

HOW THE FMD READY PROJECT WILL USE AGRICULTURAL INNOVATION SYSTEMS

In order to be ready for an outbreak of foot-and-mouth disease (FMD) or other exotic diseases, government and researchers are looking at a variety of ways to be better prepared. This includes the FMD Ready project which ensures that appropriate vaccine stores are ready and that we have as much information as we can about possible outbreak scenarios and how we might manage these.

The Farmer-led partnerships for improved animal health surveillance sub-project is looking at ways to strengthen partnerships at a local, state and national level, in order to promote trusting and respectful relationships that will enhance animal health management and early detection of disease introduction and spread. This will result in fewer, less damaging and more readily controlled, disease outbreaks.

Why is this sub-project studying farmer-led partnerships?

The issue of animal health management in Australia is complex, due to the number of partners involved who all have different resources and priorities. This means that strong and trusting relationships are hard to make and maintain.

This sub-project is trialling an Agricultural Innovation Systems (AIS) approach to address these issues and identify how animal disease monitoring and reporting in Australia might be strengthened.

What is AIS?

In the past, ideas for agricultural improvements have mainly come from researchers and government, often with limited connection to the issues and priorities faced by the partners on the ground. In contrast, the AIS approach is based on sharing of knowledge and experience between partners and within existing networks, encouraging open discussions and new ideas to be considered and trialled.

AIS was introduced at the beginning of the 2000s to understand and promote innovation in agriculture in developing countries. It also has been applied in developed countries such as New Zealand and the Netherlands. See the reading list below for examples.

AIS uses innovation platforms or multiple member partnership groups. These are like the working groups of the AIS. They are formed by bringing together partners that are affected by and involved and interested in an issue. In the context of this project the focus will be on animal health surveillance and may include farmers, private veterinarians, industry and government representatives. For issues that need to be addressed across local, state and national levels, local groups can link with networks at other levels, making legislative and governing change possible.

What will a pilot group look like?

This sub-project will establish pilot groups across Australia in each of the five industries susceptible to FMD across Australia: beef, dairy, pork sheep and goat. Because the groups rely on partnerships to consider

what change might be possible, the pilot groups themselves will create and trial possible solutions to the complex problem of improving animal health surveillance, rather than relying on ideas or suggestions from others. Each pilot will be established using the following phases:

Phase 1: Understand context and create the partner group

- The research team, guided by local advice, will make contact with partners within existing networks with the aim of understanding more about the current local animal health monitoring system.
- The first meeting will be organised, with researchers facilitating the discussion of shared problems and opportunities and establishment of goals.
- The pilot group will have the initial goal of considering any possible improvements that might be made to animal health and disease monitoring and reporting.
- A plan of action will be developed, based on the needs and priorities of the partners.

Phase 2: Develop possible options and strategies

- As the pilot group moves through the action plan and further meetings, knowledge and experiences are shared and developed.
- Innovative strategies based on local solutions are considered.
- Different level (regional/state/national) challenges that require policy and/or industry-level interventions will be identified.
- Training and communication required to run the pilot group will be identified.
- Options and strategies will be translated into plans of action to test and implement the ideas.

Phase 3: Implement innovative options and strategies

- Strategies developed are tested and implemented.
- Training or incentives required are sourced and introduced.
- Clear communication strategies to inform and support the group and their activities are developed.
- Ways of checking progress, measuring success and documenting lessons learnt will be developed. Consideration of ways to scale out to other industry groups and to regional/state/national levels are also established.

Phase 4: Review, learn and adapt

- Occurs at the same time as the other phases.
- Adjustments are made to options and strategies and their implementation as necessary based on feedback and learning from meetings and activities.

What will be required of participants?

The pilot group will initially be organised and facilitated by the research team, with support from local industry and producer groups.

The pilot group will meet no less than four times each year, with the pilots starting early 2018 and running for 18-24 months. The sub-project finishes in 2020.

What are the expected benefits for those who participate in the pilot group?

The expected benefits for those who take part in a pilot include:

1

Access to new animal health management strategies

2

Enhanced partnerships to assist with animal health management of issues specific to local producer groups or regions

3

Strengthened local networks, enabling a stronger 'local voice' to engage in problem solving

4

Opportunities for better communication of animal health and disease management issues and solutions

Where is the money coming from?

This project is supported by Meat & Livestock Australia (MLA), through funding from the Australian Government Department of Agriculture and Water Resources (DAWR) as part of its Rural R&D for Profit programme; producer levies from Australian FMD susceptible livestock (cattle, sheep, goats and pigs) industries; and Charles Sturt University. The project also leverages significant in-kind support from the research partners.

The research partners for this project are the Commonwealth Science and Industrial Research Organisation (CSIRO), Charles Sturt University (CSU) through the Graham Centre for Agricultural Innovation, the Bureau of Meteorology (BOM) and the Australian Department of Agriculture and Water Resources, supported by Animal Health Australia (AHA). The project commenced in July 2016 and will conclude in June 2020.

Reading list

BOOGAARD, B., SCHUT, M., KLERKX, L., LEEUWIS, C., DUNCAN, A. & CULLEN, B. 2013. Critical issues for reflection when designing and implementing Research for Development in Innovation Platforms. *Report for the CGIAR Research Program in Integrated Systems for the Humid Tropics*. The Netherlands.

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TURNER, J. A., WILLIAMS, T., NICHOLAS, G., FOOTE, J., RIJSWIJK, K., BARNARD, T., BEECHENER, S. & HORITA, A. 2017. Triggering system innovation in agricultural innovation systems: Initial insights from a community for change in New Zealand. *Outlook on Agriculture*, 46, 125-130.