Supporting Innovation Decisions Through Extension

COMMUNICATION CHANNELS

I. KNOWLEDGE  
II. PERSUASION  
III. DECISION  
IV. IMPLEMENTATION  
V. CONFIRMATION

1. Adoption  
2. Rejection  
Continued Adoption  
Later Adoption  
Discontinance  
Continued Rejection

Figure 1: The 5 Stages of Innovation Decision Process
Source: Everett M. Rogers. 1995. Diffusion of Innovation

PRFA of BC works to support ranchers and farmers in their decision making by helping them beyond just the sharing of knowledge (highlighted in gold in Figure 1 above). Much work is done in the Peace region by local agricultural associations, researchers, technicians and professionals to work with producers around making the decision to try a new idea, and then to evaluate its success in their own farm operation (highlighted in green in Figure 1 above).

If failure or less than desirable results occur it is important to assess if the innovation needs to be tweaked and retried or rejected for now. The cyclic tool outlined in this fact sheet was elaborated on to help producers and other extension personnel understand and consider many aspects of each decision, and is cyclic in nature. Farm decision makers learn in different ways and often enter into decisions at many points of this matrix. The next 2 pages detail the complexity of the farm decision making.
When we first meet with a producer or cooperator about their request for information or to work on a demonstration together, we like to get a sense of their farm business reality. Questions such as those listed here will help get us started (see box to the right).

For example, Sandra Burton met with Stan Smithard (see photo upper right) about setting up a manure demo. Stan felt the forage production on his "ridge field" was declining and he wanted to improve the soil and forage health.

The next part of the discussion with producers, if it proceeds linearly, is exploring what their farm opportunities are. When we set up a sainfoin demonstration with Fred Schneider, he shared his goal of wanting to increase his forage production by increasing the legume content of his pastures (see photo right, Fred talking with Samantha Dilworth).

There are various ways or quick tools producers can use to assess the status of their situation rapidly (see list to the left). Gordon Lazinchuk wanted to check nodulation of his birdsfoot trefoil as an indicator of his forage stand health (see photo to right). Sarah Davies wanted to dig up a spade full of her topsoil to quickly assess soil health and where she needed to focus her efforts (see photo left).
There can be 2 stages that we work through in setting priorities: Stage 1 is a quicker assessment while Stage 2 is a look in more depth. An example was the discussion with Rob Larson on the investment to bale graze (see photo above) rather than plough to rejuvenate. Another example of this was the discussion with Tara Holmes. At one point, she identified the key obstacle to being able to expand their sheep operation was the need for a handling system for health checks and marketing their lambs so that was a priority to invest in. (see photo right).

At this point in the decision making, the farm cooperators decide what actions they want to try. Examples of the types of actions they might take are listed (see box to the right). For example, Gordon Lazinchuk decided to reseed his pasture with AC Bruce birdsfoot trefoil with a rented Valmar. Another example was Stan’s action to use the vertical beater style manure spreader for some plots (see photos below).

One of the most important steps in the process of deciding to adopt an innovation is to monitor whether it was successful. In many cases we set up benchmarks that can be revisited to examine changes in soil or stand health. Working with Andrew and Brian Clarke on birdsfoot trefoil we took time sequence photos at selected benchmarks (see photo right). We also counted and weighed bales to determine yield (see photo below). A producer’s measure of success may be in other terms such as livestock sales or costs versus returns.
What makes people willing to try new ideas?

Have you ever wondered why some people are so quick to try new ideas while others wait until it is tried, tested and true? Research completed by Everett Rogers’ in 1962, in the Diffusion of Innovations discusses innovation and uptake of new ideas (see Figure 3 below). In this research we see that not everyone will immediately adopt a disruptive/new idea despite obvious benefits. Over years of research, Rogers identified some fascinating personality traits that help us understand how people will accept a new innovation. It turns out we approach innovations in very different ways.

The bell curve developed by Everett Rogers (Figure 4 pictured below) shows the distribution of people in relation to their adoption of an innovation. It’s interesting that after 16% of the population has adopted a new practice a critical tipping point has been achieved.

Consider learning styles

People learn in different ways as well. Some people are auditory & learn by hearing about an innovation. Others are visual & learn best by seeing. Still others, including many farmers & ranchers learn by doing. New ideas need to be presented in the form that leads to effective learning/adoption.

Characteristic Image by The Center for Creative Emergence 2011, Adapted by Sandra Burton 2019.

Main Sources; Diffusion of Innovation by Everett Rogers & Crossing the Chasm by Geoffrey Moore.

This is why on farm demonstrations are often such an effective tool for technology transfer. This enables the farmer and researcher to work together through the decision making process of whether to adopt or not, while the cooperator is actually doing it to learn about it.

Key Messages

1. The decision whether to adopt an innovation is often complex.
2. Acknowledge your reality & who you are & proceed accordingly.
3. Be candid with yourself & your team; seek the information & insights you need.
4. Change or innovation should fit your operation & personnel so ask:
   - What interests & skills are available?
   - How will our days change?
   - What options do we have if issues arise?