

Rural research and regional innovation: Are past and present research funding policies building future resilience in the bush?

Richard Price

Centre for Sustainable Catchments, University of Southern Queensland,
and Fenner School of Environment and Society, Australian National
University



Key messages

- Collective farmer action predates government action in agricultural and rural development
- Government assistance has been historically justified to build resilience in the bush
- Government contributions have long supplemented farmer contributions to R&D
- Farmer bodies have a long history of advocacy and influence on rural R&D policy and this collective voice has been heard arguably more than other rural voices
- Governments have actively institutionalised the R&D process, including rural research
- The history of agricultural shows can tell us a lot about resilience in the bush

The Port Phillip Farmers Society was formed in 1848 by a group of farmers on Moonee Ponds Creek. As gold-rush Victoria boomed, the society was the only body in the colony interested in the affairs of the farmer. In 1855 the society convinced the Victorian government to make its first contribution to aid agriculture in the colony, an amount of 500 pounds to supplement the prizes at the annual show and ploughing matches. It also successfully lobbied government to develop a Government Experimental Farm, which opened at Dookie in the Benalla district in 1877, and worked to convince government to establish a Board of Agriculture and contribute to various competitions to improve stock and crops.



Table 1: Rural R&D expenditure in Australia (Total), 2008-09

	Government \$m	Higher education \$m	Business \$m	Total \$m
Agriculture, Fisheries and Forestry	479.7	301.8	294.9	1,076.4
Expanded along the value chain	180.8	110.2	688.9	979.9
Related to rural	457.6	237.1	130.0	824.8
Total expenditure	1,118.1	649.2	1,113.8	2,881.1

Key messages

- About \$3billion is spent on rural R&D annually
- About 3% of this goes towards productivity related R&D
- The evolution of the Rural R&D funding institutions has coincided with increased rural R&D expenditure
- This is in contrast to biodiversity and atmospheric R&D expenditure (and possibly other rural R&D expenditure)
- Despite this, productivity gains are declining
- Productivity is an important factor in resilience in the bush, but it is only one of many factors in resilience
- The institutionalising of rural R&D has favoured those who can collectively act and have a voice

Figure 1: RDC contributions and estimated R&D expenditure*



Cropping sector productivity index



CHALLENGE

The institutional history of rural research in the twentieth century has been less kind to NRM and other rural research than it has been to traditional agricultural science

The issues for rural research in future won't simply be about resolving dilemmas such as production versus environment, community versus farmer, urban versus rural and regionalisation versus centralisation

Rural research needs to take into account the nature of resilience, including the capacity to self organise, learn, adapt and cope with nonlinearities and uncertainties. However, the productivist voice speaks loudest in the bush

The tendency to assume most problems can be solved by identifying the optimal solution and developing a method to apply that solution lends itself to the development of 'scientific tool kits', the forte of the biophysical sciences

REQUIRED RESPONSE

The future of rural research ought to lie in building the resilience of individual farmers and communities in ways that support their capacity to achieve a range of aspirations. This will require integration of the research effort, best achieved through mechanisms of **integration** that start with priority setting and funding

Funding for rural research needs to go beyond single commodity institutions, yet creating new institutions with specific cross-commodity foci can remove the important interplay between innovation and decision-making. **Collaboration** that places productivity and other factors of resilience in context is essential.

Adaptive management frameworks can help frame problems more broadly and if well facilitated, can help achieve integration and collaboration at the **local level** where decisions-in-context are most important

Social science comes into its own in identifying and **dealing with multiple perceptions** of problems, understanding their basis, and finding ways to bring people to the point of acceptance of imperfect solutions

Principles

- Resilience is about more than simple economic viability
- We need to acknowledge individuals' sense of place
- We need to acknowledge communities' shared sense of place
- There are multiple perceptions about the 'big picture', the nature and causes of problems, and the required solutions
- Collaboration needs to build on this acknowledgement
- Integration is important and needs to be thought about in problem definition, prioritisation and research design
- Adaptive management can overcome the lack of hard scientific evidence when action becomes an imperative