



Riverina Local Land Services
Building 24 | Darnell-Smith Drive | Charles Sturt
University Wagga Wagga NSW 2678
PO Box 513 | Wagga Wagga | NSW 2650
Tel: 1300 795 299 www.lls.nsw.gov.au/riverina

Our ref:

21 September 2015

Committee Secretary
House of Representatives Standing Committee
on
Agriculture and Industry
PO Box 6021
Parliament House
Canberra ACT 2600

To the Committee,

RE: Agricultural Innovation Submission

Thank you for the invitation for Riverina Local Land Services to provide our opinion and project proposals to assist the agricultural sector with technological advancement and innovation.

Riverina Local Land Services (RLLS) provides agricultural, natural resources management, biosecurity and animal health advice and services to approximately 14,000 rural rate payers.

Working closely with landholders enables us to identify, first-hand, the issues that rural landholders are facing particularly with agricultural innovation and technological advancement.

Our Community Advisory Groups meet regularly to discuss the real on-ground, on property issues that the rural community faces in these areas and provide advice to our Board.

Barriers to the adoption of emerging technology

Some of the underlying barriers to the adoption of emerging technology for rural landholders include:

- Lack of financial capability to purchase new, innovative technological equipment and services. Government subsidies providing a healthy balance of monetary (services or \$\$) and in-kind assistance may kick start the adoption of upcoming advancements such as drone technology for example;

- Inadequate training on how to use basic technology. For example, we have identified a growing need for short introductory courses on how to use an iPhone application. A large percentage of landholders are 60 years or older who are reluctant to use iPhone applications because they are barely able to make a telephone call. Furthermore knowing what farm specific iPhone apps are credible and available on the market today;
- Landholders are time limited and can be overwhelmed with the amount of information available to them regarding technology. Developing *targeted* small projects embracing a widely accepted innovative idea to landholders may be the catalyst for landholders wanting to know what other advancements are available;
- Providing clear and concise information around the social and legal parameters of adopting advanced technology. For example what are the legalities around using drone technology on farm ie privacy issues, potential litigation issues and recording meetings with iPhones.

Improvements in the efficiency of agricultural practices due to new technology, and the scope for further improvements

Riverina LLS have identified several ideas that may assist landholders with the move to technological advancement and innovation. This includes:

- Provide financial (or in-kind service) support to rural farms for the installation of on-farm base stations to boost bandwidth and signal strength;
- Assist landholders with setting up back to base monitoring for property surveillance of pest animals, hunters, other people etc. Landholders particularly concerned about people coming onto their property invited and shooting;
- Facilitate the delivery of technology introductory sessions on such as workshops on how to use iPhones and what current apps are available and how to use face book and twitter to make their businesses work for them.

Emerging technology relevant to the agricultural sector, in areas including but not limited to telecommunications, remote monitoring and drones, plant genomics, and agricultural chemicals

Riverina LLS have identified three potential projects that may be implemented, state wide or nationally to assist landholders with keeping abreast and updated on emerging technology and innovation. This includes:

1. Property Monitoring & Surveillance Project – assist (facilitation or providing monetary subsidies) landholders with setting up back to base property monitoring to assist with pest animals' surveillance, illegal hunters & rubbish dumpers and trespassers. There is a growing biosecurity concern of trespassers coming onto their property and shooting pests.
2. Eco Agricultural Waste Project- Investigating ways to use agricultural waste on farm. Studies already underway with Deakin University / Scientists/ CSIRO. Explore the pros and cons of eco agricultural waste i.e. what are the bi-products and costs associated with reusing stubble for bio char or other versus the amount of increase in property carbon emissions.
3. On farm carbon emission reduction scheme - The concept of offering landholders a snapshot of their on farm carbon emissions by enterprise and then identifying adaptive ways to reduce overall on farm emissions. \$\$ could be used to assist landholders with solar panels as an alternative to electricity; feeding animals with bio seeds, oils etc

I thank you for the opportunity to provide this submission on barriers to agricultural innovation and technological advancements and future ideas on how we can assist our rural landholders with this progression.

Yours sincerely

Robert Kelly
General Manager