Agriculture – from macho to gender balance

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Abstract
For 100 years, agricultural education in Australia was provided for males only. From the 1970s onwards women were admitted to almost all agricultural education institutions but it took until 2003 for gender balance in these courses to become a reality. This was some 15 years after gender balance had been reached across the university sector. Agriculture is now positioned on the average for the university sector and well in front of architecture, engineering and information technology disciplines. It is perhaps timely to evaluate whether work arrangements are in place in agriculture to provide the appropriate support for the increasing proportion of women in the agricultural workforce.

Keywords
Gender balance, participation rates, agricultural education, agricultural history.

Introduction

Gender balance (*i.e.* equal participation of men and women) in agriculture is a global issue and many studies (e.g. Huyer 2016) consider the on-farm role of women, which varies with country and agricultural products. In Australia however agriculture has long been held as a man's domain. This not only applied to agriculture but to many other sectors. Even today, senior management roles in industry and the public service are male–dominated. This paper explores some of the aspects that created and perpetuated this situation in agriculture and considers whether the move in the community towards equal opportunities in employment and education for women is reflected in modern Australian agriculture.

The early days

Agriculture is unique in Australian education in that specialist agricultural high schools and post-secondary agricultural colleges were established specifically to address the needs of the sector. This followed the traditions in the UK. In almost all cases, the early versions of the institutions described their mission as educating boys, lads or young men in the 'practice and science of agriculture' for profitable management of farms (Falvey and Bardsley 1997). While some consideration was given in Victoria in the early days to the education of young women "whereby they might assist in the development of agricultural interests", nothing was done to put this into effect (Falvey and Bardsley 1997). Table 1 shows the dates of establishment of Agricultural High Schools, the traditional Agricultural Colleges and the later Vocational Colleges. All institutions shown were established as male only. Even those established in the late 1950s/1960s (i.e. James Ruse Agricultural High School, Marcus Oldham College and the vocational colleges) were male only. In the early 20th Century, Victoria did flirt with coeducational agricultural high schools but the experiment lasted only a short time. The outcome however was that, for the then newly created Intermediate Certificate, all *male* candidates going to school in rural areas were required to study agriculture as one of their subjects (Martin 1977).

Universities generally had no gender barriers to entry but the number of women undertaking agricultural courses was a small minority, if at all. Burnley Horticultural College was well ahead of sister colleges in admitting women part-time from 1899 and full-time from 1914. Falvey and Bardsley (1997) assert, however, that many female students treated Burnley as a form of finishing school since it did not lead to a means of livelihood.

While the literature tends to discuss male dominance in the context of farming, it is also true that at that time the public service in agriculture and other service companies were very much male domains. Of course, the parliaments that made the rules were themselves predominantly male.

The transformation

Only one institution, Farrer Memorial Agricultural High School, remains male only today. There seems to have been an epiphany in the 1970s as many of the institutions progressively, but suddenly, became coeducational. At that time there was a strong affirmative action push by women that built through the next decades. This is described by Alston (2006) and Alston and Whittenbury (2013). During the 1960s, legislation against discrimination of sex, race and religion was adopted by various states. It also coincided with the International Women's Year in 1975 and the social reforms of the Whitlam government, although whether that played a role is a matter for debate.

Table 1. Establishment of selected agricultural education providers and year of first female admission in Australia (various sources).

Institution	Date established	Coeducational
School		
NSW Agricultural High Schools		
Hurlstone	1907	1979
Yanco	1922 (Yanco)	1993
Farrer Memorial	1939 (Tamworth)	Boys only
James Ruse	1959 (Carlingford)	1977
South Australian Agricultural High School		
Urrbrae	1913	1972
Western Australian College of Agriculture		
Harvey	1953	1988
Denmark	1942	1991
Agricultural College		
Queensland	1897	1969
Hawkesbury	1891	1974
Wagga	1896	1974
Orange	1973	1973
Dookie	1886	1973
Burnley	1891	1899
Marcus Oldham	1962	1979
Roseworthy	1883	1972
Vocational College		
Queensland		
Longreach	1967	1979
Emerald	1968	1991
NSW		
CB Alexander now Tocal	1965	1972

Table 2. Composition of participants in agricultural and related education in Australia in 1990 (McColl et al. 1991).

Category	Percentage
women	34
indigenous	0.2
rural	55

The review into agricultural education in 1990 (McColl et al. 1991) provided a glimpse of progress in gender balance in agricultural courses in Australia (Table 2). By this time the proportion of women had grown from the near zero of the 1960s to 34% some two decades later. A further study in recent times (Pratley 2016) has shown that since 2003 female enrolments in Australian universities in agriculture has exceeded enrolment by males (Figure 1). It is also clear that, through the evolution to current offerings, the early provision for 'boys only' over a long period has now dissipated and agriculture is considered as appropriate for women as it is for men.

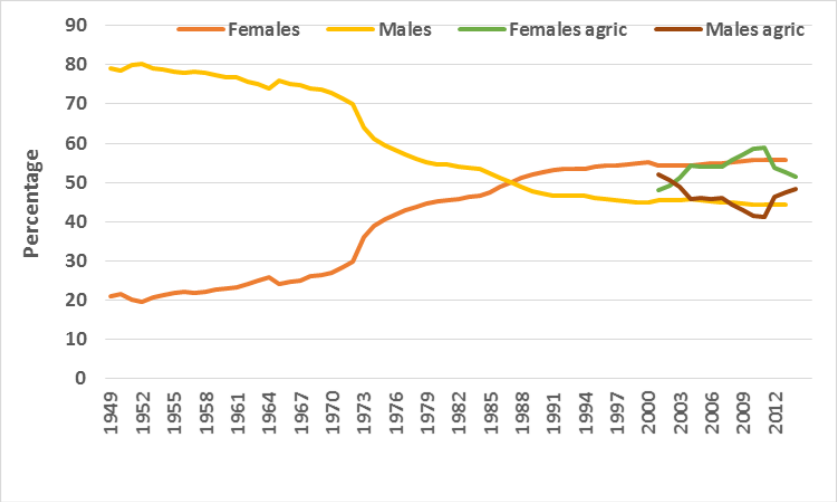

Figure 1. Annual enrolments of all students by gender in Australian universities, 1949-2012 (Australian University Rankings 2017) relative to those in agriculture for the period 2001-2013 (Pratley 2016).

How then does agriculture rate with other sectors and with the community? Data show for higher education overall, males dominated universities until the early 1970s after which difference in proportions between genders gradually narrowed until 1988 when females became the majority. Females have remained in the majority since then with proportions consistently around 55:45 for female: male. That 1970s change is consistent with the transformation then of the many agricultural institutions to coeducation. The female majority in agricultural enrolments, however, did not occur until 15 years after changeover in the student population at large and was still 1:2 in 1990 (Table 2).

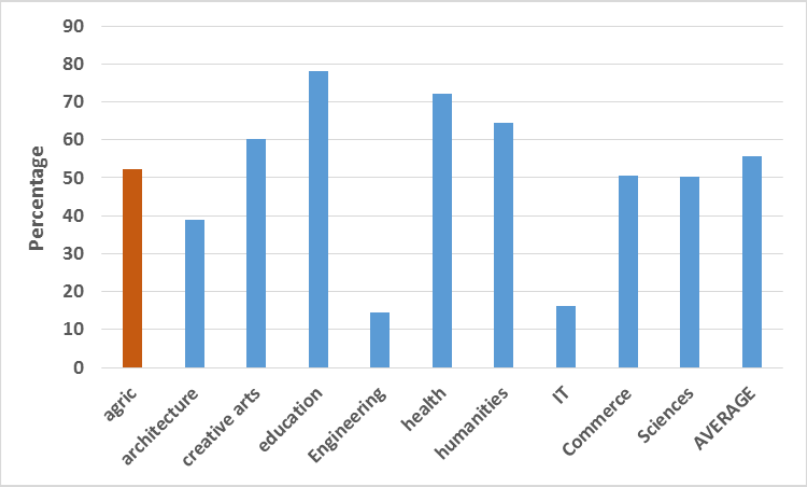

Figure 2. The proportion of females in university courses in Australian universities relative to those in agriculture, 2016 (Australian University Rankings 2017).

It is also worth benchmarking against other sectors in the economy in terms of gender balance to explore whether the long-standing 'blokey' image reflects reality. Figure 2 shows the proportion of females in other areas of study in 2016 at Australian universities. Agriculture gender percentages are now on par with the average across all areas and similar to those in commerce and the sciences. Education (78%) and health (72%) have much higher percentages of women while architecture (39%) and particularly engineering (14%) and information technology (16%) perform badly in this metric.

Conclusion

Australia, as with numerous other countries, has made significant progress towards improved participation rates of women in recent decades, particularly in education, health and in the workforce generally. The imposition of barriers to the progress of women in agriculture defies logic. Some justification was the 'heavy' work involved on farm but that has been addressed largely by technology. This paper suggests that agriculture can now be considered one of the success stories of gender balance, particularly in respect of agricultural education and training.

The reasons why this is important for agriculture are the same as those for other sectors. The fundamental drivers of sustainability and economic growth are the people. If only one gender is encouraged to participate, the talent pool is halved. A diverse workforce tends to produce a more holistic analysis of issues an organisation faces, leading to greater motivation and improved decision making (World Economic Forum 2015).

Of course statistics about participation are not the end of the story. In general, women still continue to earn less than men, are less likely to advance in their careers as men do and they accumulate less superannuation. Flexible working arrangements and support for employees with family responsibilities are critically important for support of women in the workforce. Thus while the 'blokey' image for agriculture is dissipating, the sector does need to evaluate whether it truly provides the working arrangements to benefit fully from the talents of its women.

References

Alston M (2006). Gender mainstreaming in practice: a view from rural Australia. NWSA Journal 18 (2), 123-147.

Alston M and Whittenbury K (2013). Does climatic crisis in Australia's food bowl create a basis for change in agricultural gender relations? Agriculture and Human Relations 30, 115-128.

Australian University Rankings (2017). (http://www.universityrankings.com.au/gender-balance-ratio.html).

Falvey JL and Bardsley JB (1997). Land and food: agricultural and related education in the Victorian colleges and the University of Melbourne. University of Melbourne, Parkville, Vic

Huyer S (2016). Closing the gender gap in agriculture. Gender, Technology and Development 20 (2), 105-116.

Martin RA (1977). The Victorian agricultural high schools: origins, development and failure: with special reference to Ballarat, Sale, Shepparton and Wangaratta agricultural high schools. Masters Coursework thesis, Education, The University of Melbourne.

McColl J, Robson AD and Chudleigh JW (1991). Report of the Review of Agricultural and Related Education. Department of Employment, Education and Training, Canberra. (http://www.voced.edu.au/content/ngv%3A64444).

Pratley JE (2016). Graduate supply for agriculture – a glimmer of hope. Agricultural Science 28 (2), 13-17.

World Economic Forum (2015), Global Gender Gap Report. (http://www3.weforum.org/docs/GGGR2015/cover.pdf).