



November 2021

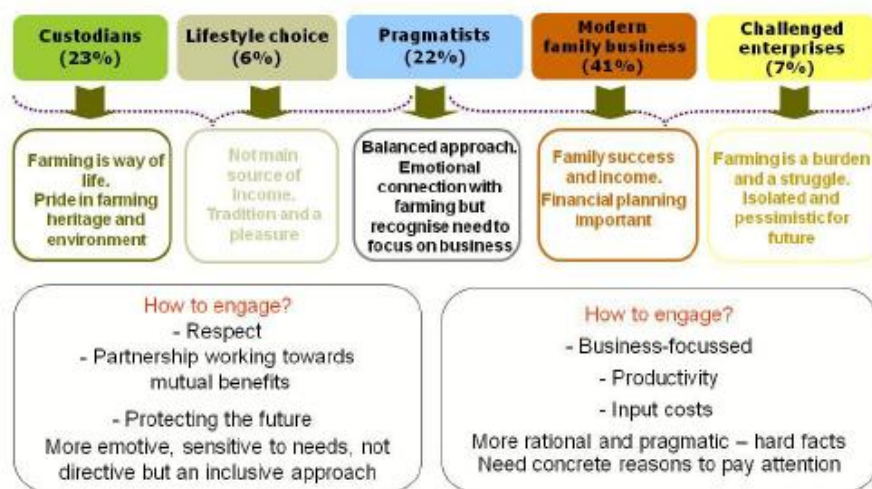
2021 Farm Segmentation

From January through March 2021, Canadian Cow-calf Cost of Production Network (CDN COP Network) participants were asked to complete a five-minute survey about their farming mindset. The aim of the survey was to learn more about the motivations behind on-farm decision-making, recognizing that profitability may not be the only driver influencing on-farm practices and defining success.

Approach

Participants were asked to choose one of five statements in response to the question, “why do you farm?” Statements were structured using key words from the Government of the United Kingdom’s (UK) Department for Environment, Food and Rural Affairs (DEFRA) framework for segmentation. Overall, the DEFRA model recognizes that both external drivers (e.g., financial and regulatory drivers) and internal drivers (e.g., attitudes, motivations, and norms) influence individual actions, and that focusing on regulation and compliance may not always be the most effective method for changing “hearts and minds” (Pike 2007, p.4). Figure 1 shows the internal driver component of DEFRA’s farmer segmentation model from their research with UK farmers. A full summary of the characteristics of each segment is described in Pike 2007. The value of the segmentation framework comes from identifying internal drivers, but also in describing how to communicate and engage with each different segment.

Figure 1. DEFRA Farmer Segmentation Model (Pike 2007, p.15)



For this study, CDN COP Network participants were segmented by their response to the first survey question, “why do you farm?” Participants chose one of the following five phrases that aimed to capture the spirit of each segment in the DEFRA framework:

1. *Farming is a way of life in my family where we care for the land and animals to carry on/pass on to the next generation* (**Custodian**)
2. *I enjoy day-to-day farm duties but mostly the work of building a business to pass on to the next generation in my family* (**Modern Family Business**)
3. *Farming is a way to breakeven while working outdoors, for the pleasure of growing and harvesting my products* (**Pragmatist**)
4. *Farming is a positive choice I made to create a more balanced lifestyle* (**Lifestyle Choice**)
5. *I'm not sure why I farm. I feel the burden that farming takes and often wonder how the farm might survive* (**Challenged Enterprise**)

Using the DEFRA segmentation framework as a guide, not a template, the remainder of the mindset survey asked participants about their priorities (goals), approach to risk, and approach to profitability. Results from analysis in these areas support the segmentation of participants. This report focuses on the two largest segments identified, Custodians and Modern Family Business, and describes both in detail, noting the best approaches to communication for both. Our significance tests suggest that the Custodian and Modern Family Business segments identified here are significantly different from one another on several parameters (see section V). This report examines what the two segments have in common with respect to motivations, approaches to risk and profitability, and what distinguishes them from one another.

Limitations

Qualitative methods and/or attitudinal scales would be required to validate the segmentation of participants and generalize their existence within the national cow-calf production community. The DEFRA model is derived from farmers in the UK, and a different study design could confirm/negate the existence of these segments, and potentially more or different ones, within Canada.

It should be noted that the herd sizes for farms in the 2021 CDN COP Network ranged between 35 and 350 head, with individual producers having a broader range. The sample of participants is skewed along herd size (i.e. involving more participants with larger herds could influence the results) and therefore, the profile in some provinces may not reflect what might be expected.

Profile

- Most participants (N=101) were Custodians (54%). Provinces where Custodians were the majority included, British Columbia (88%), Alberta (64%), Manitoba (50%), and the Maritimes (73%).
- The second largest group among all respondents was the Modern Family Business segment (33%). Provinces where Modern Family Businesses were the majority included, Ontario (64%), Quebec (50%), and Saskatchewan (47%). The second largest group in these provinces were Custodians.
- The remainder of respondents were segmented as Lifestyle Choice (7%), Pragmatists (3%), and Challenged Enterprises (3%).

Segmentation

■ Custodian ■ Lifestyle Choice ■ Pragmatist ■ Modern Family Business ■ Challenged Enterprise

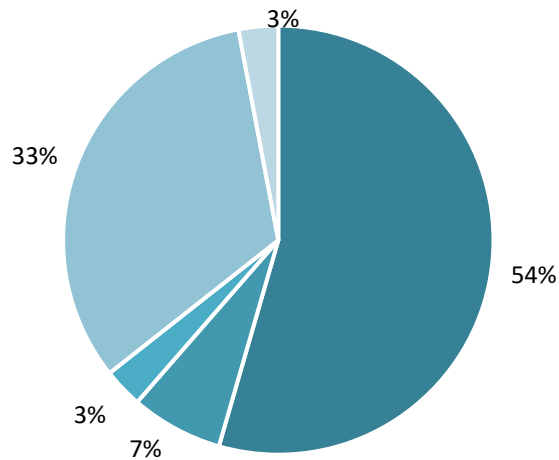


Figure 2. Profile of Segmentations among CDN COP Network Producers

Custodians

Custodians can be characterized by the following key words: **lifestyle, family, heritage, inter-generational, stewards/guardians/caretakers.**

According to the DEFRA framework (Pike 2007), the **key characteristics are:**

- Segment most content with lifestyle.
- Farming provides a quality of life, peace and tranquility for the family that it would be hard to achieve in any other walk of life
- Would be happy for children to inherit / continue the farm if that is what they choose to do
- Farm and family life are intrinsically linked and farming provides a way of life that enables you to spend a lot of time with your family
- Less of a business focus than other segments with profit reinvested in the farm
- Pride in farming heritage and feel proud to look after and also to enhance the farm.” (27)

Fifty-four per cent (55 out of 101) of respondents could be characterized as having a Custodian mindset.

Provinces where custodians were the majority include: British Columbia, Alberta, Manitoba, and the Maritimes. Custodians were grouped based on their response to being asked why they farmed, they all selected the response: *Farming is a way of life in my family where we care for the land and animals to carry on/pass on to the next generation.*

Modern Family Business

The Modern Family Business segment can be characterized by the following key words: **inter-generational knowledge transfer, growth, job enjoyment, farming as a business, work/life balance.**

According to the DEFRA framework (Pike 2007), the **key characteristics are:**

- Farming has been passed from one generation to the next

- Tends to be an implicit pressure or assumption that the farm will be passed onto the next generation
- almost feel duty bound and less successful farmers worry that it won't be taken on by the children
- Enjoy farming lifestyle – freedom to be your own boss and working from home, outdoors and with family
- Other positive issues identified include the opportunity to build strong ties with their children and pass on their knowledge of how to run the farm but long hours can be a strain on family life.
- Although prefer working outdoors rather than book-keeping there is a focus on business planning and financial management of the farm and typically they are on top of paper-work
- Believe increased pressure on farmers to operate as a business in order to survive with corners cut and profit margins compromised
- More future focused than other segments – looking at opportunities for growth / making a profit to survive – are optimistic about future prices” (28)

Thirty-three per cent (33 out of 101) **of respondents could be characterized as having the Modern Family Business mindset.** Provinces where the Modern Family Business segment were the majority include: Ontario, Quebec and Saskatchewan. Modern Family Business participants were grouped based on their response to being asked why they farmed; they all selected the response: *I enjoy day-to-day farm duties but mostly the work of building a business to pass on to the next generation in my family.*

Communication

As Pike 2007 points out, communicating with different segments should occur in different ways. Not all segments are motivated by external drivers and have their own internal motivations driving decision-making. When it comes to communicating with Custodians, key messages need to acknowledge the role that Custodians play as stewards of the countryside. Custodians are best encouraged versus enforced (27). The Modern Family Business segment should be communicated with in a professional manner, considered as equals or partners in business with respect to programs and will approach change as a business transaction, working out costs and benefits for themselves (28).

Similarities and Differences Between Custodians and Modern Family Businesses

Goals

Participants were asked about how they would prioritize their goals for next year. Participants were asked to rank a list of goals as either 'Not a Priority,' 'Low Priority,' 'Medium Priority,' or 'High Priority.' The proportion of responses were calculated (Custodian n=55 and Modern Family Business n=33) for comparability and shown in the tables below. The highest proportion for each parameter is highlighted in grey in tables 1 and 2 below.

Table 1. Goal Prioritization among Custodians

Goals	Not a Priority	Low Priority	Medium Priority	High Priority	Mean
Status Quo	5%	16%	47%	31%	3.04
Innovation	0%	13%	51%	36%	3.24
Environmental enhancements	0%	16%	45%	38%	3.22
Increasing working capital	0%	5%	25%	69%	3.63
Business expansion	2%	31%	47%	20%	2.85
Succession/transition planning	16%	33%	24%	27%	2.62
Improving work/life balance	2%	18%	55%	24%	2.95

Table 2. Goal Prioritization among Modern Family Business

Goals	Not a Priority	Low Priority	Medium Priority	High Priority	Mean
Status Quo	9%	27%	52%	12%	2.67
Innovation	0%	18%	52%	30%	3.12
Environmental enhancements	3%	33%	42%	21%	2.82
Increasing working capital	3%	9%	18%	70%	3.55
Business expansion	0%	21%	36%	42%	3.21
Succession/transition planning	9%	30%	33%	27%	2.79
Improving work/life balance	3%	33%	36%	27%	2.88

The significance of the differences in priorities between each group was tested using the Mann-Whitney U (non-parametric) test. Results show that Custodians seem to prioritize maintaining the status quo, as well as environmental enhancements more so than the Modern Family Business segment. Significance results are highlighted in grey in table 3. This makes sense under the DEFRA segmentation framework where Custodians are characterized more so as traditionalists and conservationists than the other segmentation groups.

Table 3. Significance Testing on Goal Prioritization

Goals	Custodian (mean)		Modern Family Business (mean)	p
Status Quo	3.04	>	2.67	0.037
Innovation	3.24	>	3.12	0.453
Environmental enhancements	3.22	>	2.82	0.024
Increasing working capital	3.63	>	3.55	0.878
Business expansion	2.85	<	3.21	0.04
Succession/transition planning	2.62	<	2.79	0.465
Improving work/life balance	2.95	>	2.88	0.675

Table 3 also shows how the Modern Family Business segment prioritizes business expansion more so than Custodians, which also makes sense given how the Modern Family Business segment is characterized as future focused. The two groups prioritize work/life balance, innovation, increasing working capital and succession and transition planning similarly, as both can be described as intergenerationally and family motivated when it comes to farming.

Interestingly, the median was three for all goal categories listed, for both the Custodian and Modern Family Business segments, except for the increasing working capital category, where the median response was four for both segments. This indicates a higher priority goal for increasing working capital exists among both groups, compared to the other goals listed.

Risk

Participants were asked about their approach to risk in each of the following categories listed in tables 4 and 5 below. The proportion of responses were calculated (Custodian n=55 and Modern Family Business n=33) for comparability. The highest proportion of responses for each parameter is highlighted in grey in tables 4 and 5.

Table 4. Approaches to Risk among Custodians

Risk	Very risk averse	Risk averse	Risk neutral	Willing to take risks	Very willing to take risks	Mean
Family well being	13%	44%	24%	15%	5%	2.56
Personal well-being	9%	29%	27%	27%	7%	2.95
New investments	2%	7%	24%	60%	4%	3.56
Market fluctuations	0%	11%	33%	49%	0%	3.38
Policy and regulation	2%	20%	51%	24%	0%	3.00

Table 5. Approaches to Risk among Modern Family Business

Risk	Very risk averse	Risk averse	Risk neutral	Willing to take risks	Very willing to take risks	Mean
Family well being	15%	27%	18%	4%	7%	2.36
Personal well-being	6%	18%	25%	9%	0%	2.85
New investments	0%	0%	15%	31%	7%	4.00
Market fluctuations	0%	11%	22%	25%	7%	3.30
Policy and regulation	0%	16%	29%	15%	7%	2.97

The significance of the difference between risk approaches were tested using a two sample (parametric) t-test assuming unequal variance, which is appropriate to use for small samples and ordinal data under certain assumptions that apply to the risk data set. Significance findings using the two sample t-test were confirmed using the Mann-Whitney U test. The two segments have a similar approach to risk in all categories except for new investments. When it comes to new investments, the Custodians are more risk averse than the Modern Family Business segment, shown in table 6 below.

Table 6. Significance Testing on Risk

Risk	Custodian (mean)		Modern Family Business (mean)	p
Family well being	2.56	>	2.36	0.359
Personal well-being	2.95	>	2.85	0.660
New investments	3.56	<	4.00	0.008
Market fluctuations	3.38	>	3.30	0.641
Policy and regulation	3.00	>	2.97	0.850

The median value was three in all categories except for new investments in which the median value for both segments was four. While the Modern Family Business segment may have a riskier approach to new investments than Custodians, both groups seemed more likely to take risks with respect to new investment compared with other risk categories listed. The median value in both segments approaching risk to family well-being was lower, at two.

Profitability

Participants were asked how they thought about profitability on their farm and were prompted to select all that apply from a list of possible ways to think about profitability, meaning respondents could select more than one approach. Those in the Modern Family Business segment were less likely to approach profitability through cost-savings than Custodians and thought more about profit in the long-term (figures 3 and 4 below).

Figure 3. How Custodians Think About Profitability on Their Farms

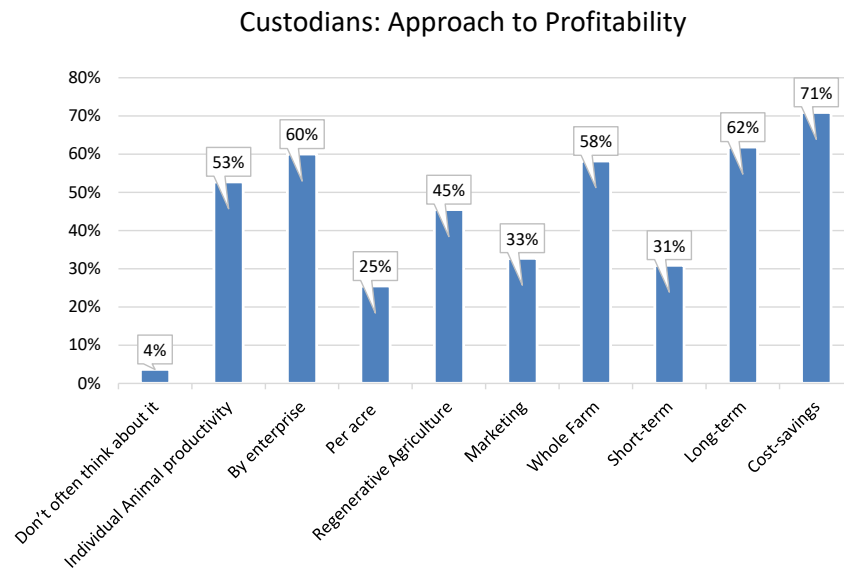
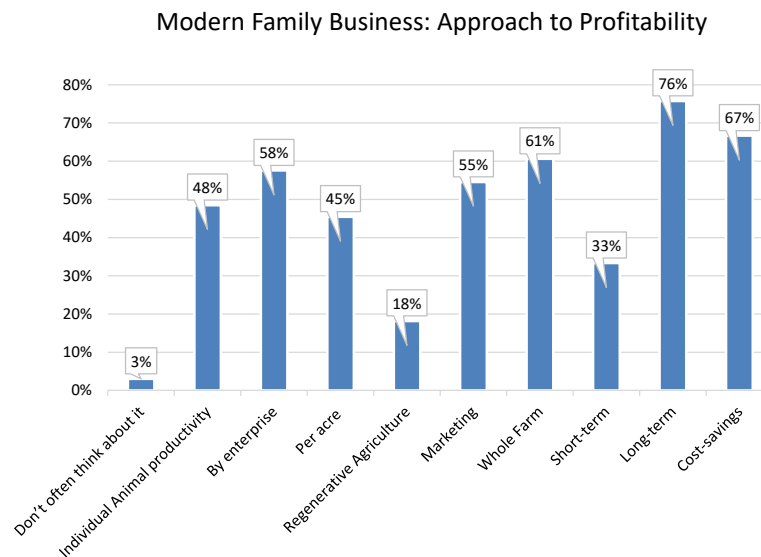


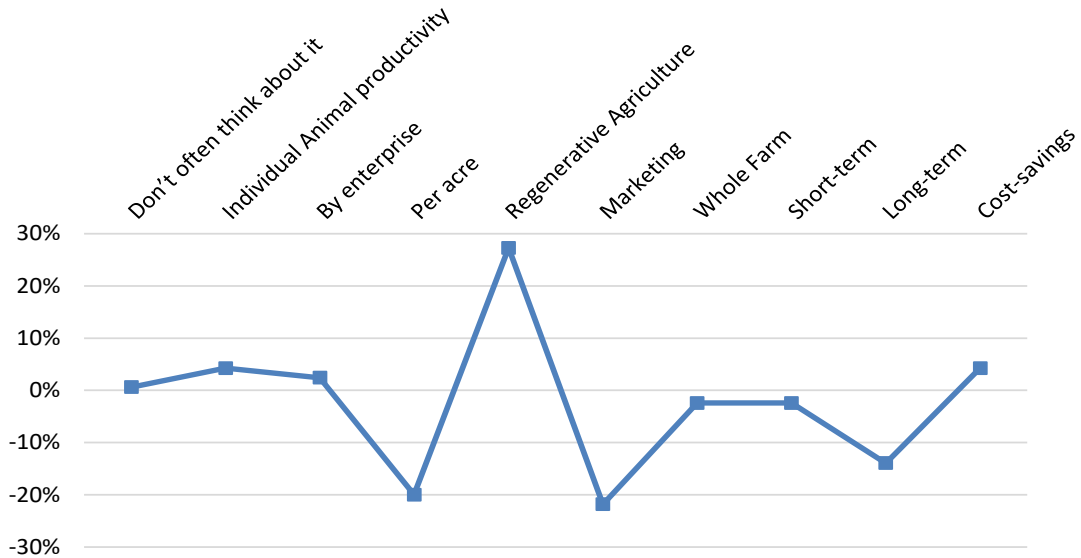
Figure 4. How Modern Family Business Thinks About Profitability on Their Farms



The most noticeable difference between how the two segments thought about profitability was concerning regenerative agriculture, with nearly half (45%) of Custodians indicating they thought about profitability

via regenerative agriculture (again confirming their stewardship mindset), and only 18% of the Modern Family Business segment considering regenerative agriculture as an approach to profitability. The difference, highlighted in figure 5 below, is 27 percentage points. The proportional differences between the two groups are charted in figure 5. Approaches to profitability on or near '0' show a similarity between the two group's mindset. Positive percent differences lean more toward the Custodian mindset. Negative percent differences lean toward the Modern Family Business mindset.

Figure 5. Difference Between how Custodians and Modern Family Business Think About Profitability



Reference

Pike, Tony. 2007. Understanding Behaviours in a Farming Context: Bringing theoretical and applied evidence together from across Defra and highlighting policy relevance and implications for future research. *Department for Environment, Food and Rural Affairs, Government of the United Kingdom.*