34TH ANNUAL CONFERENCE

AUSTRALIAN AGRICULTURAL ECONOMICS SOCIETY
UNIVERSITY OF QUEENSLAND, BRISBANE,
12-15 FEBRUARY 1990

Presidential address
Fisher, B. S. (Australian Bureau of Agricultural and Resource Economics), 'Issues in resource management'.

Invited papers
Carter, C. and Alston, J. (University of California, Davis), 'The benefits and costs of farm programs'.
Chambers, B. (University of Maryland), 'What do aggregate supply and demand curves mean?'
Dowrick, S. (Australian National University), 'Industrialisation and economic growth'.
Green, G. (Australian Bureau of Agricultural and Resource Economics), 'Management policies for the southeast trawl fishery: an economic analysis'.
Kraft, D. (University of Manitoba), 'Returns to research on biotechnology'.
Lawrence, D. and Zeitsch, J. (Industries Assistance Commission), 'A disaggregated model of agricultural production response'.
Lindner, B. (University of Western Australia), 'Something fishy in the individual transferable quotas market'.
Martin, W. (Australian National University), 'Agriculture in economic development'.
Mullen, J. (NSW Agriculture & Fisheries), 'Returns to farm R&D in the wool industry'.
Piggott, R. (University of New England), 'What is meant by market instability?'.
Sandrey, R. and Reynolds, R. (MAFCorp New Zealand), 'Economic liberalisation: consequences for New Zealand agriculture'.
Webb, I. (NSW Egg Corporation), 'Deregulation of the egg industry: a progress report'.
Wright, B. (University of California, Berkeley), 'Smoothing the income of primary product exporters'.

Contributed papers
Ahmadi-Esfahani, F. Z. (University of Sydney), 'The political economy of the Canada-US free trade agreement'.
Ahmadi-Esfahani, F. Z. (University of Sydney), 'An open model of curriculum content knowledge in agricultural postgraduate degree programs'.
Arch, A. M. J. (Department of Agriculture and Rural Affairs, Victoria), 'Pesticide costs - measuring welfare costs with marginal analysis'.

© Copyright 1990 The Australian Agricultural Economics Society
Delforce, J. (University of New England), 'Programming model of Tongan smallholder agriculture: profit maximization, subsistence consumption and risk'.

Dickson, A., Harris, D. and Corra, G. (Australian Bureau of Agricultural and Resource Economics), 'South Korean beef industry: potential impact from liberalization'.

Ekanyake, R. (Australian National University), 'A review of public policy in agricultural research in the United States'.

Ekanyake, R. (Australian National University), 'Women and access to sources of household energy: value of labour and resource scarcities in peasant economies of South Asia'.

Eshan, A. (Department of Industry, Technology and Resources, Victoria), 'Economic rent, taxation and the water industry'.

Etherington, D. M. (Australian National University), 'Should agro-industrial research be funded from the public purse? The case of integrated coconut processing for the South Pacific'.

Evison, D. (Forest Research Institute, New Zealand), 'The New Zealand wood products industry in the 1980's'.

Farquharson, R. J. and Griffith, G. R. (NSW Agriculture & Fisheries), 'An assessment of the potential economic returns to the Australian beef industry from twinning'.

Foster, M. and Davidson, H. (Australian Bureau of Agricultural and Resource Economics), 'Forecasting Australia's monthly sheep wool exports'.

Fraser, K., 'The economics of acid soils'.

Fraser, R. W. and Murrell, A. J. (University of Western Australia), 'The Australian wool corporation's reserve price scheme: an assessment of price stabilisation and producer benefits'.

Fry, C. (National Australia Bank), 'Factors influencing the financial viability of the Australian family farm in the 1980's'.

Gaffney, J. and Sondergeld, L. (Toowoomba), 'The variable costs of providing wheat segregation services in central Queensland'.


Gomboso, J. (University of Western Australia), 'Economic modelling of dryland salinity in Western Australia'.

Griffith, G. R. and Moore, W. B. (NSW Agriculture & Fisheries), 'Processing and marketing margins for lamb, mutton and beef in New Zealand'.

Harris, D. and Corra, G. (Australian Bureau of Agricultural and Resource Economics), 'The US–Canadian free trade agreement and EC beef sales to Canada: implications for Australia'.

Harris, M. S. and Lloyd, A. G. (University of Melbourne), 'Evaluating the returns to agricultural research: a survey'.

Hertzler, G. (University of Western Australia), 'Dynamically optimal adoption of discrete land degrading and renewing farming techniques'.

Holmes, W. E. (Townsville), 'Effect of changing prices and herd parameters on age of male turnover from northern beef herds'.

Hwang, T. C. (Ohio State University), 'World soybean market competition: the case of US, Brazil and Argentina'.

Janssen, B. (USDA Economic Research Service), 'Interactions between agricultural policies and the environment'.

Javis, P., Stent, A. and Harvey, S. (MAFtech, Invermay, New Zealand), 'A stochastic model for financial forecasting at the farm level'.

Johnson, R. W. M. (Ministry of Agriculture, New Zealand), 'Recent changes in the financial status of New Zealand farmers'.

Jones, R. and Marshall, G. (NSW Agriculture & Fisheries), 'The economics of salinity, waterlogging and surface drainage in Benerebah irrigation district'.

Kane, Milham and Sturgiss, 'An analysis of the demand for new horticultural crops: mangoes as a case study'.

Keyworth, S. W. (Dwyer Leslie Pty. Ltd.), 'Kerang lakes irrigation area impact of irrigation water quality on agricultural sector income'.

Keyworth, S. W. (Dwyer Leslie Pty. Ltd.), 'Kerang lakes irrigation area agricultural sector structure'.


Kingwell, R. (Western Australian Department of Agriculture), 'Optimal strategies for regional yield tests of wheat cultivars'.

Kneebone, V., Beare, S., Geldard, J. and Short, C. (Department of Agriculture and Rural Affairs, Victoria), 'Demand for meat in the Middle East'.

Lawrence, D. (Industries Assistance Commission), 'The supply response of Australian agricultural exports'.

Lawrence, D. (Industries Assistance Commission), 'A generalised McFadden cost function for Australian agriculture'.

Lawrence, D. and Zeitsch, J. (Industries Assistance Commission), 'A disaggregated model of Australian agricultural production response'.

Low, J. and Hinchy, M. (Australian Bureau of Agricultural and Resource Economics), 'Estimation of supply response in Australian broadacre agriculture: the multiproduct approach'.

MacAulay, T. G., Thomas, W. C. and Musgrave, W. F. (University of New England), 'Simultaneity in the determination of assistance to agriculture: revisited'.

McDougall, R., Quirke, D. and Zeitsch, J. (Industries Assistance Commission), 'Industry assistance and sectoral factor income'.

MacIntosh, R. (University of Sydney), 'The factors affecting demand for fluid milk in New South Wales'.

MacLeod, N. D. and Johnston, B. G. (CSIRO), 'An economic framework for considering rangeland restoration options'.

McRae-Smith, K. G., Mullen, J. D. and Griffith, G. R. (NSW Agriculture & Fisheries), 'Evaluating R & D activities in the Australian pig industry'.

Masae, A. and Cramb, R. A. (University of Queensland), 'Women's role in agriculture in Southern Thailand: the impact of new rice technology'.

Eshan, A. (Department of Industry, Technology and Resources, Victoria), 'Economic rent, taxation and the water industry'.

Evison, D. (Forest Research Institute, New Zealand), 'The New Zealand wood products industry in the 1980's'.

Farquharson, R. J. and Griffith, G. R. (NSW Agriculture & Fisheries), 'An assessment of the potential economic returns to the Australian beef industry from twinning'.

Foster, M. and Davidson, H. (Australian Bureau of Agricultural and Resource Economics), 'Forecasting Australia's monthly sheep wool exports'.

Fraser, K., 'The economics of acid soils'.

Fraser, R. W. and Murrell, A. J. (University of Western Australia), 'The Australian wool corporation's reserve price scheme: an assessment of price stabilisation and producer benefits'.

Fry, C. (National Australia Bank), 'Factors influencing the financial viability of the Australian family farm in the 1980's'.

Gaffney, J. and Sondergeld, L. (Toowoomba), 'The variable costs of providing wheat segregation services in central Queensland'.


Gomboso, J. (University of Western Australia), 'Economic modelling of dryland salinity in Western Australia'.

Griffith, G. R. and Moore, W. B. (NSW Agriculture & Fisheries), 'Processing and marketing margins for lamb, mutton and beef in New Zealand'.

Harris, D. and Corra, G. (Australian Bureau of Agricultural and Resource Economics), 'The US–Canadian free trade agreement and EC beef sales to Canada: implications for Australia'.

Harris, M. S. and Lloyd, A. G. (University of Melbourne), 'Evaluating the returns to agricultural research: a survey'.

Hertzler, G. (University of Western Australia), 'Dynamically optimal adoption of discrete land degrading and renewing farming techniques'.

Holmes, W. E. (Townsville), 'Effect of changing prices and herd parameters on age of male turnover from northern beef herds'.

Hwang, T. C. (Ohio State University), 'World soybean market competition: the case of US, Brazil and Argentina'.

Janssen, B. (USDA Economic Research Service), 'Interactions between agricultural policies and the environment'.

Javis, P., Stent, A. and Harvey, S. (MAFtech, Invermay, New Zealand), 'A stochastic model for financial forecasting at the farm level'.

Johnson, R. W. M. (Ministry of Agriculture, New Zealand), 'Recent changes in the financial status of New Zealand farmers'.

Jones, R. and Marshall, G. (NSW Agriculture & Fisheries), 'The economics of salinity, waterlogging and surface drainage in Benerebah irrigation district'.

Kane, Milham and Sturgiss, 'An analysis of the demand for new horticultural crops: mangoes as a case study'.

Keyworth, S. W. (Dwyer Leslie Pty. Ltd.), 'Kerang lakes irrigation area impact of irrigation water quality on agricultural sector income'.

Keyworth, S. W. (Dwyer Leslie Pty. Ltd.), 'Kerang lakes irrigation area agricultural sector structure'.


Kingwell, R. (Western Australian Department of Agriculture), 'Optimal strategies for regional yield tests of wheat cultivars'.

Kneebone, V., Beare, S., Geldard, J. and Short, C. (Department of Agriculture and Rural Affairs, Victoria), 'Demand for meat in the Middle East'.

Lawrence, D. (Industries Assistance Commission), 'The supply response of Australian agricultural exports'.

Lawrence, D. (Industries Assistance Commission), 'A generalised McFadden cost function for Australian agriculture'.

Lawrence, D. and Zeitsch, J. (Industries Assistance Commission), 'A disaggregated model of Australian agricultural production response'.

Low, J. and Hinchy, M. (Australian Bureau of Agricultural and Resource Economics), 'Estimation of supply response in Australian broadacre agriculture: the multiproduct approach'.

MacAulay, T. G., Thomas, W. C. and Musgrave, W. F. (University of New England), 'Simultaneity in the determination of assistance to agriculture: revisited'.

McDougall, R., Quirke, D. and Zeitsch, J. (Industries Assistance Commission), 'Industry assistance and sectoral factor income'.

MacIntosh, R. (University of Sydney), 'The factors affecting demand for fluid milk in New South Wales'.

MacLeod, N. D. and Johnston, B. G. (CSIRO), 'An economic framework for considering rangeland restoration options'.

McRae-Smith, K. G., Mullen, J. D. and Griffith, G. R. (NSW Agriculture & Fisheries), 'Evaluating R & D activities in the Australian pig industry'.

Masae, A. and Cramb, R. A. (University of Queensland), 'Women's role in agriculture in Southern Thailand: the impact of new rice technology'.
Milham, N., Davenport, S. and Penn, J. H. (Australian Bureau of 
Agricultural and Resource Economics), 'Substitution relations in 
Australasian beverage consumption'.

Mues, C. (Australian Bureau of Agricultural and Resource Economics), 
'An analysis of marketing operations for cotton in Australia'.

Naik, G. and Leathold, R. M. (Indian Institute of Management), 
'Identifying factors affecting corn basis relationships using a 
general theory'.

Nisbet, A. (Nagoya University), 'Wholesale pricing of primal cuts in 
Japan: a comparison of Wagyu and Holstein cattle'.

North, R. M., Sellers, J., Katcher, K. J. and Guan, W. (University of 
Georgia), 'Analyzing alternative water resource management 
options in South China'.

Nusantoro, A. and Cramb, R. A. (University of Queensland), 
'Land-use targets in Javanese agriculture: an institutional 
analysis'.

Ockwell, A. P., Parton, K. A., Nguluu, S. and Muhammad, L. 
(Australian Bureau of Agricultural and Resource Economics), 
'Farming systems of the semi-arid tropics of Eastern Kenya: a case 
study of 16 farms'.

O'Mara, L. P. and Walshaw, T. (Australian Bureau of Agricultural and 
Resource Economics), 'Some implications of inflation adjustment of 
interest payments on Australia's foreign debt'.

O'Sullivan, M. H. (Fractionated Cane Technology Ltd.), 'Sugar cane: 
biological and environmental considerations, alternative uses 
economies of scale'.

Owen, K. (University of New England), 'An analysis of strategic 
management in the NSW wine production industry'.

Pandey, S. (University of New England), 'An economic instruments for 
evaluating the size of benefits from weeds research'.

Passmore, J. G. (Queensland Department of Primary Industries), 
'Profitability, stocking rates and land degradation in the Mulga 
region of south west Queensland'.

Penn, J. H. and Gerardi, W. (Australian Bureau of Agricultural and 
Resource Economics), 'Some estimates of the price elasticity of 
demand for feed grains in Australia'.

Phillips, S. and Bewley, R. (University of New South Wales), 'The 
effects of flexible exchange rates on Australian wool prices'.

Pigot, R. R., Parton, K. A. and Treadgold, E. M. (University of New 
England), 'Indonesian rice price policy: sufficient for self-
sufficiency'.

Rauniyar, G. P. and Goode, F. M. (Pennsylvania State University), 
'Rate of technological adoption for the third world agriculture'.

Rish, B., McClintock, D., and Johnston, J. (NSW Agriculture & 
Fisheries), 'The costs and utilization of farm trucks for grain 
transport in southern NSW'.

Sappideen, B. (Soil Conservation Service of NSW), 'Dryland salinity in 
New South Wales: landholder awareness and economic factors'.

Scobie, G. M., Mullen, J. D. and Alston, J. M. (Scobie Economic 
Research, New Zealand), 'The returns to farm R & D in the 
Australian wool industry'.

Short, C. and Beare, S. (Australian Bureau of Agricultural and 
Resource Economics), 'Fibre substitution in retail demand for 
apprarel'.

Simpson, Y. L. and Kaine-Jones, G. (University of New England), 
'Cluster analysis of cotton planting strategies in the Namoi 
Valley'.

Sinden, J. A. (University of New England), 'Log or preserve? An 
extension of the characteristics model of consumer choice to value 
benefits of preserving native forest'.

Soe, U. T. (University of Sydney), 'Agricultural development in 
Burma: problems and prospects'.

Sri-Ramaratnam, S. and Reynolds, R. (MAFCorp New Zealand), 'New 
Zealand pastoral sector supply responses'.

Sterland, B. (Australian Bureau of Agricultural and Resource 
Economics), 'Australian demand for imports in the 1980's'.

Strong, A., Johnston, J., Green, W. and Marshall, G. (NSW 
Department of Agriculture & Fisheries), 'Estimating the financial 
impact on producers of deregulation in the NSW egg industry'.

Sumner, N. R. (CSIRO), 'Detecting misspecification of functional 
form in hedonic price equations using recursive residuals'.

Tisdell, C. (University of Queensland), 'Exploring the demand for 
farmed giant clams and their components: approaches and 
problems'.

Turnist, A. W. (Charles Sturt University – Riverina), 'Corruption! At 
Flemington markets?: a case study in public policy'.

Vere, D. T. and Griffith, G. R. (NSW Agriculture & Fisheries), 
'Forecasting in the New South Wales prime lamb market'.

Vershay, H. (Department of Agriculture and Rural Affairs, Victoria), 
'Estimating input demand for the Australian meat processing 
industry'.

Vlastuin, C. and Wohlers, T. (University of Queensland), 'The decision 
to fund a research project: some results for wool production 
research'.

Voon, J. P. and Edwards, G. W. (La Trobe University), 'Incentives for 
weat grain quality improvement research: a multilevel trade 
analysis'.

Voon, J. P. and Edwards, G. W. (La Trobe University), 'Economic 
payoffs from reduction in the incidence of dark-cutting beef in 
Australia'.

Voon, J. P. and Edwards, G. W. (La Trobe University), 'Research 
payoffs from quality improvement: the case of backfat depth in pig 
carcasses'.

Voon, J. P. and Edwards, G. W. (La Trobe University), 'A note on the 
calculation of research benefits with linear and non-linear 
specifications of demand and supply functions'.

Wan, G. H. (University of New England), 'Institutional effect on 
changes in Chinese foodgrain output and its variability'.

Wang, K. M. and Lindner, R. K. (University of Western Australia), 
'Rangeland degradation and rehabilitation under optimal 
management decisions'.

Weber, J. and Chadee, D. (Massey University, New Zealand), 
'Evaluating the economic impacts of climate change: a framework 
for policy analysis'.

Wen, C.
BOOK REVIEWS


Economists differ on the extent to which the money metric can be used universally to appraise options. Differing views permeate the literature on decision making, mathematical programming and cost-benefit analysis. Although many practitioners in these areas may be content to conduct analysis in terms of expected money values, the authors quote Milton Friedman to the effect that decision problems with a single criterion should be considered technological problems, and only those with multiple criteria should be seen as economic problems.

This book is the fifth in Elsevier's series 'Developments in Agricultural Economics'. Its coverage is not as broad as might be supposed from the title. The subject matter is what has come to be known as multiple criteria decision making (MCDM) as expounded in many publications by Zeleny. It deals with linear programming (LP) problems for which there is more than one criterion, and for which the constraint requirements may be non-rigid. Agricultural economists would be expected to have a keen interest in MCDM because LP is such a staple part of their diet. One of the points made by the authors in ch. 1 'Main features of the MCDM paradigm' is that modellers in agricultural economics have not given enough attention to the approach. The authors do proceed to list a number of agricultural studies, applied at the farm level in developed and developing countries, and at the regional planning level. The wider interest is indicated by a listing of conference proceedings and special issues of journals organised by operations research and management science bodies.

A book on MCDM applied to agricultural decision making is certainly justified by the scope of the approaches and the absence of another text on the subject. The authors provide a very useful service of describing and illustrating the approaches without becoming overly technical. The authors are right in claiming that the requirements for following the book are basic knowledge of linear algebra and LP.

The book is well-structured. It has three parts. In Part 1 the philosophy and historical background of the MCDM approach are discussed, and the concepts and terminology outlined. Although this is done simply and well, the case for MCDM and against usual practice is a little overdrawn. If for a LP problem there are other criteria for assessing the desirability of a plan besides the one embodied in the objective function, it is natural to add constraints to deal with these. If there is uncertainty on what the right-hand-side values should be for these or other constraints, it is natural to examine the shadow prices of the slack variables of these constraints. The decision maker can opt to marginally relax a constraint if he judges the gain to the objective value to be greater than the loss through relaxation of the constraint. The

177

© Copyright 1990 The Australian Agricultural Economics Society