

Curriculum Vitae

David J. PANNELL

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Degrees

B.Sc.(Agric) (H1), University of Western Australia, 1984.

B.Ec., University of Western Australia, 1989.

Ph.D, University of Western Australia, 1991.

Awards and Recognition

- 2009 ARC Eureka Prize for Excellence in Interdisciplinary Research
- 2009 Australian Agricultural and Resource Economics Society, Quality of Research Discovery award
- 2009 Australian Agricultural and Resource Economics Society, Quality of Communication award
- 2008 UWA award: Higher Degree by Research Achievement to student Graeme Doole, for Doole and Pannell (2008) *Journal of Agricultural Economics* 59(1): 188-206.
- 2008 Finalist, Eureka Prize for Environmental Research
- 2007 Australian Research Council Federation Fellowship.
- 2007 Invited by the Gates Foundation to *RoundTable* and a meeting of *HarvestChoice* to advise on analysis for agricultural research priorities for the poor.
- 2007 Australian Agricultural and Resource Economics Society, Best article in *Connections: Farm, Food and Resource Issues*.
- 2007 Award of "Distinction" granted by UWA to PhD student Graeme Doole under my supervision.
- 2007 Outstanding journal reviewer for 2006, *Agricultural Systems*
- 2006 Australian Agricultural and Resource Economics Society, AARES Fellowship to attend IAAE 2006 conference.
- 2005 Named as one of 500 "Western Australian Leaders" by the Sunday Times newspaper.
- 2004 National Dryland Salinity Program, W.E. Wood Award for Excellence in Salinity Research and Development.

- 2004 Finalist, Eureka Prize for Research to Improve the Environmental Sustainability of Graingrowing (GRDC).
- 2004 Australian Agricultural and Resource Economics Society, Prize for best PhD thesis in Australia or New Zealand awarded to my student, Rick Llewellyn.
- 2003 Landcare Research Award (Western Australia), awarded by the National Landcare Program.
- 2003 American Agricultural Economics Association, Outstanding Journal Article in the *Review of Agricultural Economics* for 2002, for "Farm-Level Modeling for Bigger Issues," with Alfons Weersink and Scott Jeffrey.
- 2001 Canadian Agricultural Economics Society, outstanding journal article award for 2000, for "The economics of crop hail insurance," with Jim Vercammen.
- 1998. Australian Agricultural and Resource Economics Society, Prize for best masters thesis in Australia or New Zealand awarded to my student, Sally Marsh.
- 1997. Australian Agricultural and Resource Economics Society, Best Article in the *Review of Marketing and Agricultural Economics* during 1996: "Debugging mathematical programming models: Principles and practical strategies."
- 1996. University of Western Australia "Excellence in Postgraduate Supervision" (Commendation).
- 1994. University of Western Australia "Excellence in Teaching" award. One of eight awards made by the University for undergraduate teaching.
- 1992. Australian Agricultural Economics Society PhD Thesis Prize, for best PhD thesis in agricultural and resource economics in Australia and New Zealand, 1990-1991.
- 1990. PhD Thesis passed with "special congratulations" (awarded to about 5 percent of successful PhDs at UWA) and with no amendments.
- 1990. Agricultural Economics Society (Britain) Prize Article Competition. "Responses to risk in weed control decisions under expected profit maximisation".

Research

Research areas:

- (a) Resource and environmental economics and policy. Topics included dryland salinity, herbicide resistance, soil acidification, farmer adoption of sustainable practices, and the economics of monitoring sustainability indicators.
- (b) Whole-farm bioeconomic modelling. Played a leading role in the development of the MIDAS whole-farm model based on wheat-sheep farming systems of Western Australia.
- (c) Economics of weed management. Three times invited to present reviews at international conferences and three times to the Australian Weed Science Society.
- (d) Risk and uncertainty. Tactical responses to risk, risk in weed management, risk and uncertainty in farmer's adoption decisions, uncertainty in sustainable farming systems.
- (e) Extension and communication. Economic evaluation of a major extension program, review of agricultural extension policy in Australia, impacts of extension on adoption, extension for land conservation practices.
- (f) Adoption and diffusion of innovations. Impacts of risk and uncertainty on adoption, impacts of extension on adoption.
- (g) Evaluation and prioritisation of research. The balance between basic and applied agricultural research, estimation of farm-level benefits of research, the value of information generated in research.

- (h) Farming systems economics. Rotation selection, farm modelling, legumes in the farming system, economics of perennials.
- (i) Linear programming. Published book, “Introduction to Practical Linear Programming”. Also journal articles on methods and practical application of LP.

Publications

Books, monographs, major reports	6
Articles and notes in journals	116
Book chapters	28
Invited conference papers	31
Contributed conference papers: published	31
Contributed conference papers: unpublished	59
Working Papers	14
Extension articles	79
Book reviews	5
Other	38

Citations

- Scopus.com documents 774 citations, and calculates my *h* index as being 17. With self-citations excluded, the results are 536 and 14.
- 6th most cited paper in *Canadian Journal of Agricultural Economics* (as of 10 July 2007), John, Pannell and Kingwell (2005).
- 7th most cited paper in *Agricultural Economics* (as of Sept 2006): Pannell, Malcolm and Kingwell (2000)
- 12th most cited paper in *Australian Journal of Agricultural and Resource Economics* (as of Oct 2006): Pannell and Nordblom (1998)
- 10th most cited paper in *Australian Journal of Agricultural and Resource Economics* (as of Aug 2007): Pannell (2004). Effectively communicating ...

Internet downloads

- Most downloaded paper in *Australian Journal of Experimental Agriculture* since 2000 – effectively the all time most down loaded paper out of 1300 published in that time (have been no. 1 since May 2008 to present): Pannell, Marshall, Barr, Curtis, Vanclay and Wilkinson (2006).
- 17th most downloaded paper of all time in *Australian Journal of Experimental Agriculture*: Ridley and Pannell (2005).
- Most downloaded paper in *Australian Journal of Experimental Agriculture* over past 12 months (was at no. 1 continuously from Nov 2006 to July 2008 and again in May 2009): Pannell, Marshall, Barr, Curtis, Vanclay and Wilkinson (2006).
- 2nd most downloaded paper in *Australian Journal of Experimental Agriculture* over past 12 months (as of Oct 2006): Ridley and Pannell (2005).
- 12th most downloaded paper in *Australian Journal of Experimental Agriculture* over past 12 months (as of August 2007): Marsh, Burton and Pannell (2006).
- 6th most downloaded paper in *Agricultural Economics* for 2000: Pannell, Malcolm and Kingwell (2000)

- 6th most downloaded paper in *Canadian Journal of Agricultural Economics* (as of 10 July 2007), John, Pannell and Kingwell (2005).
- 9th most downloaded paper in *Land Economics* (June 2008): Pannell (2008) Public: private benefits framework.
- 12th most downloaded paper in *Australian Journal of Agricultural and Resource Economics* (as of Dec 2006): Pannell (2001). Dryland salinity ...

Co-editor of *Australian Journal of Agricultural and Resource Economics* (2004-2007).
Special issue editor for *Environmental Science and Policy* (2008-2009).

Member of editorial boards for *Applied Economic Perspectives and Policy* (since 2009), *Agricultural Systems* (since 2003), the *Canadian Journal of Agricultural Economics* (since 2004) and the *Australian Journal of Agricultural and Resource Economics* (2003-2004).

Research funding and research leadership

- \$10.0 million of external funding in 34 projects since 1983.
- Established and led Centre for Environmental Economics and Policy at UWA, 2008-
- Co-developed the successful proposal for \$34 million for the Future Farm Industries Cooperative Research Centre, 2007-2014.
- Co-developed the successful proposal for \$25 million for the Cooperative Research Centre for Plant-Based Management of Dryland Salinity, 2001-2007 and the successful “Supplementary Bid” for \$5 million expansion of the CRC in 2003-2006.
- Leader of the Economic Modelling program of CLIMA (Cooperative Research Centre for Legumes in Mediterranean Agriculture), 1992-1997.
- Obtained a large grant from GRDC for project “Sustainability and Economics in Agriculture” (SEA), 1997-2002. Built and led a team of 5 core researchers in the project, with numerous external collaborators.

Collaboration

Collaboration with economists at the University of Western Australia, CLIMA, Agriculture Western Australian (AgWA), ICARDA (Syria), INRA-LECSA (France), New South Wales Agriculture, University of Melbourne, University of Sydney, University of Saskatchewan, University of British Columbia, University of California Berkeley, University of Guelph, North Carolina State University and University of Cambridge. Work closely with a number of non-economists, including biological scientists, hydrologists and social scientists. Have had links with scientists at CLIMA, ICARDA, CSIRO (Perth, Canberra, Brisbane, Toowoomba), Agriculture WA, University of Adelaide, Department of Primary Industries Victoria.

Teaching

Undergraduate teaching in the Faculty of Agriculture at the University of Western Australia in the areas of agricultural policy, farm management, mathematical programming, farming systems, environmental economics, resource economics, extension and communication.

University of W.A. "Excellence in Teaching" award (1994).

Nominated for the UWA "Excellence in Postgraduate Supervision" award (1996).

Research students: 21 undergraduate student projects, 2 Postgraduate Diplomas, 2 Masters of Science in Natural Resource Management, 3 Masters of Science and 8 PhDs.

Service

Within the University

CRC for Plant-Based Management of Dryland Salinity, 2001-2007.

- Member of Management Committee
- Chair of Research Evaluation Committee
- Program Leader, People, Land and Water
- Sub-program Leader, Economic and Social Assessment

Member of Management Committee and Sub-program Leader, CLIMA, 1993-1997.

Outside the University

Established web-based newsletter *SEA News* (<http://welcome.to/seanews>) as a communication vehicle to industry, the community and other researchers. Nineteen issues distributed 1998-2006. 1000 subscribers. Over 50,000 hits per year.

Since 2004 I have written regular "Pannell Discussions" – brief articles on issues and ideas in economics, science, the environment, natural resource management, politics, people, and agriculture. 150 articles published on line. Over 1000 subscribers and around 60,000 web site hits per year.

Served on 15 government committees and boards related to natural resource management.

Contributor to a number of research funding bodies and R&D Corporations nationally, most notably through being a Director on the Board of Land and Water Australia, 2002-2005. Also have contributed to the National Dryland Salinity Program, the Joint Venture Agroforestry Program, the Social and Institutional Research Program of LWA, Rural Industries Research and Development Corporation, and Grains Research and Development Corporation, providing advice on the economics of research and on technology transfer/adoption of innovations.

Served on organising committees for two international conferences, three national conferences, an international workshop, and four national workshops.

Contribution to the Australian Agricultural and Resource Economics Society (AARES) through the following roles.

- President-Elect, President, Past-President, 1999-2001.
- Member of National Council, representing WA, 1993-1998.
- President, AARES (WA), 1996-98.
- Secretary, AARES (WA), 1992-4.

- Treasurer, AARES (WA), 2009.
- Chair of Masters Thesis Prize assessment Committee, 1998 and 1999.
- Nominations Committee (for Distinguished Fellowships, and President-Elect), 2000-01.

Contributions to Policy for the Environment and Natural Resource Management

Based on integration of latest science and economics, my research has provided a strong and influential critique of existing policies on land degradation, particularly by dryland salinity, and a constructive diagnosis of new policy needs. The findings have been influential at the national level and in all states. The peak national policy committee in this area has recently prepared recommendations to ministers for policy changes that are based on my research. The following quotes from policy makers (from the final report for my project "Sustainability and Economics in Agriculture" (SEA) indicate the degree of influence achieved.

- “Your research provided the sound economic and social principles that underpin the State's Salinity Investment Framework, that has recently been endorsed by Cabinet. ... Your articulate and powerful presentations to the State Salinity Council were instrumental in achieving the necessary shift in policy thinking that will enable more strategic, cost-effective investment.” Dr Paul Vogel, Director, Environmental Policy Unit, Dept Premier and Cabinet, WA.
- “You provided the committee with a big-picture view of the issues which was challenging but at the same time easily understood. ... Your input will be a significant contribution to the Committee’s parliamentary report.” Hon. Pam Allen MP, Chairman, NSW Parliamentary Select Committee, Salinity.
- “The work was influential at the highest levels of policy as well as with natural resource managers in the field. Overall, the SEA Project was one of the most successful that I have ever known.” Dr Don McFarlane, Director, Resource Management, Water and Rivers Commission, WA.
- “New South Wales Treasury has found the work published under this project, by yourself and others, extremely valuable in developing our thinking on natural resource management issues. The SEA Project has injected much needed objectivity, practicality and realism into the discussion. The project has been particularly successful in conveying the available scientific, economic and social information on these issues together with associated policy implications in a manner that is readily accessible to decision makers.” Mr Kevin Cosgriff, Executive Director, Resource Allocation, NSW Treasury.
- “Your wise counsel while participating in innovative policy development committees and inquiries for Government and community action will have a long-term impact on salinity management and Natural Resource Management in Western Australia.” Mr Garry English, WA Farmers Federation (also State Salinity Council, NRM Council).
- “I have no doubt that your group, through the SEA Project, has influenced not only industry attitudes towards sustainability, but also national policy agendas, particularly in respect to dryland salinity.” Mr Richard Price, National Manager, National Dryland Salinity Program.

More recently, I have developed SIF3 (Salinity Investment Framework III), which was used by several Catchment Management Bodies in WA and Victoria. SIF3 was of considerable interest to policy makers. In March 2006, the Australian Government's Senate Committee Report on "Living with salinity" stated that "The Committee was particularly impressed by SIF3, which appears to offer a sound framework for making informed, objective and transparent investment decisions in a systematic way." (p. 205). "The Committee recommends that the Australian Government in cooperation with the states and territories keep a watching brief on the development of the Salinity Investment Framework 3, with a view to potentially implementing it around the country." (p. 229).

Work History

- 2007-2012 Australian Research Council Federation Fellow, UWA.
- 2002-2007 Associate Professor (Professor from May 2004), School of Agricultural and Resource Economics, UWA and Program Leader: People, Land and Water Program, CRC for Plant-Based Management of Dryland Salinity.
- 2002. Visiting Professor, Department of Land Economy, University of Cambridge, On leave from UWA, Oct-Dec.
- 1997-2002 Associate Professor, and Principal Research Fellow, Faculty of Agriculture, University of Western Australia. Research and supervision of postgraduate research students (and a little teaching).
- 1995. Visiting Professor, Department of Agricultural Economics, University of Saskatchewan, Canada. On study leave from UWA, June-December.
- 1991-97. Senior Lecturer, Faculty of Agriculture, University of Western Australia. Leader, Economic Modelling Program, Centre for Legumes in Mediterranean Agriculture.
- 1990-91. Research economist with the Western Australian Department of Agriculture at Merredin.
- 1986-89. PhD research: Economics of tactical decision making for weed control.
- 1983-86. Research officer, Western Australian Department of Agriculture.