



Vision Poll for Publication: Farm Technology Report 2009

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Farm Credit Canada
Advancing the business of agriculture

Canada



**Vision Poll for Publication:
*Farm Technology Report 2009***

Eight in ten respondents (83%) have implemented at least one cost-saving technology/device on their farm or ranch and two thirds of respondents (63%) have realized both cost and time savings because of the implementation of the new technologies/devices. Two thirds of respondents (63%) report that they have saved up to \$10,000 annually, while six in ten respondents (60%) report that they have saved up to 7 days of time annually. Some examples of technologies/devices that have been implemented include GPS, minimum tillage equipment and manure spreaders.

When asked to explain the motivation for considering cost-saving technologies/devices, producers most frequently cited the potential for increased productivity (70%), the potential for future cost-savings (67%), immediate reduction of operational costs (64%) and the potential for time savings (64%).

In the next five years, half of the respondents (52%) are planning to implement at least two additional cost-saving technologies/devices on their farm or ranch. Some examples of technologies/devices planned for implementation include upgraded computer systems, robotic milkers and computerized mapping of fields. Crop (34%) and beef (41%) producers are significantly more likely to state that they are **not** planning to implement any cost-saving technologies/devices in the next five years compared to dairy producers (17%).

Methodology

In order to reach a geographically diverse sample, Research employed a quantitative on-line methodology. This methodology enabled FCC to meet strict timeframes, to view real time results and to provide as much convenience as possible to respondents.

Note on analysis of subgroups: When reference to subgroups such as sector is made throughout the text, only those differences that are *both* statistically significant *and* relevant will be highlighted.

Confidentiality

Preserving the confidentiality of responses, all names are removed from data file therefore no individual responses are revealed.

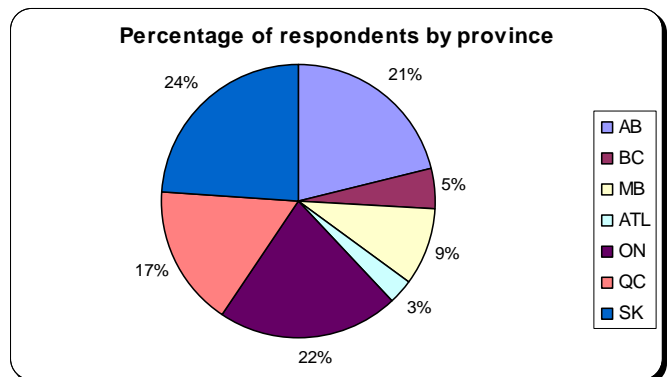
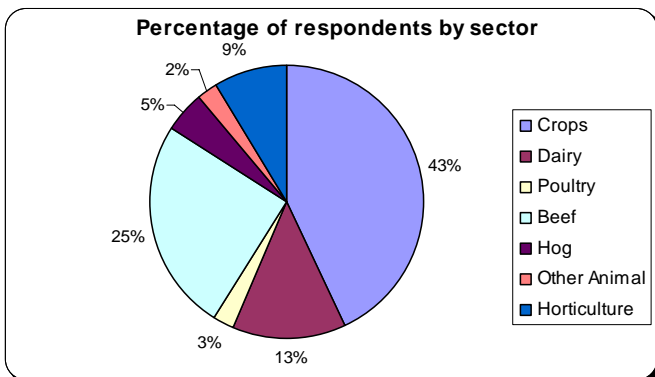
Response Rate

The study's sample was taken from FCC's Vision Panel, a national research panel with more than 9,000 members of the agriculture community across Canada and was limited to primary producers.

In order to gather responses from all sectors, the survey was sent to a variety of respondents indicative of the make up of Canada's agricultural. The tables below identify the number of respondents from each sector.

The survey was sent to a total of 2349 producers and agribusinesses, of these, 988 completed the survey, translating into a 42% response rate. The margin of error is +/- 2.3%, 19 times out of 20 on a sample of this size. Demographic subgroups will have a higher margin of error.

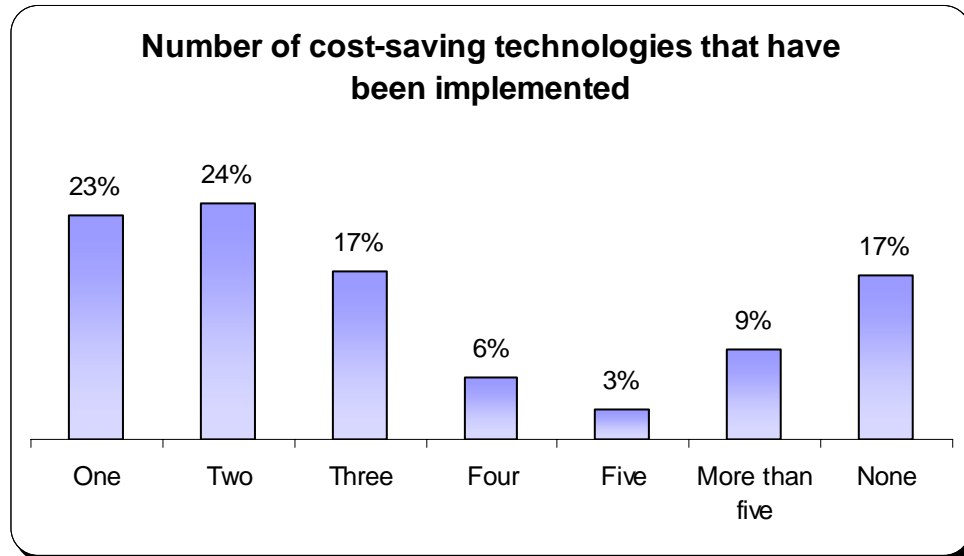
NOTE: All data was subsequently weighted to reflect the sector distribution of farms in Canada as reported in the 2006 Census of Agriculture.



Findings:

Cost-saving technologies implemented

In the past five years, half of the respondents (47%) implemented at least two cost-saving technologies/devices on their farm or ranch.



Over the past five years, how many cost-saving technologies/devices have you implemented on your farm or ranch?
(n=988)

Sector:

Beef (25%), other animal¹ (35%) and horticulture (28%) producers are significantly more likely to indicate that they have not implemented **any** cost-saving technologies/devices on their farm or ranch in the past five years compared to crop (13%) and dairy (8%) producers. There are no other significant differences to report.

Province:

Producers British Columbia (26%) are significantly more likely to state that they have implemented more than five cost-saving technologies/devices on their farm or ranch in the past five years compared to producers from Alberta (8%) and Saskatchewan (8%). Producers from the Atlantic provinces² (39%) are significantly more likely to state that they have not implemented **any** cost-saving technologies/devices on their farm or ranch in the past five years compared to producers from all other provinces. There are no other significant differences to report.

¹ Other animals include but are not limited to sheep, bison, goats, etc...

² The Atlantic provinces include New Brunswick, Newfoundland, Nova Scotia and Prince Edward Island

Comments regarding past technologies/devices implemented

Respondents were asked to list the technologies/devices that they have implemented on their farm or ranch in the past five years. A sample of the comments can be found below.

“Automatic milk take-offs, pre-cooler for the milk before it enters the bulk tank, mulch-finisher, doing our own A.I. breeding.”

“Built a free stall barn, built a milking parlor, and went to liquid manure system. Use computer aided breeding, bought large high dump wagon and dump trailer for hay/corn silage to save trips, bought straw chopper for large square/round bales.”

“GPS, Milk Meters, Automatic Take-Off, Vertical Manure Spreader, Hammermill.”

“Improved water through a water treatment system resulting in better livestock performance.”

“Purchased a new more energy-efficient hot water pressure washer, uses less water and time. We developed a new method of removing excess water from floors after washing, using a small tractor, it saves time and energy.”

“Energy Efficient Lighting, Revisions to Waste water filtering, Upgraded Insulation.”

“GPS Guidance system, Heater saving devices in Chicken Barn, 2 new tractors, Grain dryer, minimum tillage equipment, compact fluorescent light bulbs in chicken barn.”

“Use a quad or horse instead of a pickup, invested in solar panels for fencing and pumping water for cattle.”

“Solar powered dugout pump.”

“Intensive grazing using electric wire spreading manure over evenly, feeding cattle in field not in corrals thus no need to haul out manure.”

“GPS mapping of fields and record keeping of production and purchased a no till seed drill.”

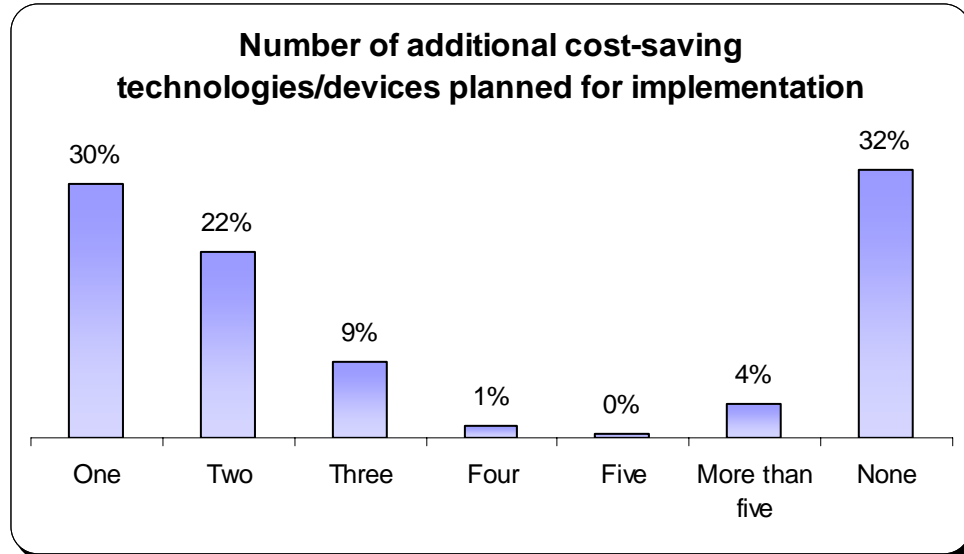
“Roundup ready corn, roundup ready soybeans, rent equipment per acre, calve cows later, soil testing.”

“Cell phones, fax machines, computers, telephone banking services, internet, all save trips to town.”

“GPS, auto steer, solar power, wind power, residue straw bunching for cattle feed, large wheel rake for haying, paddock grazing for cattle, winter water system for cattle.”

Cost-saving technologies planned for implementation

In the next five years, one third of respondents (30%) are planning to implement one cost-saving technology/device on their farm or ranch.



In the next five years, how many additional cost-saving technologies/devices do you plan to implement on your farm or ranch? (n=988)

Sector:

Dairy producers (37%) are significantly more likely to state that they are planning to implement two additional cost-savings technologies/devices on their farm or ranch in the next five years compared to crop (19%), beef (22%) and horticulture (20%) producers. Hog producers (40%) are significantly more likely to state that they are planning to implement three additional cost-saving technologies/devices in the next five years compared to producers from most other sectors. There are no other significant differences to report.

Province:

Producers from Alberta (23%) and Saskatchewan (26%) are significantly more likely to state that they are planning to implement two cost-saving technologies/devices on their farm or ranch in the next five years compared to producers from Manitoba (13%). There are no other significant differences to report.

Comments regarding technologies/devices planned to be implemented

Respondents were asked to list the technologies/devices that they are planning to implement on their farm or ranch in the next five years. A sample of the comments can be found below.

“Complete computer mapping of all fields, computer control of grain dryer and handling system.”

“Air drill with computerized cart for fertilizer and seed amounts, yield monitor for the combine and any other technologies that we can afford to improve our farming practices.”

“More aeration bins, variable rate air seeder, spray boom auto shutoff controlled by GPS, mid row banders or upgrade of seeding tool in move to one pass direct seeding/fertilizing operation.”

“Electricity load sharing, upgrade insulation in shop.”

“Reverse osmosis machine for maple syrup, newer tractor, no till drill, field drainage tile, and high speed internet.”

“Solar hot water.”

“We are always looking for ways to save money. We will take advantage of the environmental farm plan. Not quite sure yet, but we try to do what ever we can.”

“Cameras on air drill, more GPS' and auto steers (swather, combines), auto-boom for sprayer.”

“Purchase of high clearance sprayer, GPS, auto steer, for accuracy, enabling later spraying rather than custom as at present.”

“Larger areas of solar powered electric fence, implementation of wind power for small on-farm electrical requirements, updated computer system, seeding unit updated to eliminate banding N on canola acres.”

“Upgrade computer with high speed internet, solar watering for cattle.”

“New barn. Robot milkers.”

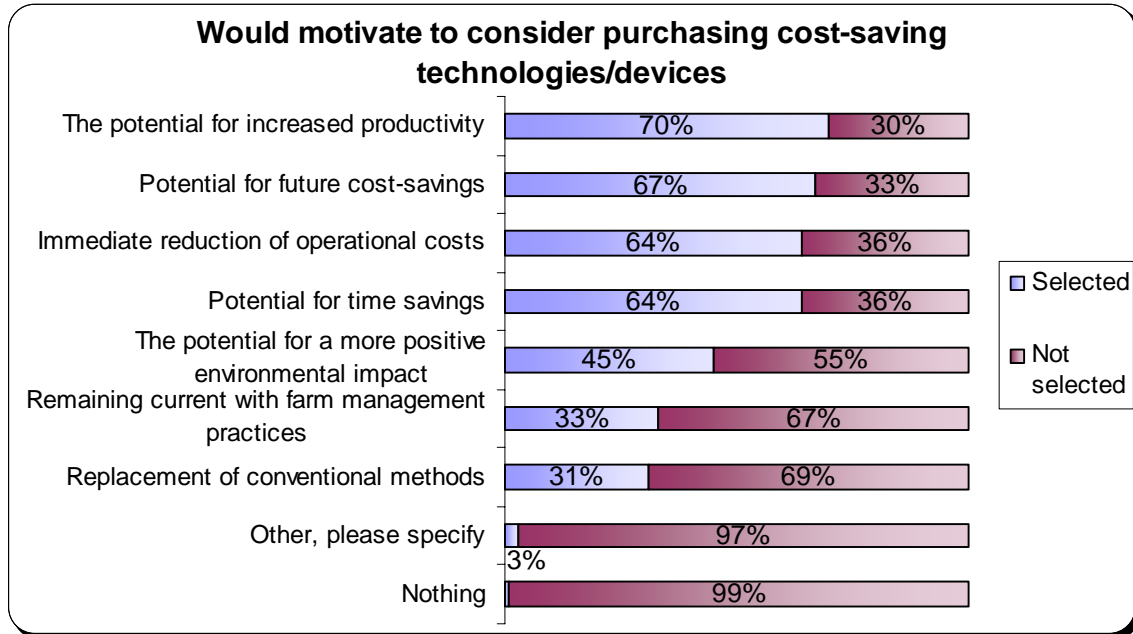
“Solid Liquid separator for manure. Switch from propane hot water to electric. Auto steer/RTK/GPS planting and harvesting equipment.”

“Automated pipeline washer, computerized traceability program.”

“Tiling, irrigation, robotic grazing from Lely, liquid manure pit, flush system for milking parlous, crowd gate for holding pen.”

What motivates the purchase of cost-saving technologies

Two thirds of producers (70%) cite the potential for increased productivity as a reason that would motivate them to consider purchasing cost-saving technologies/devices.



What reasons, if any, would motivate you to consider purchasing cost-saving technologies/devices? Select all that apply. (n=988)

The potential for increased productivity

Sector:

There are no significant differences to report between sectors.

Province:

Producers from Manitoba (76%) and Saskatchewan (76%) are significantly more likely to cite the potential for increased productivity as a reason for considering the purchase of cost-saving technologies/devices compared to producers from Quebec (57%). There are no other significant differences to report.

Potential for future cost-savings

Sector:

There are no significant differences to report between sectors.

Province:

There are no significant differences to report between provinces.

Immediate reduction of operational costs

Sector:

There are no significant differences to report between sectors.

Province:

There are no significant differences to report between provinces.

Potential for time savings

Sector:

Dairy producers (77%) are significantly more likely to cite the potential for time savings as a reason for considering the purchase of cost-saving technologies/devices compared to crop producers (61%). There are no other significant differences to report.

Province:

There are no significant differences to report between provinces.

The potential for a more positive environmental impact

Sector:

There are no significant differences to report between sectors.

Province:

There are no significant differences to report between provinces.

Remaining current with farm management practices

Sector:

Dairy producers (49%) are significantly more likely to cite remaining current with farm management practices as a reason for considering the purchase of cost-saving technologies/devices compared to crop (33%), beef (27%), other animal³ (22%) and horticulture (30%) producers. There are no other significant differences to report.

Province:

Producers from Quebec (41%) are significantly more likely to cite remaining current with farm management practices as a reason for considering the purchase of cost-saving technologies/devices compared to producers from British Columbia (19%). There are no other significant differences to report.

³ Other animals include but are not limited to sheep, bison, goats, etc...

Replacement of conventional methods

Sector:

Dairy producers (45%) are significantly more likely to cite the replacement of conventional methods as a reason for considering the purchase of cost-saving technologies/devices compared to crop producers (27%). There are no other significant differences to report.

Province:

There are no significant differences to report between provinces.

Other

Producers who indicated “other” as a reason to motivate them to implement technologies/devices on their farm or ranch were asked to specify. A small number of comments were made and are varied in nature therefore no themes are present. Below is a sample of the comments.

“Reduces management.”

“Easier to learn farming, setting benchmarks.”

“Health benefits-physical stress.”

“Sustainability.”

Sector:

There are no significant differences to report between sectors.

Province:

There are no significant differences to report between provinces.

Nothing

Sector:

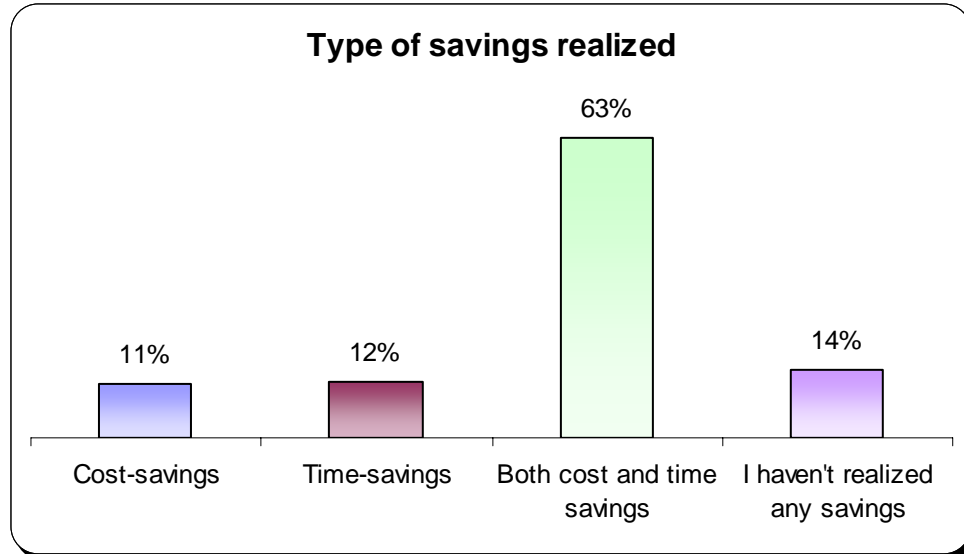
There are no significant differences to report between sectors.

Province:

There are no significant differences to report between provinces.

Management practices

With the implementation of technologies/devices over the past five years, two thirds of respondents (63%) have realized both cost and time savings.



Thinking about the technologies/devices you have implemented in the past five years, what type of savings, if any, have you realized? (n=988)

Sector:

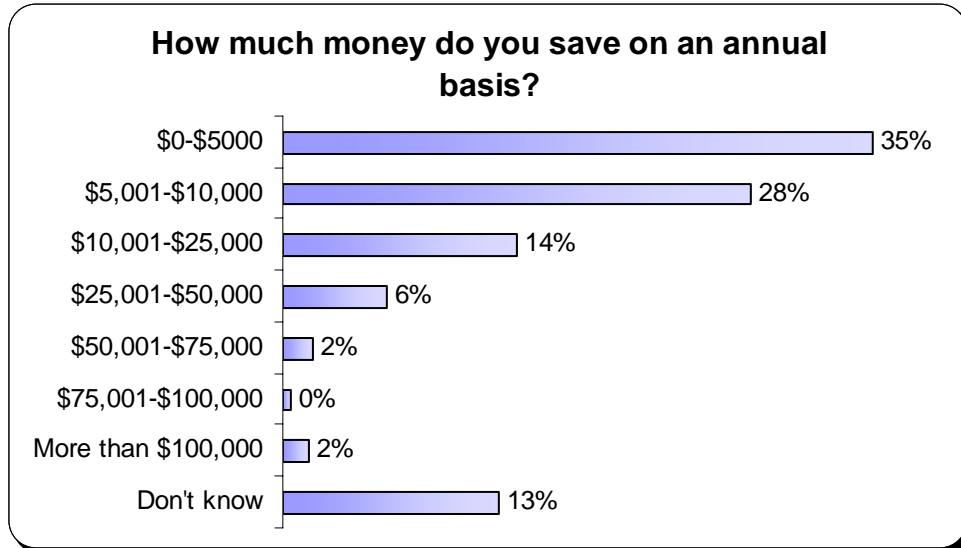
Crop producers (76%) are significantly more likely to report that they have realized both cost and time savings with the implementation of technologies/devices compared to beef (45%), other animal (52%) and horticulture (58%) producers. Additionally, beef producers (24%) are significantly more likely to report that they have **not** realized any savings with the implementation of technologies/devices compared to crop (10%) and dairy (9%) producers. There are no other significant differences to report.

Province:

Producers from Saskatchewan (73%) are significantly more likely to report that they have realized both cost and time savings with the implementation of technologies/devices compared to producers from most other provinces. Producers from the Atlantic provinces (39%) are significantly more likely to report that they have **not** realized any savings with the implementation of technologies/devices compared to producers from all other provinces. There are no other significant differences to report.

Money saved annually

As a result of the technologies/devices implemented over the past five years, one third of respondents (35%) report that they save between \$0 and \$5,000 annually.



As a result of the technologies/devices you have implemented over the past five years, approximately how much money do you save on an annual basis? (n=732)⁴

Sector:

Beef producers (49%) are significantly more likely to report that they have saved between \$0-\$5,000 with the implementation of technologies/devices compared to crop producers (28%). There are no significant differences to report between sectors.

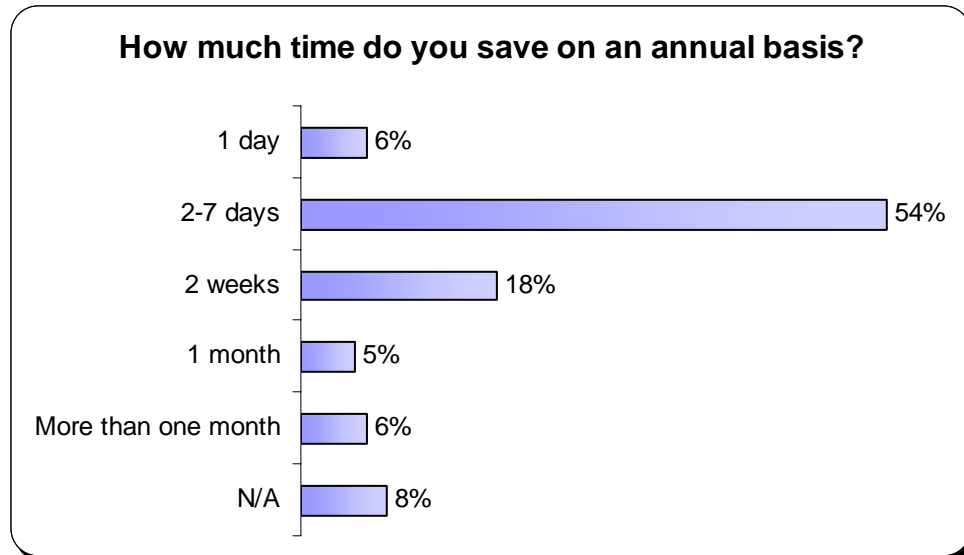
Province:

There are no significant differences to report between provinces.

⁴ Only those respondents who previously indicated that they have realized cost-savings or both cost and time savings were asked this question.

Time saved annually

As a result of the technologies/devices implemented over the past five years, half of all respondents (54%) save between 2 and 7 days of time annually.



As a result of the technologies/devices you have implemented over the past five years, approximately how much time do you save on an annual basis? (n=734)⁵

Sector:

Crop producers (68%) are significantly more likely to report that they save between 2 and 7 days of time annually with the implementation of technologies/devices compared to producers from most other sectors. Beef producers (30%) are significantly more likely to report that they save 2 weeks of time annually with the implementation of technologies/devices compared to crop producers (14%). There are no significant differences to report between sectors.

Province:

Producers from Alberta (59%), Manitoba (61%) and Quebec (69%) are significantly more likely to report that they save between 2 and 7 days of time with the implementation of technologies/devices compared to producers from the Atlantic provinces (32%). There are no significant differences to report between provinces.

⁵ Only those respondents who previously indicated that they have realized time-savings or both cost and time savings were asked this question.

Respondents were provided the opportunity to share any other comments they had. Comments varied and included themes such as: new technologies are good and help save time and minimize stress on the farm, sometimes it is difficult to quantify the savings realized with technologies/devices; and the implementation of technologies is too expensive. A sample of comments can be found below.

"It is important to stay competitive in the farming industry. We must keep trying to save time and money and work responsibly in all facets of our business. We must also work to keep environmental issues in the foreground, while maintaining a progressive business."

"Some times it is hard to measure the true cost savings while still paying for the unit purchased, those will be much clearer once debt cleared . Time however is easier to measure and with poor weather conditions especially for planting, the streamlined use of the units has made significant benefits."

"Unfortunately, to implement a cost saving today, initial outlay of money is an issue. Secondly, for instance, we purchased a hand held GPS in 2008 and have not had time to learn how to use it for such things as soil sampling, fence building."

"At first, some new technologies actually take MORE time and do not lower costs but as more regulations and records are required they became time savers. Computers and related software for example have actually increased my workload and time commitment but it allows me to keep more information and use it for analysis."

"A lot of the savings we have realized are stress related, referring to the GPS auto steer & accuboom, as it takes a lot of the human error out of operating equipment."

"New technology is expensive. Given that money is tight due to low farm gate prices, purchasing new equipment is not part of the budget...."