The employer of choice or a sector without workforce?




Australian agriculture is at the crossroads. It is charging ahead towards its goal of $100 billion gross value of production (GVP) by 2030 but is compromised in that endeavour by its limited ability to find a suitable workforce. The pandemic experience of 2020 onwards effectively terminated agriculture's itinerant worker program of international labour, and the availability of domestic qualified labour is highly restricted. The agricultural workforce demand continues to both grow and change, moving towards greater skills and capability needs as a result of evolving technology developments, increased market complexity and business acumen imperatives. Workforce is scarce both for on-farm production and off-farm agribusiness – new endeavours are needed if the future workforce is to be adequate. University graduate and Vocational Education and Training (VET) paraprofessional supplies are well short of what is needed to fill employment opportunities, and on current trends will stay that way unless there is intervention. This paper considers these issues and argues for greater industry intervention in education to increase the supply from particular target markets. Agriculture needs to become an employer of choice, or it will be without a workforce.

Jim Pratley,[a] Scott Graham,[ab] Hardy Manser[a] and Joshua Gilbert[ac]

a Gulbali Institute, Charles Sturt University

b Barker College

c Food Agility CRC

Agriculture faces major challenges every day ranging from environmental perturbations to market volatility. The future workforce is an emerging challenge, a fundamental issue if agriculture is to move towards its potential.

Background

Australian agriculture has evolved over the last 200+ years through trial and error in the first part and by research and development in the last part. In that process, the supply of labour always has been an important component. However, for much of the 20th century, labour was seen by producers as a cost, and much effort by farmer organisations and the political system was directed towards ensuring low farm labour costs. It is worth noting that farm labour supply was more plentiful in those days – it tended to be sourced locally from families who stayed in their communities and from Indigenous peoples who were often compensated with rations rather than wages.

Post-World War II, however, significant change occurred. The population increasingly relocated away from rural areas towards the coast into the bigger cities (Figure 1), thereby creating one of the most urbanised nations globally. Opportunities for rural workers also opened up in mining and elsewhere, resulting in a decline in labour supply for farming.

The election of the Whitlam Government in 1972 was transformational for Australian society, including agriculture. Protection for the primary industries was wound back and long-held input subsidies were scrapped. The environmental movement suddenly became a force and has been an arbiter of agriculture's environmental social licence since then.

The removal of university fees was transformative. It resulted in a broader range of people accessing vocational and higher education. It included folk of lower socioeconomic status (SES), a category which comprised the mainstream farm employees of the past. Agriculture was slow to take up the opportunity of free education for its sector. Employers were installed commonly through inheritance rather than qualifications, and education of their staff was not a high priority. For a period in the late 20th and early 21st centuries, there was interest in 'just-in-time' TAFE training where employees were sent to get specific training but not for a qualification as that would raise their remuneration expectations and requirements. Similarly, it was sector policy not to embrace apprenticeships due to their imposition of extra cost and ongoing commitment, agriculture being the loser in that process.

Affirmative action for women was also initiated nationwide in the 1970s. Agricultural colleges and agricultural high schools, which hitherto only admitted male students (Pratley & Archer 2017), became co-educational almost overnight, potentially creating a bigger workforce with more diverse talent.

The 20th century for agriculture was a story of *not* embracing education nor recognising women and First Nations peoples in the

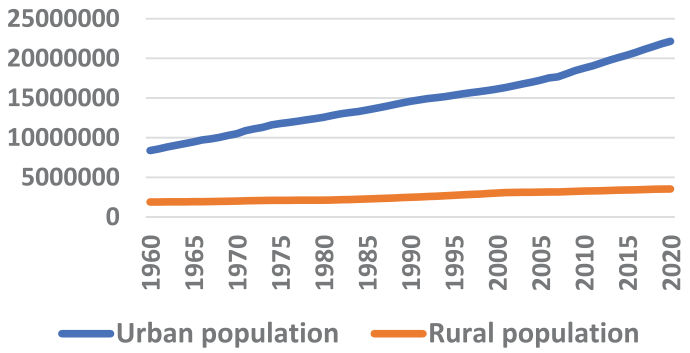

Figure 1: Urban v rural population in Australia (1960–2020).

Source: Ritchie and Roser (2018).

sector's workforce. Poor leadership in the sector in the latter half of the 20th century resulted in a negative public image of agriculture, which has proven to be a disincentive for potential new employees. Vestiges of those attitudes continue today.

It is also important to recognise that the agriculture workforce is not only on-farm. There has long been a service sector, examples being merchandise, land and property real estate, livestock marketing and grain marketing. The employees were often from farming families and required no qualifications except perhaps some relevant experience.

Evolution of the 'New Agriculture'

The McColl Report (McColl et al. 1991) provided a review of agricultural education in Australia. Among its recommendations was the need to increase the number of agricultural graduates produced by higher education to meet an increasing demand for such qualified personnel. Also recommended was a reduction in the number of institutions offering agriculture, the view being that fewer, stronger university schools or departments would serve the sector best.

The outcomes did not deliver on the McColl recommendations. Figure 2 shows the decline in the annual supply of qualified agriculturalists from the late 1980s to 2010 – from 800 to 300 per annum, a decline of over 60% in two decades. A consequence of student decline was the noticeable reduction in university campuses offering agriculture – fewer, but not stronger. Institutions were becoming unsustainable due to lack of student numbers. The Agricultural Colleges (pre-1989 Colleges of Advanced Education) were swallowed up by universities, thereby eliminating a specific layer of education. Numerous VET agricultural colleges also disappeared. This rationalisation resulted in a loss of 10 higher education campuses teaching agriculture, from 22 in 1989 to 12 in 2011 (Figure 3, Pratley 2012), although there has been a gradual increase to around 16 since then.

During the 1990s some agribusiness employers determined to give preference in employment to graduates, in light of changes in business compliance requirements (such as in agricultural chemicals). This added to the demand for graduates that already operated in multinational companies and the public service. The agribusiness sector since that time has experienced difficulties in recruitment of suitable staff, often resorting to enticements for qualified people to change companies for better remuneration. The 'law of supply and demand' was activated and salaries increased significantly due to this competition for qualified staff. This difficulty has occurred in all areas of the agricultural employment market including academic and research staff. Figure 4 shows the consistent demand for employees, both on-farm and off-farm during the first decade of the 21st century.

The present

The scenario this review paints is that demand for qualified people in agriculture has been sustained for a long period. The concern is that, despite the availability of employment at competitive salaries since at least the turn of this century, the sector has had little to no impact on the annual supply of qualified personnel. In 2022, the employment market is highly challenging due to low unemployment levels generally and the strong claims for workforce in other industries, such as tourism, hospitality and health, as well as for rural industries.

There continues to be unprecedented change in agriculture, due to new technologies such as remote sensing, smart technologies and market impacts such as traceability and chemical management. Increases in the proportion of corporate farming, corporation-style management of family farms and a general increase in farm size are all adding to the professionalising of agriculture. Routine activities on-farm commonly have been replaced by labour-saving devices while, increasingly, robots are being developed and adopted, particularly in horticulture. Commonly predictions have labour being reduced by these changes, whereas labour demand is increasing – although the jobs are changing in nature to higher-skilled ones.

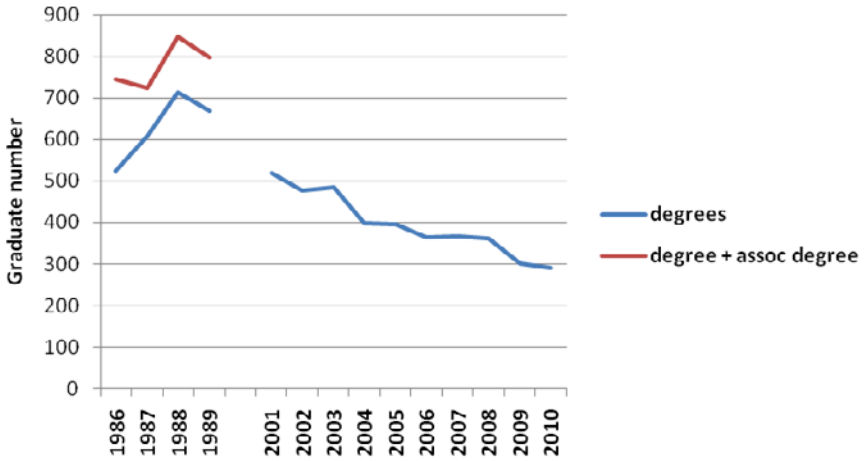

Figure 2: Graduate completions in agriculture, 2001–2009, from Australian universities with McColl et al. (1991) estimates of agriculture degree and associate degree completions for the period 1989–2011.

Source: Pratley (2012).

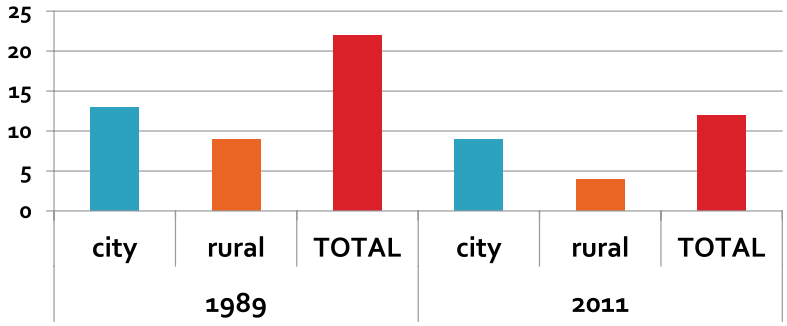

Figure 3: Number of university campuses offering undergraduate agriculture degrees, 1989 and 2011.

Source: Pratley (2012).

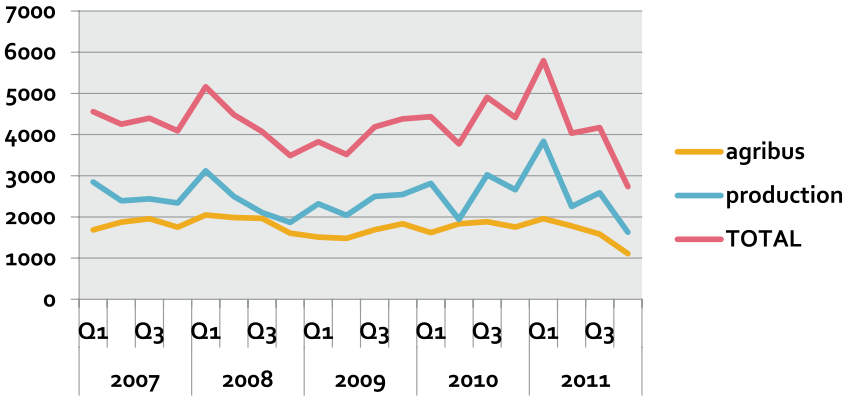

Figure 4: Number of agricultural job advertisements in papers and on internet, for on-farm and in agribusiness over the period 2007–2011.

Source: Pratley (2012).

Figure 5 shows recent trends. Employment offerings on-farm show no signs of declining or levelling off. Rather, they have intensified. On-farm over the period of 2015 to 2021 inclusive, the demand for management personnel, based on internet advertisements, increased by over 160% and for non-management staff by around 77%. The increase for on-farm staff overall increased by 53% in 2021 over that for 2020. In agribusiness, i.e. off-farm professional employment, the demand increased by 44% over the six-year period and by 70% in 2021 over 2020. These increases seem extraordinary.

Also demonstrated in Figure 5 is the number of graduates per year in agriculture and related areas, such as horticulture, animal science and farm business management. This annual supply is relatively constant just below 900, and projections based on intakes suggest that this is unlikely to change significantly in the short term.

Further analysis (Figure 6) shows the range of employment opportunities along the value chain, indicating opportunities for almost all skill sets. The clear 'winners' are farm management and merchandising, both of which had very large increases in recent years. Of significance are the opportunities (167 advertisements) in 'agritech', which was considered separately in advertisement monitoring for the first time in 2021.

An additional important statistic is the separation of the off-farm opportunities between city and regional location. In 2020, there were 756 or 39% of advertisements identified for the cities and 1187 or 61% for the regions. In 2021, 1133 (28%) advertisements were for city destinations with regions generating 2982 (72%) off-farm advertisements.

Some key issues therefore emerge:

- *The employment market for graduates* consistently has been buoyant across all parts of the sector at around 3000 to 5000 per year. However, the market in 2021 continued to increase by half as much again as technological requirements and opportunities impacted.
- The *off-farm agribusiness component* of the market is significant at around 4000 per year and increasing, with around 1000 being sought for city jobs. This component is rarely mentioned in the media and is not promoted by agribusiness. The question then is how students become informed if businesses do nothing to promote such careers.
- The *supply of graduates* maximises at around 900 per annum and projections indicate that this is unlikely to increase in the short term. Some agribusinesses do provide scholarships to university students, and that is welcomed and encouraged. The problem is that such scholars are already in the higher education agriculture system and so this support does not increase supply.
- Many employers over a long period of time, both on-farm and off-farm, have had an expectation that it is the government's role to provide appropriately trained labour to their industries free of charge. That is flawed thinking: other sectors seem to engage at all levels of education.

Increasing supply

How then does agriculture provide a closer match between the availability of jobs and the supply of graduates? Clear trends over an extended period suggest that workforce **demand** (Figure 4, Figure 5) is not going to contract – change, yes, but contract, no. The only other factor in the equation then is **supply**, so emphasis must be directed to increasing that supply. Sourcing the potential supply then becomes the critical component. It is important to note that a component of supply is *sustaining the existing workforce*. Wu et al. (2019) report that, in the agriculture sector, there is a high turnover of highly skilled employees and this accounts for at least some of the demand identified. Several reasons can be offered: the older age bracket, which is substantial in number in agriculture, is retiring – this is the farmer and also agribusiness 'baby boomers' who have contributed over a long period of time; there is net migration continuing from the regions to the cities, some of whom are people from the cities who have briefly tested out living in the country

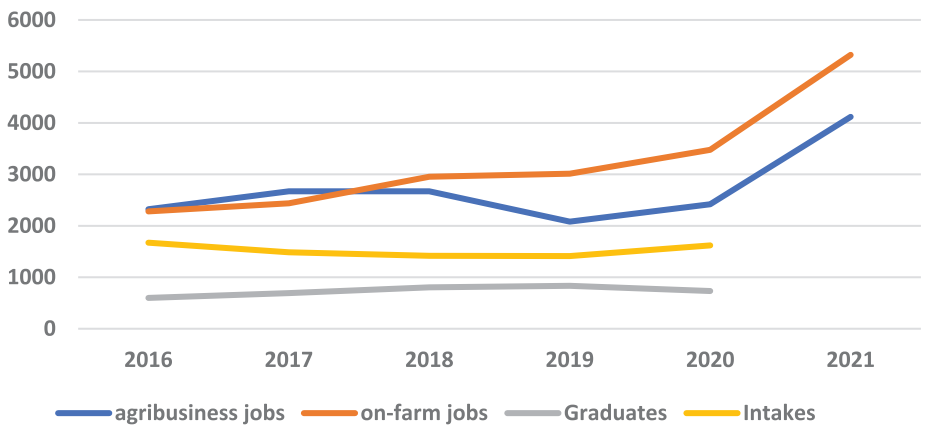

Figure 5: Discrepancy between the job availability market in agriculture and the supply of agriculturally qualified personnel out of university for the period 2016 to 2021.

Source: ACDA, unpublished.

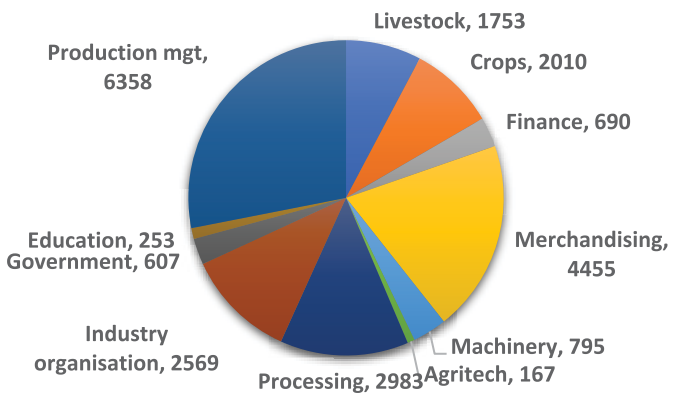

Figure 6: Opportunities for professional employment in agriculture in the different industries, 2015 to 2021; Agritech was identified separately only from 2021.

Source: Rimfire Resources (2022).

– there is plenty of evidence to show that professionals educated in the city either do not take employment in the regions or otherwise return to the cities after a short regional stint. There is a clear mantra that *if the professionals originate in the bush and become educated in the bush, they will seek employment in the bush and remain there long-term*. The importance of regional universities in providing the industry professionals for agriculture cannot be over-emphasised.

Recent statistics indicate some 400,000 jobs across the economy remain unfilled in Australia and an unemployment rate of 3.9%, the lowest in a long time. The NSW Intergenerational Report (2021–22) indicates that over the next decades the competition for workforce will intensify as the composition of society changes to a higher proportion of aged people. It follows that inaction by agriculture will have its own consequences, including a denuded workforce. The answer for on-farm workforce in the past has been the utilisation of backpacker tourists and Pacific Islander workers. The COVID-19 pandemic exposed the fickleness of this approach. The media continues to provide coverage of the associated unscrupulous employment agents and unsustainable social practices, albeit in

small numbers. It is reality that those at the lowest common denominator in management practices are the most likely to receive high profile, negative media attention and thus tarnish the image and reputation of the great majority. The itinerant worker program is likely to evolve to a 'top-up' arrangement rather than the main event as in the recent past.

That scenario suggests the need to identify within Australia particular demographic cohorts who have not associated particularly with agriculture in the recent past. Four categories are suggested as targets for marketing: females, First Nations youth, metropolitan students, and migrants.

a. *Females*

It is of relevance to recall that agriculture did not admit females to agricultural high schools and colleges until the 1970s (Pratley 2017; Pratley & Archer 2017). It took until 2003 for women to become the majority in university agriculture courses, a position they have continued to hold. While it seems that this demographic is not in urgent need of enticement, it is unclear to what extent flexible working conditions, particularly for young parents, are embedded in the workplace for a business to be an employer of choice. Salary discrepancies between genders are not evident at career starting points but they do move apart to the detriment of women as careers progress. With commitment, diversity in the workforce can change quickly and it is acknowledged that the National Farmers' Federation's focus on gender has resulted in an increase in leadership roles for women. This suggests that commitment to other demographic cohorts can also be positive.

b. *First Nations youth*

Despite Indigenous labour being synonymous with agricultural properties post-colonisation, there has been much reluctance since the late 1900s to appreciate Indigenous labour (McGrath 1987). As agricultural companies mature towards societal-driven human resourcing functions, it is expected that the agriculture sector at large will follow a vast minority of Australian businesses in developing Reconciliation Action Plans (RAPs). This will see the agricultural sector commit (based on current populations) 3% of its workforce positions to Indigenous people, taking advantage of the only growing youth population in Australia (Australian Human Rights Commission 2006). It is of concern that just 1% of the current agricultural workforce identify as First Nations (Binks et al. 2019) and there is only a small pipeline of professional talent with fewer than five Indigenous agriculturists graduating nationally from universities each year (Pratley 2019). Workforce conditions also require considerable attention to ensure cultural safety for Indigenous employees (Brown et al. 2020).

c. *Metropolitan students*

Agriculture has a poor image among this demographic. The agricultural stereotype for them is a farmer who is unskilled, environmentally irresponsible, lowly paid and 'traditional' i.e. the opposite of what such students are seeking in their careers (PIEFA 2020). Their focus is on the future being technology rich, and where there are many well-paid jobs with purpose to provide the opportunity to make a difference. Sustainability and climate change are important aspects of that future. These students choose a tertiary course that either fits their career choice or one based on their interest and passion. Either way, agriculture is not front and centre for them. Improved images of contemporary Australian agriculture need to be promoted frequently and the opportunities for agriculture careers in the cities should be articulated loudly and clearly. Currently a relatively low number of students study Year 12 Agriculture each year, around only about one-third being from metropolitan areas despite two-thirds living there. In Sydney, for example, around 50,000 students per annum sit for the Higher School Certificate, yet only about 500 or 1% of them sit the Agriculture HSC examination. This cohort represents the greatest chance, based on numbers alone, to increase supply to agriculture. Barker College in Sydney has shown it can be done successfully (Graham 2021).

d. Migrants

Many of these students have emigrated from countries where agriculture is seen as a peasant existence. Parental influence against agriculture is strong in some ethnic groups. It is important that career promotion makes it clear that agriculture is a high tech, well paid and essential service under Australian conditions. However, this will require sponsored long-term capacity development away from the transient, low-skilled worker experience of the past, with success more likely with second generation than first generation migrants.

Target markets therefore exist; the marketing process becomes pivotal to the success of enticing new players into the sector. It bears repeating that the image of an agricultural worker as a pre-retirement Anglo-Saxon male with blue singlet and Akubra hat is outdated and contrary to attraction impulses of the new generation. It is critical in attracting the new generation that they be the focus of the imagery in marketing. Innovative imagery is at the centre of attracting the youth of Australia, as shown by PIEFA (2020) and similarly reported in the United States (Russell 1993). In any marketing, the target populations need to be well represented in the campaign according to the mantra that *you can't be what you can't see*.

Education and training

In this process the schools need to play their part. No longer can the sector afford to accept that agriculture is presented as a second-rate teaching area. There has to be a clear indication to students and their teachers that agriculture is an essential service underpinned by strong and complex science, technology and business. It has a major environmental management role as well. We cannot afford to accept that the 'ag plot' should be down the back of the campus and out of sight of the majority. 'Food and fibre' are the basis of existence and underpin the modern urban quality lifestyle: this needs to play a central role in the school curricula and in life discussions. In addition, the way agriculture is taught needs to fuel the imagination and interest of students away from traditional farming and attitudes to the new high-tech opportunities (Cosby et al. 2022; Manning et al. 2022) that deliver precision, sustainability, profitability and humanity. This needs to be an immersive process (Specht et al. 2014) for full engagement, awareness and in-school profile. Agriculture teachers also need to consider what image they present to students, to parents and their colleagues – is it the traditional or the new agriculture image they portray?

RTOs and Colleges – The Vocational Education and Training (VET) sector, once a thriving education icon, has been emasculated as successive governments have endeavoured to privatise its provision through the registered training organisations (RTOs) scheme. Private RTOs picked the low-hanging fruit. The thin market end of the offerings was largely ignored and either left for TAFE[1] or did not continue. Quality control in this process has been a concerning issue, as has the availability of courses particularly in the more remote areas. The training sector is at the crossroads and needs the strong support of industry and government if it is to be sustained. There is an identity crisis with an unclear mission and inadequate funding. Industry, education and government sectors need to work together to define the purpose of competency-based training packages in the 'new agriculture' space, so that paraprofessional roles have training in transdisciplinary skill sets that support a dynamic and rapidly evolving technological industry. Such training needs to be conducted by specialist trainers with real world experiences that provide immersive opportunities for students. It is worth repeating that there was an extensive network of VET colleges of agriculture but political decisions closed a significant proportion of them. Fortunately, some still contribute strongly, including Tocal College in the Hunter Valley, Longeronong College near Horsham and RIST College at Hamilton in Victoria.

Schools – In the absence of government supported vocational colleges, some schools across Australia, such as The Rockhampton Grammar School, have shown that industry relevant, dynamic training can be delivered by schools utilising qualified educators. This requires the support of industry-based partners

1 Technical and further education.

and resources to ensure students are exposed to evolving industry best practice. Such students can leave the school with a VET qualification in a position to be employed and on a pathway to lifelong education. The school VET program continues to grow but depends on local industry support and investment to thrive.

An anachronism in education and training in agriculture is the sector's long-held view rejecting apprenticeships. While not a particular policy in the National Farmers' Federation today, it was discouraged by the NFF's predecessor organisations. Yet it would seem to be an ideal vehicle to attract school students in senior high school as a career choice. School-based traineeships and apprenticeships are available, at least in NSW. Over the years amendments to the apprenticeship schemes have been made to facilitate use by agriculture and horticulture. The scheme, either through the schools or TAFE, would seem to be suited ideally for the on-farm labour shortage. It provides the opportunity for industries to demonstrate their employer credentials if it is seen as an investment rather than a cost. The NFF should openly promote the scheme. While forestry and amenity horticulture have taken advantage of the scheme, Pratley (2013) indicated the absence of any apprenticeships in agriculture or production horticulture. Little has changed in the interim. It must signify to the youth looking in that space that there is no career path in agriculture, so they look elsewhere. These negativities make no sense.

Universities – At university level there is commonly a call by industry and others for technology to be included in curricula. That has already occurred in most, if not all, institutions as there is much research activity in precision agriculture, drones, remote sensing, apps, big data and the like, and this has transferred readily into teaching programs. University graduates have always been expected to be capable in higher-order thinking and that has not changed, although emphasis probably has evolved towards the digital economy and the role of technology. Greater emphasis on Indigenous knowledge and understanding (e.g. Pratley 2019; Gartaula et al. 2020) is an area that is emerging as the sector moves towards RAPs and encouraging First Nations youth into employment.

Sector responsibilities

An important principle is that employees are needed by the business – either farm or agribusiness. There is a misguided view by some employers that they do not have a role in attracting potential staff and therefore do nothing. At the other extreme there are industries that consider that they can do it regardless of others in the sector and set up in competition to existing players who are endeavouring to make the system work for all.

Fortunately, agriculture is well served for support, at least in some states. The Primary Industries Education Foundation Australia (PIEFA) has been set up to provide well targeted teaching materials particularly for the primary schools and increasingly for the secondary schools through its website PrimeZone.[2] Feeding teaching materials into the education system is not an easy process, but PIEFA is well connected and trusted by the stakeholder system which comprises industry, education and government. All materials are prepared by educational designers and the Foundation has an extensive network of schools attached to it. It needs to be supported with its role. In NSW there is a strong contribution in teaching resources and student experiences from the Royal Agricultural Society NSW.[3] Businesses are encouraged to engage with such organisations and, in the case of the RAS network, ensure it makes a significant contribution in each State.

In many cases the farm business or agribusiness will seek out university students in their final year or two of study and provide a scholarship as enticement for future employment. These are valuable to the student and are encouraged, but do not contribute to overall supply of students. That needs to be done at the secondary school level where a student can be enticed to change aspirations into agriculture. Offering a scholarship in Year 12 towards a university or TAFE course can result in a change of career because

2 https://www.primezone.edu.au/

3 https://www.rasnsw.com.au/education/

the student feels wanted and valued. In some cases, other students, having seen the opportunity, might also change.

Finally, it is important to mention that the National Agricultural Workforce Strategy (2020) recommended there to be an AgriFood Tertiary Education Council, similar to the Minerals Tertiary Education Council. Currently there is no formal forum for agricultural industry and education. There is no avenue for formulation of joint policy or for accessing project funds. There is no real investment of industry into its educational institutions. Given the significant constraints on workforce now and in the immediate future, it would seem logical that some dialogue mechanism is in place. It will be too late when all other sectors have arrangements in place – because there will not be a spare workforce to employ.

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References

Australian Human Rights Commission (2006) "A Statistical overview of Aboriginal and Torres Strait Islander Peoples in Australia" (Published online: Australian Human Rights Commission) https://humanrights.gov.au/our-work/statistical-overview-aboriginal-and-torres-strait-islander-peoples-australia

Azarias J, Nettle R, Williams J (2020) *National Agricultural Workforce Strategy: Learning to excel.* (National Agricultural Labour Advisory Committee: Canberra)

Brown C, D'Almada-Remedios R, Gilbert J, O'Leary J, Young N (2020) "Gari Yala (Speak the Truth): Centring the Work Experiences of Aboriginal and/or Torres Strait Islander Australians" (Diversity Council Australia/Jumbunna Institute: Sydney)

Cosby A, Manning J, Power D, Harreveld B (2022) New decade, same concerns: A systematic review of agricultural literacy of school students. *Education Sciences* **12,** 235.

Graham S (2021) Untapped potential: The neglected urban interest in secondary agriculture. *International Journal of Innovation in Science and Mathematics Education* **29** (4), 11–21

Gartaula H, Patel K, Shukla S, Devkota R (2020) Indigenous knowledge of traditional foods and food literacy among youth: Insights from rural Nepal. *Journal of Rural Studies* **73,** 77–86

McColl JC, Robson AD, Chudleigh JW (1991) "Review of Agricultural and Related Education", Volumes 1 and 2. Department of Employment, Education and Training and Department of Primary Industries and Energy (AGPS: Canberra)

McGrath A (1987) "Born in the cattle: Aborigines in cattle country" (Allen & Unwin: Sydney)

NSW Intergenerational Report (2021–22) Towards 2061 – planning for the future. (NSW Treasury: Sydney)

PIEFA (2020) "Food, Fibre and our Future: Student Survey Report" (Youth Insight) https://www.piefa.edu.au/uploads/9/8/9/8/98986708/piefa_student_survey_final_report.pdf

Pratley JE (2017) Agriculture – from macho to gender balance. *Proceedings 18th Australian Agronomy Conference*, Ballarat http://www.agronomyaustraliaproceedings.org/

Pratley JE (2019) Indigenous students do not choose agriculture at University. *Proceedings of 19th Australian Agronomy Conference*, Wagga Wagga. https://acda.edu.au/resources/IndigenousStudentsDoNotChooseAgricultureAtUniversity.pdf

Pratley J (2012) Professional agriculture – a case of supply and demand. Australian Farm Institute Occasional Paper 12.01 (AFI: Surry Hills)

Pratley J (2013) Review into Agricultural Education and Training in New South Wales. (NSW Government: Sydney)

Pratley J, Archer C (2017) Evolution of agricultural education in Australia. *Agricultural Science* **29** (1), 10–27

Reconciliation Australia (2022) https://www.reconciliation.org.au/

Ritchie H, Roser M (2018) *"Urbanization"*. Published online at OurWorldInData.org https://ourworldindata.org/urbanization

Specht AR, McKim BR, Rutherford T (2014) A little learning is dangerous: the influence of agricultural literacy and experience on young people's perceptions of agricultural imagery. *Journal of Applied Communications,* **98,** 63–74.

About the authors

Jim Pratley is Professor of Agriculture at Charles Sturt University, Wagga Wagga and Fellow of the Australian Society of Agronomy. He participated in the 2020 Australian Agricultural Workforce Review, undertook the Ministerial Review into Agricultural Education and Training in NSW in 2013 and has written widely on agricultural education. He is Secretary of the Australian Council of Deans of Agriculture. He was awarded Member of the Order of Australia (AM) in 2019 for services to agricultural education, research and advisory.

Scott Graham is Head of Agriculture at Barker College in Sydney, having commenced his teaching career there in 2010. Largely through his efforts and those of his teaching colleagues, Barker College has transformed agricultural education such that it is one of the top electives for students, resulting in the highest number of HSC candidates in the subject across Australia. Scott is the recipient of the 2021 Prime Minister's Prize for Science Teaching in Secondary Schools.

Hardy Manser is Head of Agriculture at The Rockhampton Grammar School in Queensland where more than 250 students are involved in the School's agriculture program in some way including academic or VET pathways. The program operates across three campuses including 3500 ha Belmont Research Station in partnership with AgForce, CQUniversity and industry partners. He is Subject Matter Expert with the Queensland Curriculum and Assessment Authority, former Board Member of the Primary Industries Education Foundation Australia and former President of the National Association of Agricultural Educators.

Joshua Gilbert is a Worimi man and is undertaking higher degree research at Charles Sturt University focused on Indigenous agriculture. He is supported by the Food Agility CRC for his research. Joshua is the Indigenous co-chair of Reconciliation NSW and on the boards for Indigenous Business of Australia, KU Children's Services and the NSW Aboriginal Housing Office. He was named in the inaugural cohort of 50Next, recognising the world's top 50 young gastronomers, has been named as Australian Geographic's Young Conservationist of the Year and was a finalist for the ACT Young Australian of the Year awards.