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Field advisors as agents of knowledge exchange

A Rural Economy and Land Use project investigating the field expertise of specialist advisors and their role as knowledge brokers between scientific research and land management.

Policy and Practice Notes

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The Rural Economy and Land Use Programme is a UK-wide research programme carrying out interdisciplinary research on the multiple challenges facing rural areas. It is funded by the Economic and Social Research Council, the Biotechnology and Biological Sciences Research Council and the Natural Environment Research Council, with additional funding from the Scottish Government and the Department for Environment, Food and Rural Affairs.

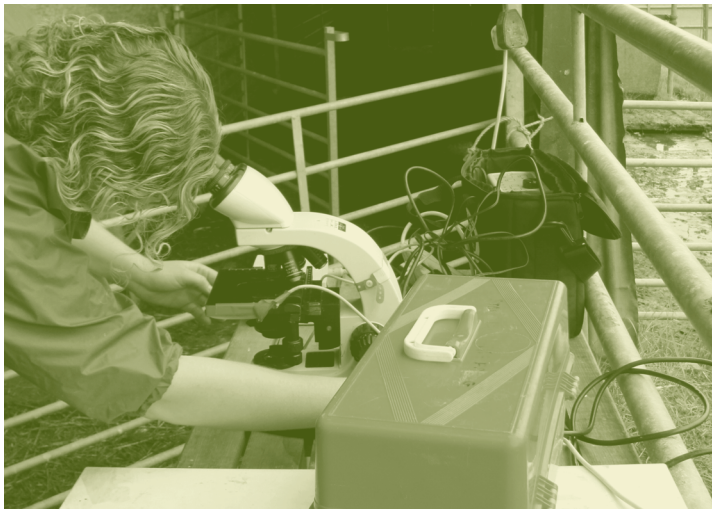
Field advisors face complex and ever changing calls on their expertise. How do they keep their knowledge up to date in practice and do they act as intermediaries bringing science to the farm? Undoubtedly, advisors actively broker a range of different types of knowledge, besides formal science, as well as generating knowledge themselves 'on-the-job'. What are the implications for professional training and research, to better equip field advisors for the work they do?

Who advises land managers?

The privatisation of previously state-funded agricultural extension services, combined with new challenges and priorities for farming, has opened up farm advice provision.

Farm advisors:
- Work across the public, private and third sector.
- Are from a range of professional backgrounds.
- Assist land managers in improving existing practices and adopting new ones.

The research considered three groups of specialist advisor:
- **Land agents and surveyors** who advise farms and estates, value property and assets and provide expertise on legal, tax and land use issues.
- **Applied ecologists** who select and safeguard legally protected sites, carry out practical countryside management and conduct field surveys, monitoring and impact assessments.
- **Large animal veterinarians** who provide advice and services in the care and treatment of animals, promotion of animal welfare and optimisation of animal production.



Why do advisory professions need continually to develop their skills?

Advisors must constantly develop their services and renew their skills and knowledge in order to meet the needs of land managers:

- The Foresight Report on The Future of Food and Farming identified the improvement of advisory services to farmers, land managers and food producers as a top priority in tackling the challenge of food security.
- Constant and changing commercial and legislative pressures on land managers create a need for up to date professional advice.
- The requirement to increase productivity, while at the same time protecting the environment and animal welfare, necessitates continuous improvements in the skills and knowledge applied to land management and farming.

What informs field expertise?

The research revealed the complexity of field advisors' knowledge sources:

- Professional associations are the most important source, through programmed Continuing Professional Development (CPD), training, websites, publications and meetings of specialist divisions. These play a particularly prominent role within the land agent and veterinary professions.
- Training and information are provided by government agencies and sectoral bodies such as Natural England, the National Farmers' Union and Agriculture and Horticulture Development Board as well as private companies such as fertiliser, feed, agrochemical and veterinary pharmaceutical firms.
- Advisors also update their knowledge through other channels, including in-house training, the internet, books, journals, magazines and circulars.

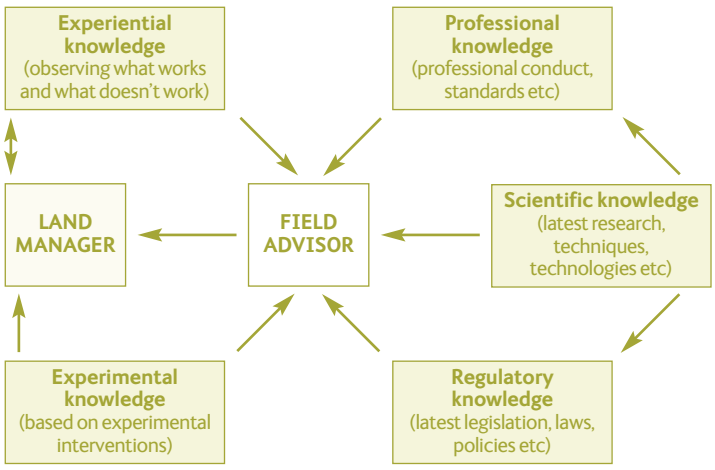
What barriers prevent them from refreshing their scientific knowledge?

Field advisors say that:

— They lack time for professional development.
— Most scientific output may not be relevant or applicable to what they do.
— Published science is inaccessible to them.
— They expect their professional organisations to filter out and synthesise what scientific developments are relevant to their work.

What other types of knowledge are being brokered?

The findings also reveal the significance of field-generated knowledge, gleaned on the job. Advisors learn by doing and thereby build up their own knowledge.



Experiential knowledge:

— Involves field advisors learning through observation of what works and doesn't work e.g. learning from mistakes, sharing best practice, etc.
— Is expertise derived from application and refinement and developed through replication and multiple adaptations case by case. It is seen by practitioners as essential to the formation and renewal of field expertise.
— Derives from interactions with others. Field advisors emphasise the importance of learning from colleagues' experience via formal mentoring or through informal discussion back at the office.
— Is often obtained from inter-professional working e.g. a vet working closely with a nutritionist, or a land agent working with an ecologist on an agri-environment application.
— May be derived from clients; such knowledge is vital in helping advisers to understand the practical and commercial context into which their technical advice must fit.
— Is essentially learning about what works in specific contexts.
— Is acknowledged by all three groups of field advisors questioned during the research.

Some of the field advisors also distinguish a different source of field knowledge – experimental knowledge, generated through deliberate interventions in the field.

Experimental knowledge:

— Includes trial and error but also conducting their own field experiments, systematically trying out different approaches.
— Was mentioned most by vets, who had the most experimental outlook, followed by ecologists.
— According to vets there are limits to how far experimentation can go (e.g. restrictions of drug licences, costs, client's attitude etc) but they see it as valuable in extending their knowledge, testing their skills and finding novel solutions.
— Was not a concept popular with land agents, who expressed anxiety about the idea of experimenting in practice.

Do we need to re-think our understanding of the role of advisors as knowledge intermediaries?

Field advisors undoubtedly act as intermediaries bringing science to the farm, but they are not simply conduits of formal science:

— Advisors broker different types of knowledge and generate their own, to create their own field knowledge.
— Farmers look to their advisors to absorb complex, ambivalent messages from diverse sources, including technical, commercial and legislative developments, and 'translate' them into terms they can understand and act upon.
— In conveying advice, advisors will also take into consideration factors such as local geography and ecology, the social context and aspirations of the land manager and their families, as well as the technical capabilities and commercial objectives of the farm business.
— They are not simply transferors of knowledge from other experts, but combine and repackage information, and draw on their own accumulated field knowledge to tailor it to the circumstances of the individual farmer.

What are the implications for policy and practice?

Professional organisations, and universities, colleges and other training institutes need to reconsider the type of skills that field-based advisors require:

— Training establishments need to prepare field professionals to be lifelong learners and practical experimentalists.
— Practice needs to have greater emphasis in the formal training of field practitioners.
— Academics involved in training field practitioners and in research need to acknowledge the importance of field expertise, rather than dismissing it.
— Formal CPD provision and requirements need to reflect the range of ways that field-based advisors keep their expertise up to scratch.
— Training systems should address the complexity of multiple professions which work together and learn from each other, while advisors need to be better prepared to understand the networks and local contexts in which they are operating and their role within them

Research institutions, programmes and projects could make better use of advisors in knowledge exchange:

— Knowledge transfer strategies that rely on advisors as intermediaries need to be better informed about their knowledge practices.
— Knowledge professionals in land management and animal health should be much more actively involved in the design and execution of programmes of research and knowledge transfer on land management issues.
— Links should be strengthened between research organisations and professional bodies, as the key knowledge source for advisors, to maximise knowledge exchange opportunities between research and practice.

Further information

This note was written by Amy Proctor, Jeremy Phillipson, Philip Lowe and Andrew Donaldson with contributions from the project advisory group including David Coulson, Laurens Klerkx, Chloe Palmer and Megan Power.
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Project Website: http://research.ncl.ac.uk/scienceinthefield/index.php

Useful resources: Phillipson, J., Liddon, A., Proctor, A. and Lowe, P. (2010) *Telling Stories: Accounting for Knowledge Exchange*, Rural Economy and Land Use Programme Briefing Paper, No.10.
Proctor, A, Lowe, P., Phillipson, J. and Donaldson, A. (2011) Veterinary Field Expertise, Veterinary Record, forthcoming.
UK Government (2011) Foresight. The Future of Food and Farming, The Government Office for Science, London.

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