

WHERE IS FARM MANAGEMENT?

DISCUSSION PAPER: FARM MANAGEMENT WORKSHOP 2002

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This workshop aims to discuss what is farm¹ management and what are the directions for this field in the future, for both teaching and research. This background paper offers a brief commentary on these topics and aims to raise some questions for consideration at the workshop. This paper does not attempt to exhaustively review the literature on farm management, nor on some of the approaches being taken to teaching and researching farm management, as they are the subjects of other papers. Our aim is more to discuss a few issues that are central to the contemporary debate on the future of farm management and agriculture-related education.

What is Farm Management?

Farming the land is one of humanities's oldest activities. Plants and animals were domesticated and 'farmed', so that they would produce food, fibre and fuel. The wild harvest of flora and fauna by indigenous hunters and gatherers also often involved modifying the environment (Kohen 1995). Gatherer / hunter cultures learnt to systematically control their biophysical environment so that it would continue to provide products for their needs. The principles embodied in those early developments in landuse are still relevant today for agriculture *i.e.* exploiting the bio-physical environment to control risks and improve the efficiencies with which food, fibre and fuel are obtained from other species. Over time the necessities of a survival lifestyle were supplemented with the benefits of trading until today where farm activity is more involved with trading and a commercial business lifestyle than simply satisfying the subsistence needs of those dependent on farming.

Farm management is not simply about the exploitation of other species for food, fibre or fuel. It requires more than that. To produce food, fibre or fuel other species need to be able to grow and that means in turn their basic biophysical needs have to be attended to. Farming then involves the controlled use of environmental resources from diverse landscapes (*e.g.* nutrients, a physical space wherein to grow, water and an atmosphere) to support the productive growth of other species that are then harvested and processed for products. Management in this context means systematically controlling the plants, animals and other factors to produce goods that satisfy market demands as well as deciding upon the alternative allocation of resources.

The primary component of farming as a social and institutional practice is then the culture of plants and animals for food, fibre and fuel. In addition the character of the farmer, the vision of the farm and what constitutes farming in diverse earthscapes is embedded in these cultural practices *i.e.* in how they manage their farms. These factors then significantly influence how farms are perceived by others and the standing that farmers have within the wider community (Eckersley 1992). The cultural shocks,

¹ In this paper the term 'farm' is a bounded bio-business enterprise and 'farming' is a landuse activity that includes the culture of plants and the systematic control of livestock relying solely on the forage available from 'natural' systems *i.e.* all those human activities that aim to repetitively produce food, fibre and fuel for the lifestyles of different cultures from bio-physical environmental sources.

clashes and struggles between the green environmental movement and farming communities meeting the mass market demands of western lifestyles and their urban habitats has marginalised farmers and farming and are arguably influencing the ways people farm.

Technical know-how and technological capability in farming is built into the western farmer's practical ethos. You can't mass produce goods for mass consumption by simply sitting in an office or having discussions. However, being able to produce food and fibre is obviously inadequate in today's world. Developing western liberal democratic countries like Australia still rely very heavily for national economic growth on earning income from the exploitation of biophysical environmental resources, but there is no point producing goods unless there is a market of consuming customers. Farming is very much a bio-business activity now aimed at satisfying the consumer wants associated with communities and their lifestyles *i.e.* a demand driven activity compared with the supply driven approach that characterised earlier historical periods.

Farm management shaped by western cultures, their lifestyles and consumption habits then embodies the integration of the technical know-how, skills and cultural factors with the control of risk required to run a commercial business within a monetarised, competitive market economy. Successful farm management implies the integration of all these factors such that the business and biophysical resources survive over the medium to long-term. In many ways farm management is synonymous with the systematic control of agricultural systems – at a farm level – and is the key to successful agricultural industries and their contribution to national economic growth.

Farm management is a land use activity that is still vitally important to the Australian economy and the norms and standards of living demanded by its western lifestyles. However, it is not clear that as an important social and institutional practice, farm management has been able to adapt and be seen as a desirable, highly valued, occupation in a urban-centred popular mass media shaped by the philosophies of green environmentalism (Hay 2002).

*Farm management is an activity that integrates technical know-how and landuse technologies with commercial business practices meeting the demands and tastes of western materialist lifestyles, BUT has the **balance** between these components been right to produce graduates and research outcomes that are seen as highly desirable by the wider community?*

Farm Management as a Discipline or a Field?

The management of farms as an occupation and field of authoritative knowledge and expertise emerged over recent centuries. But the study of farm management as a field is somewhat shorter. The view of farm management presented here argues that it is both a multidisciplinary and interdisciplinary field of academic and practitioner practice, rather than a singular discipline. Within this context it is important to also consider disciplines relevant to the field of farm management. Considering other areas of contemporary interest such as farming systems studies and agronomy can help understand some of the current perceptions and potential directions wherein farm management as a field of enquiry, teaching, research and practice can develop.

Farm management, when it developed as an multidisciplinary and interdisciplinary field over the last century, tended to be viewed narrowly as an agricultural branch of micro-economics of the firm. This probably resulted in a somewhat over-simplification of what was involved in managing the complexities of 'the farm' as a bio-business enterprise. The implicit assumption was that all decisions could be reduced to financial decisions about how to allocate resources; this now of course poses some limitations within the current interest in making enterprises more sustainable, as discussed later.

Farm management, within agricultural economics, came to be defined often as the study and statistical modelling of on-farm decision making. These trends are evident in the alignment of farm management economists with the study of production economics.

If farm management as a component of agricultural economics is simply about the process of decision making, has that defined this 'field' as too narrow and therefore of limited interest to many practitioners and academics?

A multidisciplinary and interdisciplinary approach to the field of farm management would suggest that making appropriate decisions on resource allocation requires an understanding of the technical know-how in each alternative. A deeper understanding of technical issues often exposes those subtle and diverse elements that become critical in the success of different farming practices. The technical

know-how required of farm managers now goes beyond a simple understanding of the immediate production process. The introduction of the 'flexible specialisation' model of 'lean production' in large, complex agribusiness and farming enterprises and the notion of 'production' in many contexts being replaced by 'operations and logistics', means that the farm enterprise models that adequately describe the context and practices of farm management need to dramatically change. These models also need to now incorporate the multi-faceted aspects of sustainable systems. We are still attempting to understand many of these 'new' issues and how best to fit them into a farm management context.

One reason that current models of farm management struggle to incorporate the many components of contemporary business's could be that many involved in farm management have a specialised background in traditional areas of e.g. agricultural economics, agronomy and horticulture and lack the skills to develop more effective management models?

A reduction in technical know-how within farm management courses and studies potentially exposes such courses and studies to the perception that they are not practical and thus irrelevant, particularly to those who see in farming the central issues of the technical know-how about how to produce plants and animals for food, fibre and fuel. This is not to argue that many of the research studies done under the title of farm management are irrelevant, rather than they may appear to be too narrow for those not closely involved with the field.

While farm management as a field developed narrowly within agricultural economics and arguably has declined over recent decades, there has been an increasing interest in farming systems studies *i.e.* descriptive research about how farms as systems and subsystems actually function and relate in practice. This was often more at a research level than undergraduate teaching. Some economists are involved in farming systems studies but probably more proponents are technically based in the biophysical sciences. An outcome of farming systems studies is often a model (conceptual or numeric) of parts or all of a farm. One finds that many researchers with agricultural biophysical science knowledge and expertise who are interested in farm management prefer to say they are interested in farming systems.

One of the interesting farm management related disciplines is agronomy, which is arguably a more popular career as indicated by the number of job advertisements. The first definition of an agronomist is that they are a 'rural economist' (Oxford English Dictionary, 1814 definition) and probably predates the development of agricultural economics. While the meaning of agronomy varies with regions, local customs *etc.*, it is interesting that this earlier definition probably accords more with what many Australian farmers have considered to be the case. That was apparent when NSW Agriculture reduced the number of extension agronomists a few years ago. This generated more concern among farmers than the loss of extension farm management economists, livestock officers and others. It emerged that many of these farmers viewed the extension agronomists in a wider context than simply the cultivation and management of pastures and field crops. When rural trading houses appoint specialised staff to support their merchandising arms invariably they appoint an agronomist rather than, for example, a formally tertiary qualified farm management specialist. Many of these agronomists have had some formal training in economics, commerce and other organization managerial studies. It has also been interesting when discussing their role with some recent appointments in 'farming systems' they have commented that they see it very much as being agronomy (in the broad sense).

A connection with farming technology is arguably seen within the practical ethos of farmers as being more relevant, than simply having the technical know-how of commercial business?

There are also other closely related bioscience disciplines in the study of horticulture and livestock that include a farm enterprise focus as part of their study. Experts in these disciplines, however, do not necessarily see themselves as being aligned with farm management in the broad sense. The same can be said of some agricultural economists. Many of those who have done a science or applied university degree in agriculture would claim to be involved in farm management, but they don't claim to be part of the discipline of farm management or identify strongly with the occupation of farm manager or farm management consultant.

Why then is farm management seen to have a narrow focus, rather than being the central field around which many others can associate and co-operate?

Teaching Farm Management

The teaching of farm management as specialist field of study has obviously waned over recent years with fewer university lecturers in 'farm management'. This then raises the issue about why that has occurred when there is still an obvious need for farm managers and for service professionals who understand how different types, scales and complexities of farms are managed.

One of the possible reasons for the reduced interest in farm management as a field may have been the too close an alliance with economics and reduced linkages with the technical know-how of the applied bio-science disciplines in *e.g.* agronomy, horticulture, livestock *etc.* A similar danger can lie in over emphasising commercial business management studies within degree courses in farm management. As argued earlier the primary component of farming is the systematic control of risks and improvement of efficiencies in the production of plants and animals to produce food, fibre and fuel. While many courses relevant to farm management have tried to integrate the technical know-how associated with the applied biophysical sciences, economics and commercial business disciplines that (arguably) hasn't always been achieved. Continuing attempts need to be made to use common case studies and multi- and inter-disciplinary examples to strengthen the systematic understanding of farm management.

The rise of farming systems studies and continuing importance of the applied biophysical science disciplines such as agronomy and horticulture, possibly at the expense of the field of farm management, does raise some issues that need to be addressed. The first is that technical know-how at a reasonable level is obviously of interest and utility to farm-orientated students, occupations and professions. Courses that do not include an appropriate level of technical know-how for farm management will be seen as being of limited labour market value to many interested in farm management as a vocation. A second point is that more research advances are probably being made within farming systems and the farm level applied biophysical science studies, but they are not seen as being within the field of farm management. This means that few fresh ideas are identified with and claimed to be within the field of farm management; the advances are being claimed elsewhere. Without being able to lay claim for the development of new knowledge as the basis of identity and expertise, a field can be seen as 'stale' and will then have difficulties attracting a community of students and academic staff.

Longer-term biophysical environmental sustainability has become a major focus for Australian agriculture. This does then need to be incorporated within specialist farm management degree programmes and as a theme in related courses. Any incorporation does though need to be done in ways that identifies its relevance to farming and the farm as a predominantly bio-business enterprise.

Is the current teaching and research focus in farm management seen as too narrow by potential participants?

This is not meant to imply that it is too narrow, but that it may be perceived to be, especially in terms of the perception of future employment outcomes and occupational status?

Possible Directions for Farm Management

The importance of responsible farm management for Australian agriculture is probably not a point in dispute, especially in terms of the sustainable biophysical health of diverse earthscapes and the people and other species that inhabit them. But the better ways of developing professionals with the required skills may be. The development of these professionals can be considered at two levels; first teaching undergraduate students and second for postgraduate research. Graduates may be employed to manage farms as generalist, executive or operational farm managers depending on types, scale and complexity of farming activity, while others are likely to be employed in servicing agriculture where their applied knowledge and technical expertise of how farms work will be important.

There has often been the argument that technical biophysical know-how and, or commercial business skills for farming and the farm enterprise can be learnt on the job – like an apprentice craftsman. However, the failure rate among farm businesses (particularly over the medium to long-term – as applies with many other categories of small businesses) suggests that line of argument doesn't survive a close examination. Small business owner-operators, including family businesses, have preferred informal workplace training and resisted participating in education and training that was too costly and too long from their perspective. Farmers with tertiary training have higher incomes

(50% greater) than others indicating that how they learnt rather than necessarily what they learnt at University does pay dividends when owning and managing farms. It is though uncertain how many of the tertiary trained farmers have done a farm management degree in Australia or overseas (some have certainly studied in New Zealand). Many have probably done agriculture science or other technically focussed applied science degrees. This reinforces the merit of a strong practical understanding in the successful management of farms. There are also successful farm managers who have done degrees in economics, commerce and related disciplines.

While no one prescriptive recipe would suit all, as individuals vary in their interests, the argument developed in these notes is that farm management, as a multidisciplinary and interdisciplinary field, needs to encompass both technical know-how and bio-business knowledge and expertise. Courses that do both are more likely to be successful than those that emphasise one component partly or wholly at the expense of the other. Developing the applied know-how of a technical understanding at the same time as a greater appreciation of how farm's function and are managed should reinforce the integrative nature of managing farms and expose students to the need to consider the complexities and challenges presented in the practices of farming.

Farm management as a component of agricultural economics does not appear to have made many advances in recent years in exciting great interest in students or in research. There have been though many advances in related academic disciplines *e.g.* farming systems, economics, agronomy *etc.* that arguably have been important for thinking about farm management problems. Any work aimed at improving the management of farms, particularly where two or more disciplines are involved could be considered relevant for farm management or claimed as a contribution to the field of knowledge and expertise of farm management.

Has farm management taken too narrow a view of itself as a discipline and in consequence reduced its impact? Is the problem that most farmers are small business owner-operators in agriculture and as a community don't identify as an occupation with aspirations of professional labour market power, high social status and thus lack the need to base their professional knowledge and expertise in university education and research?

Much agricultural R&D aims to improve the sustainability of farms, but rarely is this described or claimed as farm management research. A stronger stand could be taken to argue the central case that farm management can provide a realistic framework for bio-business and biophysical sustainability research, which isn't always the case. Part of such research needs to be the development of that farm-centred framework. At present the framework is often at a conceptual level and several related models commonly exist, but those models have not been translated into quantifiable management practices. One important area for research in farm management is how to incorporate these wider components within the farm-centred approach to land use management (Kemp *et al.* 2001, 2002).

Future farm managers will be operating in an increasingly complex bio-business and biophysical environment. The language and concepts involved in constructing and managing systems sustainably will become increasingly important given the contemporary political discourse about the degradation of landscapes. Many farmers would like to have more sustainable farming systems, but our applied knowledge and technical expertise of how to do that is still very poor. The goals of most environmental perspectives on sustainable farm and farming development, for instance, have not been effectively translated into practices that have become central to the management of all farms; they are still peripheral. The newer interest in attending to social factors in farm businesses is probably even more poorly understood and implemented. Farm management as a field does not appear to be making great advances in making claims to its own terrain of authoritative knowledge and expertise, research understanding of exclusively practical concerns linked to technical know-how of farm management practitioners and then incorporating these issues into commonly used management practices in farming and business practices.

Is farm management capable as a field of incorporating wider biophysical, social and other factors into farm management practices, or will that be considered the province of and claimed by others?

Has Farm Management a Use-by Date?

Fields of interest in popular culture often seem to proceed in fashions, the consuming passions and desires of the time. Farm management may be highly relevant as a field of research and the work being done valuable to economies, but is it now considered 'old fashioned'? Agriculture often suffers

from the perception that it is a 'sunset' group of industries while at the same time the demands of consumers requires an increasing attention to both quantities and qualities of the products of farming activities. Farm management could be seen as the activity you get into if you are not good enough to get into a more glamorous field like environmental sciences or the applied sciences of biotechnology? In reviewing farm management as a field of teaching, research and occupational practice, we need to take into account these broader perceptions that seem to permeate popular culture.

Is a rebranding by name change in order with or without a change in the knowledge and expertise involved? How can farm management as an occupation portray itself as a university-trained vocation to attract the best and brightest of academic high achievers?

What would be required to make farm management exciting to generation 'y'?

Generation 'y' and their successors generation 'z' have not lived through the really bad times of world wars, deep economic depressions or the tensions of the 'cold war'. They make quick decisions influenced greatly by the media of popular culture and they evidently don't worry if some decisions don't work as portfolio careers and life-long learning has displaced thinking about a job for life. Their parents worry that they merge advertising and reality in what seem unreal ways, but maybe they are better tuned to consumers and their wants. These often tribal traits could create successful business entrepreneurs and especially farm managers who may be more adaptable to incorporate non-traditional with traditional farm business endeavours, tuned to consumer needs of contemporary lifestyles as dictated through the popular media and would not be fixed on growing wheat or grazing cattle or sheep in the same paddock for ever, always expecting a good price no matter what else happens.

Will the next generation of farm managers take agriculture back to a very central role for in popular culture and make it fashionable again?

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