

***Evaluation of Agri-Environmental
Programs: Lessons Learned from the
Environmental Farm Plan and Two
Ontario Watershed Programs.***

Environmental Sustainability Research Forum

**Ontario Ministry of Agriculture, Food and Rural Affairs
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Research Questions?

- *How are the programs in question being designed and promoted to encourage farmer participation?*
- *What are the social motives behind change processes in farmer interactions with environmental sustainability (water quality) programs.*
- *Are the social dynamics around farmers' decision-making processes changing policy and program design?*
- ***What*** *are potential 'social tipping points' towards new practices on farms which can have the benefit of improving environmental health in watersheds?*

Context, Facts and Figures:

- Research Project: Focused only on dairy sector (a prominent agricultural sector in Ontario, contributing billions to the economy).
- Dairy farmers: manage 10,000s of acres in Ontario - critical to natural resource management.
- 85% + of the over 4,200 dairy farms in Ontario concentrated close to or within focus watersheds - neighbour some of the largest pop. agglomerations in Canada.
- Dairy farms in Ontario: 4,249 (2009, OMAFRA)
- Dairy farms in Grand River watershed: app. 750
- Dairy farms in South Nation watershed: app. 450

The 3 Programs in Focus

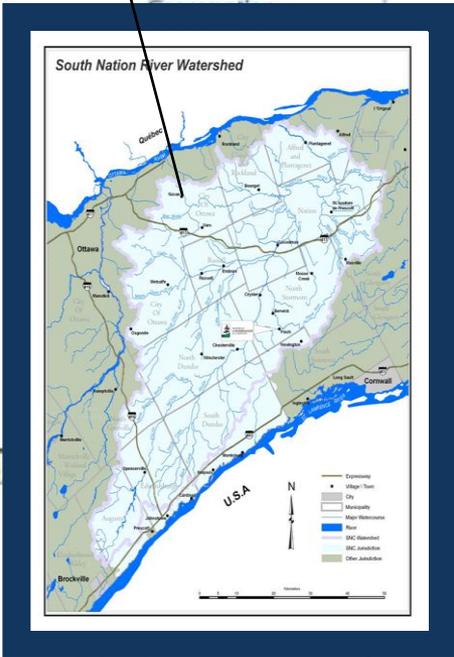
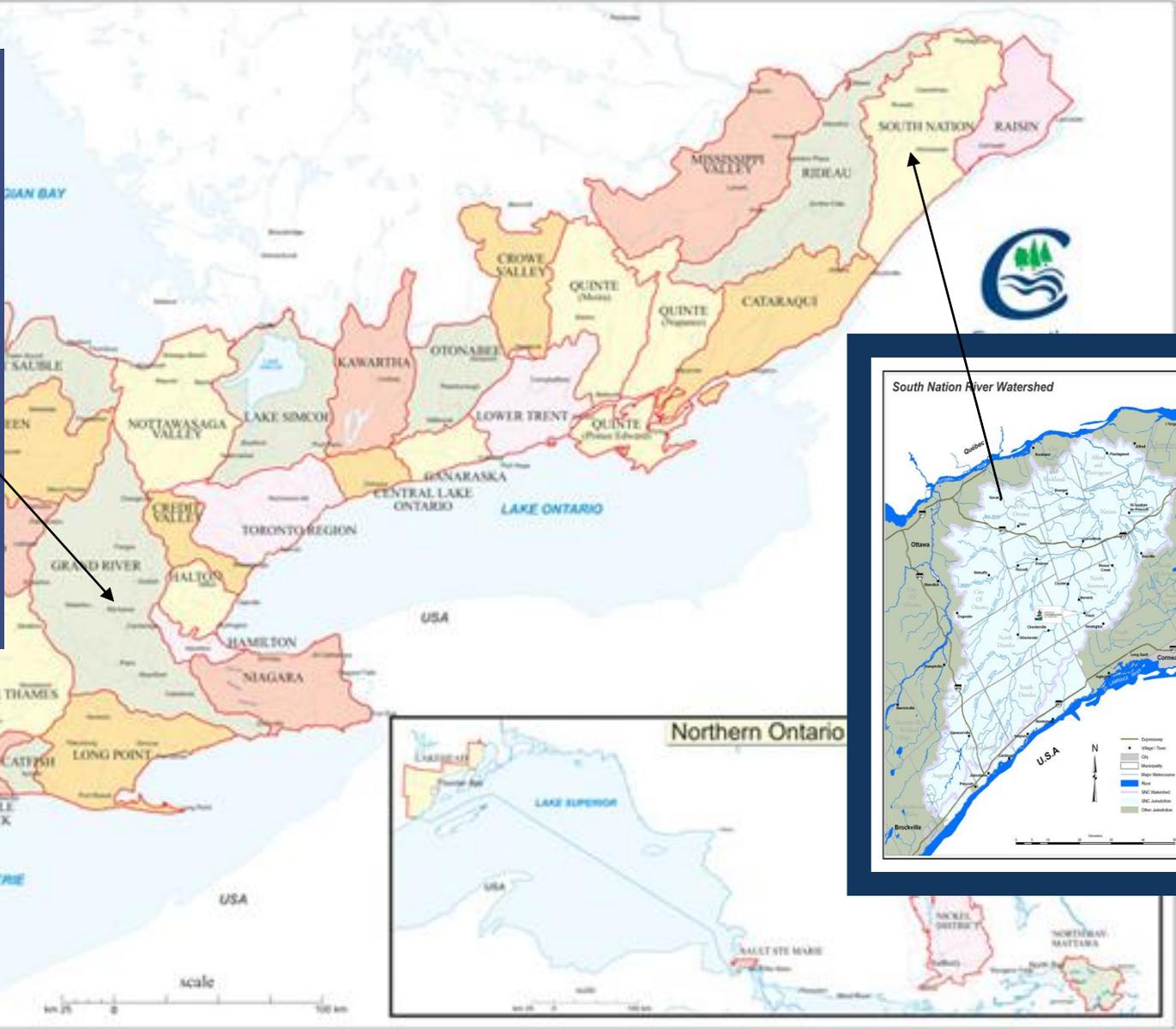
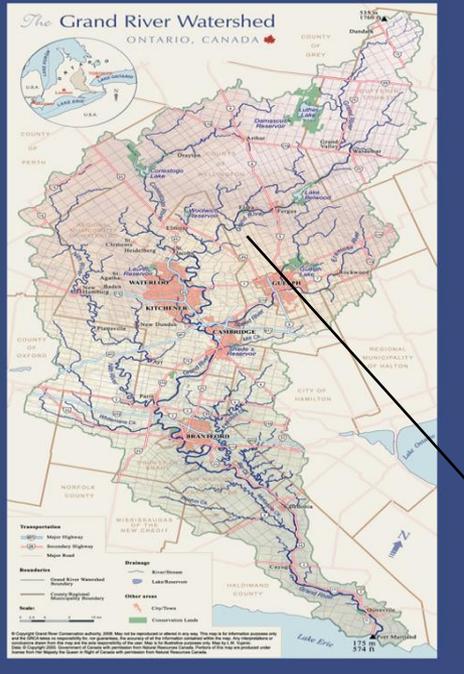
- The Environmental Farm Plan
- The Rural Water Quality Program (Grand River)
- The Clean Water Program (South Nation)

All three programs provide cost share (and top-up financing for on-farm projects that aim to improve water quality).



Conservation
ONTARIO

CONSERVATION AUTHORITIES OF ONTARIO

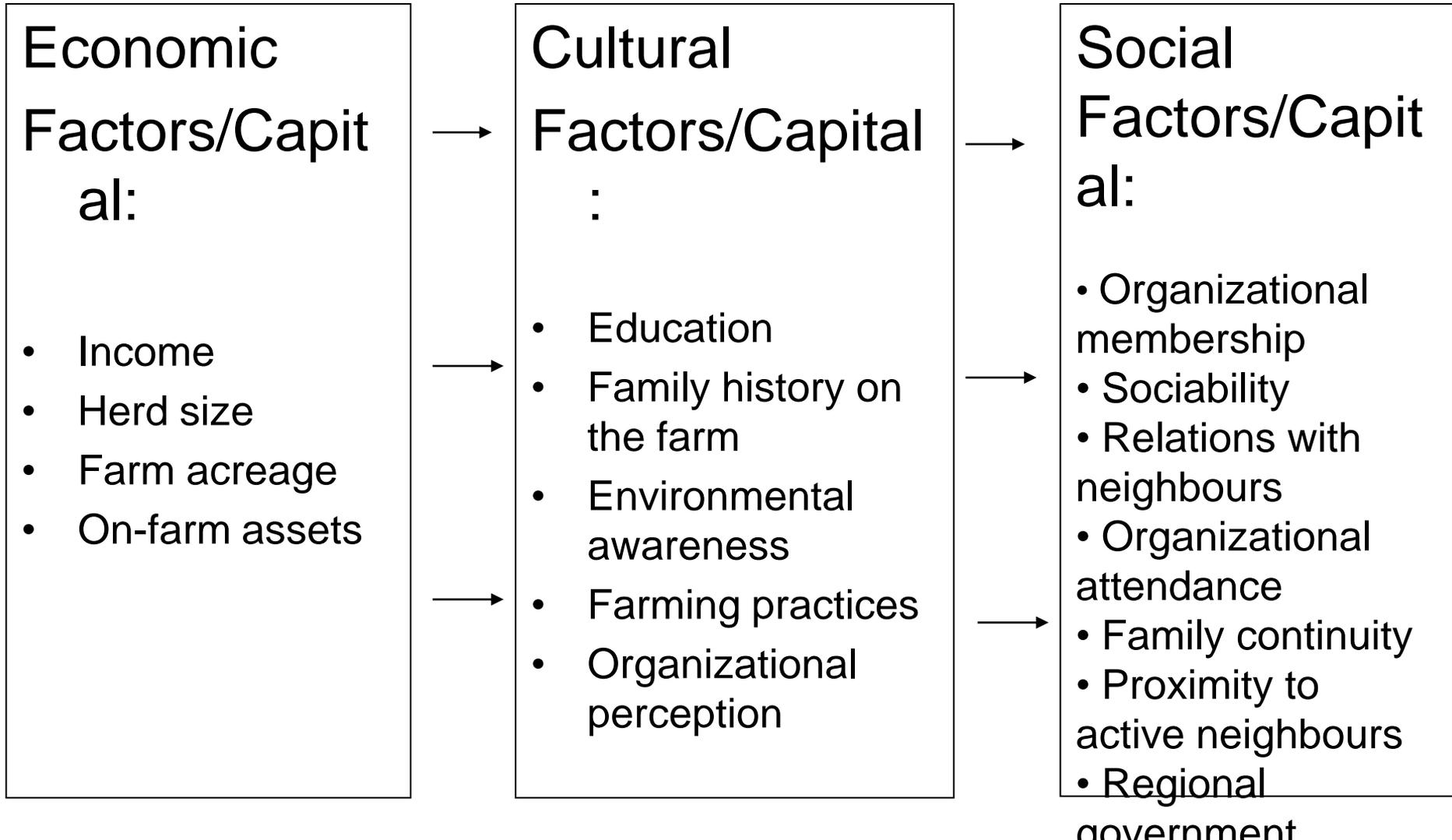


What research data has been gathered?

- Since Winter 2009:
 - Semi-structured Interviews:
 - 25 semi-structured interviews in Grand River.
 - 40 semi-structured interviews in South Nation.
 - Farmer Workshops:
 - 2 workshops completed (2 remaining); one in each respective watershed.
 - Farmer Survey:
 - Both on-line and a mail out: approx. 100 from South Nation and 140 from Grand River.

Research data analysis

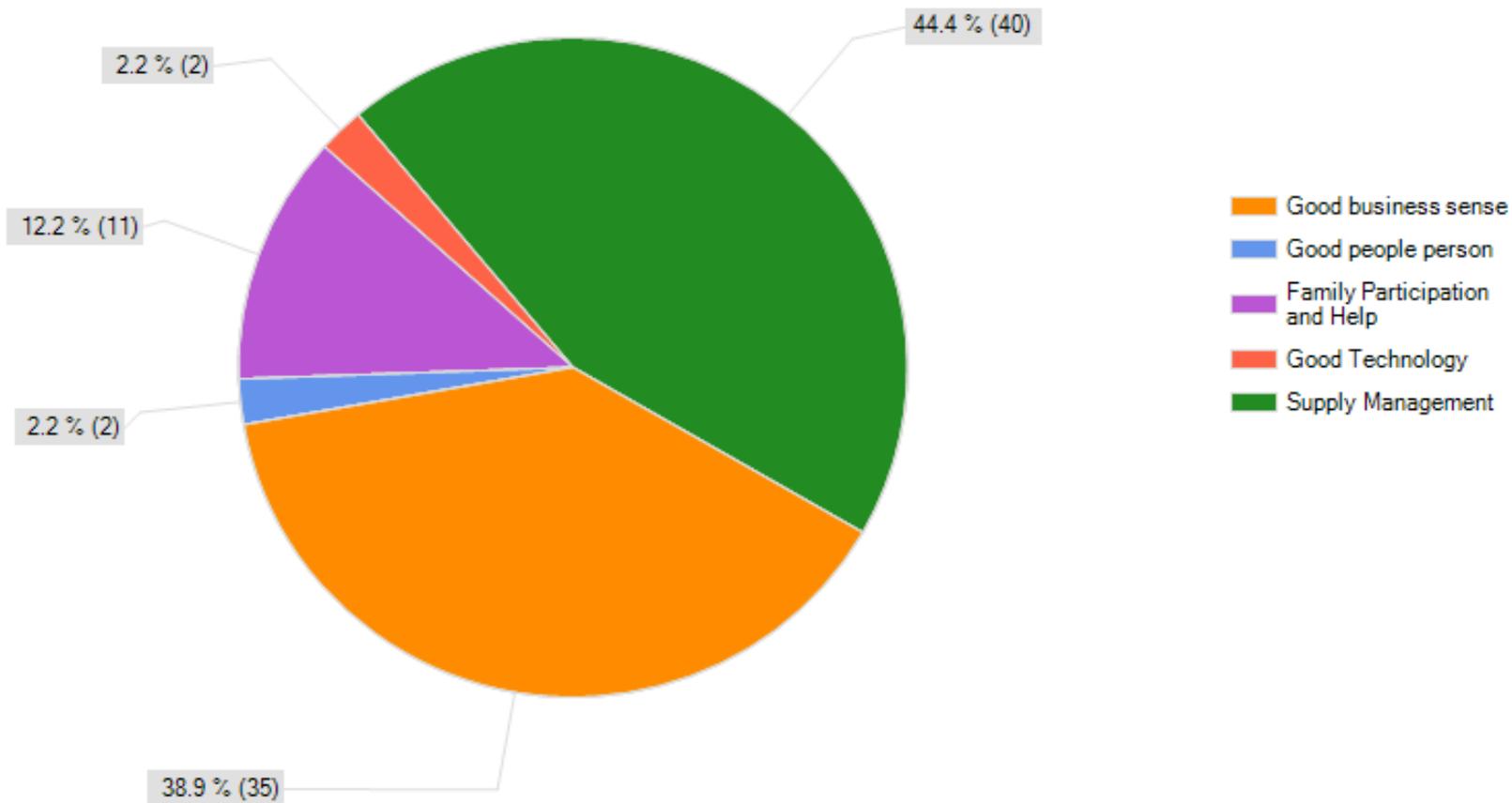
A layered matrix of farmer socio-economic decision-making factors:



Emergent Insights

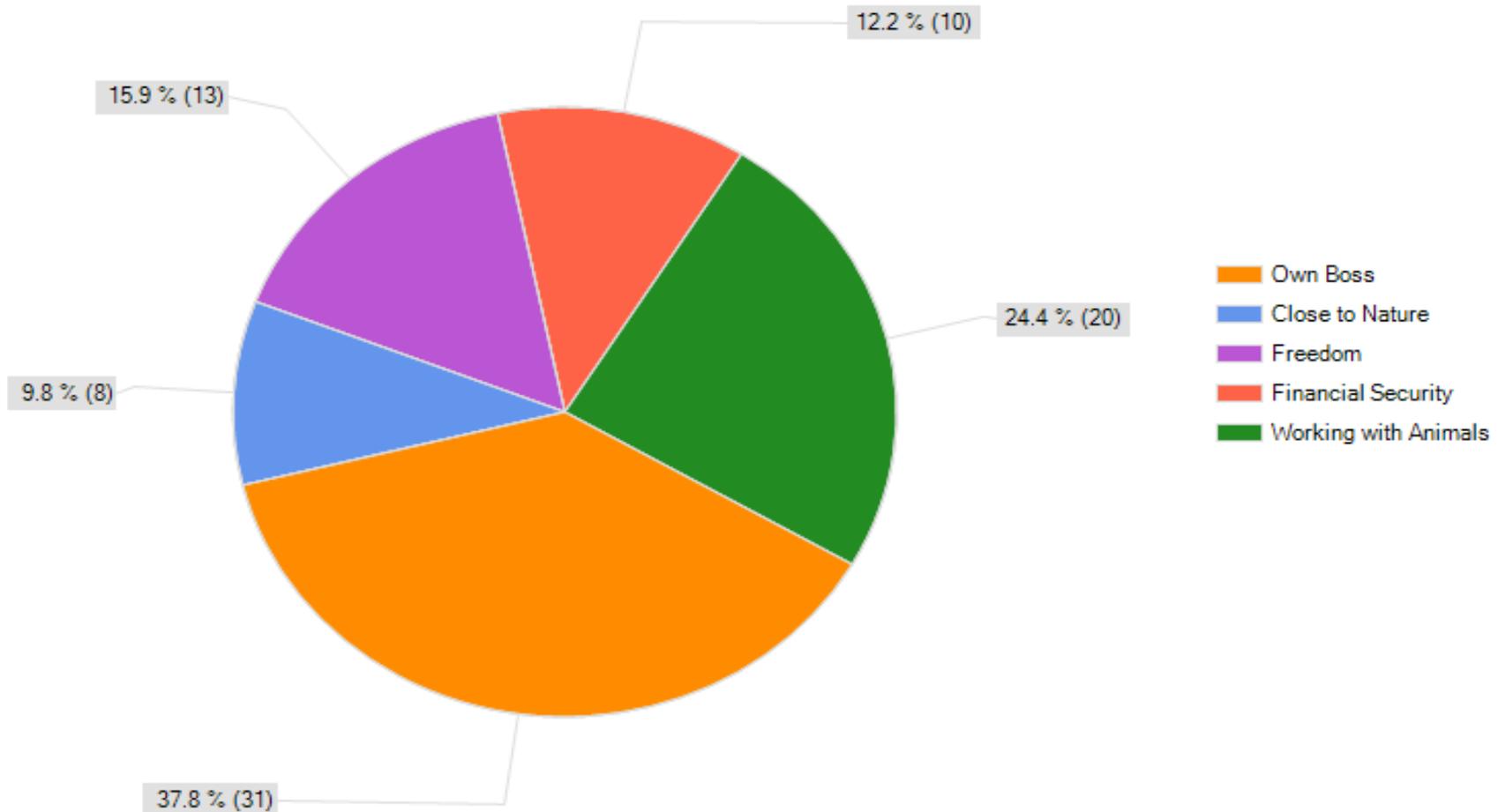
South

What is the most important thing a dairy farmer requires today to be successful?



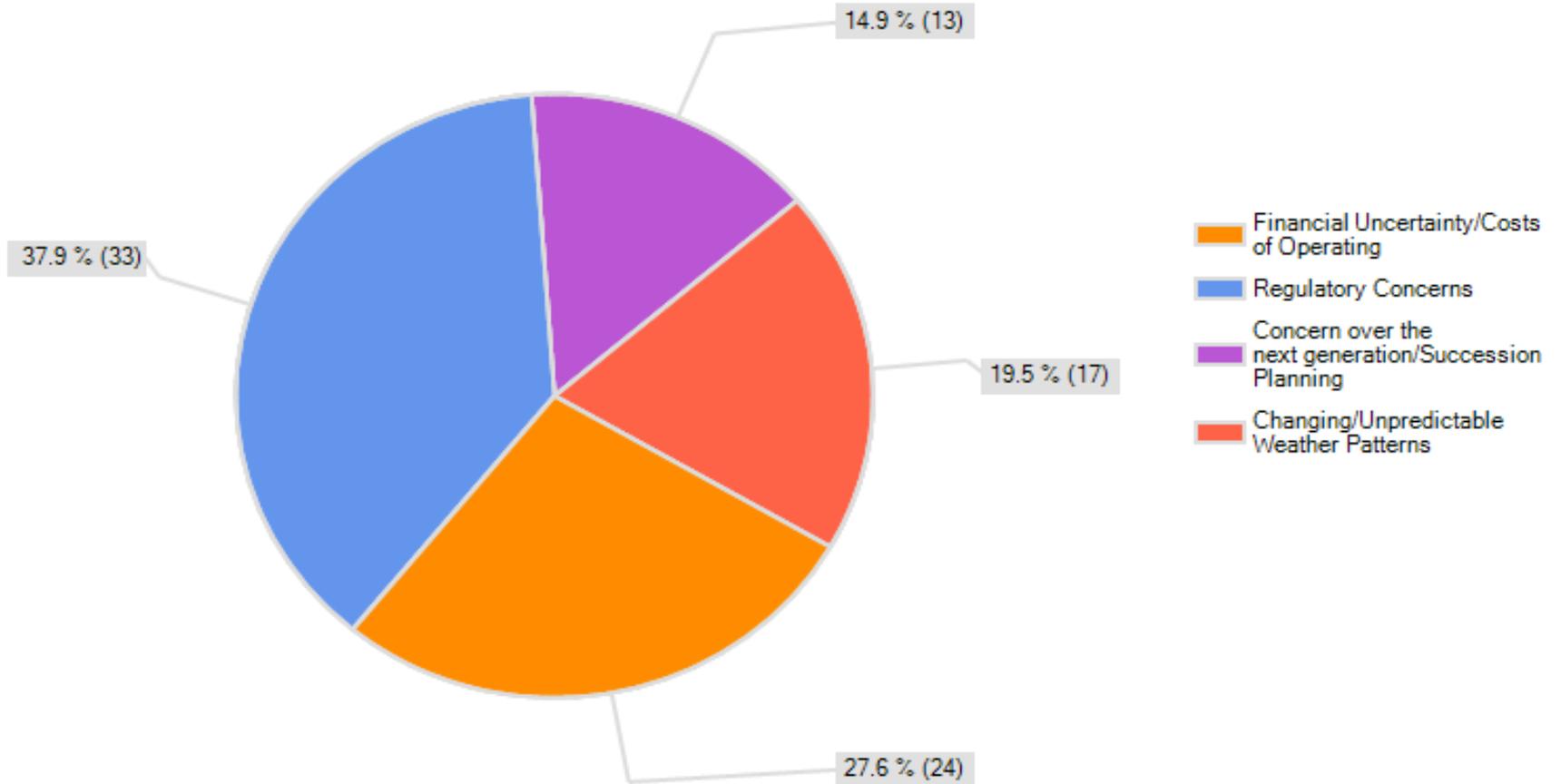
Grand River

What is it that you most enjoy about dairy farming (The one MOST important to you)?



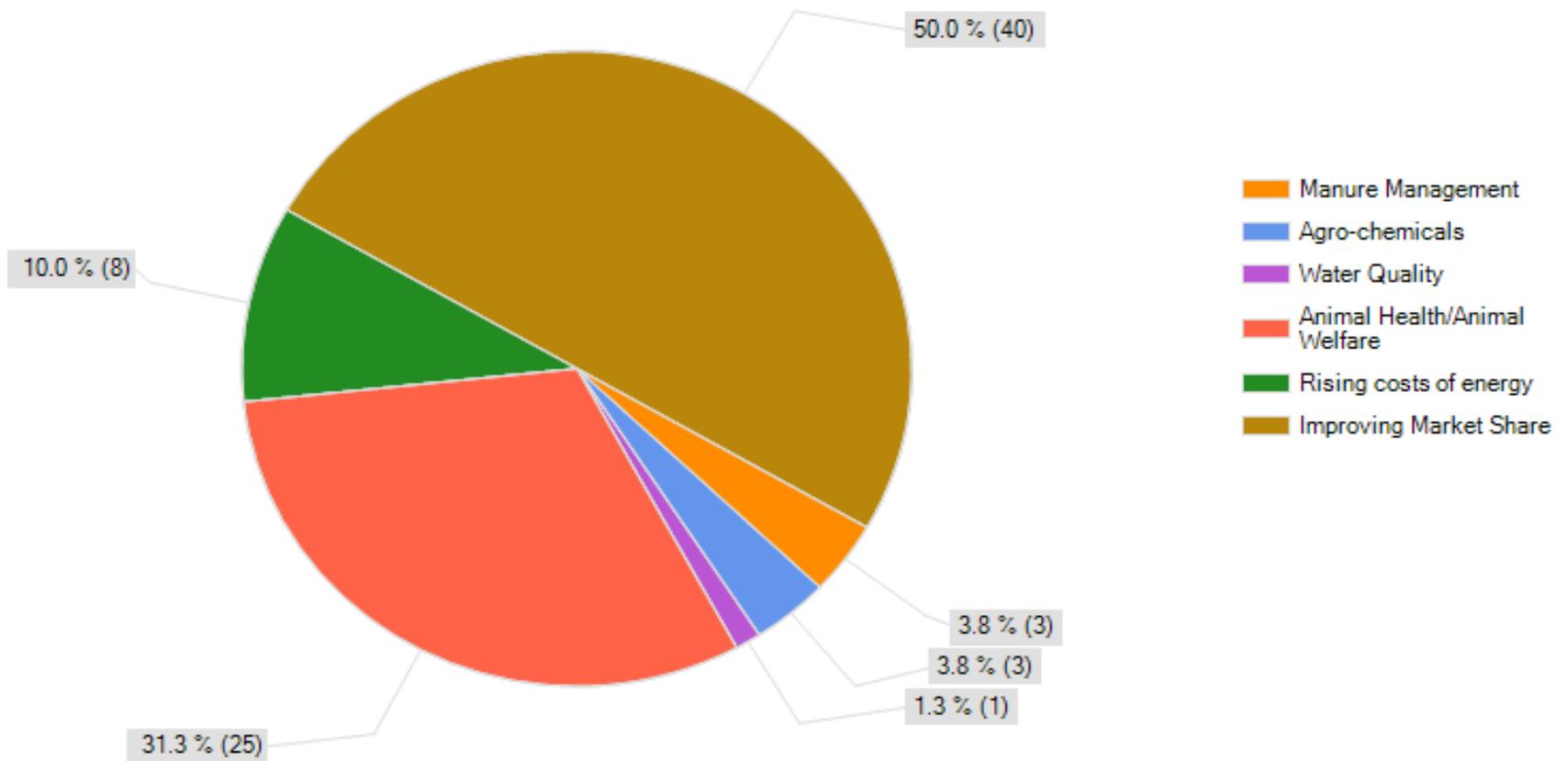
South Nation

What is it that you find most difficult about dairy farming (The one MOST important to you)?



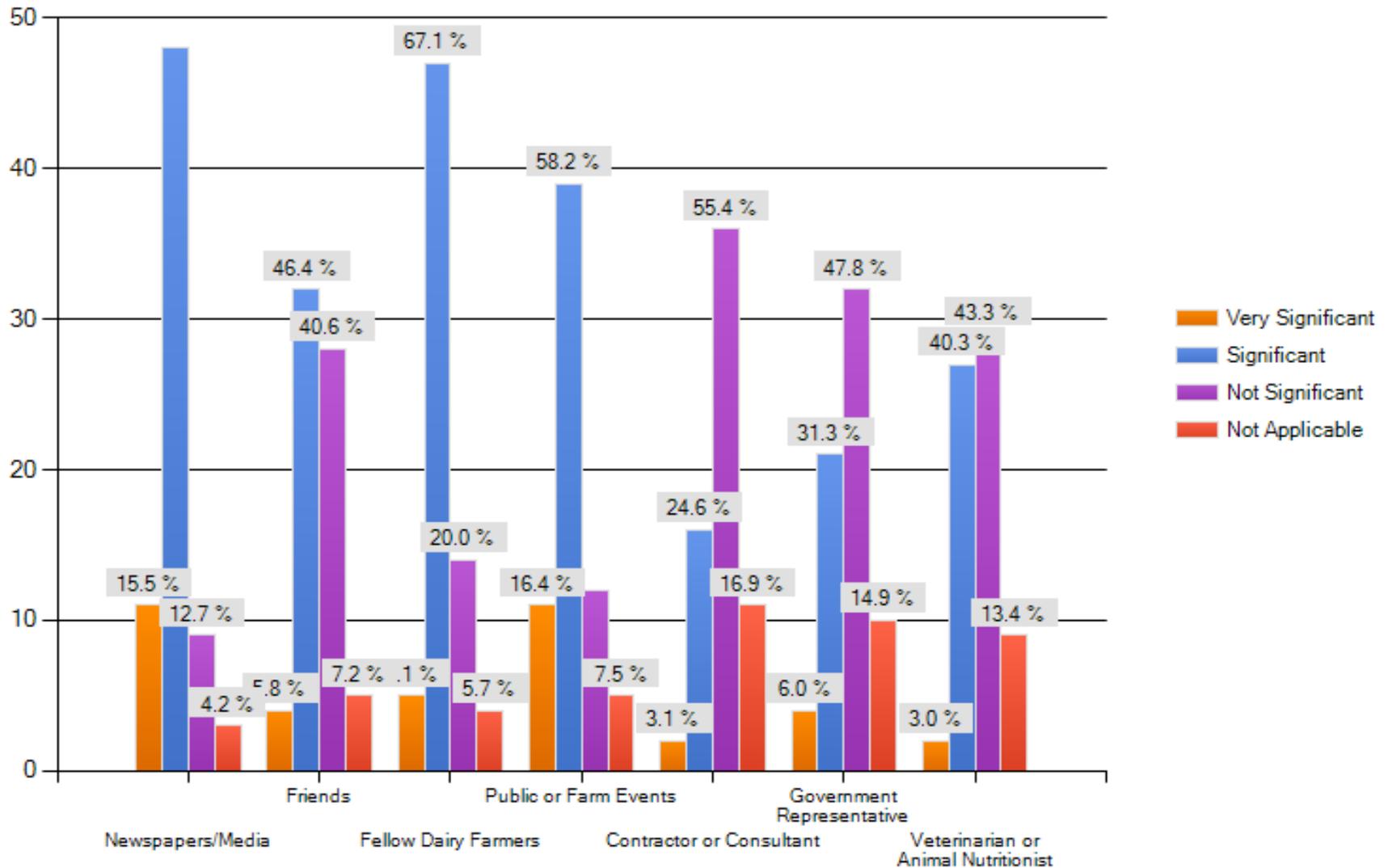
Grand River

What would you say is the most important emerging issue in the dairy sector today?



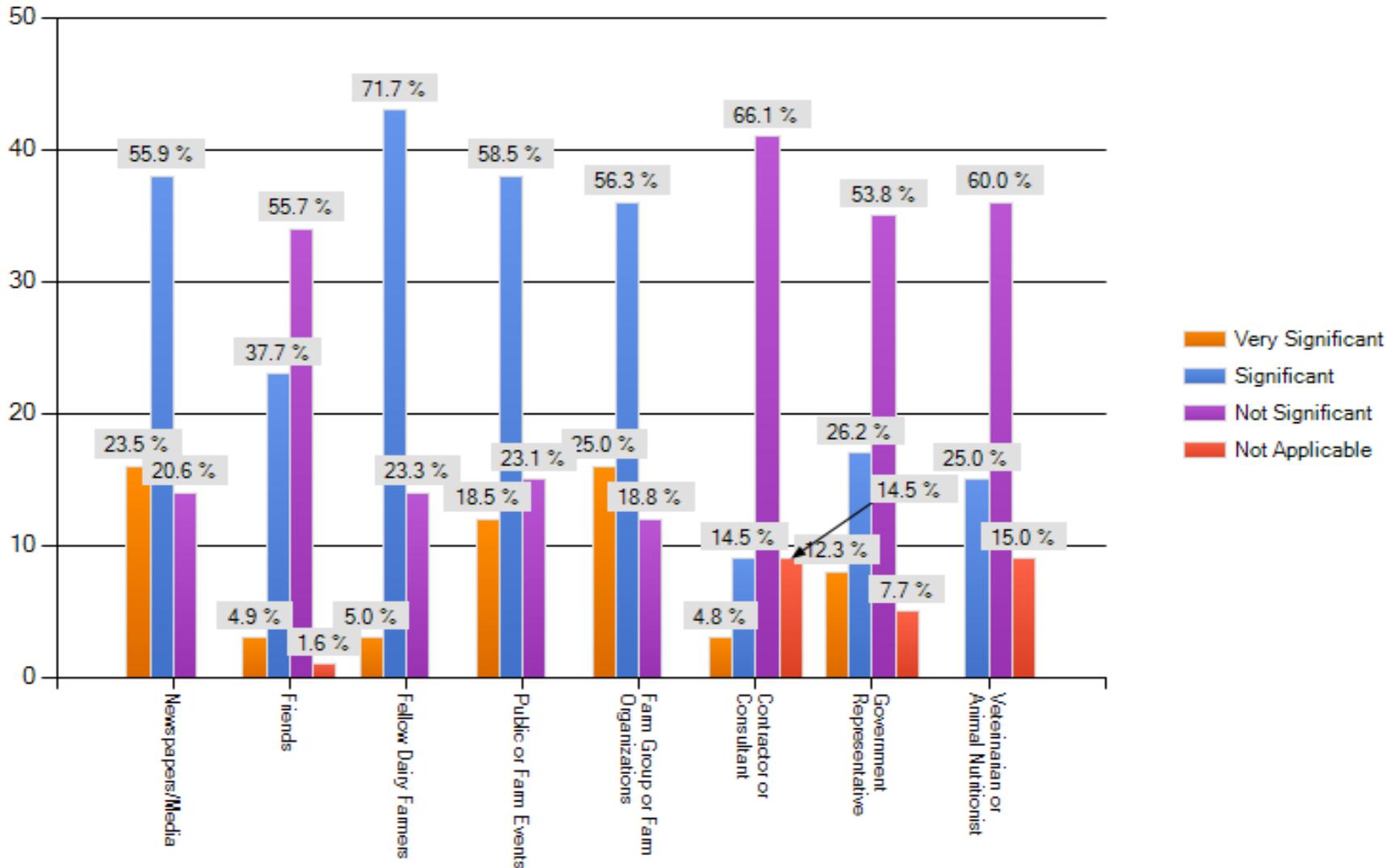
South Nation

From where do you get information when forming an opinion about the water quality in the South Nation watershed? (Please rank the significance of each source)



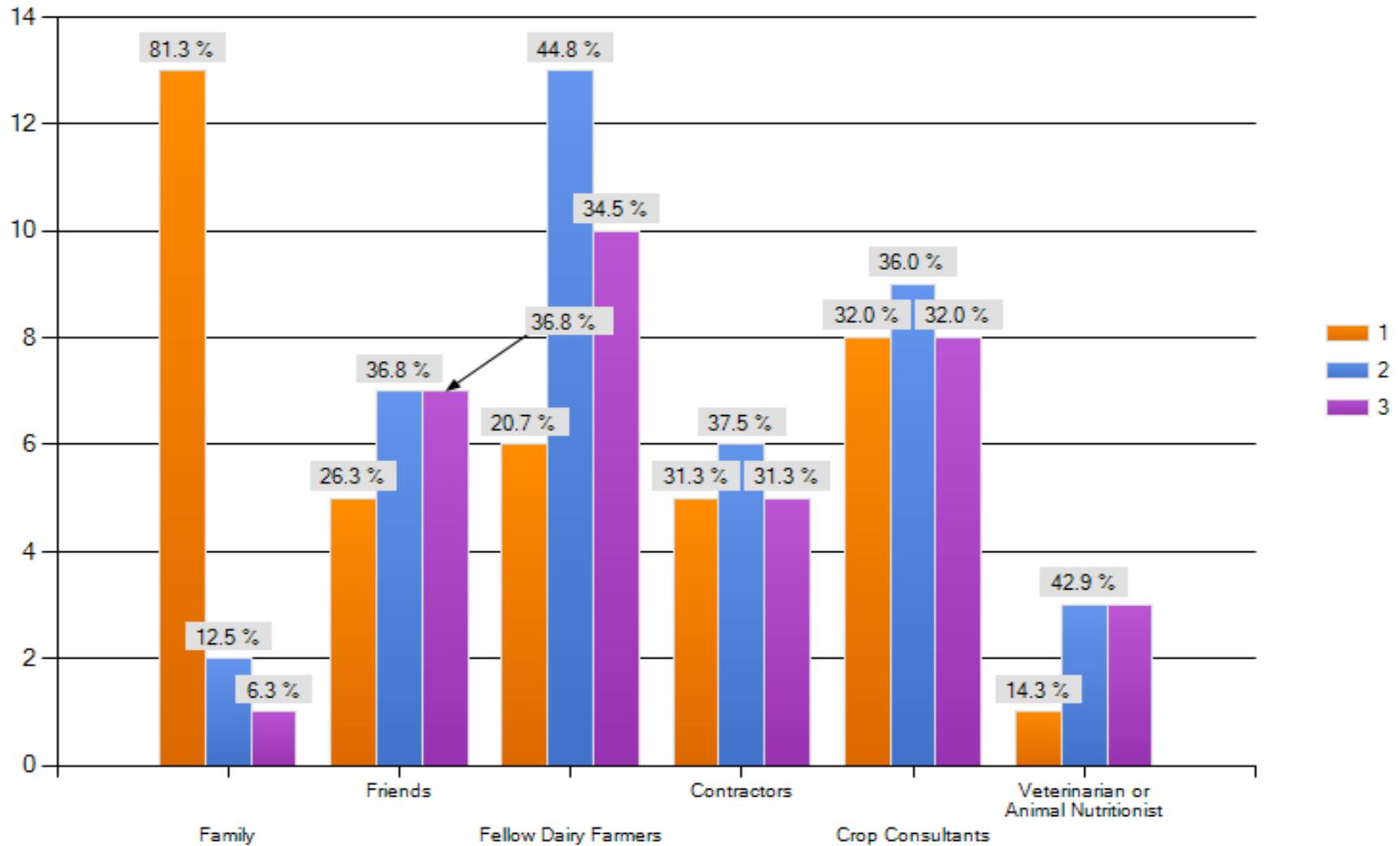
Grand River

How did you learn about the EFP and/or the RWQP? (Please rank the significance of each source)



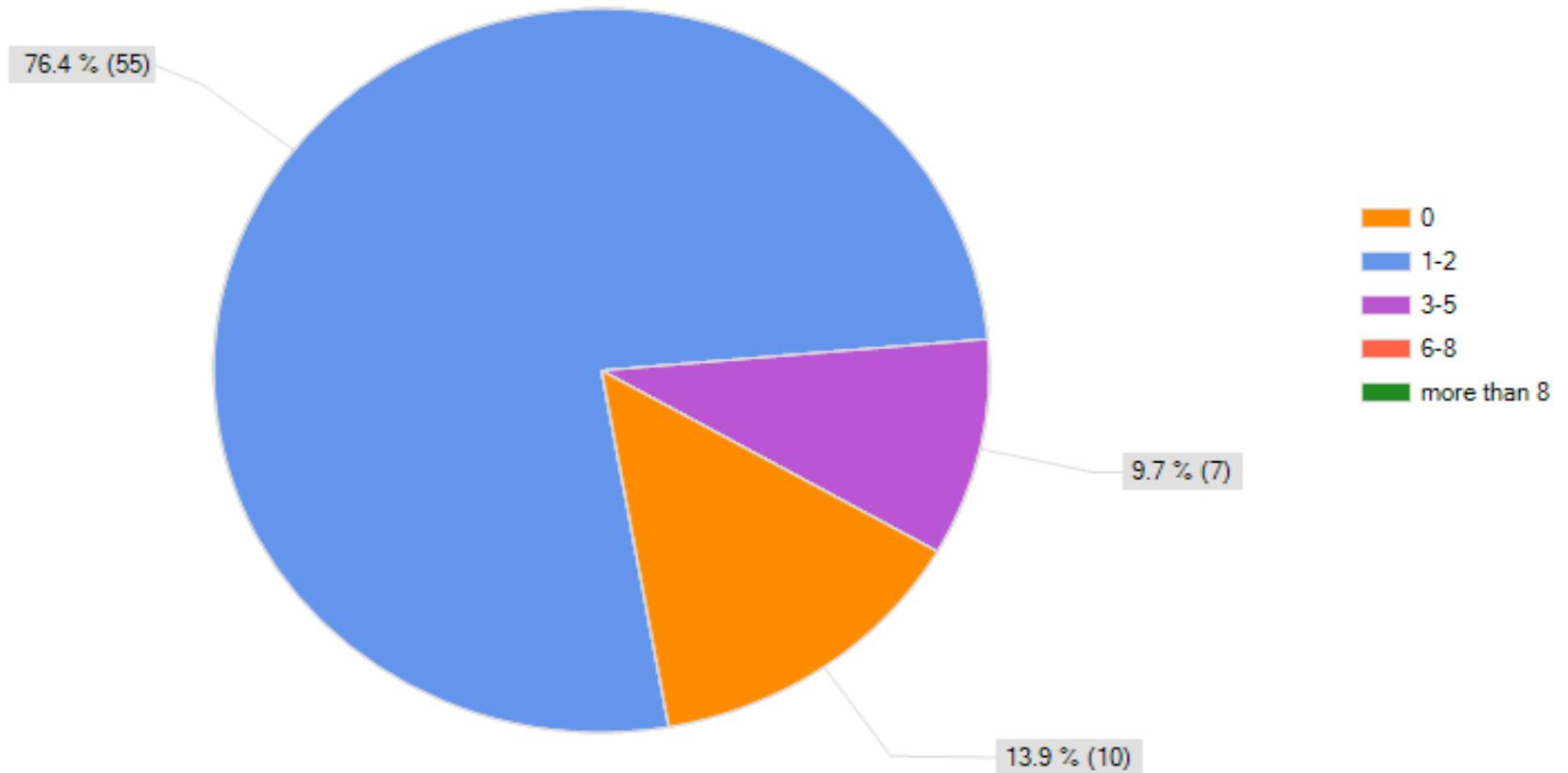
South Nation

If you have participated in either the EFP or the CWP, from whom (if any) did you seek advice from before making a decision? (Please rank the top 3, with 1 being the most important):



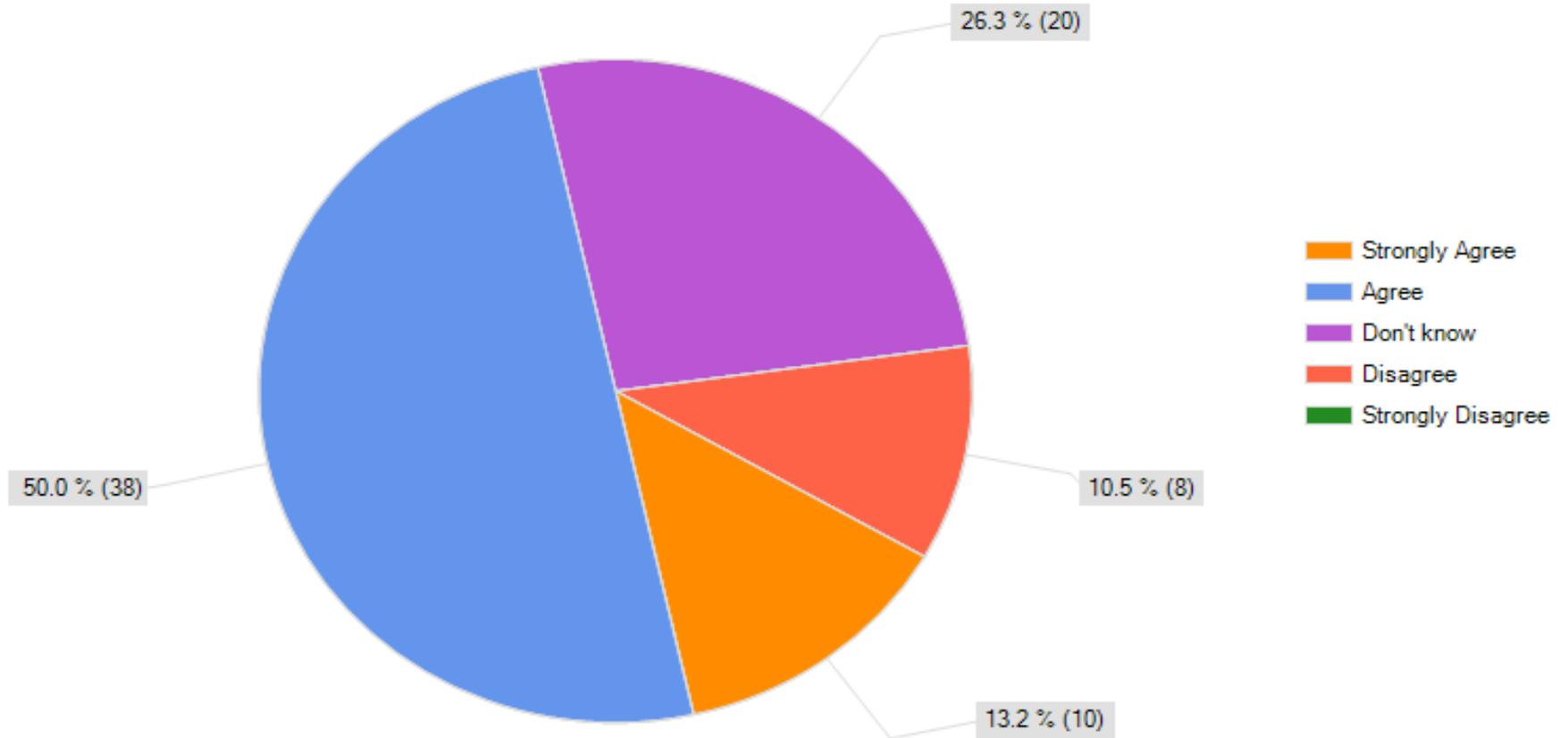
Grand River

How many times a month would you say you attend a farming related event?

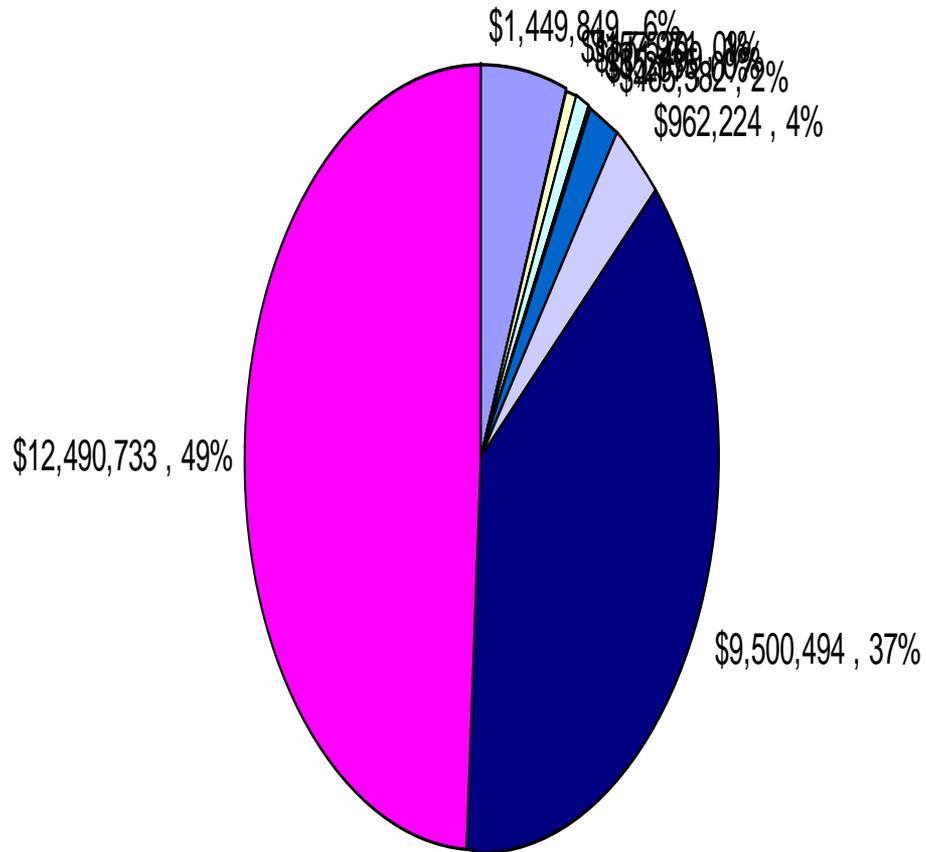


South Nation

Dairy groups are effective at working with environmental and water related programs in Ontario (please check box that applies):

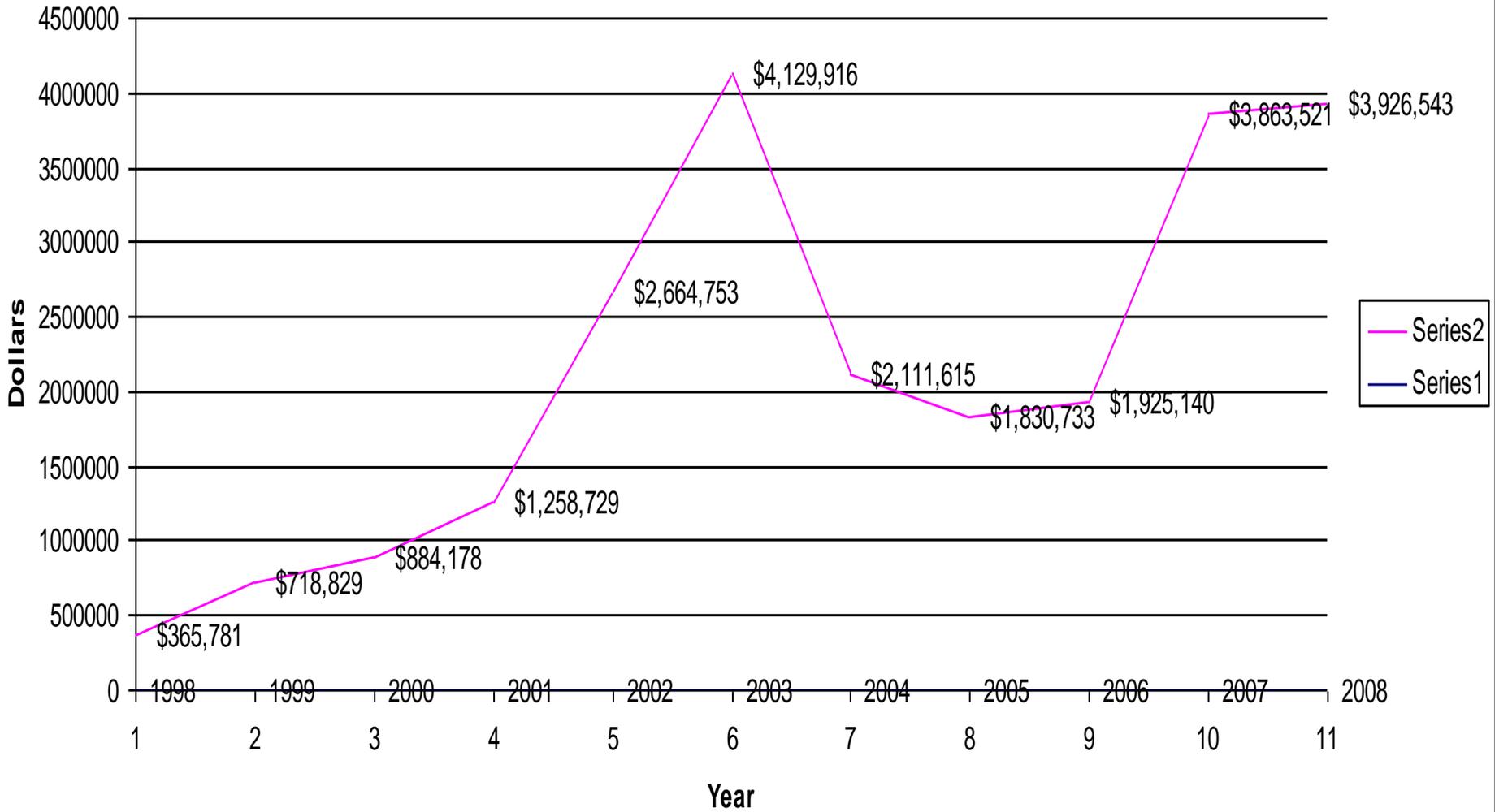


Total Investments in Projects - Rural Water Quality Program (1998-2008)



- Brant
- Dufferin
- Haldimand
- Hamilton
- Halton
- Grey
- Oxford
- Perth
- Waterloo
- Wellington

Total Expenditures in the Grand River Rural Water Quality Program (1998-2008)



Future social factor research questions...

- Does:
 - Computer and Internet activity
 - County location
 - Year of birth
 - Herd size
 - Farmland acres
 - Formal education
 - Gross farm sales

.....effect participation in programs?

Do the following social factors relate to program participation....

- The number of generations on the dairy farm?
- Does the size of one's herd or gross farm sales relates to willingness to additionally support smaller farmer's projects?
- Having a farm neighbour as a program participant?
- Having a son or daughter planning to take over the farm?

Are there social differences between program participants and non-participants?

- Do participants:
 - More often have buffer strips?
 - Get their information differently?
 - Socialize at farming events more frequently?
 - Place greater value on strong social relationships?
 - Have a greater appreciation for the value of the programs in question?
 - Feel their:
 - Regional municipality is promoting agricultural viability to a greater degree?
 - Regional municipality is promoting environmental sustainability to a greater degree?
 - Differ in farming practices on their land?

Some emerging qualitative research insights

- Expert advice: shift from public extension to private-sector consultants.
- A farmer culture that is hesitant to share knowledge about/with immediate neighbours?
- Conflict between agricultural & municipal (environmental) regulations.

Some emerging qualitative research insights

- Hesitation with programs: fear of ‘strings’, regulations, paperwork, scrutiny.
- In regions: emergent regulatory compliance ‘watch groups’ exist.
- Staying competitive leads some to indebtedness.

Some emerging qualitative research insights

- Farmers: Grant structures shape farmer project decisions, (may not be compatible with their desired goals).
- Holes/Inequalities exist in a.) farmer knowledge of programs, b.) action required to apply for funding, and c.) to win approval.
- Farm-level specifics should be know better with programmers by financing niche sizes if 'social tipping points' could be determined.

Is a farmers' social network their most important factor to sustainable practices?

'.....to a certain point, it depends **who** that network is.....a lot of dairy industry now is funded by universities and pharma companies...my neighbour is a vet who was pushed by the pharma and seed businesses...they are pushing for more milk, more milk, for me, net profit is more important than more milk...and the dairy industry doesn't look at the farm as a whole...but rather higher and higher production...guys are so in debt.....they have to fill their large bulk tanks...and their push to produce more milk as a priority effects your thinking...which is not necessarily sustainable or money wise...'

Dairy Farmer – Eastern Ontario

How can the results add to knowledge?

- Insight into more adaptive program development and collaboration.
- Insight into the social complexity of farming systems.
- Developing a matrix of
 - Hierarchies of social awareness:
 - Farm Level (Social) Decisions
 - Group/Community Level (Social) Decisions
 - Macro Level (Markets, Trade, National/International Policy) (Social) Decisions.

Farmers and Programs – Working Together, Communicating Meaning, Articulating Value

