Why do farmers choose to adopt (or not adopt) new management techniques?

Workshop on Nutrient Management Challenges & Solutions
Natural Resource Social Science Lab at Purdue

- Surveys
- Interviews
- Literature reviews
- Focus groups
- Facilitated meetings
1982-2007: 55 U.S. Studies looked at BMP adoption

1982-2007: 55 U.S. Studies

Overall Finding:
- Very few generalizable trends

However → age
1982-2007: 55 U.S. Studies

Overall Finding:
- Very few generalizable trends

However → Farm size
Smaller Farms:

– Not as aware of information sources: SWCD, NRCS, watershed group, Extension
– Less aware of pollutants and practices
– Have more positive attitudes towards improving water quality
– More willing to try new practices

Rebecca Perry-Hill, Ph.D. Dissertation, In Progress
1982-2007: 55 U.S. Studies

Overall Finding:
- Very few generalizable trends

However ➔

Environmental attitudes
Attitudes

Three types of farmers:
- motivated by farm as business
- motivated by stewardship concerns
- motivated by off-farm environmental benefits

Reimer, Thompson, Prokopy, 2012, *Agriculture and Human Values*
1982-2007: 55 U.S. Studies

Overall Finding:
- Very few generalizable trends

However
Practice Characteristics also Important

Focus on:
• Raising awareness of on-farm and financial benefits
• Environmental benefits
• Compatibility with current farm practices

Diffusion of Innovations (Rogers)

Innovators:  
- Need to be respected in community for this to lead to more adoption.
What motivates maintenance?

- Local networks – being connected to community groups
  - Social norm towards BMP maintenance?

- Sense of ownership is important
  - Hesitancy to participate in government programs leads to longer term maintenance

Adam Baumgart-Getz, Ph.D. Dissertation, 2010
Where Programs Succeed

• Focus on watersheds with sufficient capacity:
  • Paid watershed staff
  • Active conservation groups
  • Inter-agency trust and collaboration
  • Problem salience and awareness
  • “Basic” BMPs already adopted
  • Some farmers are conservation leaders

Source: facilitated discussion with government program administrators, university researchers, and professional resource managers
Where Programs Fail

- Focus on the individual farmer, not communities
  - Lack of consistent farmer network engagement
- Don’t think about maintenance
- Don’t consider constraints such as drainage boards
- No landscape-scale planning, geographic targeting
  - Despite interest from farmers!*

*Margaret Kalcic, Ph.D. Dissertation, in progress
Take Away Messages

- Some watersheds have more capacity.
- Need to think about adoption from perspective of **farmer** and **practice**.
- Having the “right” innovators is critical.
- Networks are extremely important!
- Must focus beyond adoption and think about who will maintain.
- Incentives have mixed results.
- First come, first served approach not always best.