

Environmentally Sustainable Agriculture Practices

Alberta Public Opinion Study – Fall 2018

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Methodology

Population: The province of Alberta has a total population of 4,334,025 residents (Statistics Canada, 2018) approximately 78% of which are 18 years of age or older for an adult population of 3,380,540.

Sample: Data were collected by Lethbridge College students in the fall of 2018. Students interviewed 1,364 adult Alberta residents by telephone from September 29 to October 4, 2018 under the supervision of principal investigator Dr. Faron Ellis, Research Chair, Citizen Society Research Lab. Landline/hybrid telephone numbers were selected from a sample drawn from InfoGroup directories and supplemented with a selection of mobile numbers from CSRL lists. We sincerely thank all participants who took time out of their day to respond to our inquiries. Further results from this study and results from past studies can be accessed by visiting the CSRL web pages at: www.lethbridgecollege.ca

Representativeness: Analysis of the demographic data indicates that, within acceptable limits, the sample accurately represents the demographic distribution of the adult population within the province of Alberta. The sample has been statistically weighted where necessary to even better reflect the demographic distribution of the population (gender, area of province and age).

Confidence: The weighted sample yields a margin of error ± 2.65 percentage points, 19 times out of 20. The margin of error increases when analyzing sub-samples of the data (Calgary ± 5.1 percentage points, Edmonton and immediate area ± 5.1 percentage points, North ± 5.6 percentage points, South ± 5.6 percentage points 19 times out of 20).

IB Commons Call Centre: Students conducted interviews using the facilities of the Lethbridge College IB Commons Call Centre. We thank members of Lethbridge College's ITS and AV teams for their support in helping maintain the IB Commons Call Center.

Sponsorship: These data are part of a larger study of the opinions and attitudes of Alberta residents conducted by the Citizen Society Research Lab at Lethbridge College. These questions were derived from student and faculty interest in the topics.

Agriculture and the Environment – Summary

Primary responsibility for ensuring environmentally sustainable agriculture practices

Understanding that everyone has a role to play in ensuring Alberta agricultural practices are environmentally sustainable, when asked to choose who should hold primary responsibility almost half of all Alberta residents (46.3%) chose Alberta farmers. Just as many believe one or the other levels of government should be primarily responsible, with nearly twice as many siding with the provincial government (32.2%) than the federal government (17.0%). Very few Alberta residents (4.5%) believe non-governmental environment groups should be primarily responsible.

Humane treatment of livestock

The vast majority of Alberta residents (91.1%) agree that livestock are treated humanely on Alberta farms. Nearly half strongly agree (49.4%) while a further 41.7% somewhat agree.

Water Use

Most Alberta residents (87.0%) also agree that Alberta livestock producers are using water responsibly. Of those who expressed an opinion, two of five strongly agree (41.1%) while a similar proportion (45.9%) somewhat agree.

Livestock manure recycling

Almost nine of every ten Alberta residents (89.7%) agree that recycling livestock manure by spreading it on crop fields is an environmentally acceptable practice. A clear majority (57.4%) strongly agree while nearly one-third (32.3%) somewhat agree.

Growth hormones

A clear majority of Alberta residents (65.9%) disagree with the practice of using growth hormones in livestock production. Nearly half (44.2%) strongly disagree while slightly more than one in five (21.7%) somewhat disagree.

Agriculture and the Environment (%)

Primary responsibility for ensuring sustainable agriculture practices				
Federal Government				17.0
Provincial Government				32.2
NGO Environment Groups				4.5
Alberta Farmers				46.3
Livestock treated humanely				
		Strongly agree	49.4	
Agree	91.1	Somewhat agree	41.7	
Disagree	8.9	Somewhat disagree	5.2	
		Strongly disagree	3.7	
Water use				
		Strongly agree	41.1	
Agree	87.0	Somewhat agree	45.9	
Disagree	13.0	Somewhat disagree	8.4	
		Strongly disagree	4.6	
Manure spreading				
		Strongly agree	57.4	
Agree	89.7	Somewhat agree	32.3	
Disagree	10.3	Somewhat disagree	6.3	
		Strongly disagree	4.0	
Growth hormones				
		Strongly agree	13.0	
Agree	34.1	Somewhat agree	21.1	
Disagree	65.9	Somewhat disagree	21.7	
		Strongly disagree	44.2	

Note: Due to rounding, proportions may not total exactly 100%

Don't know and refused responses removed from tables

- Responsibility 7.3%
- Humane treatment of livestock 6.7%
- Water use 16.3%
- Manure 6.7%
- Growth hormones 5.2%

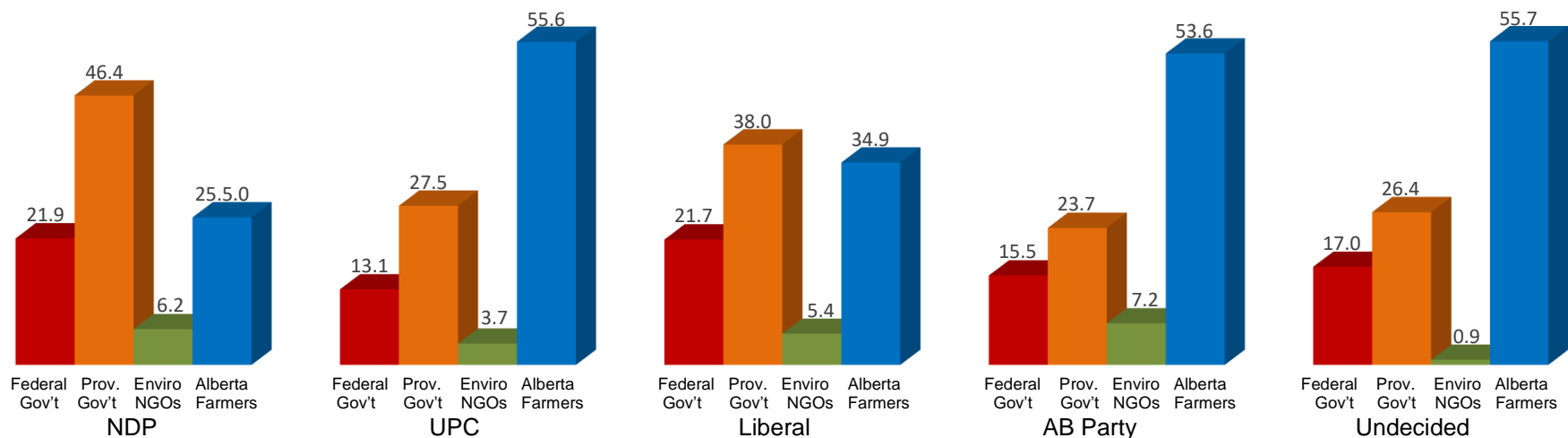
Primary responsibility for ensuring environmentally sustainable agriculture practices

Opinions about who should hold primary responsibility for ensuring an environmentally sustainable agriculture industry in Alberta are not significantly impacted by the income or the area of Alberta within which residents live. Opinion is significantly impacted by gender, education levels, age and, most importantly, political partisanship.

Although still most likely to side with Alberta farmers, men are slightly less likely to do so than are women, while women are slightly less likely to side with governments. Similarly, residents in all education categories are most likely to select Alberta farmers as the group that should be primarily responsible, but university grads (40.5%) and those with some post-secondary education (43.5%) are slightly less likely to believe farmers should hold primary responsibility than are those with high-school education or less (51.8%) and college-tech-trade graduates (50.8%). Majorities of university graduates and those with some post-secondary education prefer one or the other levels of government, with twice as many choosing the provincial government over the federal government.

Alberta residents of all ages are most likely to side with farmers. Support for farmers increases with age, peaking at 55.4% among seniors. Support for governments is strongest amongst the youth (36.9% provincial government and 19.6% federal government.)

Most significantly, sharp political differences in opinion are evident. Provincial NDP voters are least supportive of Alberta farmers. In fact, NDP voters are nearly twice as likely to prefer the provincial government (46.4%) over farmers (25.2%), only slightly more than those who prefer the federal government (21.9%). Provincial Liberal voters are similar with the provincial government (38.0%) edging out Alberta farmers (34.9%) among Liberal partisans. Conversely, clear majorities of UCP voters (55.6%) and Alberta Party supporters (53.6%) side with Alberta farmers. UCP voters are least likely to side with the federal government (13.1%) and NGOs (3.7%).



Primary responsibility for ensuring environmentally sustainable agriculture practices (October 2018) (%)

Gender*	Male	Female	Alberta
Federal Government	18.5	15.7	17.0
Provincial Government	33.8	30.0	32.2
NGO Enviro Groups	3.8	5.5	4.5
Alberta Farmers	44.0	48.8	46.3

Area	Calgary	Edmonton	North	South
Federal Government	15.8	21.7	15.4	14.9
Provincial Government	33.5	34.6	31.1	28.4
NGO Enviro Groups	3.7	3.2	6.4	5.5
Alberta Farmers	47.0	40.5	47.1	51.2

Household Income	Under \$40,000	\$40,001 to \$100,000	Over \$100,000
Federal Government	16.1	16.9	16.3
Provincial Government	34.7	34.6	30.7
NGO Enviro Groups	5.4	5.3	1.9
Alberta Farmers	43.9	43.2	51.0

Education*	High School or less	Some Post-secondary	College-Tech-Trade	University Grad
Federal Government	13.8	15.5	18.8	18.9
Provincial Government	30.4	33.5	26.9	36.8
NGO Enviro Groups	4.0	7.5	3.6	3.9
Alberta Farmers	51.8	43.5	50.8	40.5

Age*	18-29	30-44	45-64	65 and older
Federal Government	19.6	20.6	16.5	12.4
Provincial Government	36.9	34.0	31.6	27.0
NGO Enviro Groups	6.1	3.1	3.8	5.2
Alberta Farmers	37.5	42.3	48.1	55.4

Provincial Vote*	NDP	UCP	Liberal	AB Party	Undecided
Federal Government	21.9	13.1	21.7	15.5	17.0
Provincial Government	46.4	27.5	38.0	23.7	26.4
NGO Enviro Groups	6.2	3.7	5.4	7.2	0.9
Alberta Farmers	25.5	55.6	34.9	53.6	55.7

Notes: Due to rounding, proportions may not total exactly 100%; * sig < 0.05

Livestock Treated Humanely on Alberta Farms (October 2018) (%)

No significant differences of opinion are measured between most demographic groups when considering whether livestock are treated humanely on Alberta farms. Substantial majorities of all demographic groups believe livestock on Alberta farms are being treated humanely.

Gender	Male	Female	Alberta
Agree	92.3	90.4	91.1
Disagree	7.7	9.6	8.9

Area	Calgary	Edmonton	North	South
Agree	92.5	88.1	94.4	89.3
Disagree	7.5	11.9	5.6	10.7

Household Income*	Under \$40,000	\$40,001 to \$100,000	Over \$100,000
Agree	88.4	94.0	95.4
Disagree	11.6	6.0	4.6

Education	High School or less	Some Post-secondary	College-Tech-Trade	University Grad
Agree	89.0	88.7	92.7	92.5
Disagree	11.0	11.3	7.3	7.5

Age	18-29	30-44	45-64	65 and older
Agree	83.9	91.8	93.2	95.5
Disagree	16.1	8.2	6.8	4.5

Provincial Vote	NDP	UCP	Liberal	AB Party	Undecided
Agree	86.8	95.7	83.5	88.8	92.1
Disagree	13.2	4.3	16.5	11.2	7.9

Notes: Due to rounding, proportions may not total exactly 100%; * sig < 0.05

Responsible Water Use by Alberta Livestock Producers (October 2018) (%)

No significant differences of opinion are measured between demographic groups when considering the water use practices of Alberta livestock producers. Substantial majorities of all demographic groups believe Alberta livestock producers are using water responsibly.

Gender	Male	Female	Alberta		
Agree	87.5	86.3	87.0		
Disagree	12.5	13.7	13.0		
Area	Calgary	Edmonton	North	South	
Agree	86.1	86.1	88.8	87.1	
Disagree	13.9	13.9	11.2	12.9	
Household Income	Under \$40,000	\$40,001 to \$100,000	Over \$100,000		
Agree	85.4	88.6	89.3		
Disagree	14.6	11.4	10.7		
Education	High School or less	Some Post-secondary	College-Tech-Trade	University Grad	
Agree	87.4	83.4	90.7	86.0	
Disagree	12.6	16.6	9.3	14.0	
Age	18-29	30-44	45-64	65 and older	
Agree	80.0	86.8	89.6	91.9	
Disagree	20.0	13.2	10.4	8.1	
Provincial Vote	NDP	UCP	Liberal	AB Party	Undecided
Agree	82.2	93.7	75.6	81.7	84.9
Disagree	17.8	6.3	24.4	18.3	15.1

Notes: Due to rounding, proportions may not total exactly 100%; * sig < 0.05

Recycling Livestock Manure by Spreading on Crop Fields (October 2018) (%)

Few significant differences of opinion are measured between demographic groups when considering the practice of recycling livestock manure by spreading it on crop fields. Even where minor differences of opinion exist, substantial majorities of all demographic groups believe livestock manure spreading is an environmentally acceptable practice. Slight difference of opinion are measured between age groups with younger residents slightly less supportive than older residents. Women and lower-income residents are also marginally less supportive than are men and upper-income residents.

Gender*	Male	Female	Alberta		
Agree	92.0	87.5	89.7		
Disagree	8.0	12.5	10.3		
Area	Calgary	Edmonton	North	South	
Agree	88.7	88.3	92.9	88.9	
Disagree	11.3	11.7	7.1	11.1	
Household Income*	Under \$40,000	\$40,001 to \$100,000	Over \$100,000		
Agree	88.5	89.5	94.0		
Disagree	11.5	10.5	6.0		
Education	High School or less	Some Post-secondary	College-Tech-Trade	University Grad	
Agree	87.2	91.9	89.1	90.7	
Disagree	12.8	8.1	10.9	9.3	
Age*	18-29	30-44	45-64	65 and older	
Agree	85.2	90.5	92.4	91.1	
Disagree	14.8	9.5	7.6	8.9	
Provincial Vote	NDP	UCP	Liberal	AB Party	Undecided
Agree	86.6	91.6	88.5	87.5	93.8
Disagree	13.4	8.4	11.5	12.5	6.2

Notes: Due to rounding, proportions may not total exactly 100%; * sig < 0.05

Growth Hormone Use in Livestock Production is Acceptable (October 2018) (%)

While supportive of Alberta farmers in general, as well as in their practices with respect to the previous three aspects of environmentally sustainable agriculture, opinion is much more divided when Alberta residents consider the use of growth hormones in livestock production. A clear majority of Albertans are opposed to the use of growth hormones in livestock production (65.9%).

- Men are much more evenly split on the issue (57.1% disagree while 42.9% agree) than are women, where nearly three-quarters are opposed (74.9%) and only about one-quarter supportive (25.1%).
- Edmontonians (70.1%) and other northerners (66.4%) are slightly more opposed than are Calgarians (64.5%) and other southern Albertans (62.4%).
- Opposition to the use of growth hormones increases with age. In fact, a clear majority of young Alberta residents (55.7%) are supportive of the use of growth hormones, while seniors are most opposed (79.9%).
- Provincial NDP voters are most opposed to the use of growth hormones (70.1%), followed by their Alberta Party counterparts (63.8%), UCP supporters (62.5%) and Liberal partisans (57.6%)..

Gender*	Male	Female	Alberta		
Agree	42.9	25.1	34.1		
Disagree	57.1	74.9	65.9		
Area	Calgary	Edmonton	North	South	
Agree	35.5	29.9	33.6	37.6	
Disagree	64.5	70.1	66.4	62.4	
Household Income	Under \$40,000	\$40,001 to \$100,000	Over \$100,000		
Agree	40.4	35.1	35.2		
Disagree	59.6	64.9	64.8		
Education	High School or less	Some Post-secondary	College-Tech-Trade	University Grad	
Agree	30.5	40.7	34.5	32.4	
Disagree	69.5	59.3	65.5	67.6	
Age*	18-29	30-44	45-64	65 and older	
Agree	55.7	37.0	24.8	20.1	
Disagree	44.3	63.0	75.2	79.9	
Provincial Vote	NDP	UCP	Liberal	AB Party	Undecided
Agree	29.9	37.5	42.4	36.2	22.8
Disagree	70.1	62.5	57.6	63.8	77.2

Notes: Due to rounding, proportions may not total exactly 100%; * sig < 0.05

Demographics (%)

Area of Province		Gender		Income		Education		Age	
Calgary	27.6	Male	49.8	Under \$60,000	39.0	H-School/less	20.8	18-29	24.7
Edmonton	27.2	Female	49.5	\$60-\$120,000	35.7	Some P-Sec.	19.2	30-44	23.3
North	22.4	Other	0.7	Over \$120,000	25.3	Col-Tech-Grad	25.2	45-64	26.5
South	22.8					University Grad	34.8	65 or older	25.5

Mean age = 48.7 years old

Note: Due to rounding, proportions may not total exactly 100%

Questions

Thinking for a moment about agriculture in Alberta, understanding that everyone has a role to play in ensuring Alberta's agriculture industry is operated in an environmentally sustainable way, which of the following groups do you think should be primarily responsible for ensuring environmentally sustainable agricultural practices?

- The federal government
- The provincial government
- Non-governmental environmental groups
- Alberta farmers

Please tell me whether you strongly agree, somewhat agree, somewhat disagree, or strongly disagree with each of the following statements about agriculture in Alberta.

- Livestock on Alberta farms are treated humanely.
- The use of growth hormones in livestock production is an acceptable practice.
- Alberta livestock producers are using water resources responsibly.
- Recycling livestock manure by spreading it on crop fields is an acceptable practice.
 - Strongly agree
 - Somewhat agree
 - Somewhat disagree
 - Strongly disagree
 - Don't know (unprompted)
 - Refused (unprompted)