

# Unis leaving the land?

The time has arrived for action on agricultural education, write Simon Livingstone and Peter Smith.

**F**ood and Agriculture Organisation data from 2008 estimates there are 6.5 billion people in the world, and this is likely to climb to 9.3 billion by 2050. Much discussion continues on how this rising human population will be fed.

Some believe the present food shortages in some parts of the world are a forewarning of what can be expected in the decades ahead, as global demand doubles, energy costs increase, bio-fuels expand and civilization runs lower on water, arable land and nutrients. The International Food Policy Research Institute's 2010 *Reflections on the global food crisis* report also observes that price surges are likely to reoccur unless we move to address the underlying issues facing food production, security and distribution.

As the world population grows and food demand increases, the educational requirements on those involved in agriculture will increase. The real change will be in the requirements on managers. It is anticipated there will be fewer farm managers in the future, but they will be highly skilled and degree-qualified.

Food security issues, however, are not the only concern for Australia and indeed the world. Imminent agricultural education concerns must already be apparent to the federal and state governments. Higher education is witnessing a rationalisation of agricultural programs at a time when farmers need to be highly qualified to effectively manage complex businesses and environments.

Of Australia's 39 universities, 12 offer agricultural-related degrees. It is evident that most university agriculture courses are struggling to attract and maintain sustainable student enrolments. Marcus Oldham College, a private agricultural higher education provider, is an exception.

In every state of Australia there have been newspaper reports highlighting low enrolments and predicting the fate of university agricultural faculties. That is not a good image for agriculture. What impact will this continued negative

publicity have on the sector and on student enrolments in the future?

Universities are the largest provider of agricultural education in Australia and they have undergone – and continue to experience – rapid changes. Federal government data shows that from 1996 to 2005, the share of university income from Commonwealth grants declined from 57 to 41 per cent per cent of total operating revenue.

With the reduction in the scale of commonwealth grant funding, and the need to secure income from other sources, it is evident agricultural faculties have been struggling to compete within their universities. Faculties are being appraised against their ability to generate income. Agriculture rates unfavourably as a contributor to university financial health compared, for example, to business and law programs – which are cheaper to run and have been commanding healthy domestic and international enrolments.

Universities continue to compete against each other for a dwindling number of agricultural enrolments and funding allocations. In the longer term, this situation is not beneficial to the institutions, students or rural sector. The question remains as to how long agricultural facilities can continue to survive with declining student enrolments.

Universities will be forced to specialise in specific academic areas and for many, if not most, agriculture will not be on offer. No longer will there be universities in every state offering agricultural courses.

A declining number of agricultural education providers will, unless actively managed, reduce the diversity of skills and knowledge at a time when agriculture is rapidly diversifying its outputs and processes. That industry diversity, and the capacity to develop new products and processes, is essential if we are to increase food production at a pace commensurate with population growth.

Yet while agricultural faculties struggle to attract sufficient enrolments to remain viable, there are healthy employment

opportunities in the rural sector. It is widely known there is a shortage of labour from unskilled workers through to managers. A 2010 Australian Farm Institute report warned that 30 per cent of the existing labour supply was likely to leave the industry by 2018 – suggesting a need for increased entry of skilled labour directly from education and training.

Meanwhile the Commonwealth government wants to raise the proportion of 25- to 34-year-olds in the workforce with a higher education qualification to 40 per cent by 2025. This is a very ambitious goal for an agriculture sector in which, according to 2005 Productivity Commission estimates, only 7 per cent of the workforce holds university qualifications.

It seems doubtful our current higher education arrangements can yield the number of farmers and others in the sector, and the diversity of skills and knowledge required – unless we are willing to change.

As a nation we need to understand the need for skills diversity in agriculture. We must understand the need to develop skills at the secondary school, vocational training and higher education levels. If we are to maintain a position as an important food producer – and if we are to contribute meaningfully to the productivity increases required to feed a growing global population – we need to make the skills, knowledge, occupations and people who make up the food supply chain a national priority.

In a different age the education of people on the land was a national priority. It worked for us then. We need to take effective action that makes agricultural education – along with agricultural careers, lifestyles and incomes – sufficiently attractive to ensure a supply of new entrants.

**Dr Simon Livingstone is director of the Centre for the Study of Rural Australia at Marcus Oldham College, near Geelong, Victoria. Dr Peter Smith is the centre's principal research associate.**