

Strengthening links between the UK strategy for agricultural technologies and farm advisory professions

What role could the advisory professions play in making knowledge exchange between research and farm more effective and fruitful?



Photo by James Taylor

**Living With Environmental Change
Policy and Practice Notes**

Note No. 12
October 2014

The Living With Environmental Change Partnership brings together 22 public sector organisations that fund, carry out and use environmental research and observations. They include the UK research councils, government departments with environmental responsibilities, devolved administrations and government agencies. The private sector is represented by a Business Advisory Board.

The farm advisory professions play a key role in agriculture and land management, influencing both operational and strategic decision-making by contributing knowledge and expertise on technical matters, synthesising information and targeting this to fit the commercial objectives and specific circumstances of individual clients. The UK Government's strategy for agricultural technologies is emphasising the need for sustainable intensification and more efficient agricultural production, drawing on the latest research findings. But knowledge exchange models and mechanisms must improve, so that the advisory professions are more engaged in research and more aware of the latest findings, and research is more responsive to the contemporary challenges of farming and land management.

How does the UK strategy for agricultural technologies address the current position?

The Government's strategy for agricultural technologies has brought the role of innovation and technological change in agriculture into sharp focus by seeking to:

- Reverse a decline in funding for applied and translational research.
- Link UK research strengths in agriculture-relevant research with forward thinking farmers who will put it into practice.
- Achieve a better shared understanding of private and public sector research priorities.
- Put sustainable intensification at the heart of new developments and deliver this via:
 - The Agri-Tech Catalyst, a £70m scheme to support collaborative projects which accelerate the development of near-market agricultural innovations and the commercialisation of agricultural research.
 - Centres for agricultural innovation which will focus on key sectors and bring together industry, education and research to provide sources of expertise, support advances in sustainable intensification, deliver training and disseminate best practice.

What is needed to move the UK strategy for agricultural technologies forward?

The strategy relies on translational research but does not acknowledge who the critical agents to engage with are, and how this might be achieved. In order to be effective it will need:

- To develop effective knowledge exchange strategies which involve stakeholders in research from beginning to end rather than merely as end users.
- Engagement with advice networks that support agriculture and land management and an understanding of the intermediary role the advisory professions play or could play in linking the laboratory and the farm.

What barriers exist in knowledge exchange about farming and land management?

The knowledge exchange landscape for agriculture and land management is complex and often challenging because:

- There are a large number of research providers (both public and private) and a dispersed population of potential research users most of whom access research (if at all) through intermediaries.
- Although some research programmes and institutions place knowledge exchange with the advisory professions at the heart of their activities, many are stuck in more traditional models of knowledge transfer that see the professions as mere recipients of new advances.
- Some of the advisory professions are better linked to research than others.
- It may be difficult for advisers to find out about relevant research, or find information in a format that is accessible and relevant to the day to day issues farmers and land managers face.
- Researchers may have little understanding of the advisory landscape which itself is complex and dispersed across public, private and third sector providers.
- Research agenda setting in the public and private sectors can seem closed to the advisory professions and difficult to access.

Are the advisory professions effective knowledge intermediaries?

The farm advisory professions are critical intermediaries in efforts to strengthen the relationship between research and farm because:

- Many farmers rely on their advisors to keep up to date with technical developments.
- Advisory professionals target technical advice to the particular circumstances of individual farmers, setting it in a business and regulatory context which is relevant to them.
- Advisory professionals have an informed sense of what will work or will not work with their clients.
- Advisory professionals are attuned through their training and continuing professional development to be receptive to technical advances.

What role could the advisory professions play in the delivery of the strategy?

With the move away from government-funded farm “extension” there has been a shift in how research is transferred between laboratory and farm, involving development of:

- A mixed economy of advice provision across a range of different professions (eg land agents, agronomists, ecologists, veterinarians etc) working in the public, private and third sectors.
- A range of specialised functions, some of which are public and some of which are marketable. The advisers delivering these functions have a key role in:
 - Supporting the design of new technologies and techniques, as well as enabling their application to the day to day working practices and decisions of farming and land management.
 - Working with entrepreneurial farmers and land managers to promote innovation to others.
 - Devising and implementing knowledge exchange and transfer strategies for research programmes and agri-tech projects.

What are the priorities for advisers, researchers and the agri-tech sectors?

In order to strengthen the links, advisory professions, research organisations and agri-tech sectors need to consider what they can do to maximise knowledge exchange opportunities:

Researchers need to:

- Understand better the knowledge exchange potential of advisers in establishing research priorities, conducting research and disseminating findings.
- Involve the professions in their pathways to impact and knowledge exchange plans.
- Recruit professionals onto research project advisory groups to provide expert guidance.
- Target professional publications as an outlet for publishing research findings.

Research funders and agri-tech programmes need to:

- Be more transparent in agenda setting and engage with professional bodies and associations to understand the current or approaching big issues.
- Include relevant professionals in the research planning, procurement and review process.
- Encourage and commission more collaborative research which is co-designed by the professions and researchers.
- Fund research on the social, regulatory and economic requirements of agri-tech innovation.
- Involve the farm advisory professions and their networks as key research and knowledge exchange partners in future centres for agricultural innovation.

Professional bodies and associations representing advisers need to:

- Ensure greater input into agenda setting exercises, research consultations and the identification of big challenges.
- Develop relationships with research funders; this will enable them to feed back the farming and land management challenges their members are encountering.
- Proactively explore opportunities to input into research decision making and the development of new research programmes by putting members forward for research boards, review panels and committees charged with developing research strategy.
- Coordinate more effectively efforts across different professions in contributing to the research system and identify joint knowledge demands and needs.
- Communicate more clearly to research projects and programmes their own networks and channels to enable researchers to engage with advisers.

Individual advisers need to:

- Be more active in articulating to their professional bodies their research needs and the needs of clients.
- Get better at promoting their own knowledge and identifying how they could contribute to research.
- Explore opportunities for representation on university-industry advisory boards and on individual research project advisory panels.
- Use adviser and cross-professional networks such as Landbridge to engage with research communities.

Further information

This note was written by **Jeremy Phillipson, Amy Proctor and Philip Lowe** and draws on the ESRC funded "Science in the Field" project and Landbridge network: (RES 229-25-0025; ES/J01057X/1) and recommendations from the workshop "Taking stock of the links between research and the land professions", held at the British Academy, 1 May 2014.

Useful resources:

Landbridge website: www.landbridge.org.uk

Could advisers of land managers work more effectively across professions?

LWEC Policy & Practice Note 3, September 2013

http://www.lwec.org.uk/sites/default/files/attachments_biblio/LWEC%20PP_03_Sept13.pdf

How can land advisers incorporate ecosystem services thinking into their everyday practice? LWEC Policy & Practice Note 4, December 2013

http://www.lwec.org.uk/sites/default/files/attachments_biblio/LWEC%20PP%20Note%2004%20Dec13.pdf

Field Advisors as agents of knowledge exchange, Relu Policy & Practice Note 30 July 2011

<http://www.relu.ac.uk/news/policy%20and%20practice%20notes/Proctor%2030/PPN30%20Proctor.pdf>

A UK strategy for agricultural technologies, HM Government, July 2013

<https://www.gov.uk/government/publications/uk-agricultural-technologies-strategy>

Contact: Jeremy Phillipson, email jeremy.phillipson@ncl.ac.uk

Series editor: Anne Liddon, Newcastle University

Series coordinator: Jeremy Phillipson, LWEC Land Use Fellow, Newcastle University