

Horizon Series: Getting research into practice

Highlights with Dr. Steven Roche, Director and principal consultant,
ACER Consulting

As part of its Horizon Series, the Livestock Research Innovation Corporation (LRIC) has written a series of white papers on issues impacting livestock producers and the entire livestock value chain. In this issue, Dr. Steven Roche reviews some of the challenges, strategies and opportunities for getting research knowledge into on-farm practice. Roche completed his PhD at the University of Guelph. He is the director and principal of ACER Consulting, adjunct faculty at the Ontario Veterinary College and a co-author of LRIC's white paper Getting Research into Practice.

“Even when we have the right knowledge and the right tools, getting research into practice is far from simple.” Dr. Steven Roche

Roche is interested in extension and understanding what makes people tick as a way to get research into practice. He stresses the importance of knowing how to define and understand end users—their mindset, attitudes and preferences—to be able to develop and deliver more effective programs with more effective information. Through his research and consulting, Roche is looking at how to design practical programs and tools that translate science into clear messages.

“We weren't seeing a lot of on-farm adoption or change.” Dr. Steven Roche

When Roche started his PhD at the University of Guelph, he was looking into how to stimulate change, specifically within the Ontario dairy industry around the prevention and control of Johne's disease. Despite the availability of programs and incentives to motivate farmers to change farm practices to address the chronic infectious disease—financial incentives, consulting and educational opportunities—there was very little uptake. That became the focus for Roche to uncover some of the pieces that influence getting research into practice.

“How do we get information from one group to another to influence change for the betterment of animal welfare, human health or other outcomes?” Dr. Steven Roche

Whatever term you use—knowledge translation and transfer, knowledge mobilization or extension—Roche is working to understand how to motivate change. He's also interested in helping others do the same by delivering training programs to build knowledge and influence attitudes.

“The shift in the model of government extension services resulted from several pressure points.” Dr. Steven Roche

The government's role in supporting research has changed significantly over the last several decades. Before the 1990s, research knowledge was passed to farmers through significant government investment in extension services. Extensionists in rural and regional locations across the province provided advisory service on a broad range of topics. Since then, government has pulled back funding, and recognized the role of third-party advisors to share research knowledge and extension with end users.

Roche identifies a number of factors behind the changing model of how research extension and knowledge sharing happens:

- Changing rural sector
- Difficulty in demonstrating ROI on extension service
- Changing role and definition of extension
- Evolving academic systems that don't reward or incentivize extension
- Growing and diverse number of advisors
- Diverse industry needs and capacity depending on the commodity
- Growing base of tools available to communicate and disseminate knowledge

“If the government is relying on advisors to educate and work closely with producers, there is a significant reliance on these advisors to have the right information-seeking behaviour and deliver it consistently across the province.” Dr. Steven Roche

Private advisors provide specialized and very technical services to producers. They are directly accountable to end users, have varying engagement with research, and there are significant regional differences. There are challenges with underserved areas of the province where farmers don't have the same access to advisors such as veterinarians, agronomist, nutritionists and geneticists.

“Change is ultimately about mindset—about attitudes, experiences, beliefs and priorities.” Dr. Steven Roche

There is an assumption that education and awareness may be the only thing lacking for getting research into practice. But Roche indicates that making changes on the farm is about much more than knowledge because human behaviour is influenced by so many things. Changing a mindset comes from:

- Understanding your audience—know their characteristics, barriers to adoption
- Knowing your message—stories are an effective way to deliver information
- Tailoring your approach—reach your audience with a variety of tools that could include video, websites, social media, factsheets, infographics and online toolkits



“There are three things we need to think about for what’s next with getting research into practice.” Dr. Steven Roche

1. Improve and enhance our capacity to get research into practice including training, scholarships and investments.
2. Better collaboration between industry, academia, government and non-profit sectors.
3. More coordination through a centre or structure that could help guide activities and motivate change.

Watch the full webinar or review the white paper at livestockresearch.ca/white_papers.
For more information, contact LRIC at info@livestockresearch.ca or 519-766-5464.

Month Year