

Innovation development and adoption within broad acre Farming Systems

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The Future Farm Industries Cooperative Research Centre (FFI CRC) aims to increase the adoption of perennial based farming systems on 7.5 million hectares of Australia's southern farmland, principally amongst broad acre primary producers (72,000 small to medium sized enterprises). FFI CRC has research interests that focus on developing perennial-based production innovations and technologies toward improving farm profitability and it undertakes these interests via a multi-agency collaborative partnership involving:

- Three Commonwealth Research and Development Corporations: Meat & Livestock Australia, Grains RDC & Australian Wool Innovation Limited
- Four Universities: Western Australia, Adelaide, Melbourne and Charles Sturt
- Landmark: an AWB company
- Commonwealth Scientific & Industrial Research Organisation
- Seven State Departments: Ag & Food WA, Environment & Conservation WA, Industry & Investment NSW, Primary Industries Vic., Natural Resources NSW, Water Land & Biodiversity SA, and SA Research & Development Institute.

FFI CRC is very much aware of the difficulty of achieving successful adoption of agricultural innovations. While the literature comprises seemingly endless accounts of less than satisfactory adoption outcomes of standalone technologies, the challenge for research and extension agents is even greater when adoption is associated with an adjustment of whole of farm system thinking and management, as is the case for many FFI CRC products.

In taking on this challenge, FFI CRC uses four major integrated facets as part of its adoption promotion efforts. The first facet centres on a policy of assigning responsibility for achieving adoption outcomes at the research project level. That is, all research proponents are required to develop an Industry Use Plan (IUP) that clearly articulates the manner in which industry will incorporate / benefit from the research outputs and the range of activities to be employed to achieve adoption and / or commercialisation prior to the research commencing. In developing an IUP, proponents are strongly supported by an Adoption Team (facet two) and specific social science knowledge (provided from other research projects in the CRC).

A second facet includes the establishment of an Adoption Team, comprising representation from each of four state public extension agencies and designated responsibility for supporting and overseeing adoption activities under a 'whole of CRC' approach, including, where possible, integration across research projects within a farming systems context.

A third facet centres on engaging specifically with innovation 'next users' (rather than 'end users' — although 'leading farmers' are considered part of the FFI CRC next user group) — the advisory, consultancy, extension based network across the public and private sector. Much of this engagement has historically been communication based: informing agency partners and the like of research developments. However, within FFI CRC, next user engagement involves opportunities for up-skilling, making available direct training (accredited and non-accredited), seminars, workshops and field days to better equip next users with the necessary knowledge and skills to carry out subsequent engagement with end users. This involves strong association within traditional public sector extension networks, particularly emanating from Adoption Team representation, building rapport and collaboration with lead agencies in each state and ensuring that adoption activities involving FFI CRC complement those led by the respective state agency as appropriate. It also involves collaboration with 'local networks' outside any traditional public agency pathways, where such networks exist.

A fourth facet focuses on the challenge for FFI CRC to symbiotically engage with the commercial sector, including drawing specifically on the FFI CRC participant relationship with Landmark, identifying ways commercial partners can provide roles in research and extension frameworks where the systems and technologies are implemented and available within both public and private domains.

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