

Communiqué 4

Soil Research, Development and Extension Strategy Implementation Committee meeting – Sydney, November 2015

The Soil RD&E Implementation Committee held its fourth meeting in Sydney on the 26th November 2015 with representatives attending from CSIRO, Federal and State agencies, Research and Development Corporations and Universities.

Rural R&D for Profit – Round 2

The second round of the Rural R&D for Profit program will provide grants to RDCs for collaborative research that enhances farm-gate profitability and supports continuing innovation in Australia's primary industries. The research is to focus on delivering cutting-edge technologies and making research findings more accessible for primary producers. It must also improve coordination and cooperation between stakeholders.

The second round of the Rural R&D for Profit program closed on the 1st December 2015. RIRDC coordinated the initial process for soil-related bids. The Implementation Committee's role has been to encourage an open, effective and inclusive process. The intent was to ensure proposals were developed that related to the five national soil RD&E priorities. The process was discussed and consideration was given to what worked well and where improvements can be made for future calls. The Committee resolved to hold an Investor Forum in 2016 to feed into future investment processes, including the Rural R&D for Profit Program.

Report from Advocate for Soil Health

The Advocate for Soil Health, Major General Michael Jeffery, gave a brief update on his activities and outlined his proposals for 'Fixing Paddock' and 'Fixing Policy' to restore and maintain landscapes that are fit-for-purpose. The Implementation Committee discussed the proposals and agreed to consider them when developing and implementing future activities.

Update on the Global Soil Partnership

An update was provided on the [Global Soil Partnership](#). The Australian Government is a partner through its status as an FAO member-country. Other Australian partners include CSIRO, the University of Sydney and Soil Science Australia. Michele Barson (Australian Government Department of Agriculture and Water Resources) is the Focal Contact for the GSP in Australia.

The International Year of Soils has been organized by the GSP and as the year draws to a close, several significant activities are being finalized. They include:

- Release of the [Status of the World Soil Resources Report](#)

- Establishment of the International Network of Soil Information Institutions
- Release of the [Revised World Soil Charter](#)

The development of Voluntary Guidelines on Sustainable Soil Management which aims to complement the Revised World Soil Charter is underway.

Register of field sites

One of the goals of the strategy is to improve use of physical infrastructure, which includes long-term trial sites. The strategy notes that ‘these (long-term trial sites) are essential to enable assessment and comparison of gradual changes in soil attributes under different farming systems, for evaluation of the effects of climate change and of alternative adaptation strategies and for testing of innovations in soil management at practical spatial and temporal scales’. The Soils RD&E strategy recommended that ‘a network (for sharing information about and interrogating existing long-term experiments) should be developed, with consideration given to how experiments can be accessed by collaborators to address scientific questions’.

The Soil RD&E Implementation Committee has endorsed the development of a register to assist in addressing this recommendation. The register will provide context on the representativeness of sites along with justification for ongoing investment. The register will allow researchers to identify existing sites, samples and data sets that can be used to investigate new issues and problems without the cost of having to establish new trial sites. This will also help foster further collaboration amongst researchers. A survey will be distributed to organisations in order to collect required information in 2016.

Trends in investment and capability in Soil RD&E

A stocktake of Australia’s current investment in soils research, development and extension was undertaken in 2011. The Implementation Committee requires an update of this work and spent time discussing how this could be achieved efficiently. A working group was established to progress this activity in 2016.

Soil Sensing project

An update was provided on the \$1.5 million soil sensing project announced by Agriculture Minister, Barnaby Joyce. The collaborative project led by CSIRO will provide farmers with online access to real-time estimates of soil water status and nitrogen availability. The intention is provide farmers with practical information that leads to better management decisions. Ross Searle (CSIRO, Brisbane) is leading the project. More specifically, the project will:

- estimate current and predict future soil moisture stores at the field scale using satellite and field-based measurement systems,

- investigate the use of local automated and telemetered climate data stations to improve farmer's knowledge of seasonal conditions in their paddocks,
- quantify and track the nitrogen stocks in the soil to optimise use of fertiliser inputs, and
- assess the viability of a number of communications technologies to assist in the collection and synthesis of relevant data streams.

The project has research, development and extension components. It is collaborative and the style of engagement fits with the broad intent of the Soil RD&E strategy. Interested parties are encouraged to monitor the project and provide input and support where possible.

Vote of thanks for Noel Schoknecht

The committee acknowledged the major contribution made by Noel Schoknecht from the Department of Agriculture Western Australia in the development and implementation of the National Soil RD&E Strategy.