

**THE PROFESSIONALISATION OF AUSTRALIAN
AGRICULTURAL ECONOMICS
1920-1970**

By

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1. INTRODUCTION

The agricultural economics profession developed originally in Germany, France, the United States and the United Kingdom.¹ Both economics, agricultural economics and agricultural science were examples of professions that arose in these countries when new skilled occupations came into existence in the nineteenth and early twentieth centuries. With increased commercialisation and industrialisation, together with the modernisation of society, a more scientific/rational approach to the entire body of knowledge evolved and there was increased emphasis on technical expertise (Bellis, 2000, p. 4). This growth of modern knowledge strengthened the 'new' professions such as economics and agricultural economics because members were able to provide specialist knowledge to modern, expanding industries, and to exercise their professional judgement when called upon to give policy advice.

The history of the Australian agricultural economic profession has yet to be written.² I hope to arouse interest in a neglected aspect of the development of the discipline in this country by presenting this paper. It is significant to outline the process by which professionalisation occurs and in so doing reveal the origins and evolution of the agricultural economics profession in Australia. Agricultural economics is the offspring of a connection between two mature disciplines, economics and agricultural science, and the subject can be approached from either side. My approach from the side of economics is, I believe, appropriate in the 21st century and it reflects my own special interest in the history of economics and the sociology of the professions.³

The concept of a profession is outlined in this paper and the various attributes that define a profession are discussed. The accepted characteristics of a profession are then applied to agricultural economics to determine the extent to which the discipline fits the criteria of a profession. Some people have influenced the way in which agricultural economics grew into an important and effective profession. This paper identifies the economists and scientists who laid the foundations of agricultural economics in this country.

Australian agricultural economics was on the verge of professional recognition at the beginning of the 1950s. The subject had emerged from the Second World War in a strong position due primarily to the work of the State Departments of Agriculture, the Economics Departments of the banks, and the pioneering efforts of the Bureau of Agricultural Economics. Agricultural economics as a field of study was being taken up by economics and agricultural science students alike, and research projects in the

¹ Agricultural economics started in Germany and France in the late nineteenth century in the university departments of *Landwirtschaftliche Betriebslehre* (farm management) and *Agrarpolitik* (political economy of agriculture) and in the study of *economie rurale* (rural economics) (Private correspondence with Professor J. Lewis).

² *The Story of Australian Agricultural Economics 1900-1975* L. Myers, 2006, Deakin University unpublished thesis, includes some history of the profession

³ In this respect I am following the stance of A. W. Coats, an economic historian, who wrote about the development of the profession in England (Coats, 1976).

discipline were growing. Agricultural economics went through a clear process of professionalisation during the 1950s and 1960s and it conformed broadly to the characteristics of the newer type of professions that had grown up in the twentieth century. These professions were based on the command of a specialized body of knowledge, intellectual skill or technique acquired by means of a protracted period of learning. This emphasis on knowledge as the core generating trait of professionalism is a valid approach. Accumulation and understanding of the body of knowledge associated with a discipline is a significant part of the professionalisation process. Consequently the entrance of the discipline into the university system is the most decisive stage of the overall professionalisation process. This paper describes the way in which agricultural economics came into the universities.⁴ By the 1970s, most Australian universities had established chairs of agricultural economics.

2. WHAT IS A PROFESSION?

The concept of a profession has been discussed and debated a great deal since the matter was first raised in the 1920s by Professor A. M. Carr-Saunders.⁵ There is no single immutable definition of a profession but there is much interest and importance attached to the notion of professionalism. A profession can be described simply as a vocation that involves some branch of advanced learning. It can be likened to a learned society or club, the existence of which provides members with a mechanism by which they can capture control over an area of expert work. There are few associations more important or powerful than those formed by professional men (Carr-Saunders, 1933).

How did these learned societies come into existence? Some believe that the professions can trace their ancestry back to the medieval craft guilds, others maintain that many professions arose as a new phenomenon in the modern era. It is clear that new skilled occupations did develop in the 18th and 19th centuries and the practitioners in these occupations wanted to take their place in society at the highest level. They had the model of the 'learned professions' before them - law, medicine and divinity. These professions had held the monopoly over formal learning since the 16th century and their work had always carried an aura of special importance (Bellis, 2000).

All vocations aspire to professional status and but, as West (1996) argued, even when it does receive professional recognition, a vocation is often still questioned regarding the legitimacy of that status. By considering the sociological literature about occupations, one can determine the elements which are generally regarded as the distinguishing attributes of a profession (Greenwood, 1966). However, the difference between a professional and a non-professional is quantitative not qualitative – all occupations possess these attributes to some extent and there are no clear cut divisions. After

⁴ There was another path for the subject – agricultural colleges – but that is the subject for a future paper.

⁵ Professor Carr-Saunders was the first social scientist to analyse systematically the transition of diverse occupations in terms of the process of professionalisation in a lecture he gave in 1928, five years before the publication of his book *The Professions*, co-authored with P. A. Wilson (Vollmer & Mills, 1966, p. 2).

outlining and discussing the attributes, it is possible to show the extent to which agricultural economics meets the criteria of a profession.

3. WHAT ARE THE COMMON ATTRIBUTES OF A PROFESSION?

3.1 Body of theoretical knowledge

The distinguishing characteristic of a profession is the possession of a specialized intellectual technique acquired as a result of prolonged training. Acquisition of professional skill involves mastery of the theory. Therefore preparation for a profession is intellectual and requires formal education in an academic setting. A discipline must be well established in the university system in order to be recognized as a profession. There is generally group self-criticism of the body of knowledge and much theoretical controversy. This leads to expansion of the theory. As a result, the requisite academic education is lengthened and post graduate courses become a regular part of professional training. Membership of a professional body has always indicated a certain level of competence and a willingness to update skills and knowledge on a regular basis. The growth of modern knowledge means that no one can know everything. However, this reinforces the strength of a profession because members must provide specialist expertise.

3.2 Authority

Professional judgement has been the most significant factor in deciding whether an occupation was a profession or not. To be recognized as a profession, an occupation needs to contain the right balance between the application of technique and the exercise of personal judgement - not all objective technique or all subjective judgement, the two are complementary propositions and there must be a balance. Professional people are called upon to make professional judgements. These judgements are readily accepted by the community because, in general, people believe they lack the required educational background to determine their own needs in certain situations and are often not aware of the options that are available. The clients are also not in the position to question the quality of the service they receive and to this extent the professionals have authority and monopoly over their judgements.

3.3 Community Sanction

The community generally sanctions the monopoly given to the professional group. The community expectation is that those who possess the professional skill will deliver a superior service and the need for this service has to be socially important to the community in order for the discipline to be professionally recognized.

3.4 Conduct

Every profession has a built-in regulative code which requires ethical behaviour on the part of its members. Professionals are not motivated by self-interest but by the desire to

give quality service. Furthermore, members accumulate knowledge and disseminate information within their group. Professional colleagues form their own societies and publish their own journals. This is another specific indication of professional status.

3.5 Culture

The fundamental beliefs of the profession, its essential worth, and its social good, form the culture of the profession. The history, jargon and heroes of the profession are an important part of that culture.

4. ATTRIBUTES APPLIED TO AUSTRALIAN AGRICULTURAL ECONOMICS

The professionalism of Australian agricultural economics was high by the 1970s (Dillon, 1988, p. 342). This is substantiated by the fact that the subject was firmly established as an academic discipline at the better universities and the number of undergraduates passing through university courses was at a high level. The training programs were robust with some university departments achieving high standards of research and teaching. Agricultural economists had evolved from mere technical workers to highly trained economic theoreticians specializing in production economics and price theory. Graduates were readily employed in both the public and private sector and postgraduate studies were flourishing. Agricultural economists were regarded as excellent applied economists.

The overall quality of the Australian agricultural economic publications⁶ was well recognized. The literature of Australian agricultural economics was a most impressive branch of Australian economics (Corden, 1968, p. 120). The professional society was strong⁷ and activities of members of the profession extended to commerce, government, educational and international service (Dillon, 1972, p. 73). According to Parish, no other group of applied economists was remotely comparable to agricultural economists in terms of numbers, output, or professional organization (Parish, 1969, p.1).

Agricultural economists took part in the public debate of policy issues at that time, particularly agricultural policy and agriculture's role in the economy. They had sound knowledge of agricultural techniques and institutions and a good empirical approach in the use of theoretical concepts. Agricultural economists were well trained to give policy advice regarding the efficient use of resources. The standard of public discussion of agricultural policy matters was high.

The community accepted and sanctioned the role of agricultural economists as advisers. The agricultural economists collated facts and presented information to decision makers such as politicians, public servants, agricultural organizations and farmers. They

⁶ For example, the Australian Journal of Agricultural Economics, the Quarterly Review of Agricultural Economics, and the Review of Marketing and Agricultural Economics.

⁷ The AAES was formed in 1957 and in 1980 had about 600 members.

questioned the status quo and raised controversial issues such as the economic viability of certain government policies.⁸

By the late 1960s there was cohesiveness and esprit de corps within the ranks of the agricultural economics profession that Parish believed had developed from the very successful annual conferences (Parish, 1969, p.1). Twenty years later, Dillon still claimed there was great camaraderie among professional colleagues. There was also plenty of folklore and tradition within the profession, including well-known stories of heroes and villains (Dillon, 1988, p. 342).

Given the attributes mentioned in the previous section and the comments above, I would maintain that agricultural economics in Australia achieved professional status during the 1950-1970 period.

5. AUSTRALIAN AGRICULTURAL ECONOMICS

The emergence of new professions, such as economics and later agricultural economics, was related to the rise of specialised occupations around new scientific knowledge. With the rapid and advanced technological change that occurred in the agricultural industry in the late nineteenth, early twentieth century, and the establishment of the economics profession in the 1920s, it was natural that a new occupation of agricultural economics would appear. Two or more professions carrying out similar work is not sustainable and in such a situation, a new profession will emerge specializing in the joint area. Hence agricultural economics developed out of economics and agricultural science.

The discipline arose in the 1940s due to the efforts of certain members of the newly established economics profession, particularly Copland, Giblin, and Crawford. However, in order for agricultural economics to develop into a profession, a body of theory had to evolve. As Greenwood (1966) pointed out, the skills that characterise a profession flow from, and are supported by, an organised fund of knowledge. This specialised knowledge comes from the continuous research undertaken by the members of the growing discipline. But in Australia, agricultural economic research had been neglected in the early twentieth century.

The particular economic problems that arose in the rural sector due to the depressed economic activity and war-time conditions of the 1930s and 1940s were, at first, dealt with by State and Commonwealth governments through their departments of agriculture. Yet these departments lacked sufficient staff trained in the field of agricultural economics at the time. During the Second World War this lack of expert personnel had been recognised,⁹ but little could be done to redress the problem given the war situation. In the

⁸ For example, closer settlement, irrigation developments and some price policies

⁹ The Australian National Research Council called a conference at Melbourne University in 1941 to discuss the training of agricultural economists. It was recognised that there was an urgent need for training and research in agricultural economics. This was highlighted by the immediate shortage of properly trained personnel to assist with the problems of war and reconstruction. The conference recommended that a post-graduate training centre be established and the vice-chancellors' Committee

post-war decade agricultural scientists and agricultural economists were able to establish the subject within the university system and begin training agricultural economists in Australia. By the 1970s the agricultural economics profession had attained a respected position in Australia due to the quality of education being provided in the universities and the extensive research being carried out in both universities and government departments.

6. AGRICULTURAL ECONOMICS IN AUSTRALIAN UNIVERSITIES

The most important single step towards the overall professionalisation of a particular field of study is its establishment in a university context (Clark, 1968, p. 13). University teaching gives the subject increased prestige and legitimacy as well as providing a continuing source of new recruits for the field. In the Australian case agricultural economics achieved this status after a period of initial establishment in the 1940s and early 1950s but it was not until the mid-1950s that formal academic training for agricultural economists became well entrenched within Australian universities.

Although agriculture was the still the most important export sector of the Australian economy in the 1920s and 1930s, there were no specific courses in agricultural economics at Australian universities and no specialist practitioners working in the discipline at that time. This is not to deny the work being done at that time by agricultural extension workers. Extension workers were associated with the various State Departments of Agriculture and their technical knowledge was very sound. However as E. J. Underwood, Professor of Agriculture at the University of Western Australia stated

“Agricultural research and extension (services) in Australia have suffered too long from an almost exclusive devotion to technical problems and a severe neglect of economic and sociological problems” (Underwood, 1952, p. 184).

In this paper, developments at five universities are singled out for investigation; Sydney, Melbourne, New England, Adelaide and Western Australia. The universities of Sydney, New England and Adelaide were the first Australian universities to establish formal courses in agricultural economics in the 1950s and the professors and lecturers at those three institutions pioneered the academic development of the discipline. It was approximately ten more years before the subject was equally well established at Melbourne and in Western Australia. However, it is significant to note that at the two latter institutions, the Professors of Agriculture were particularly enthusiastic about the role of agricultural economics in their courses. Professor Wadham at Melbourne was a keen advocate of economics in general and Professor Underwood at UWA was instrumental in establishing an Agricultural Economics Research Centre at that university.

endorsed the general resolution. The issue of government assistance with finance had to be addressed but the discussions were indefinitely postponed when the war situation deteriorated.

The relationship between Agricultural Science and Agricultural Economics and between Economics and Agricultural Economics was complex. Scientists working in agriculture were becoming increasingly aware of the economic aspects of their activities, whilst general economists tended to concentrate on their own discipline. Williams, (1957, p. 38) argued that there had been ‘gross neglect on the part of the academic economists, of the special problems of rural industries’ until the middle of the twentieth century. R. M. Parish,¹⁰ at the time President of the Australian Agricultural Economics Society, claimed that agricultural economics was a branch of applied economics and its practitioners were agricultural economists, not economical agriculturalists (Parish, 1969, p. 3). There was much debate in Australia about what the content of an effective curriculum in agricultural economics should be (Drummond, 1959, p. 96). Was it a technical course in the marketing of primary products, or was it a course seeking to derive rules for successful farming by interpreting the data obtained from farm surveys and farm record books?

Agricultural science courses in Australia did not include the study of economics at first. Other countries recognised the importance of the economic aspects of agriculture much earlier.¹¹ Education in economics was not widely available to agricultural science students in Australian universities until the 1930s and even at that stage, the study of economics was confined to a single unit in the overall course. Agricultural colleges had been established in the late nineteenth century in many of the states¹² but these colleges tended to concentrate on the scientific and practical aspects of agriculture. When export prices fell in the 1920s it became apparent that all farmers, farm organisations and those involved in agricultural administration, needed to acquire a sound knowledge of the economic laws of supply and demand and the factors determining price. In a paper presented to the AAAS in 1913, H. Pye, Principal, Dookie Agricultural College suggested that

“... the course for the degree of Bachelor of Agricultural Science should included a certain amount of political economy, sufficient to enable the graduate to understand and explain such things as the nature of rent, interest and wages, and the part played by each in the production and distribution of a nation’s wealth, ... When a student has completed his course for the degree, he should have the opportunity of specialising in the economic phase of agriculture ...” (Pye, 1913, pp. 692-4).

The importance of economics to rural producers was gradually being recognised. A. J. Perkins, Director of Agriculture in South Australia, made a plea for nation-wide research into the economic position of various rural industries at the AAAS Meeting in 1928 (Perkins, 1928, p. 548). In that same year, A. E. V. Richardson, Director of the Waite

¹⁰ Ross Parish was a graduate from the University of Sydney, BSci(Agr), and the University of Chicago, PhD. He held many academic positions at Australian universities, viz. University of Sydney, University of New England, Monash University. He was also a visiting academic at various overseas universities, vis. Oxford, Stanford, Virginia Polytechnic Institute.

³ For example, agricultural economics was formally recognised in government departments and/or universities in USA (1902), UK (1913), South Africa (1925) and New Zealand (1926).

¹² Roseworthy, S.A. (1883), Dookie (1886), Longerenong (1889), Burnely (1891) Vic., Hawkesbury (1891) NSW, and Gatton (1895) Qld.

Agricultural Research Institute, was critical of the fact that in Australia much effort was put into the promotion of closer settlement and the stimulation of production, but very little attention was given to agricultural economics (Richardson, 1928, p. 250).

It was ultimately recognised by the State and Federal governments that there was an urgent need to provide increased academic training for agricultural economists as well as improved and expanded agricultural extension services to the agricultural industry in Australia. In the 1950s this resulted in the establishment of more specialised agricultural economics and farm management courses within the universities.

6.1 University Of Sydney

In 1910 at the University of Sydney, the Department of Agriculture in the Faculty of Science, had only one member of staff: Professor Robert D. Watt. There was one specific unit offered by the department that related to agricultural economics. It was called 'Economic Science Applied to Agriculture' and consisted of about 40 lectures on the general principles of economics with special reference to agricultural problems. There were four people enrolled in this subject in 1914 and university calendar of that year shows an examination paper for Agricultural Economics.¹³

In 1920 the Faculty of Agriculture was formed with responsibility for the award of Bachelor of Science in Agriculture. An agricultural economics unit appeared in the timetable for the first time in 1922 as a fourth year unit. In 1925 the course outline of the unit was changed. The first half of the course was to cover the principles of economic theory, and the second half involved the application of those principles to marketing and other aspects of agriculture.¹⁴ Students who graduated from this course in the 1920s were very impressive. They went on to become professors¹⁵ at Australian universities and agricultural colleges or directors¹⁶ of Departments of Agriculture.

An honours degree was also offered in the Faculty and to obtain honours, students had to undertake extensive research on one of a list of subjects. In 1939, Agricultural Economics appeared as one of the options. The Bachelor of Science in Agriculture degree changed again in the 1940s. The Faculty of Economics employed John Crawford as a lecturer in Rural Economics in 1940-42 and he was used as a visiting lecturer in the Faculty of Agriculture.¹⁷ Crawford, who had completed an Honours degree under Mills and Madgwick in 1932, was undertaking his Masters degree in Economics at this time.

¹³ There was no subject called Agricultural Economics on the time-table so it can be assumed that the examination paper applied to the subject Economic Science Applied to Agriculture.

⁴ No specific economics lecturer was listed in the University Calendar at this time. One assumes that an outside lecturer was used (possibly from the Commerce faculty).

¹⁵ J. K. Murray, W. L. Waterhouse, A. E. Southee, J. B. McMillan, A. R. Callaghan, R. N. McCulloch, H. A. Pittman, and A. E. Treloar.

¹⁶ R. J. Noble and H. J. Hynes.

¹⁷ Crawford tells the tale that Professor Mills indicated to him that Professor Watt wanted agricultural economics in his Faculty of Agriculture. Mills told Crawford to "go and give it!" (Crawford, 1985, p. 112).

He held a Walter and Eliza Hall Economic Research Fellowship. Some of the students studying under Crawford in the Faculty of Agriculture went on to be prominent agricultural economists, for example, K. O. Campbell (first Professor of Agricultural Economics at the University of Sydney), D. B. Williams (BAE, CSIRO, the University of Melbourne and Roseworthy Agricultural College) and W. Ives (BAE and Department of Primary Industry); the first wave of Australian-educated agricultural economists.

A new course outline for agricultural economics¹⁸ appeared in the 1948 Calendar. Some of the reports of the Rural Reconstruction Commission were used as textbooks as well as R. Cohen's *The Economics of Agriculture*. The changes in the course at Sydney may be attributed to the fact that John Crawford was employed at the University to teach agricultural/rural economics.

In 1950, Agricultural Economics at Sydney University was divided into 3 separate units, Agricultural Economics I, (offered in 3rd year) and Agricultural Economics IIA and IIB (offered in 4th year).¹⁹ In a major addition to the course, Statistical Methods was introduced that year and the fourth year units were extended to cover the application of the principles of economic theory to agriculture. In 1953 there were further changes to the fourth year units. In IIA considerable attention was given to the theory of national income determination and its policy applications. The course also included some lectures on farm organisation and management. The IIB course covered the process of policy formulation, and the role of the economist and the administrator. It looked at the various institutions which influenced Australian agricultural policy (Australian Agricultural Council, Farmers' Organisations), the international aspects of Australian agricultural policy, stabilisation schemes, land policy and the place of agriculture in the national economy.

These changes to the course coincided with changes in staff in the Faculty of Agriculture. 1945-46 were the last years for Professor Watt as Dean and J. R. A. McMillan was appointed the new Professor and Dean of the Faculty of Agriculture in 1947. S. J. Butlin and J. G. Crawford (from the Faculty of Economics) were listed on the teaching staff of both faculties, an indication of the interconnection between the two disciplines. In 1951, the position of a Research Chair in Agricultural Economics²⁰ was advertised but the Professorial Board did not consider any of the applicants were entirely suitable.²¹ Instead K. O. Campbell was appointed Reader in Agricultural Economics in November, 1951. The Professorial Board stated that Dr. K. O. Campbell was the best of the applicants but at that time the Board did not think he was quite up to the standard required for a

¹⁸ The under-graduate subject had been called 'Economic Science applied to Agriculture' at first. It first appeared in the Calendar as 'Agricultural Economics' in 1942.

⁹ One of the most successful students in the course at this time was J. L. Dillon who later became Professor of Farm Management at the University of New England.

²⁰ In 1948 the University of Sydney had been offered a grant from the Commonwealth Bank Rural Credits Development Fund to establish a Research Chair in Agricultural Economics. This was to replace the Research Professor in Agriculture, a position vacated by W. L. Waterhouse in 1947.

²¹ There were 14 applicants including K. O. Campbell, R. S. G. Rutherford, D. B. Williams and A. A. Dawson.

professorial chair (University of Sydney Archives, 1951). Campbell had excellent qualifications and, given the amount of his research output and the apparent quality of his work, it is not clear why Campbell was not considered to be at the required standard to be given the Research chair in Agricultural Economics. It may have been due to some reluctance on the part of the University to allow a decline in traditional university values by introducing 'useful' courses such as agricultural economics into the curriculum.²² Eventually, at a meeting in December 1954, the Senate approved the recommendation that Dr. Campbell's application for the Research Chair be reconsidered 'when his present research and projected plans are further advanced'.²³ It was not until the Professorial Board meeting in November, 1956 that Campbell was finally appointed Australia's first Professor of Agricultural Economics. The University determined that the chair should be at Sydney, not at the New England University College, and in the Faculty of Agriculture, not Economics.

For the remainder of the 1950s and during the 1960s the course in Agriculture at Sydney flourished. Campbell was the only qualified, full-time member of staff involved in agricultural economics within the Faculty of Agriculture from 1952-1956. He taught all the agricultural economics units and worked with junior research assistants or research fellows. Part-time lecturers from the Faculty of Economics were used in the Faculty of Agriculture, namely, I. A. Butler and S. J. Butlin. From 1958, Campbell began to employ other staff, at first on a part-time basis, for example, C. P. Dowsett,²⁴ F. H. Gruen and W. F. Musgrave.²⁵ In 1960 R. M. Parish was appointed lecturer in agricultural economics and remained in that position for five years during which time he completed his doctoral studies under T. W. Schultz at the University of Chicago. Successful students at that time, who later went on to play a prominent part in the agricultural economics profession, were J. H. Duloy,²⁶ A. A. Powell,²⁷ C. D. Throsby,²⁸ and W. F. Musgrave. In 1962

²² Comments attributed to certain staff in the arts, and physical and biological science faculties.

²³ Notes from minutes of Senate meeting 6th December, 1954.

²⁴ Cecil Philip Dowsett, 1916-1977, graduated from the University of Sydney in 1939. He joined the NSW Public Service Board in 1933 but transferred in 1938 to the Rural Bank of NSW. He joined the Economist's Division of the bank and became Assistant Economist in 1948 and Economist in 1954. He was a foundation member of the Australian Agricultural Economics Society and made a great contribution to the society as secretary for many years (AJAE, 1977).

²⁵ Warren Ferris Musgrave (1935--) graduated from the University of Sydney with a BAgSc and MAgSc and later completed his PhD at the University of New England. He spend most of his working life at the UNE rising from lecturer to Professor over the 1960-1971 period and remained professor for the next twenty five years. Musgrave visited overseas universities spending some time at Michigan State University in USA, and at Newcastle-upon-Tyne, and Wye College in the UK. Musgrave was editor of the AJARE from 1967-1971.

²⁶ J. H. Duloy studied at the University of Sydney from 1958. He achieved excellent results in agricultural economics and later, in 1964, he was awarded his PhD. Duloy became a lecturer in Agricultural Economics at the University of New England in 1960, lecturer in Statistics in 1963 and Professor of Economic Statistics in 1967.

²⁷ Alan Anthony Leslie Powell, (1937--) studied at the University of Sydney from 1960 obtaining excellent results in the BScAgr. He was awarded his PhD. from Sydney in 1963. Powell was a lecturer in economics at the University of Adelaide, 1962-64, and studied as a post-doctoral Fellow at the University of Chicago in 1964. He became a Senior Lecturer in economics at Monash in 1965, Reader

Campbell introduced a post-graduate diploma in Agricultural Economics which proved to be very popular.²⁹

Staff turnover was high in the growing profession and Campbell was the sole staff member again during 1965-66 with only part-time assistance from H. P. Brown.³⁰ In 1967 B. R. Davidson³¹ and J. W. Longworth³² were appointed Senior Lecturer and Lecturer respectively and remained in those positions for many years. Longworth completed his doctorates under Campbell's supervision and in 1972 moved to the University of Queensland. Other prominent agricultural economics students during the late 1960s and early 1970s were H. Haszler, D. B. Trebeck, A. Randall and B. S. Fisher.

6.2 University Of Melbourne

The Faculty of Agriculture was established at Melbourne University in 1905. Previously, various agricultural colleges controlled by the Victorian Council of Agricultural Education, had provided agricultural education in Victoria. Despite the formation of the

in 1966 and Professor of Econometrics in 1968. Powell became the Ritchie Professor of Research at the University of Melbourne in 1980 (Who's Who, 1980).

²⁸ Charles David Throsby, (1939--) studied at the University of Sydney and was awarded M.Ag. Sci. and Ph.D. He became an economic research officer with the NSW Department of Agriculture in 1960 rising to Principal Research Economist in 1967. Throsby taught briefly at the London School of Economics during 1965-66, then took up an appointment at Macquarie University in 1969 where he became Professor of Economics in 1974 (Who's Who, 1980).

²⁹ The course could be undertaken for three terms full-time, or six terms part-time. From 1962-1975 fourteen students were enrolled in the course.

³⁰ Horace Plessy Brown 1916-1971 was a statistician and economist. He graduated from University of Melbourne with first class Honours in Economics and then became a research assistant to L. F. Giblin. He went to the Grants Commission in 1938 and joined Treasury's Bureau of Census and Statistics in 1941. He was a member of the Financial and Employment Committee and a close friend of J. B. Chifley. He became Director of Research at Treasury in 1947 and in that position his statistical expertise was well used determining precise economic indicators as the basis for policy making (Kerley, 2002).

³¹ Bruce Robinson Davidson (1924-1994) became a very well regarded member of the agricultural economics profession. He had great insight in the policy arena and argued convincingly about controversial issues. Davidson was educated at Dookie Agricultural Colleges and the University of Melbourne. He studied under Wadham and never failed to acknowledge the profound influence of his mentors at the University of Melbourne where he completed both his Bachelor and Masters degrees. After studying at Wye College and receiving his doctorate, Davidson worked in Kenya and then at CSIRO, and the University of Western Australia. He went to the University of Sydney in 1965 and remained there for over twenty years. Davidson published many important books and articles including *The Northern Myth* (1965), *Australia Wet or Dry* (1969), *European Farming in Australia* (1981) and *Rum Corps to IXL* (1993) (Batterham et al, 1994).

³² John W. Longworth was a cadet research officer at the Bureau of Agricultural Economics 1961-64. He studied and worked at the University of Sydney from 1965 until 1971. He was an outstanding student obtaining high honours and winning the University Medal in 1966. He lectured in the Sydney Faculty of Agriculture from 1967-1971 and then was a Reader in Agricultural Economics at the University of Queensland, 1972-1986, before becoming Professor of Agriculture in 1987. Longworth made a significant contribution to the agricultural economics profession when he was President and President Elect of the International Association of Agricultural Economists from 1985-1991. He has been a member of the International Council of the IAAE since 1978.

Faculty, it had no dedicated staff until 1911. Teaching was carried out by members of staff from other faculties (particularly science) and through part-time lecturers from the State department of agriculture³³ and the Council of Agricultural Education.

The first Professor of Agriculture at Melbourne was Dr. T. Cherry, appointed in 1912. The chair in agriculture was one of four chairs created between 1904 and 1911; the others were anatomy, botany and veterinary pathology. These appointments reflected the university's new emphasis on rural studies (Falvey et al, 1997, p. 141). After Professor Cherry resigned in 1916 there was no full time professor for ten years. Personnel from other faculties were part-time members of the Faculty of Agriculture and much of the teaching was undertaken by agricultural scientists who worked in the Victorian department of agriculture (for example Dr. C. S. Cameron and A. E. V. Richardson). These public servants changed the structure of the course in 1916 and the curriculum was broadened. Students were to spend more time undertaking practical farm work at the Central Research Farm at Werribee. Second year study involved residence at Dookie or other experimental farm institution and Agriculture I (in 2nd year) now included topics of farm management and bookkeeping. Agriculture III (in 4th year) incorporated farm management and economics, land laws/land tenure, world markets and Australia's exports. Agriculture II was broadened in 1918 to include study of the costs of production of farm crops and farm products.

Richardson played a particularly significant role in agricultural education, extension and research in Victoria. In 1918, he had visited United States and Canada whilst he was Superintendent of Agriculture in the Victorian Department. He saw that agricultural education in those countries included both scientific and economic aspects of the industry. Richardson reported back to the Victorian Government and as a result the School of Agriculture was established at Melbourne University. In 1920, Dr. A. E. V. Richardson was appointed Dean and he held that position until he accepted the directorship of the Waite Agricultural Research Institute, Adelaide, in 1924.

The second Professor of Agriculture, S. M. Wadham,³⁴ appointed in 1926, introduced a fresh approach to the development of his faculty. Wadham was a product of the reform movement at Cambridge University and his philosophical approach was soon evident in the changes he made to the agricultural science degree. Wadham did not just view agriculture as a technical or scientific pursuit. He had a strong interest in the economic and social problems of rural life, and a sympathetic approach towards the 'man on the land'. He changed the content of Agriculture II in 1930 in order to cover fundamental economic principles in relation to the production and marketing of Australian primary products.

³³ Dr. T Cherry, State Director of Agriculture 1905-1911, and Dr. S. S. Cameron, State Director of Agriculture 1911-1933 were active members of the Faculty and Cameron in particular, had been instrumental in the creation of the Faculty and its early development.

³⁴ Wadham was one of Cambridge's best botanists. His arrival at Melbourne University heralded a period of expansion and development within the Faculty of Agriculture, which has not been surpassed. Wadham was an energetic and capable person and an inspiring leader. He communicated well with farmers and insisted that university faculty members should participate in community debate on matters of public interest.

Professor Wadham participated in all the important agricultural policy debates of the 1930s and 1940s. In his 1946 Joseph Fisher Lecture in Commerce, he clearly enunciated the principles he believed Australia should adopt if it was to develop the land more efficiently and to set up a soundly based agricultural industry (Wadham, 1946, pp. 11-21). Under Professor Wadham's leadership, the School of Agriculture prospered and produced graduates who were instilled with a broad-minded approach when dealing with agricultural problems. The course at Melbourne was always less specialised than at other institutions. Although agricultural economics was an integral part of the course at Melbourne, Professor Wadham did not appoint a qualified economist/agricultural economist to the faculty staff during his term as Dean.

In 1959, W. M. Corden, a lecturer in Economics in the Faculty of Commerce, was employed part-time in the School of Agriculture, but it was not until 1960 that a permanent appointment was made in agricultural economics in the Faculty of Agriculture.³⁵ A.G. Lloyd³⁶ was appointed Senior Lecturer in Agricultural Economics, an appointment made possible by a grant from the Rural Credits Development Funds of the Commonwealth Bank. At that time the School of Agriculture was enjoying a period of growth and prosperity and Lloyd quickly established himself as a leading agricultural economist. He contributed regularly to the public policy debate and was able to show how simple economics could be used to reject foolish policies and opinions. Lloyd's interest in current policy issues carried on the tradition established by Professor Wadham.

Lloyd was the only full-time member of staff involved in agricultural economics in the School of Agriculture at the University of Melbourne during the 1960-1966 period. In 1966 D. B. Williams came on the staff as a visiting professor in charge of agricultural extension and N. H. Sturgess³⁷ was appointed a lecturer in agricultural economics. The staff remained the same for the next five years with the assistance of various research fellows and honorary lecturers. Lloyd became Professor of Agricultural Economics in 1969 and was the Head of Agricultural Economics Department. In the early 1970s A. S. Watson³⁸ and G. W. Edwards³⁹ were appointed to the faculty as senior research fellow

³⁵ In the Commerce Faculty at the University of Melbourne there was strong support for the units in economic geography offered in the Commerce degree. These units were also available for agricultural students. Professor Wadham's book *Land Utilisation in Australia* was the standard text for economic geography students.

³⁶ Alan G. Lloyd, 1926-1999, B.Ec. Sydney, NSW Department of Agriculture, Division of Marketing and Agricultural Economics. Lloyd was the first economist to be appointed to the Faculty of Agriculture and became one of the country's leading agricultural economists. He was a member of the Industries Assistance Commission, conducted an inquiry into Victorian agriculture for the state government and attracted many of the best students at Melbourne School of Agriculture to undertake post-graduate studies in agricultural economics.

³⁷ Neil Sturgess was one of the first graduate students from UNE. He was an agricultural science graduate from the University of Melbourne and completed his masters in the early 60s. Sturgess joined the staff in the Faculty of Agriculture at Melbourne in 1966. He was President of the AAES in 1992.

³⁸ Alistair Watson holds degrees from University of Melbourne (BAgrSci), University of New England (MAGec) and University of Adelaide (PhD). After completing his studies Watson worked as an economist with the International Wool Secretariat, 1969-1972, before taking up an appointment at the

and lecturer respectively. The undergraduate degree retained its focus of producing generalists but introduced an increased ability for final year students to specialise by choosing particular units, for example, agricultural economics.

Although economics was a feature of the agricultural science course at the University of Melbourne from the 1930s the subject was treated as an addition to a primarily scientific degree. The economic aspects of agriculture were included in general agricultural units and were taught by agricultural scientists or visiting lecturers until 1960. With the appointment of extra staff agricultural economics became more significant in the course and both graduates and post graduates who studied at Melbourne went on to make significant contributions to the agricultural economics profession, for example, B. R. Davidson, I. Wills, C. Alouze, J. Alston.

6.3 University Of New England

During the Second World War, a proposal was put forward by the Australian Primary Producers Union for a Faculty of Rural Economy to be set up at the New England University College (NEUC) at Armidale, NSW.⁴⁰ Such a faculty had been a goal of the NEUC ever since its establishment in 1938 (Lewis, 1985, p.17). In 1946, economist, Dr. James Belshaw,⁴¹ Deputy Warden of the University College, together with the Hon. D. H. Drummond, Member of NSW Parliament,⁴² produced a pamphlet entitled “The Need for a Faculty of Agricultural Economics” in which they presented the case.⁴³ The NEUC published this pamphlet and in it, the College argued that given the

University of Melbourne, initially as a Research Fellow and later as a Senior Lecturer in Agricultural Economics 1972-1986. Watson was Editor of the AJAES from 1974-1977 and President of the AAES in 1979.

³⁹ Geoffrey Edwards graduated BAgEc (Hons) from the UNE. He spend three years as a research officer at the BAE 1964-1967, and undertook postgraduate studies at Monash in 1968. After four years at Treasury (1969-1973), Edwards was appointed Lecturer in Agricultural Economics at the University of Melbourne (1973-1976). He then went to LaTrobe University as a Lecturer, rising to Associate Professor. Edwards was President of the AAES in 1988 and Editor of the AJARE from 1999-2001.

⁴⁰ The Faculty of Rural Economy was first mentioned in the 1944 Report of the NEUC. It was stated in that report that the University College wanted to run a four year course in such a Faculty covering such areas as Pure Science, Agriculture, Veterinary Science, Rural Economics, and Rural Engineering. It was recognised that because the Faculty and the degree were entirely new to the University of Sydney, the College would have to wait until it became an autonomous institution before the Faculty could be created.

⁴¹ J. P. Belshaw was a New Zealander who had a Master of Arts from University of New Zealand where he had been influenced by Dr. J. Hight and J. B. Condliffe. He was awarded a Ph.D. (Economics) from the University of Manchester. Belshaw had been employed as an economist in the Department of Labour before being one of the first appointments to the NEUC.

⁴² D. H. Drummond later became the member for New England in the Federal Parliament as a Country Party politician. He made personal donations to the NEUC to be used for the development of rural economics. Some of those funds financed the overseas tour undertaken by Dr. Belshaw in 1952 (UNE, 1980, p. 11).

⁴³ In the foreword of the published pamphlet, Earle Page and James Belshaw indicated that the ideas expressed had been drawn up originally in 1944.

importance of rural industries to the prosperity and progress of Australia, there was a great need for a specialist agricultural faculty.

Belshaw believed it was imperative to establish a research institution at a university, staffed by trained and specialist rural economists, conducting continuous research into the economic problems of rural industries and free to make public the results of the research work. Research work was being carried out in government departments at the time, for example in the BAE and the State Departments of Agriculture, but such research was largely determined by the needs of government policy and the results were seldom made available to the wider community.

Belshaw outlined an entire course structure for the proposed Bachelor of Agricultural Economics degree in the early 1940s and his degree included three courses in economics, to be given by lecturers in economics from the Faculty of Arts and Economics (Belshaw, 1946, pp. 9-11). He was of the opinion that if students were to graduate with a degree in Agricultural Economics, it was essential that they first obtain a sound grasp of the principles of economics.

Belshaw travelled overseas in 1952 to report on teaching, research and extension programs in agricultural economics in United States, United Kingdom and Europe. He was impressed with the opportunities being provided overseas for the study of agricultural economics and therefore continued to strive for the establishment of the new faculty when he returned to the NEUC. However, finance was lacking. It was not until a successful application was made to the Commonwealth Bank in 1956 that the required funds were made available through the Rural Credits Development Fund. On the basis of Belshaw's detailed proposals and course outlines, a Faculty of Agricultural Economics was established at the University of New England in 1956 and the first two appointments made in 1957. J. N. Lewis,⁴⁴ Associate Director of the BAE, was appointed the Foundation Professor and W. Candler,⁴⁵ a Ph.D. from Iowa State, the senior lecturer. Agricultural economics at UNE was distinctive because it was in a separate faculty and therefore had the freedom to develop a course specifically for the profession. It was not similar to any other course in the UK or the USA and it took a pioneering approach by establishing its own statistical laboratory. Lewis (1985, p. 23) maintained that the course

⁴⁴ Jack Neville Lewis, (1921--) was a graduate of Sydney University (B. Ec), and UNE (D. Eco). After war service Lewis was a research officer in the BAE and then became Assistant Director. As the recipient of a Commonwealth Fund Fellowship, Lewis studied public administration at Harvard University in 1952-54. He was an Assistant Secretary in the Department of Trade, 1956-57. Lewis was appointed Professor at UNE in 1957 and remained in that position until 1970. During 1963-64 Lewis was Visiting Professor and Fulbright Research Scholar at the University of Illinois. After nine years as Director of Long Range Planning at the International Wool Secretariat, Lewis returned to the BAE as Principal Economist (Who's Who, 1971 and 1983).

⁴⁵ Will Candler was first appointment made by Professor Lewis for his new Faculty of Agricultural Economics. Candler had studied at Iowa State College, one of the leading centres for agricultural economics in the United States. According to Lewis, Candler made an enormous contribution to the development of tuition in production economics and economic statistics during his time at UNE. Candler was particularly interested in the University farm which he believed had a significant research and teaching role (Lewis, 1985, p. 22).

was not narrowly vocational because it was designed to equip graduates for a wide range of careers both within the agricultural sector, and in other areas. The graduates were basically economists with specialised training in the economics of agriculture and some emphasis on quantitative analytical techniques.

Although the course at UNE followed that which Crawford and Belshaw had mapped out a few years before, the content and philosophy were different.⁴⁶ The course reflected Lewis's own training in that UNE did not simply follow the comparative/farm management approach. Lewis had been a student of John D. Black at Harvard. Lewis, following Black, believed that agricultural economics could not merely play a subsidiary role to the biological and physical sciences associated with agriculture. Agricultural economics was not just a form of cost accounting for agriculture, nor was it just concerned with testing and approving various farming techniques to pass on to farmers.⁴⁷ Lewis maintained that comparative studies, seeking to derive rules for successful farming from farm surveys or farm record books, gave little guidance to farmers about ways to improve their economic performance.

Professor Lewis encouraged his staff to be active researchers, particularly with research into the production and marketing of farm commodities, as well as research into other economic and sociological problems facing rural communities. The New England course proved to be highly successful, far beyond early expectations. The Department of Agricultural Economics⁴⁸ achieved a high standing in academic circles and an enviable reputation, both in Australia and overseas, for producing high quality, and very professional graduates.⁴⁹ According to Professor Lewis, the strength and reputation of UNE in agricultural economics derived from their success in building a department of well-qualified staff who created a stimulating and productive workplace.⁵⁰ Research assistants and research fellows or teaching fellows were widely employed. Many of these people were undertaking post-graduate studies at the same time and later went on to make their mark in the profession for example, A. S. Watson, A. H. Chisholm, R. Officer, R. Piggott, J. J. Quilkey, R. Dumsday.

⁴⁶ Interviews with Professor J. Lewis, September 7-9, 1999.

⁴⁷ Lewis claimed that some associates at the University of New England saw the function of an agricultural economist as merely one of running a cost/benefit rule over new scientific practices and, if they passed the test, certain techniques would be given some kind of "Good Housekeeping Seal of Approval" which would proclaim their suitability for dissemination among farmers by agricultural extension workers (Private correspondence with Professor Lewis).

⁴⁸ The original Faculty of Agricultural Economics became a Department within the Faculty of Economic Studies in 1970. The Departments of Agricultural Economics, and Farm and Business Management combined to form a single Department of Agricultural Economics and Business Management. In 1992, the Faculty became the Faculty of Economics, Business and Law, and the Agricultural Economics and Business Management Department was ultimately subsumed into the Department of Economics.

⁴⁹ Some well known agricultural economists/economists who graduated from the UNE Department were J. W. Freebairn, R. C. Duncan, B. J. Standen, A. H. Chisholm, G. W. Edwards, A. Watson, J. Quilkey, J. Longmire, G. Griffiths, W. E. Griffiths, W. Bates, R. Piggott, K. Anderson, R. Richardson, D. Godden, J. Mullen, and G. Miller, all of whom went on to either academic careers or significant involvement with government departments and rural industry.

⁵⁰ Private correspondence with Professor J. Lewis.

Part of UNE's success was due to the AAC and the Directors of the State Agricultural Departments. Through the Public Service Board they granted traineeships to school leavers or first-year undergraduates to undertake university courses in agricultural science.⁵¹ In the case of the NSW Department of Agriculture, applicants were interviewed by the Head of the Department, C. S. King, Head of the Division of Agricultural Economics and Marketing, P. C. Druce, and a member of the Public Service Board. This committee selected students whom they considered would be most suitable for an agricultural science course, based on the subjects they had studied and their academic results. From 1957 these trainees attended UNE and majored in agricultural economics. Druce later claimed that the traineeship program was extraordinarily successful.⁵² None were failures and most subsequently achieved considerable reputations in academia, government and private enterprise as economists, agricultural economists and administrators.

The first Master of Agricultural Economics at UNE was conferred in 1961 and during the next fourteen years another nineteen Masters degrees were awarded. Over the same time period, over three hundred Bachelor of Agricultural Economics degrees were awarded, fifty of which were degrees with honours. The annual number of graduates steadily increased from the early 1960s reaching a peak in 1972-73.⁵³ A post-graduate Diploma in Farm Economics was introduced in 1965 and the name changed to Agricultural Economics in 1968. From that time until 1975, more than seventy Diplomas were conferred (UNE Calendars, various years).⁵⁴

6.4 University Of Western Australia

The University of Western Australia had been offering courses in agriculture since 1911. Agricultural science students could study a Theory of Economics unit as part of their degree. This unit was offered by the History and Economics Department under Professor Shann. The Institute of Agriculture was established in 1938 and some economic research was undertaken there. In 1946 Professor E. J. Underwood became Professor, and Director of the Institute of Agriculture at the UWA. Underwood⁵⁵ had completed his post-graduate studies at Cambridge and Wisconsin and was very entrepreneurial in his approach to the faculty.⁵⁶ He involved major rural organisations such as the Wheat Pool

⁵¹ The first cadetships and traineeships at UNE were created by the Queensland and South Australian Departments of Agriculture, followed by the NSW Departments, the Commonwealth BAE and eventually, the Tasmanian Department of Agriculture (UNE, 1980, p. 13). In the states of Queensland, South Australia and Tasmania, there were no courses in agricultural economics at their state universities in the 1950s and 1960s.

⁵² Private correspondence with P.C. Druce.

⁵³ There were five graduates in 1961 increasing to a peak of fifty nine graduates in 1973 (UNE Calendars).

⁵⁴ The Agricultural Economics and Business Management Department became part of the Faculty of Economic Studies in 1972.

⁵⁵ Eric Underwood was a close friend of H. C. Coombs. They attended the Perth Modern School and the University of Western Australia at the same time.

⁵⁶ Interview with Dr. H. Schapper, May, 2000.

of Western Australia and the Farmers' Union of Western Australia, with the development of the Institute. In addition, Underwood wanted to expand the courses being offered at the Institute, particularly in farm management. Through his contact with Dr. Coombs at the Commonwealth Bank, Underwood obtained sufficient finance from the Rural Credits Development Fund for UWA to fund a position in Agricultural Economics in 1951. H. P. Schapper took up the position and he commenced work as a research officer at the university in 1952. Schapper worked for the first two years with other research officers in agriculture and then studied for his PhD. In 1957, upon his return to the Faculty, he was appointed a Reader in Agricultural Economics. With this appointment agricultural economics became well established at the University of Western Australia.

Schapper worked virtually on his own for the next four years after which time Roger Mauldon⁵⁷ was appointed Senior Lecturer in Agriculture. B. R. Davidson spent one year as a lecturer at UWA in 1963 and Mauldon's position was changed to Senior Lecturer in Farm Management in 1966. Schapper and Mauldon headed a small agricultural economics group at UWA and they established a successful farm management club and consultancy movement in the 1960s.

6.5 University Of Adelaide

The University of Adelaide was, in fact, the first University in Australia to undertake teaching in economics as a separate and stand-alone subject. William Mitchell⁵⁸ (1861-1962) came to Adelaide in 1894⁵⁹ as the Professor of English Language and Literature, and Mental and Moral Philosophy. The University of Adelaide was at the forefront of agricultural education and research in Australia due to its association with Roseworthy agricultural college since 1883 and the Waite Agricultural Research Institute.⁶⁰ In the faculty of Agricultural Science there was a subject 'Rural Economics and Farm Management' from 1949. It involved practical work related to economic problems associated with the agricultural industry. B. Tew was the economics lecturer.

⁵⁷ Roger Mauldon was the son of Professor Frank Mauldon, who was formerly Professor of Economics at the University of Tasmania. Frank Mauldon was appointed the third Professor of Economics at UWA in 1941. Roger Mauldon was educated at the University of Western Australia graduating in agricultural science in 1955. He was awarded a Masters degree, specialising in agricultural production economics, from the UWA in 1967. Roger Mauldon's doctoral studies were undertaken at Iowa State University and he received his PhD in Economics in 1962. He took up an appointment as Senior Lecturer in Agricultural Economics at UWA in 1962. After working with Henry Schapper at UWA for many years, Roger Mauldon went to the Industry Assistance Commission in 1973.

⁵⁸ William Mitchell was educated at Edinburgh University where he was awarded a Master of Arts in 1886 and a doctorate in 1891 (Edgeloe, 1983).

⁵⁹ Prior to Mitchell's appointment, W. R. Fletcher had held the professorship. Fletcher lectured on political economy and presented the leading doctrines of the subject in a readable and interesting manner (Groenewegen, 1990, p. 46).

⁶⁰ In 1922 Peter Waite, a pastoralist and philanthropist, bequeathed his property of Urrbrae to the University of Adelaide for the establishment of an agricultural research institute. The institute came into existence in 1924 and has, since that time, focused on research and teaching for dryland conditions. (University of Adelaide Library website)

In 1951 Professor P. Karmel was appointed Dean of Economics and the Rural Economics course was changed. It became a fourth year unit, taken at Roseworthy College. The references listed for the unit were very comprehensive.⁶¹

Agricultural economics became an important part of the curriculum after the appointment of F. G. Jarrett⁶² to the staff of the Economics Faculty in 1953. Jarrett was a graduate from the University of Sydney and completed a doctorate in agricultural economics from Iowa State University. As a result of Jarrett's appointment, the course in Rural Economics was broadened to include the nature of economics and the application of economic principles to agriculture. In 1955 the texts were expanded⁶³ and in 1957 the subject was changed to Agricultural Economics. Jarrett remained at Adelaide during his working life, rising to professor in 1968.

7. CONCLUSION

The educational programmes in agricultural economics at Australian universities were strong by the 1970s and 1980s. Some of the university departments of agricultural economics had made their mark internationally and members of the Australian profession were employed at organisations such as the World Bank, and the United Nations F.A.O., and were well represented on the Consultative Group on International Agricultural Research (CGIAR). Australian agricultural economists were well educated however, they still tended to go overseas to study for their doctorates. This meant that Australian graduate schools were being denied students and Australian universities were not undertaking enough Australian oriented, in-depth research of their own (Anderson, 1983, p. 95).

The professionalisation of agricultural economics in Australia occurred in the mid twentieth century. The changed economic environment during and after the Second World War meant that agricultural economists were given opportunities to present a convincing case to pursue the professionalisation of their discipline.

Professionalisation continued with the establishment of a professional society and professional journals to support the discipline. However, merely organizing into an association does not completely create the profession. The role of the individual in the evolution of a profession is crucial. Who made a difference? The social and political backgrounds of the individuals who played important roles in the establishment of the agricultural economics discipline also need to be considered when trying to determine how it became a profession. These are matters to be covered in a future paper.

⁶¹ J. D. Black, *Farm Management*, USDA Year Book 1940, Rural Reconstruction Commission Reports 1-10, Wadham and Wood *Land Utilisation in Australia*, L. Tarshis *Elements of Modern Economic.s*

⁶² Frank G. Jarrett, BScAgr (Sydney) and PhD Iowa State, was continuously at the University of Adelaide from 1953 until 1989. During his time at Adelaide he was involved in teaching, research and community service. He spent some time overseas at the University of Minnesota, the World Bank and Sussex University. Jarrett was an important member of the Balderstone committee which, in 1982, produced the report *Agricultural Policy: Issues and Options for the 1980s* (AJARE, 2001, pp. 506-7).

⁶³ E. Thomas, *Introduction to Agricultural Economics*, T. W. Schultz, *Agriculture in an Unstable Economy*

By the 1960s the agricultural economics profession was served by specialist divisions in state government departments and a Commonwealth government agricultural economic research bureau. There were university courses at both undergraduate and graduate level throughout Australia, and three professional journals which spread ideas and disseminated information to farmers and the wider community. Agricultural economists had built up a reputation within Australia where they were recognised as being highly skilled at applying economic theory to real world problems. After a slow start during the post-depression years, the agricultural economics profession had attained a significant and respected position in Australian society.

But what does the future hold for the agricultural economics profession? What is the future role of a government research body such as ABARE? Are the professional bodies becoming more corporatised? In our changing society the concept of a ‘profession’ is also changing. Government involvement in the industry is being questioned and, in some respects, professional firms in the private sector are taking over the functions of the professional bodies. These consulting firms are often interdisciplinary and have reputable research departments. They hold seminars and training courses to keep their members up-to-date and are quick to discard members who do not measure up to their standards. A firm of agricultural economic consultants tends to have a far higher profile than the professional association.

Will the social institution of agricultural economics be able to adapt to the current situation of climate change, resource depletion and environmental degradation? Over thirty years ago Professor John Dillon stated:

“With our bio-economic orientation, our understanding of market mechanisms, our tool kit of quantitative methods, and our continuing concern with policy and management, we are by far the best equipped of any Australian professional group to contribute policy alternatives and guidelines to the amelioration of (these problems). And the sooner we start the better – to wait ... until the problem is upon us will be too late. (Dillon, 1972, p. 81)”

These are all matters to be considered in future research. One hopes we are not too late!

REFERENCES

- Anderson, J. R. 2002, 'John L. Dillon – In Memoriam' *Australian Journal of Agricultural and Economics*, Australian Agricultural and Resource Economics Society, Vol. 46, No. 1.
- Anderson, J. R. 1983, 'Agricultural economics in Australia: Perspectives from academe', in Bearman, S. (ed.), *Agricultural Economics in Australia*, University of New England, Armidale: 89-100.
- Australian Journal of Agricultural Economics*, Australian Agricultural Economics Society, various issues.
- Batterham, B., Mauldon, R. & Ockwell, T. 1994 'Bruce Robinson Davidson 1924-1994' *Australian Journal of Agricultural Economics*, Australian Agricultural Economics Society, Vol. 38, No1: 121-124
- Bellis, C. S. 2000, 'Professions in society', Sessional Paper presented to the *Institute of Actuaries of Australia*, Sydney: 1-29.
- Belshaw, J. P. 1946 *The Need for the Establishment of a Faculty of Agricultural Economics*, New England University College, Armidale
- Carr-Saunders, A. M. & Wilson, P. A. 1933 *The Professions* Clarendon Press, Oxford.
- Clark, T. N. 1968, 'Institutionalization of innovations in higher education: Four models', *Administrative Science Quarterly*, Johnson Graduate School of Management, Cornell University, New York, Vol. 13, No. 1: 1-25
- Crawford, J. G. 1983, 'The tale', in Bearman, S. (ed.), *Agricultural Economics in Australia*, University of New England, Armidale: 111-115.
- Dillon, J. L. 1972, 'The outlook for agricultural economics', *Australian Journal of Agricultural Economics*, Australian Agricultural Economics Society, Vol. 16, No. 2: 73-81.
- Dillon, J. L. 1988, 'A SWOT appraisal of the Australian profession of agricultural economics as at 1988', *Review of Marketing and Agricultural Economics*, NSW Department of Agriculture, Division of Marketing and Agricultural Economics, Sydney, Vol. 56: 340-6
- Falvey, J. L. & Bardsley, J. B. 1997 *Land and Food – Agriculture and Related Education in the Victorian Colleges and the University of Melbourne*, Institute of Land and Food Resources, The University of Melbourne.
- Greenwood, E. 1966, 'The elements of professionalisation', in Vollmer, H. M. & Mill, D. L. (eds), *Professionalisation*, Prentice Hall, New Jersey: 10-19.
- Kerley, M. 2002, 'Brown, Horace Plessay (1916-1971)', in *Australian Dictionary of Biography 1940-1980*, Melbourne University Press, Carlton, Vol. 13: 274.
- Lewis, J. N. 1985, 'Origins and early days of the department', in Bearman, S. (ed.), *Agricultural Economics in Australia*, University of New England, Armidale: 17-32.
- Parish, R. M. 1969, 'Some thoughts on the role of the agricultural economics profession in Australia', *Australian Journal of Agricultural Economics*, Australian Agricultural Economics Society, Vol. 13, No. 1: 1-7.

- Perkins, A. J. 1928, 'A plea for nation-wide research into the economic position of our various rural industries', *Report of the Nineteenth Meeting of the Australasian Association for the Advancement of Science*, AAAS, Sydney: 548-566.
- Pye, H. 1913, 'The importance of agricultural education to the Commonwealth', *Report of the Fourteenth Meeting of the Australasian Association for the Advancement of Science*, AAAS, Melbourne: 675-694.
- Richardson, A. E. V. 1928, 'The application of economic research to the agricultural industries', *Economic Record*, Melbourne University Press, Carlton, Vol. 4, No. 7: 249-259.
- Underwood, E. J. 1952, 'The role of the agricultural scientists in increasing food production in Australia', *Journal of Australian Institute of Agricultural Science*, Pergamon Press, Sydney, Vol. 18, No. 4: 184-189.
- University of Adelaide, *Calendar*, various issues
- University of Melbourne, *Calendar*, various issues
- University of New England, *Calendar*, various issues
- University of Sydney Archives:
Minutes of Professorial Board Meetings, 1951, 1956
Minutes of selected Senate Meetings, 1951, 1954
- University of Sydney, *Calendar*, various issues
- University of Western Australia, *Calendar*, various issues
- Wadham, S. M. 1946, 'Necessary principles for satisfactory agricultural development in Australia', *Joseph Fisher Lecture in Commerce*, Hassell Press, Adelaide.
- West, B. P. 1996, 'The professionalisation of accounting', in *Accounting History*, Accounting History Special Interest Group, Geelong, Vol. 1, No. 1: 77-102.
- Who's Who in Australia*, The Herald, Melbourne, various years.
- Williams, D. B. 1957, 'Contemporary agricultural economics in Australia', *Australian Journal of Agricultural Economists*, Agricultural Economics Society, Vol. 1, No. 1: 32-41.