ARC Research Hub for
Smart Fertilisers

www.smartfertiliserhub.org.au

THEME 5 - MAXIMISING SECTOR WIDE VALUE

This theme will support translation of Hub findings into agricultural practices by demonstrating the economic, social and environmental benefits through broad-based extension and communication mechanisms.

GOALS

- Estimate the marginal private, social benefits, and costs of the marginal quantities of nitrogen (N) used to produce agricultural and horticultural crops.
- Estimate the marginal social costs of pollution from negative externalities as a result of N pollution.
- Identify and quantify the economic, environmental, and social net benefits of innovative/enhanced efficiency N inputs.
- Use information on social cost of N pollution to explore feasibility of policy alternatives.

THE OPPORTUNITY

To ensure that new knowledge and technologies derived from all other parts of the Hub's activities are converted into high net added-value along the agricultural marketing value chains of which they are a part of, and in the wider natural, economic and social environments in which they are used.

INDUSTRY OUTPUT

By using whole farm and whole value chain approaches, Theme 5 will provide a comprehensive demonstration of the benefits of the new knowledge and technologies derived from the Hub's program to Australia's intensive agriculture industries. All these activities will be broad-based and will be conducted in association with the established communication and extension programs of these industries.

OUR PARTNERS

THE UNIVERSITY OF MELBOURNE

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Elders

LA TROBE UNIVERSITY

Australian Government
Australian Research Council

The ARC Research Hub for Smart Fertilisers is funded by the Australian Government through the Australian Research Council Industrial Transformation Research Program

RESEARCH ACTIVITIES

Theme 5 is based on established understanding that the extent to which new knowledge and technologies add net value in value chains and in the wider environment, depends on their adoption by users. This in turn depends on the relative economic advantage of the new products and technologies over existing sources of N in the commodity value chains and their wider environments.

Research Activities	
5.1	Map the potential private net benefits from value chains for the new products to analyse the economics of development of the new products.
5.2	Identify the sources and nature of value creation along the commercial value chains for the innovative fertilisers and inhibitor products and technologies developed by the Hub.
5.3	Identify the enablers for adoption of the new technologies and economic efficiencies associated with their use.
5.4	Conduct social cost-benefit analysis of innovative N products to quantify wider economic, environmental and social benefits and costs of innovative N inputs to intensive agricultural production.
5.5	Demonstrate benefits through broad-based extension and communication mechanisms in collaboration with existing industry networks and operations.

Research Team

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