

A National Working Group on Agricultural Innovation

CSIRO Submission to the House of Representatives Standing Committee on Agriculture and Industry

Background

At its appearance before the Standing Committee on 26th November 2015, CSIRO was asked to provide some advice on a “national leadership forum on agricultural innovation”, in particular the terms of reference for such a forum. This document summarises that advice.

Rationale

The agricultural innovation system is generally seen as having served Australia’s rural industries well in the last 25 years. Much has changed since the last major design intervention in 1989 with the passing of the Primary Industries R&D Act (PIRD) that created the Rural R&D Corporations. Australia’s rural industries now find themselves in a situation of significant market opportunity but with widespread concerns over continued competitiveness and productivity / value growth.

A number of concerns about the performance of the current innovation system were raised in CSIRO’s submission to the Standing Committee. CSIRO’s submission argued for closer examination of the contemporary and future needs and nature of agri-food innovation system, particularly in the light of the national innovation agenda, emerging market opportunities, changing patterns of competitive pressures in global agriculture, the comparative advantage offered by historical investments in agricultural R&D expertise, infrastructure and international networks, opportunities that the digital revolution offer agriculture, and the changing roles and responsibilities of current players in the system.

CSIRO observes individual institutional interests seeking to optimise the innovation system from short term and/or narrow objectives while longer-term and “whole of system” performance issues are insufficiently addressed. This is reinforced by narrowly framed sector performance metrics and evaluation methods.

The working group proposed here would seek to lift the analysis and debate to a ‘whole of system’ scale and explore ways of visioning/ foresighting a future innovation system capable of maintaining the competitiveness of Australian agricultural in an era of rapid global change.

Scope and Aims

The scope for the working group would be agri-food/fibre value chains within the context of current and emerging domestic and export markets.

The working group would conceive and describe one or more models of the agri-food innovation system to meet Australia’s needs in 2030. These models would be based on first principles and informed by careful analysis of Australian and international experience both in agriculture and in other sectors but explicitly not being constrained by the current system.

Participants and organisation

We propose that the working group is made up of a small (<8) number of carefully picked individuals from institutions such as the National Farmers Federation, the Australian Food and Grocery Council, CSIRO, Australian Farm Institute, and relevant Commonwealth Departments. As the working group's brief is exploratory, membership would not be intended to be representative but rather to bring a deliberately diverse set of perspectives and expertise.

The working group would report to a steering group chaired by a key business leader, and comprising very senior representatives from Government and knowledge institutions (for example the Chief Scientist, Departmental Secretaries for Agriculture and Industry & Innovation, the University sector, Chair of the Food and Agribusiness Growth Centre, senior official of CSIRO).

The steering group would be commissioned by, and report to, an appropriate entity within Government or the Parliament.

The working group would need organisational resourcing and support.

Process

The working group could commission a number of focussed synthesis and analysis projects to inform discussions. These could include scenarios for Australia's agri-food/fibre chains in 2030 and resulting innovation system implications; experience domestically and internationally in innovation systems in agriculture and other sectors; and alternate design options.

The working group would then use this evidence base and their collective expertise to propose the characteristics of a high functioning innovation system for the Australian rural sector in 2030, by drawing on relevant contemporary international examples, identifying barriers to effective functioning, requirements for linkages, and clarification of roles and responsibilities of the main actors.

The purpose of this process would be to explore opportunities for the agri-food innovation system in the future and to bring new perspectives to bear rather than address 'reform' of the current system. This working group would therefore explicitly not consider the transition from the current situation to the proposed future state other than to propose a process for consultation that could lead to an implementation phase.

Outputs

Outputs of the working group would be:

1. Overarching options for the future structure and function of Australia's agri-food innovation system with particular emphasis on innovative models for the interaction of RD&E with agriculture and on cross sector, value chain and whole of system performance metrics.
2. Alternate roles and responsibilities for the types of organisations required to deliver on the alternate models.
3. Options for exploring transition from the current state to the proposed future agr-food innovation system architecture.