there has been insufficient regional analysis of skills needs and shortages, which impedes training providers in better designing the relevance of local content of current VET courses likely to appeal in the various and very different regional areas of the State. This flexibility and responsiveness to local conditions will allow, for example, curricula of agricultural VET courses to better reflect the farming enterprises and practices that are predominant in the region in which that particular course is being provided.

**ICPA-NSW recommends that the Government urgently review the types and nature of skills and training most required by the agriculture sector region by region, and builds a base of knowledge so that training delivery can become better aligned with training needs.**

### *Rural and remote traineeships and apprenticeships*

Rural and remote areas have far fewer opportunities for apprenticeships and traineeships than metropolitan areas. As a result, there is less reason and opportunity for employees to undertake VET.

**ICPA recommends that the Government increase uptake of post-school VET in rural and remote areas by further developing and encouraging rural and remote traineeships and apprenticeships in agriculture, in which rural and remote employers receive support in return for providing young workers with educational and training opportunities that integrate with employment opportunities.**

### *National apprenticeship qualification in agriculture*

A national agricultural apprenticeship is one of six proposals in the report *Project proposals from the Heywire Youth Issues Forum, 6-11 February 2011* by the winners of the 2010 Heywire competition which included 33 young people from regional Australia. The scheme would allow young agricultural workers to gain a formal qualification through a mixture of study and farm work. ([www.abc.net.au/heywire](http://www.abc.net.au/heywire))

The proposed agricultural apprenticeship would consist of agricultural skills, such as animal husbandry, cropping programs and business management, but it could also encompass introductory units in regularly used trades, such as engineering and automotive, butchering and carpentry. The apprenticeships would need to include skills training that is relevant to local industry.

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By giving formal credentials to young people working on farms, a national agricultural apprenticeship would recognise their important skills and help build a more positive perception of agricultural work.

**ICPA-NSW recommends the introduction of an Australian Agricultural Apprenticeship.**

### ***School-based skills training in agriculture***

ICPA-NSW believes that more school-based training and education for young people interested in working in agriculture should be available in rural areas.

### ***Senior Residential College of Agriculture in NSW***

To further develop opportunities for school-based VET in rural southern NSW, ICPA-NSW proposes that at the site of the previous Murrumbidgee College of Agriculture, a Senior Residential College should be established, focusing on agriculture and agriculturally related industries without the restrictions of a formal HSC study pattern.

This proposal is based on the successful Cunderdin College in Western Australia, where there is a 100% uptake of students, post-school, into the workforce, tertiary education or apprenticeships. A college of this type would offer students an alternative pathway to achieve success in life, while gaining an education based on practice and competency. It is envisaged that all students would graduate with a Certificate III level of education, meeting the goals of the National Training Authority.

The Senior Residential College would overcome issues of access and incentive by providing a residential facility allowing geographically isolated students to access the opportunities of the college, including networks into agricultural jobs and careers. The college would provide relevant and up-to-date training and qualifications so that students are well positioned to seek either employment after leaving, or further training or studying at a diploma or university level to increase their skills.

Either way, students who are not necessarily suited or attracted to more traditional HSC subjects and curricula will be motivated by practical and hands-on training in areas more readily perceived as relevant to their chosen careers. As these students are seeking and receiving practice and competency in skills for their chosen industry, their educational experience will be far more positive than if they had remained enrolled but potentially disengaged with more traditional school subjects and curricula. This positive educational experience is more likely to lead to a pathway of further engagement with education and training in agriculture in the future.

If such a college was established in NSW, employers would have the opportunity of employing school leavers with agricultural experience and therefore would not have to spend valuable time on basic training and skilling. This would give both the employer and the

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employee confidence that farm-based tasks could be completed successfully and competently.

Residential accommodation is essential for students from isolated areas. Most students at the start of Year 11 do not have a driver's licence and/or live too far from the college to commute on a daily basis. Families must have their school-aged children board in a safe, supervised facility with 'duty-of-care' accreditation.

Australia needs a productive, innovative rural industry, run by trained and dedicated young people. There must be assistance and encouragement available to enable young Australians to survive and contribute to rural industries. New skills and changing trends in agriculture are best taught to future farmers through training facilities where practical skills are taught alongside traditional HSC courses.

The existing facilities of the former Murrumbidgee College of Agriculture (now Murrumbidgee Rural Studies Centre) at Yanco, NSW, would be well suited to the establishment of the Senior Residential College.

**ICPA-NSW recommends that a study assessing demand for a senior residential college of agriculture in southern NSW and other areas of rural Australia be undertaken.**

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