Farmstrong Sixth Year Monitoring Report

Report prepared for

Farmstrong

November 2021

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Acknowledgements

We wish to thank the persons who so kindly participated in this research.

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1 SUMMARY

INTRODUCTION

- Farmstrong was publicly launched on 3 June 2015 and this monitoring report assesses changes in key measures over the first six years, to June 2021.
- The Farmstrong mission is to: Improve the wellbeing of people working in farming and growing.

RESEARCH METHOD

- National telephone surveys of farmers and growers have been undertaken annually since 2015. The usual sample size is 450.
- Also included is monitoring data collected by the Farmstrong team, such as use of the website and social media, reach via print media and numbers attending Farmstrong events.

KEY FINDINGS

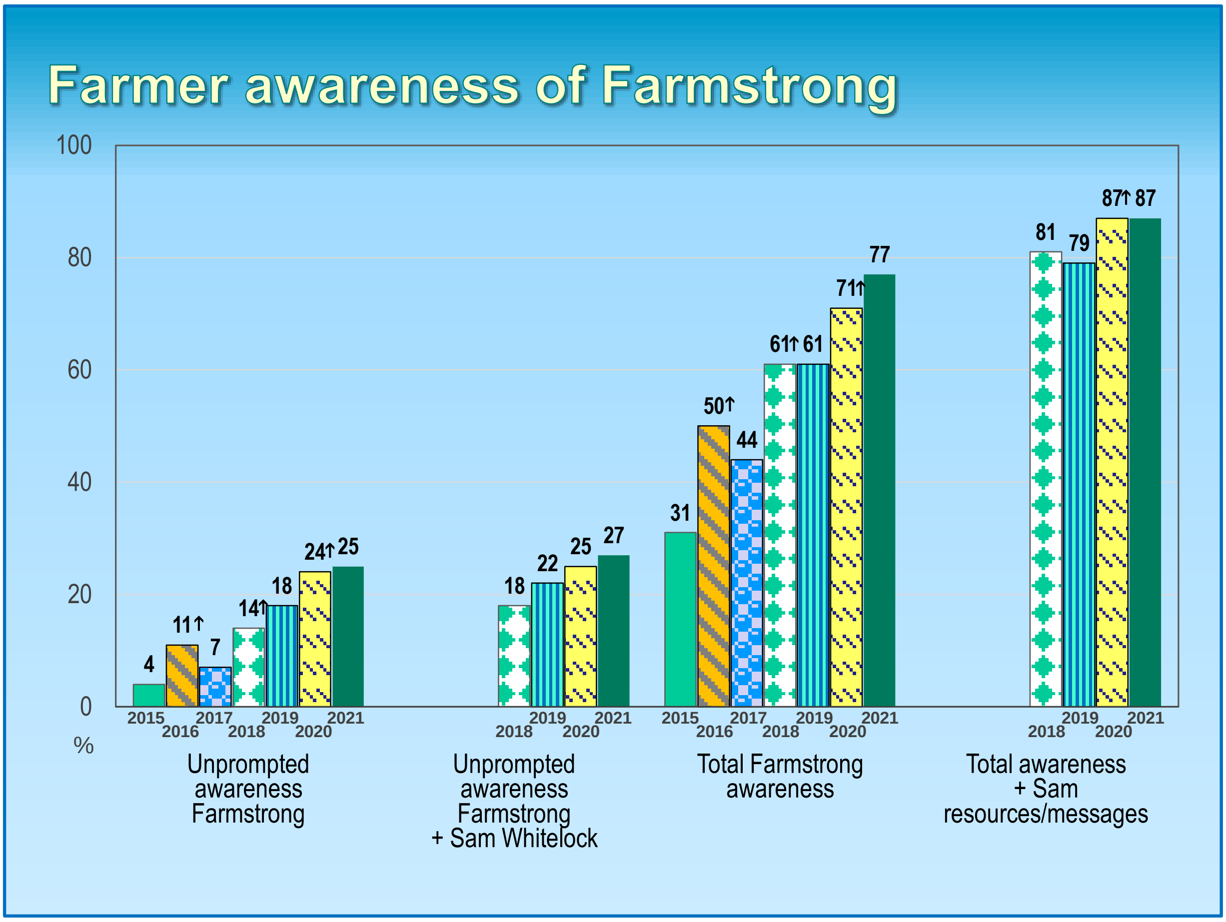
- **Total Farmstrong awareness increased by a non-significant 6% to 77%, while unprompted awareness (25%) remained at a similar level to last year.**
- **36% of farmers/growers reported having ever engaged with Farmstrong, continuing an upward trend. The data equates with approximately 23,800 farmers, growers and farm workers who have ever engaged and 21,600 in the last year.**
- **The high level of challenges farmers/growers had faced in the last year was reflected in a decline for their 'ability to cope with the ups and downs of farming', along with three other measures.**
- **Those who had at least three forms of engagement with Farmstrong often had better dashboard scores than those who had never engaged.**
- **22% (approximately 14,900 farmers/growers/farm workers) attributed some level of improvement to Farmstrong and 10% (approximately 6,500) attributed at least one 'moderate' or 'large' level of improvement to Farmstrong.**
- **The proportion attributing improvements to Farmstrong, particularly 'moderate' or 'large' improvements, was markedly higher among those with four or more different forms of engagement (see graph below).**
- **Farmstrong appears to be working more successfully for sheep/beef farmers than dairy (see graph below).**

RECOMMENDATIONS

- **The rationale for these recommendations is outlined in the Discussion chapter which follows.**
  - **Retain the focus on multiple forms of engagement**
  - **Give further consideration to what strategies might assist with increasing the impact of Farmstrong with dairy farmers**
  - **Consider whether there are any opportunities to utilise and expand on the growing uptake by younger farmers/growers**

OTHER FINDINGS

Awareness and knowledge



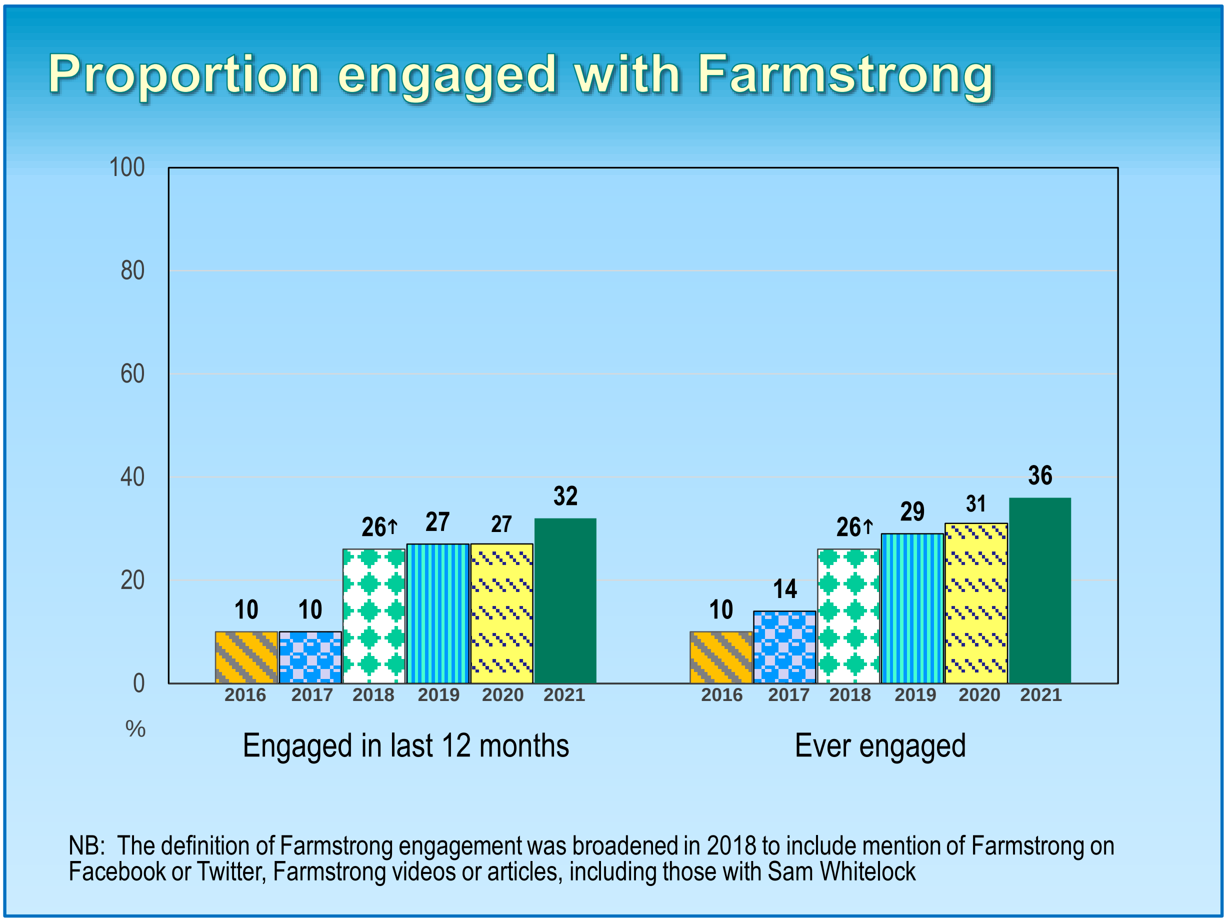
- There was a strong upward trend in unprompted awareness of Farmstrong among under 45 year olds, with a significant[1] 16% increase to 51% in the current survey.
- 18% of all the farmers/growers felt they knew at least a 'moderate' amount about Farmstrong, which was similar to the 2019 level (17%).

Engagement with Farmstrong initiatives

- The number of Farmstrong video viewings from all sources more than tripled in 2020 and has remained at high levels in 2021 (308,225). Twenty-seven percent of these were viewed via the Farmstrong Facebook page, 3% via the Farmstrong website, and the remaining 69% directly from YouTube or other social media.
- The number of unique visitors to the website, which had a major refresh in September 2018, increased 12% to 75,409, which followed a 15% increase the previous year.
- On the more critical measures of numbers of visits that are long enough to be having potentially impactful engagement, those engaging for at least five minutes increased by 18% to 3,209. Visits of at least three minutes was at a similar level to last year at 5,120, while visits of at least 10 minutes were down 16% to 1,601.

[1] Changes described as 'significant' were statistically significant at the 95% confidence level. See the Appendix A: Research Method for more details.

- There was an 8% increase in fans to the Facebook page, which now totals well over 11,300 fans.
- After decreases in 2020, there were increases for both media articles (up by 49% to 243) and total audience reach (up by 69% to over 5.3 million) .
- There were 1,841 who attended talks, workshops or webinars, which was a 75% increase.
- The increases in engagement with Farmstrong reported in the survey, as shown in the graph below, were not quite large enough to be significant.



- Farmstrong was just beginning to increase engagement with the horticultural sector prior to this survey. While still being lower than other forms of farming/growing, engagement by the horticulture sector had a non-significant increase by 8% to 17%.
- Engagement levels showed an upward trend for under 45 year olds, with a non-significant increase of 10% to 60%, this level being much higher than for any other age group.
- Sixteen percent of the farmers/growers reported three of more forms of engagement with Farmstrong.
- Under 45 year olds have higher levels than others for three or more forms of engagement with Farmstrong.
- Engagement with the Farmstrong website in the last 12 months, as reported in the survey, increased by 5% to 7%.

National dashboard measures

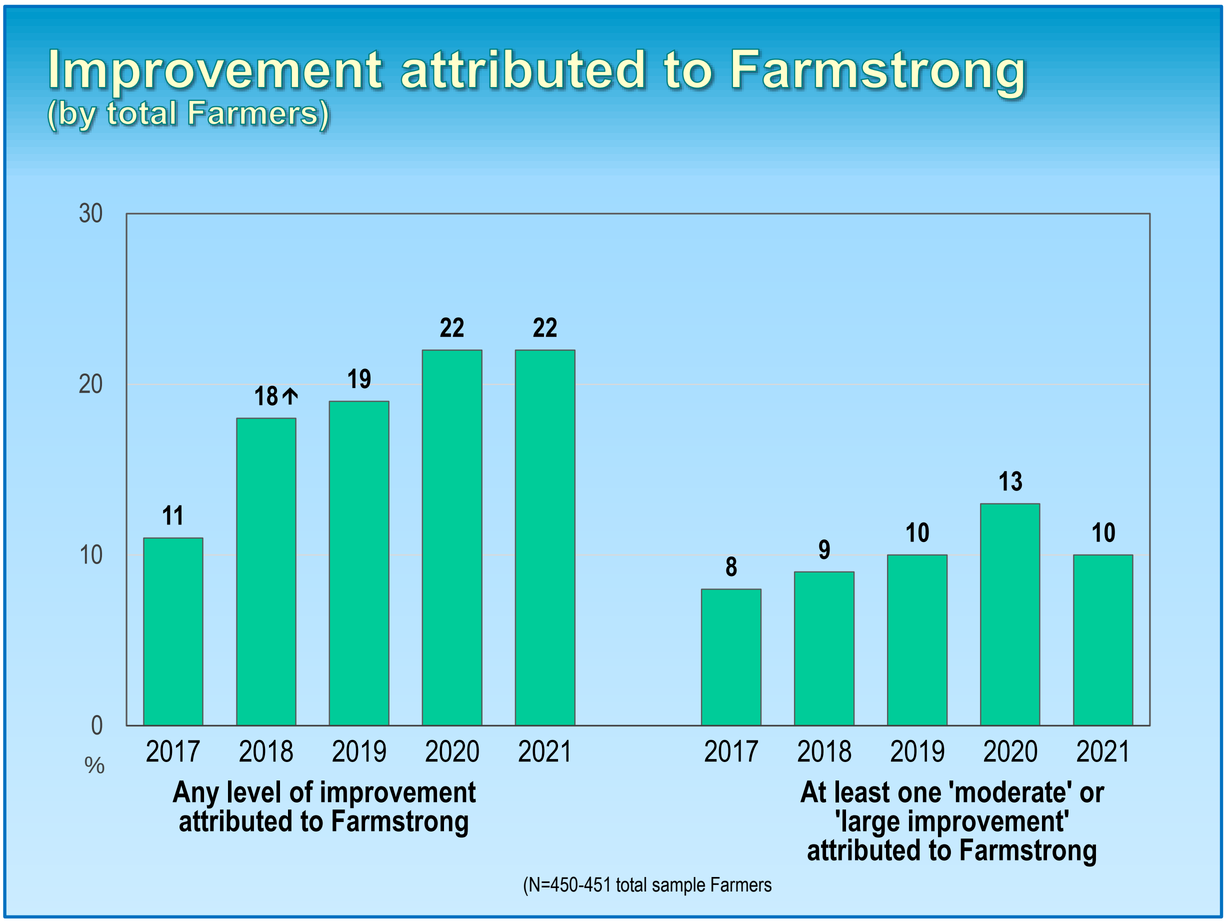
- There were four of the measures where the mean rating among all farmers/growers decreased over the last 12 months, reflecting a **worsening** situation:

  - 'Ability to cope with the ups and downs of farming'
  - 'Balance between my work and leisure'
  - 'Amount of sleep'
  - 'Time taking notice of the small things in life that bring me pleasure'
- Against this trend there were **increases**, following decreases last year, presumably due to covid lockdowns, for:
  - 'Contributions to other farmers or my local community'
  - 'Level of contact with my friends'
- Those farmers/growers who had engaged with Farmstrong via three or more forms in the previous 12 months were significantly more likely to report higher means ratings (compared with those who had never engaged) for the following, reflecting a higher level of improvement and/or a lower level of worsening[2]:
  - Ability to cope with the ups and downs of farming
  - Balance between work and leisure
  - Amount of exercise
  - Contribution to other farmers or local community
  - Level of contact with friends

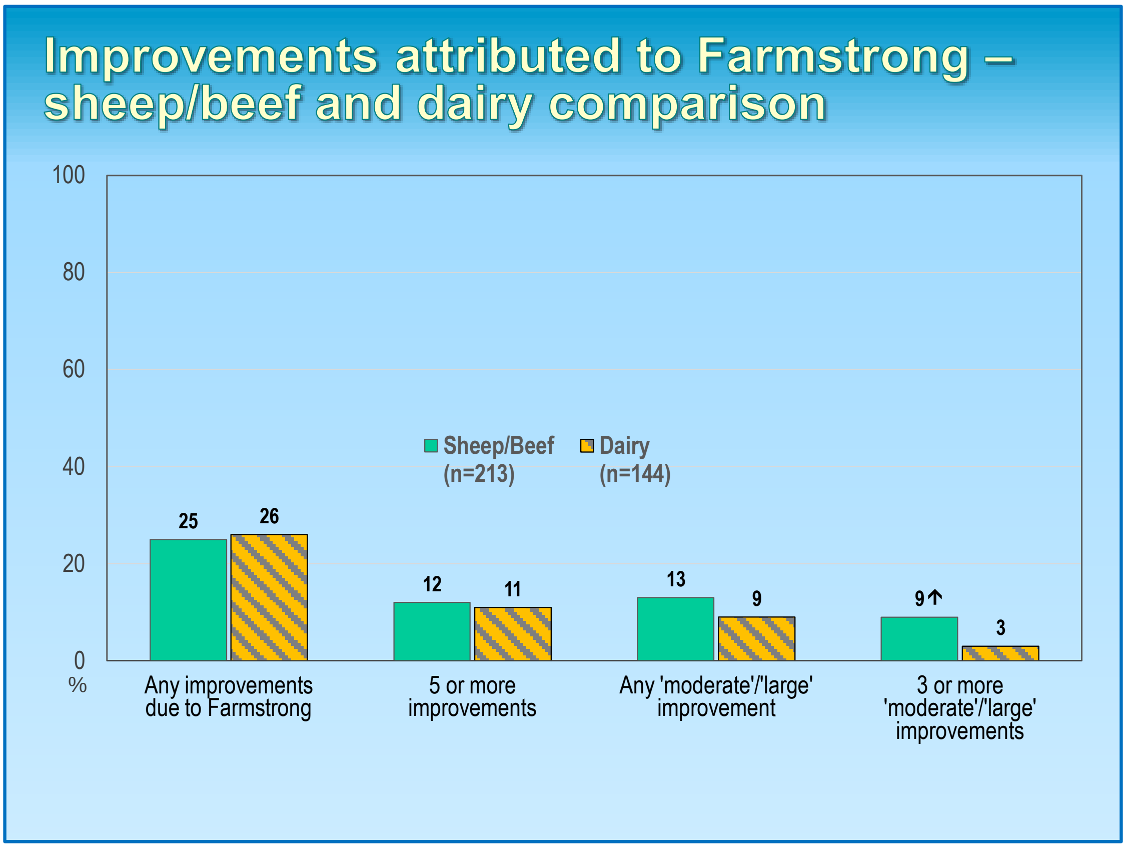
Improvements attributed to Farmstrong

- The 10% who attributed at least one 'moderate' or 'large' improvement to Farmstrong was a non-significant decrease of 3%, returning to the 2019 level (see graph below).
- There were 10% who attributed five or more improvements to Farmstrong (from the list of nine items). There were 5% who attributed three or more 'moderate' or 'large' improvements.

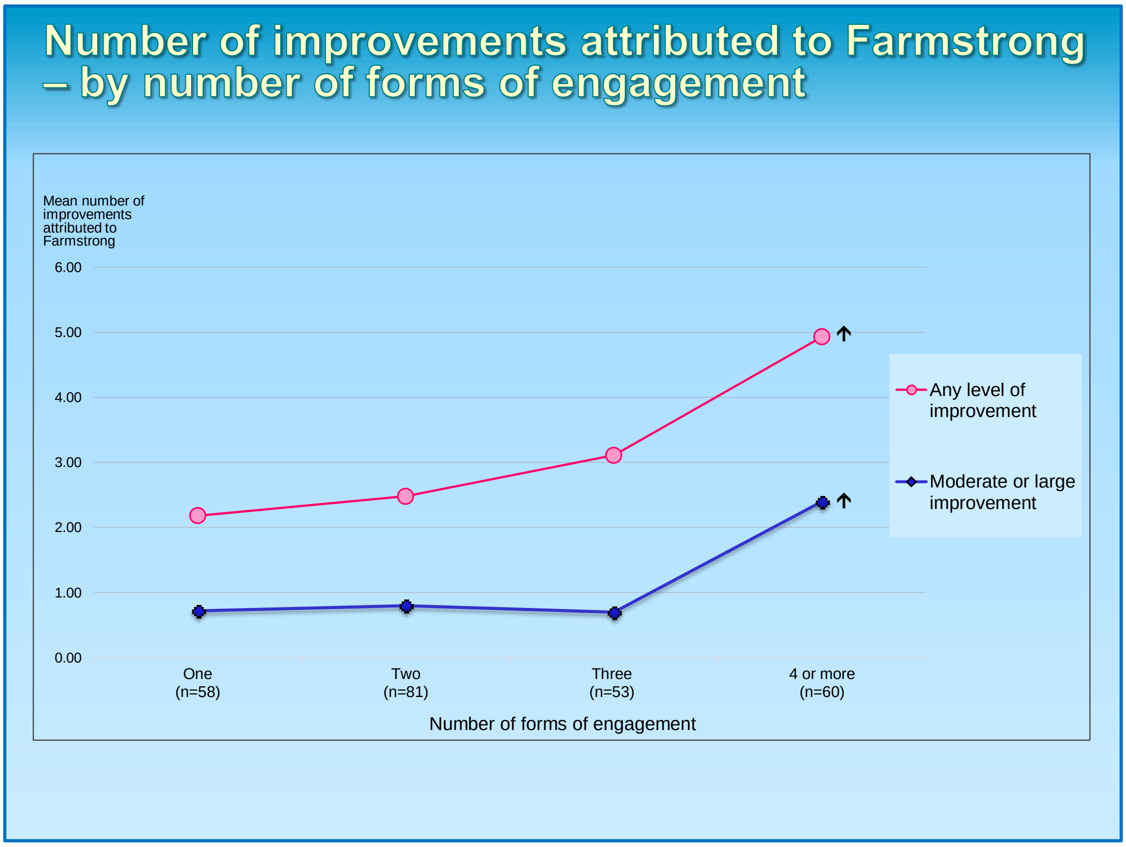
[2] This analysis was based on combined 2020 and 2021 data.



- The graph below provides the evidence to suggest Farmstrong is working more effectively with sheep/beef farmers than dairy. While both were are similar levels for the percentage who reported any improvements or five plus improvements due to Farmstrong, there was a non-significantly higher level for sheep/beef for reporting any 'moderate/large' improvements (13% vs 9% for dairy). This trend was even more apparent when considering those who attributed 3 or more moderate improvements to Farmstrong, where the sheep/beef level of 9% was significantly higher than the 3% for dairy.
- The percentage that had ever engaged with Farmstrong but were attributing no changes to Farmstrong, increased significantly by 4% to 13%.
- In 2021 the greatest numbers reporting some level of improvement which they attributed to Farmstrong were for:
  - 'Time spent taking notice of the small things in life that bring me enjoyment' (15% of all farmers)
  - 'Contribution to other farmers or my local community' (12%)



- As shown in the graph below, for any level of improvement being attributed to Farmstrong, there was some indication of an increasing trend for two and three forms of engagement, which increased much more for four plus. However, for moderate/large improvements, the level remained similar until the marked increase for four plus.



Limitations of the research

- The dashboard sample is selected from a panel which contains over 15,000 farmers/growers, mostly farm owners. Those who choose to be on a panel may not be representative of all farmers/growers. The same applies for those who agree to be interviewed. It is also possible that some of this panel may have been randomly selected and participated in more than one of the seven surveys, thereby affecting awareness levels. There is a one in 4.8 chance of being interviewed in more than one of the seven years.
- While farm/grower owners are the priority audience for Farmstrong, the initiative is also seeking to reach others working in farming. The estimates provided in this report for numbers of farmers/growers and farm workers impacted are informed by the relative levels for farm/grower owners and non-owners in a separate survey of recently injured farmers/growers, so needs to be treated as a best approximation (see Appendix B).

2 DISCUSSION

This section presents the researcher's interpretation of the implications of the research findings and the conclusions to be drawn from these.

Decline in farmer/grower wellbeing on key measures

The last 12 months have again been a challenging time for many farmers/growers. Together with the ongoing impacts of covid, some regions experienced extreme weather conditions particularly bad droughts and hail storms. The dissatisfaction of some farmers/growers with the nature and rate of government policy changes culminated in the 'Howl of Protest' event, with tractors and utes descending on city centres around the country. Although this happened in July 2021, after the survey period, it was evidence of the growing concern and increased stress among some farmers/growers.

These contextual issues are likely to explain why farmers/growers overall reported a decline this year for their 'ability to cope with the ups and downs of farming', along with three other measures including the key ones of 'balance between work and leisure' and 'amount of sleep'.

Evidence of impacts of Farmstrong

The strongest evidence of the impacts of Farmstrong is the proportion attributing improvements to Farmstrong. While the percentage of all farmers/growers attributing a level of improvement to Farmstrong was at a similar level to 2020, the three percent decline for moderate/large improvements was the first time there had been a reversal in the upward trends. The level has returned to similar levels to years prior to 2020. This decrease was despite there being a five percent increase in the proportion who had engaged in the last 12 months, resulting in an increase in the proportion that had ever engaged but were attributing no improvements to Farmstrong.

Further evidence of the positive impacts of Farmstrong was those who had ever engaged with Farmstrong showing greater increases than those who had never engaged for the two dashboard measures which increased this year, after decreases in 2020, presumably due to covid lockdowns. These were 'level of contact with friends' and 'contribution to other farmers or local community'.

There were also indications of the decline in 'ability to cope with the ups and downs of farming' being less for both those who had ever engaged with Farmstrong and those who had three or more forms of engagement in the previous 12 months , but the difference was not significant.

Lower impacts with dairy farmers

Although dairy farmers have similar levels of engagement with Farmstrong when compared with sheep/beef farmers, plus similar levels for reporting any form of improvement or five plus forms of improvement due to Farmstrong, there is a gap which appears when considering 'moderate/large' improvements attributed to Farmstrong. It is at this level of improvement that behaviour changes is most likely to be taking place.

Based on the researcher's experience from interviewing farmers over the years for Farmstrong, a key contributor to this difference may well lie in ability get away from the farm. While sheep/beef farmers have busy periods, dairy farmers are tied to milking their cows every day for much of the year. Dairy farmers who employ labour may have more opportunity for breaks, depending on how many are required for the milking. Getting time off the farm has a key impact on several of the other measures being asked about in the survey. The Farmstrong team have long been aware that getting time off the farm is a key to improving farmer wellbeing, but it has remained one of the most difficult issues to address. Some sort of farmer relief scheme was investigated, but determined to be too big a project for Farmstrong to tackle.

However, given these results, which are reinforced by the qualitative research which has followed this survey, it may well be appropriate to give further consideration to what strategies might assist with increasing the impact of Farmstrong with dairy farmers.

Upward trend for younger farmers/growers

The upward trend in unprompted awareness for the under 45 age group increased dramatically in the current survey, giving them levels more than twice any of the other age groups. A similar trend was evident for engagement with Farmstrong. There use of multiple forms of engagement with Farmstrong is higher than for other age groups.

These younger farmers/growers were over-represented in the group who had ever engaged but attributed no improvements to Farmstrong. However, because they had higher levels of engagement, the proportion attributing improvements to Farmstrong was non-significantly higher than the level for all farmers/growers.

Although they are a relatively small sub-sample in these surveys (53 in the current survey), their consistent trends give confidence in the findings.

These trends for younger farmers/growers are likely to reflect a tendency for them to be more interested in and open to new ideas, as has been identified in previous Farmstrong qualitative research. It is also a good sign for Farmstrong, as they are the future of the industry.

Importance of multiple forms of engagement with Farmstrong

The question to identify forms of engagement was added in 2020 and the current analyses have had the opportunity to combine the 2020 and 2021 data bases to provide larger sub-samples for the different numbers of forms of engagement, thereby providing greater confidence in the findings than was possible in 2020.

With the dashboard measures, three plus forms of engagement in the past 12 months appears to be the level at which significant differences are most likely to become apparent between those who have engaged and those who have never engaged. However, for attributing improvements to Farmstrong there was a marked increase for four plus forms of engagement.

As noted in the previous report, utilising multiple forms of engagement is consistent with farmers/growers being busy people who are unlikely to go looking for information on wellbeing, such as on the Farmstrong website. The more opportunities which are provided for them to come across (bump into) Farmstrong communications and initiatives, especially in bite sizes that they can quickly take in, the more likely it is that they will receive enough of this to result in improvements in their wellbeing.

We do not have measures of how often farmers/growers engage with each form, so the greater impacts linked with the number of forms of engagement may also reflect frequencies of engagement. In other words, those who engage with more forms may also be having more frequent engagement with each form, or at least some of these forms. It is therefore probable that some combination of more forms of engagement and more frequent engagement is likely to be contributing to the greater impacts.

Main forms of engagement

Having a second year asking the question on forms of engagement has in large part provided confirmation of the findings in 2020, reinforcing the importance of the Farmstrong content in Farmers Weekly. It is positive that the Farmstrong website level was significantly higher in 2021, although at seven percent, it is still not a widely used form of engagement.

Increasing focus on horticulture

While Farmstrong is in the process of having a stronger focus on horticulture (including viticulture), the results are consistent with this process being only at the developmental stage. The non-significant increases in awareness and engagement are most likely due to the information that has been communicated to the sector about the intention to increase this focus, growers being contacted about the research and the one new communication that has been made during this period which was specifically on horticulture. A further survey is being undertaken with those in horticulture in September 2021, which will be added with this 2021 Monitor data to provide a clearer picture for horticulture (a separate report will be produced).

Increasing knowledge about Farmstrong

The lack of any increase over the last two years in the percentage of all farmers/growers reporting at least a 'moderate' knowledge of Farmstrong may justify some consideration, especially as the proportion of all farmers/growers who had ever engaged with Farmstrong had increased by seven percent in this two year period. These findings may well relate to the fact that few farmers/growers are engaging with the website, which is where they are most likely to increase their overall knowledge of Farmstrong and get a sense that they know what it includes. Otherwise they are mostly being exposed to single messages/communications from Farmstrong and may therefore not feel that they have a good overall knowledge of Farmstrong.

This does raise the question as to how important it is that farmers/growers feel they are well informed about Farmstrong. If the current strategy is working, and it appears to be doing so, then it may well not be too much of a concern if farmers/growers feel they don't know a lot about Farmstrong.

Conclusions

This is a generally positive report for Farmstrong, particularly in a climate where farmers/growers overall are reporting a reduced ability to cope with the ups and downs of farming.

Now that the initiative is in its seventh year, the challenge is to keep finding ways to gain farmer/grower attention and provide information they will engage with and gain benefit from. The qualitative research which is a follow-up to this survey, examining the ways in which Farmstrong is contributing to improvements to farmer/grower wellbeing, as perceived by the farmers/growers, will help inform those strategies.

3 INTRODUCTION

Farmstrong was publicly launched on 3 June 2015 and this monitoring report assesses changes in key measures over the first five years, to June 2020.

About Farmstrong

Mission: Improve the wellbeing of people working in farming and growing

Vision: A rural New Zealand that adapts and thrives in a constantly changing world

Call to action: "Find out what works for you then lock it in."

Key messages

- The most important asset on any farm is the farmer, their family and the farming workforce.
- Farmstrong is about wellness not illness. Investing in your wellbeing helps you through the ups and downs of farming. It will also mean you're better placed to look after your family, your team and it's good for business.
- Farmstrong shares practical information and tools to support small but important habits that help you live well to farm well

Ways in which farmers/growers engage with Farmstrong

- Attending workshops, webinars, visiting Farmstrong at fieldays and local Ag events
- Accessing resources and blogs on the Farmstrong website and via social media
- Reading articles and sharing their stories via Farmstrong on radio, TV and in Farmers Weekly and other print media

Results Based Accountability framework

As part of the planning a Results Based Accountability (RBA) framework was established. This report addresses the RBA questions: How much did we do? How well did we do? Is anyone better off? This is not a full evaluation of the programme to date; there is a separate 2019 evaluation report.

Method

The Method is detailed in Appendix A. Approximately 450 farmers/growers are surveyed annually. Also included in the report is monitoring data collected by the Farmstrong team, such as use of the website and social media and reach via print media.

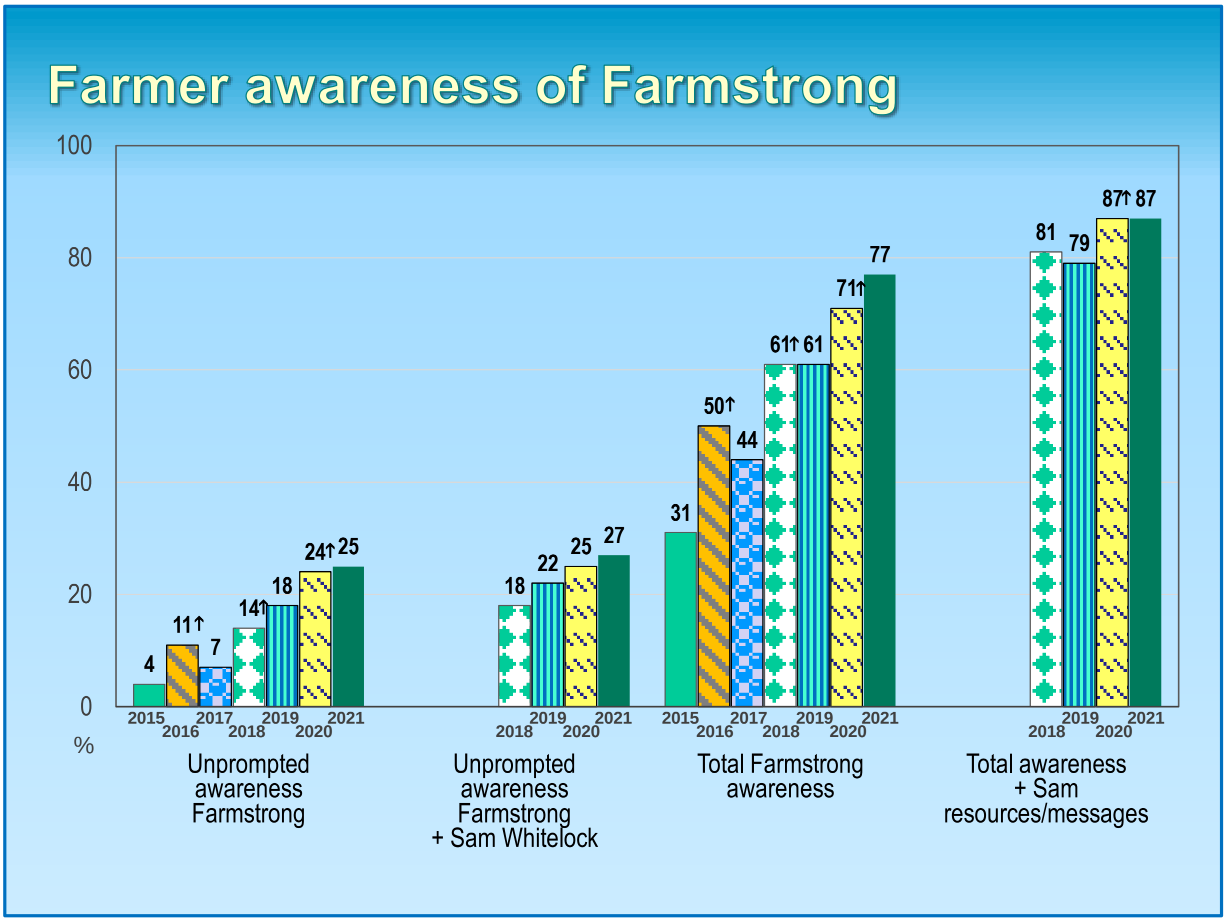
On the tables in this report, an upward arrow ↑ denotes a statistically significant higher level than the comparison group and a downward arrow ↓ a statistically significant lower level (at the 95% confidence level). All differences reported in the commentary will be statistically significant, unless otherwise stated.

4 MAIN FINDINGS

4.1 AWARENESS OF FARMSTRONG

As shown in the graph below, total Farmstrong awareness increased by 6% to 77%, although this increase was not quite large enough to be statistically significant. Unprompted awareness (25%) remained at a similar level to last year, as did total awareness after including awareness of Sam Whitelock resources/messages (87%).

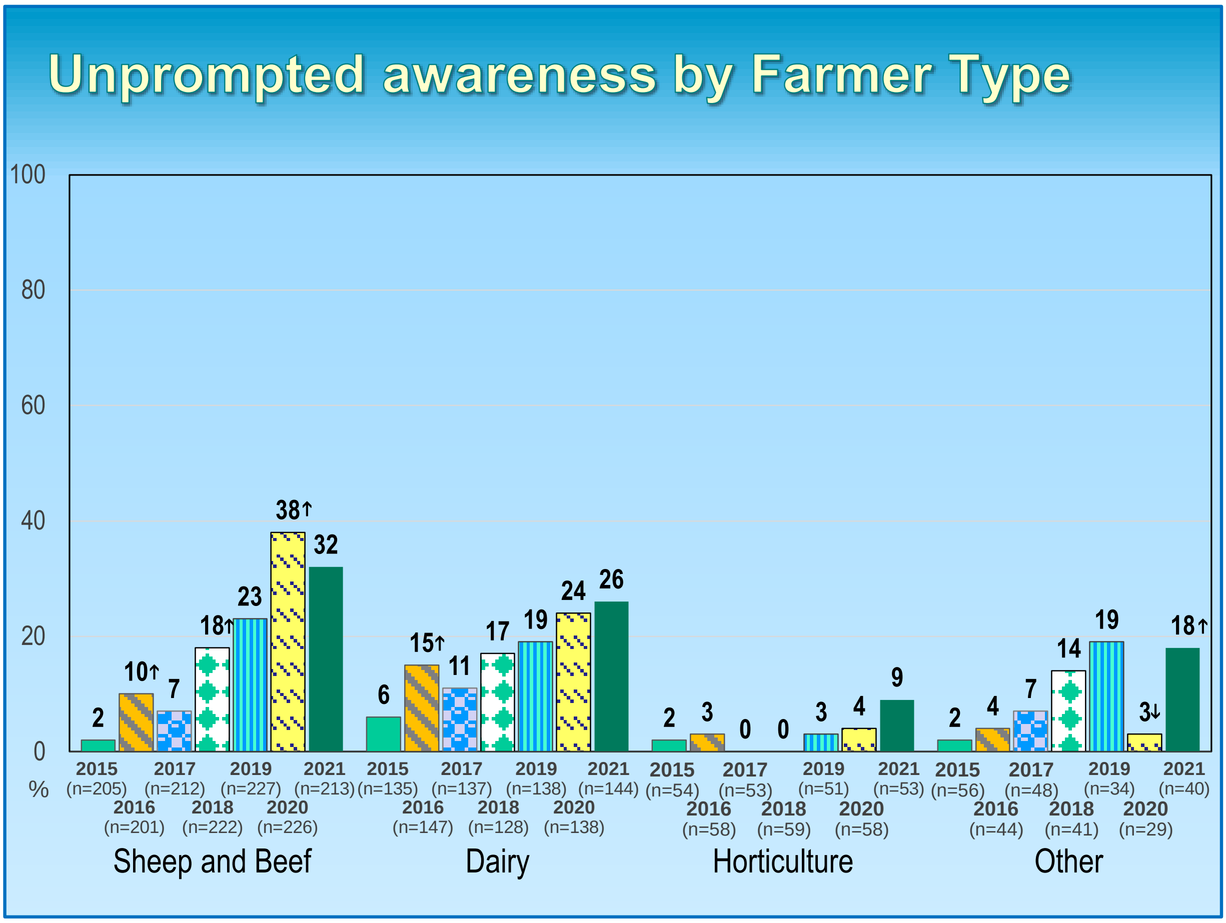
On the graphs and table which follow, an upward arrow ↑ denotes a statistically significant increase from the previous year and a downward arrow ↓ a statistically significant decrease.



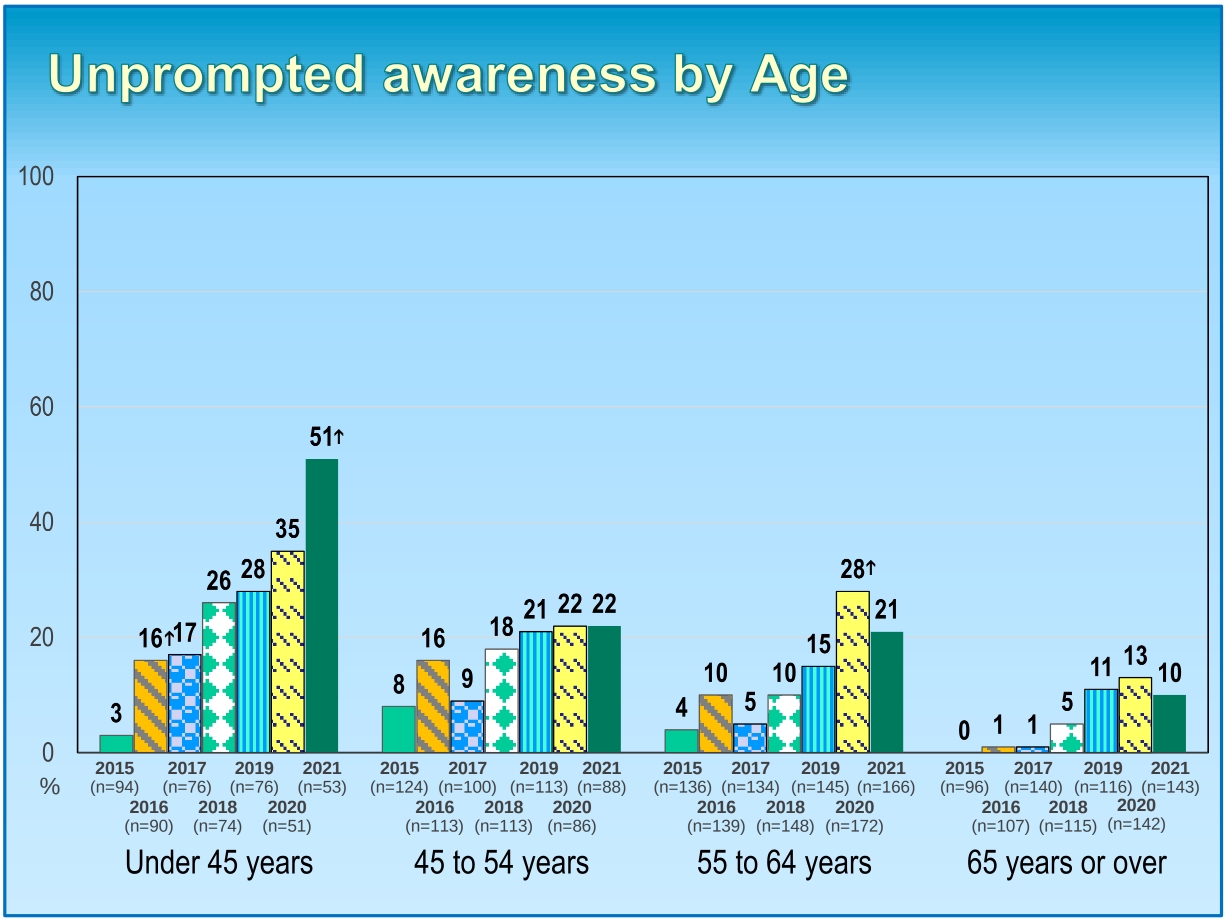
Sub-group changes

Farmstrong was just beginning to increase engagement with the horticultural sector prior to this survey. This was reflected in a non-significant unprompted awareness increase by 5% to 9% and a 15% prompted awareness increase to 57%.

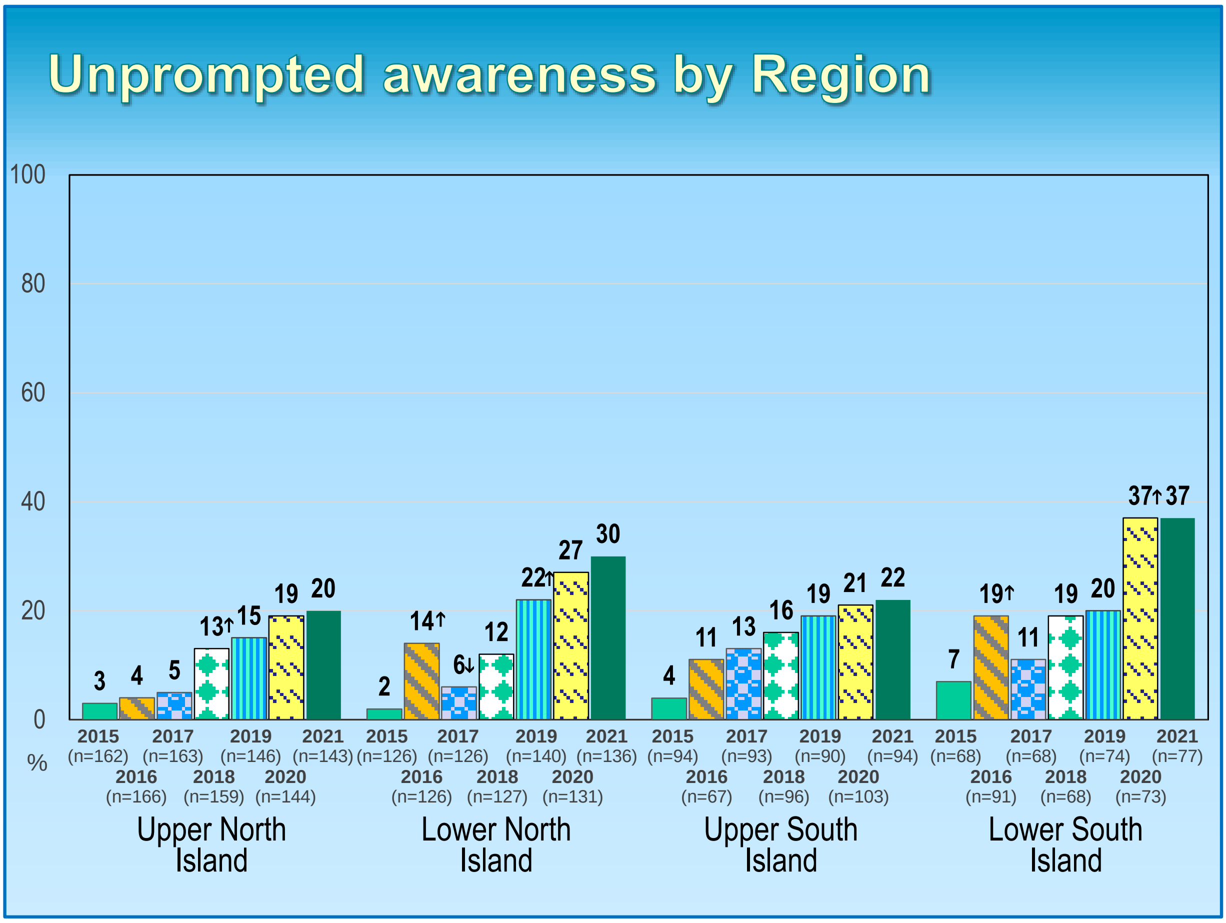
There was a strong upward trend in unprompted awareness of Farmstrong among under 45 year olds, with a significant 16% increase to 51% in the current survey. There was a non-significant 8% increase for women (now 30% compared with 23% for men). After a big increase for sheep and beef in the previous survey, the level decreased by a non-significant 6%, but this was still the farmer/grower group with the highest unprompted awareness (32%). The 'other' types of farmers/growers returned to similar levels to 2019 after a big decrease in 2020. These fluctuations are likely to be due to the small numbers in this group. After a big increase in the Lower South Island region in the previous survey, this level has been maintained (37%).

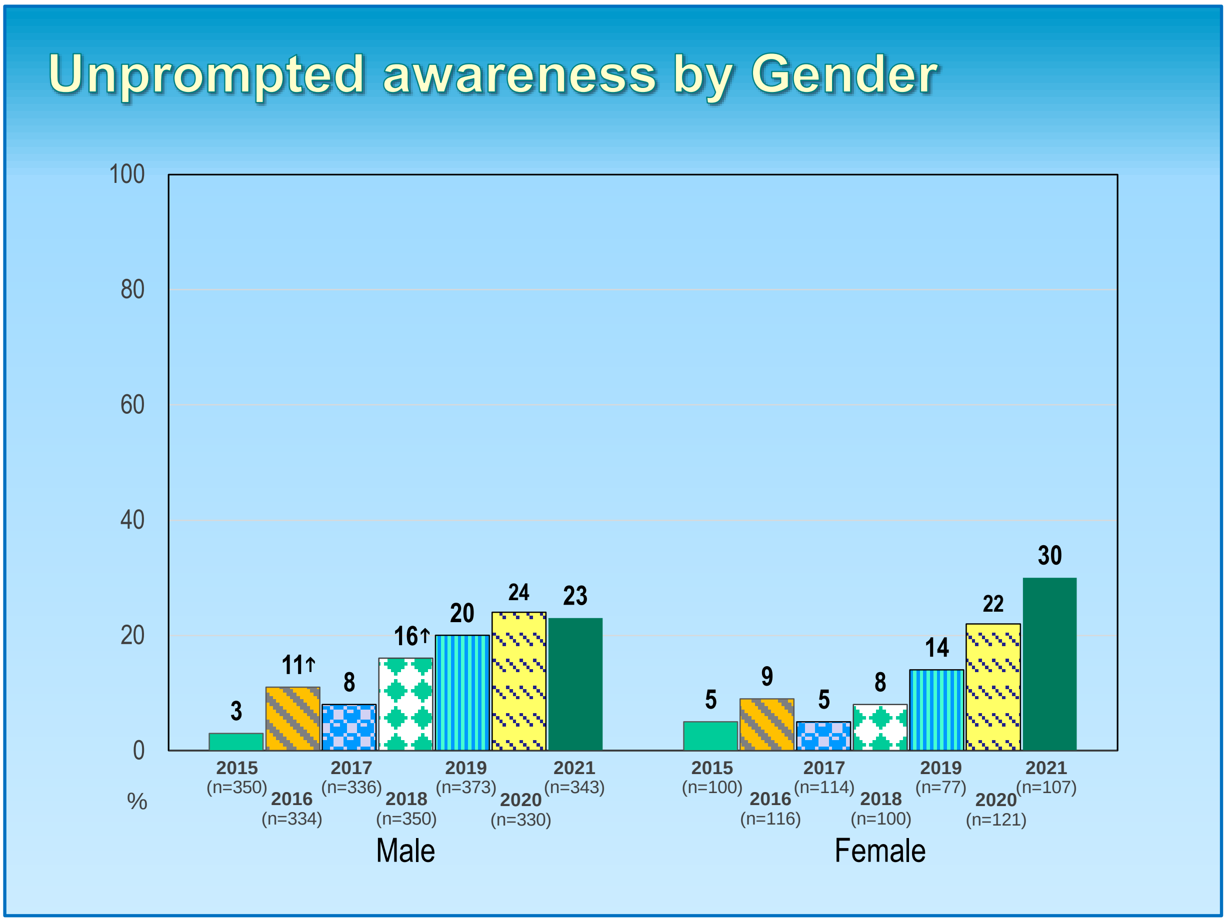


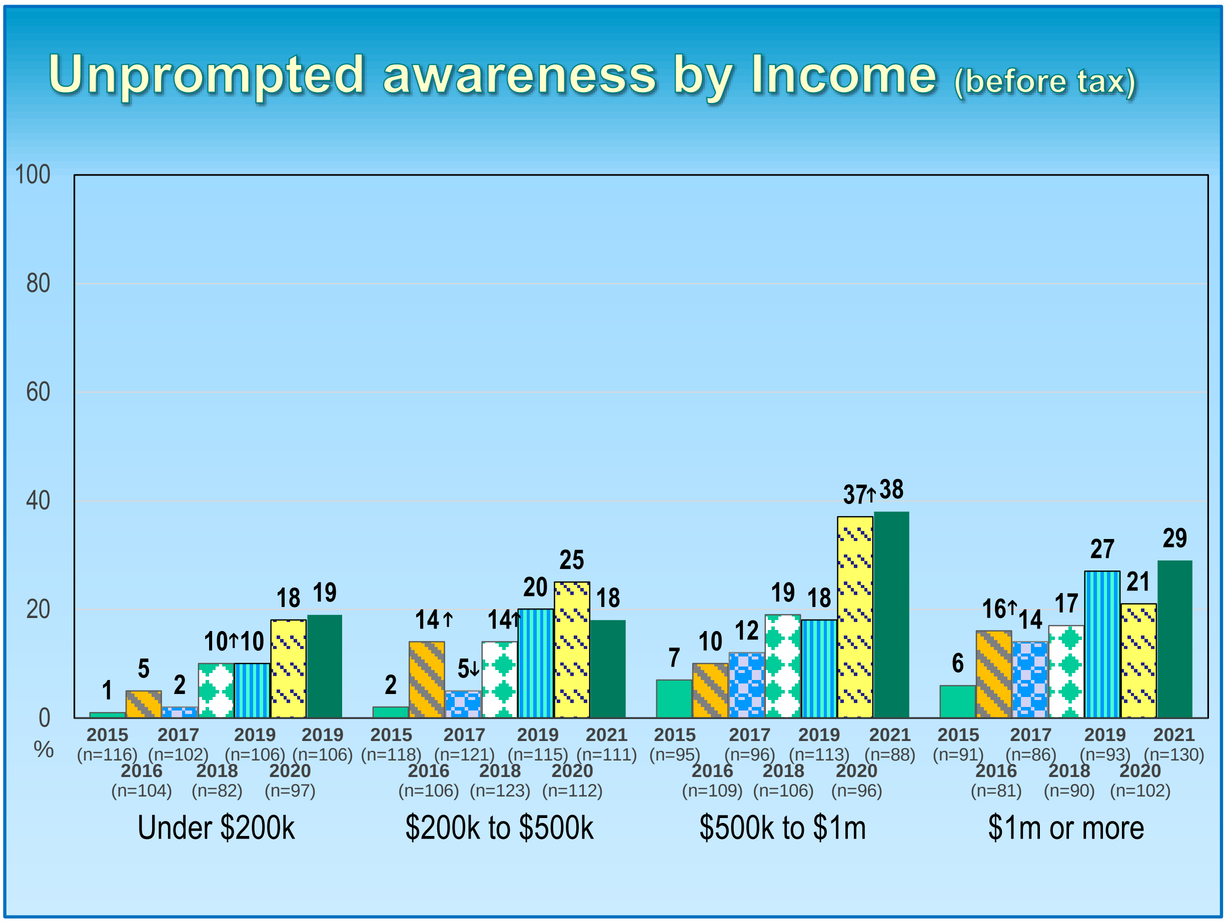
Unprompted awareness by Farmer Type
100
80
60
40
20
0
%
2
10↑
7
18↑
23
38↑
32
6
15↑
11
17
19
24
26
2
3
0
0
3
4
9
2
4
7
14
19
3↓
18↑
2015 (n=205)
2016 (n=201)
2017 (n=212)
2018 (n=222)
2019 (n=227)
2020 (n=226)
2021 (n=213)
2015 (n=135)
2016 (n=147)
2017 (n=137)
2018 (n=128)
2019 (n=138)
2020 (n=138)
2021 (n=144)
2015 (n=54)
2016 (n=58)
2017 (n=53)
2018 (n=59)
2019 (n=51)
2020 (n=58)
2021 (n=53)
2015 (n=56)
2016 (n=44)
2017 (n=48)
2018 (n=41)
2019 (n=34)
2020 (n=29)
2021 (n=40)
Sheep and Beef
Dairy
Horticulture
Other



Unprompted awareness by Age
100
80
60
40
20
0
%
3
16↑
17
26
28
35
51↑
8
16
9
18
21
22
22
4
10
5
10
15
28↑
21
0
1
1
5
11
13
10
2015 (n=94)
2016 (n=90)
2017 (n=76)
2018 (n=74)
2019 (n=76)
2020 (n=51)
2021 (n=53)
2015 (n=124)
2016 (n=113)
2017 (n=100)
2018 (n=113)
2019 (n=113)
2020 (n=86)
2021 (n=88)
2015 (n=136)
2016 (n=139)
2017 (n=134)
2018 (n=148)
2019 (n=145)
2020 (n=172)
2021 (n=166)
2015 (n=96)
2016 (n=107)
2017 (n=140)
2018 (n=115)
2019 (n=116)
2020 (n=142)
2021 (n=143)
Under 45 years
45 to 54 years
55 to 64 years
65 years or over


Unprompted awareness by Region
100
80
60
40
20
0
%
3
4
5
13↑
15
19
20
2
14↑
6↓
12
22↑
27
30
4
11
13
16
19
21
22
7
19↑
11
19
20
37↑
37
2015 (n=162)
2016 (n=166)
2017 (n=163)
2018 (n=159)
2019 (n=146)
2020 (n=144)
2021 (n=143)
Upper North Island
2015 (n=126)
2016 (n=126)
2017 (n=126)
2018 (n=127)
2019 (n=140)
2020 (n=131)
2021 (n=136)
Lower North Island
2015 (n=94)
2016 (n=67)
2017 (n=93)
2018 (n=96)
2019 (n=90)
2020 (n=103)
2021 (n=94)
Upper South Island
2015 (n=68)
2016 (n=91)
2017 (n=68)
2018 (n=68)
2019 (n=74)
2020 (n=73)
2021 (n=77)
Lower South Island


Unprompted awareness by Gender
100
80
60
40
20
0
%
3
11↑
8
16↑
20
24
23
5
9
5
8
14
22
30
2015 (n=350)
2016 (n=334)
2017 (n=336)
2018 (n=350)
2019 (n=373)
2020 (n=330)
2021 (n=343)
Male
2015 (n=100)
2016 (n=116)
2017 (n=114)
2018 (n=100)
2019 (n=77)
2020 (n=121)
2021 (n=107)
Female



Unprompted awareness of other initiatives

When asked the question, '*What programmes or initiatives are you aware of that are designed to support farmer and grower wellbeing?*' others mentioned in addition to Farmstrong and Sam Whitelock are shown in the table below. The Farmstrong figures are included for comparison. Mention of the Rural Support Trust increased by 7% to 28%, which was higher than the 25% for Farmstrong. After an increase in 2020, DairyNZ/ Dairy Connect decreased 7% to return to the 2019 level of 2%. The Surfing for Farmers programme received a 4% mention. Those who could not name any programmes or initiatives continued a downward trend, with a 6% decrease to 37%.

UNPROMPTED RECALL	Nov 2015 450 %	Nov 2016 450 %	Nov 2017 450 %	May 2018 450 %	May 2019 450 %	May 2020 451 %	May 2021 450 %
Farmstrong	**4**	**11↑**	**7**	**14↑**	**18**	**24↑**	**25**
Sam Whitelock	**NR**	**NR**	**NR**	**4**	**5**	**3**	**3**
Total Farmstrong/Sam Whitelock	**NR**	**NR**	**NR**	**18**	**22**	**25**	**27**
Rural Support Trust	11	9	10	25↑	20	21	28↑
Federated Farmers	12	11	8	10	7	9	12
DairyNZ/ Dairy Connect	11	9	5↓	3	2	9↑	2↓
Dairy Women's Network	1	1	-	2↑	-↓	1	2
Doug Avery/ Resilient Farmer	1	-	1	2	2	-↓	-
Young Farmers	NR	NR	NR	1	-	-	-
Beef and Lamb NZ	9	4↓	3	-	1	2	4
Fonterra	-	-	2	-	1	1	1
Surfing for farmers	NR	NR	NR	NR	NR	NR	4
None/ don't know	53	54	61↑	44↓	51	43↓	37↓

NR=Not recorded

4.2 KNOWLEDGE OF FARMSTRONG

A new question in 2019 asked those who were aware of Farmstrong or the Sam resources/messages, *'How much do you feel you know about what Farmstrong does?'* In the current survey there were 18% of all the farmers/growers who felt they knew at least a 'moderate' amount about Farmstrong, which was similar to the 2019 level (17%). For those who were aware of Farmstrong (excluding those only mentioning Sam) the level was 22%. Among those who had ever engaged with Farmstrong it was 32%, which included 7% who felt they knew 'a lot'.

KNOWLEDGE OF FARMSTRONG	ALL FARMERS		THOSE AWARE OF FARMSTRONG		EVER ENGAGED WITH FARMSTRONG		
	2019	2021	2019	2021	2019	2020[3]	2021
	(450)	(450)	(280)	(337)	(137)	(134)	(147)
	%	%	%	%	%	%	%
Nothing	20	24	14	21↑	6	7	9
A little	42	45	60	57	61	58	59
A moderate amount	16	15	24	19	31	33	25
A lot	1	3	2	3	2	3	7
Not aware of Farmstrong	21↑	13	-	-	-	-	-

In the 2021 survey there were no demographic differences for the different levels of knowledge (based on all farmers/growers).

The following significant changes were identified between 2019 and 2021:

- An increase in knowing a 'moderate' amount among under 45 year olds (up by 16% to 28%) and the lowest income group (up by 17% to 26%)
- An increase for knowing 'a little' among those with incomes of between $500k to under $1m (up by 17% to 55%).
- An increase in knowing 'nothing' among 45 to 54 year olds (up by 18% to 37%) and a corresponding decrease in knowing a 'moderate' amount (down 10% to 4%)
- An increase in knowing 'a lot' among 55 to 64 year olds (up from nil to 3%)
- An increase in knowing 'a little' among the oldest age group (up by 16% to 46%)

[3] 2020 data was only available for those who had ever engaged with Farmstrong.

4.3 ENGAGEMENT WITH FARMSTRONG INITIATIVES

Using the Results Based Accountability (RBA) framework, this section addresses 'How much did we do?' and 'How well have we done it?' The following table summarises key data, primarily relating to website and social media usage. The number of unique visitors to the website, which had a major refresh in September 2018, increased 12% to 75,409, which followed a 15% increase the previous year. On the more critical measures of numbers of visits that are long enough to be having potentially impactful engagement, those engaging for at least five minutes increased by 18% to 3,209. Visits of at least three minutes was at a similar level to last year at 5,120, while visits of at least 10 minutes were down 16% to 1,601.

For the period 1 July 2020 to 30 June 2021, Farmstrong saw an 8% increase in fans to its Facebook page, which now totals well over 11,300 fans.

Farmer to farmer stories continued to be the top rated content for Farmstrong's Facebook audiences, with the three most engaged posts including two cautionary tales from farmers' Paul Walker and Owen Gullery, followed by a #Speakup message from rural influencer and Farmstrong advocate,Tangaroa Walker, as part of the Movember campaign in 2020[4]. Together these three posts totalled 24,600 of the 117,242 engagements over the 12 months and reached 151,700 people[5]. The total number of engagements was at a level similar to the previous year, which was 118,159.

The number of video viewings from all sources more than tripled in 2020 and has remained at high levels in 2021 (308,225). Only three percent of these were viewed on the Farmstrong website, There were 22 videos published on the Farmstrong Facebook page, which received a combined 83,500 views (27% of the total). This leaves 214,049 (69%) viewed directly from YouTube or other social media sources.

The top performing video on Farmstrong Facebook was another cautionary tale from farmer Chris Biddles, who flipped his quad and almost lost his life due to fatigue. His story, along with the published findings of the 2019 wellbeing and farmer injury study was viewed over 29,400 times.

After decreases in 2020 there were increases for both media articles (up by 49% to 243) and total audience reach (up by 69% to over 5.3 million)[6] .

There were 1,841 who attended either talks, workshops or webinars, which was a 75% increase.

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4 These stories are housed on the Farmstrong website, with the Facebook posts linking back to them.

5 Engagement is defined as people interacting with the post in some way: e.g like, share, comment, click a link, etc. Reach is the number of people where the post was displayed on their Facebook feed (but they may not have interacted with it).

6 Data for the second and third years has not been included as a review of the clipping service categories identified that items were being counted for some of the previous years which were no longer applicable at the time. An example was mention of Dr Tom on a Mission. In the first year it was appropriate to include this, as Farmstrong was a major component of what he was doing, but that is no longer the case.

Annual engagement results by key areas since launch in 2015

MEASURE	First 13 months 3/6/2015 to 30/6/2016	Second year 1/7/2016 to 30/6/2017	Third year (1/7/2017 to 30/6/2018)	Fourth year (1/7/2018 to 30/6/2019)	Fifth year (1/7/2019 to 30/6/2020)	Sixth year (1/7/2020 to 30/6/2021)
Website unique visitors	51,451	71,135	61,547	57,366	67,542	75,409
Total website sessions	65,866	79,955	67,578	68,938	79,201	90,810
Average engagement per visit	1 minute 22 seconds	48 seconds	39 seconds	50 seconds	1 minute 37 seconds	1 minute 35 seconds
Bounce rate (single page only)	75%	84%	84%	80%	83%	84%
Proportion of repeat visitor sessions	22%	12%	6%	10%	13%	13%
Average number of pages viewed	1.7	1.4	1.3	1.5	1.5	1.4
Number of website visits of at least 3 minutes	NR	NR	NR	4,129	5,093	5,120
Number of website visits of at least 5 minutes	2,452	2,165	2,250	2,201	2,718	3,209
Number of website visits of at least 10 minutes[7]	946	1,684	1,701	1,805	1,908	1,601
Facebook fans	6,205	NR[8]	9,527	10,184	10,536	11,343
Total video views in 12 month period	68,400	137,000	114,000	108,216	328,454	308,225
Video views via Farmstrong website	NR	NR	NR	10,016	10,245	10,676
Media articles (total volume)	659	NR	NR	246	163	243
Newspaper/print articles	NR	NR	NR	137	95	118
Online articles	NR	NR	NR	104	67	87
Broadcast stories (radio/TV)	NR	NR	NR	5	1	38
Total media audience reach for 12 month period	NR	NR	NR	4,112,942	3,181,894	5,371,799
Talks/workshops given	31 Healthy Thinking	14 Healthy Thinking	NR	9 FS talks 5 FS 2 hr workshops	7 Talks 8 workshops 3 webinars	18 Talks 7 workshops 2 webinars
Numbers attending talks/workshops	1,122 Healthy Thinking	374 Healthy Thinking	NR	383 FS talks 157 FS workshops	400 approx. talks 237 workshops 393 webinars	1,274 approx. talks 467 workshops 100 webinars
Number of participant events organized and supported	NR	NR	32	58	64	83
Number sent FMG newsletter with Farmstrong article	4 issues to 47,000	4 issues to 47,000	4 issues to 47,000	4 issues to 47,000	4 issues to 47,000	4 issues to 47,000

NR=Not reported; NA=Not applicable

7 Also included in the 3 and 5 minute totals.

8 There are no figures for the end of the second year because numbers stopping being fans were not factored in to the data recorded then.

Total 10 website page views in last 12 months

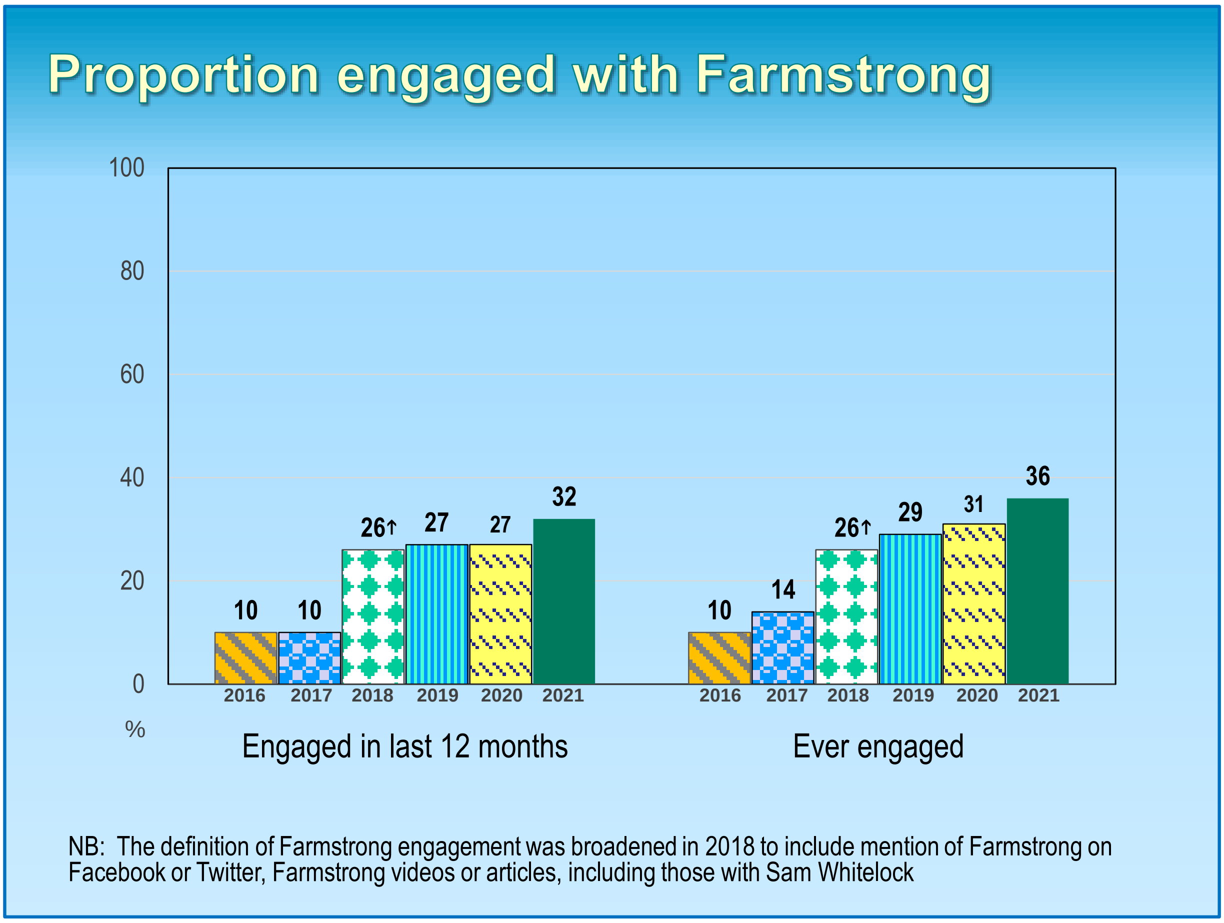
TOP 10 WEBSITE PAGES	Number of page views	Average time on page (mins)
Home Page	57,240	1:29
/energy-brownie	4,462	2:54
/resources	3,602	2:21
/wellbeing-topics	3,136	0:52
/contact-support	2,058	1:42
/wellbeing-getting-started	2,012	0:54
/blog	1,703	0:49
/video	1,546	0:42
/events	1,431	0:52
/partners	1,325	1:14

Level of engagement reported in surveys

Levels of engagement with Farmstrong showed increases which were not quite large enough to be statistically significant. There was a 5% increase to 32% for engagement in the last 12 months and a similar 5% increase for having ever engaged (now 36%). After a decrease in 2020, the proportion that had engaged in both the last 12 months and previously increased by 6% to 14% (see graphs and table below).

This was based on the following question: "Have you ever visited the Farmstrong website, Facebook or twitter, seen any Farmstrong videos or articles, including those with Sam Whitelock, or attended any workshops or other activities associated with Farmstrong or Healthy Thinking?" They were then asked whether this engagement was in the last 12 months. Some of the increase in 2018 will have been due to expanding the scope of the initiatives included in the question. The 2017 question did not include mention of engaging with Farmstrong content via Facebook or twitter, Farmstrong videos or articles, or any mention of Sam Whitelock. The graph below shows the levels for ever engaged over the five years it was measured (in 2015 the programme was just about to be launched).

The best estimate of the total farmers/growers/farm workers who have ever engaged with Farmstrong is approximately 23,800 and for the last 12 months it is approximately 21,600. Details on how these estimates are calculated are included as Appendix B.

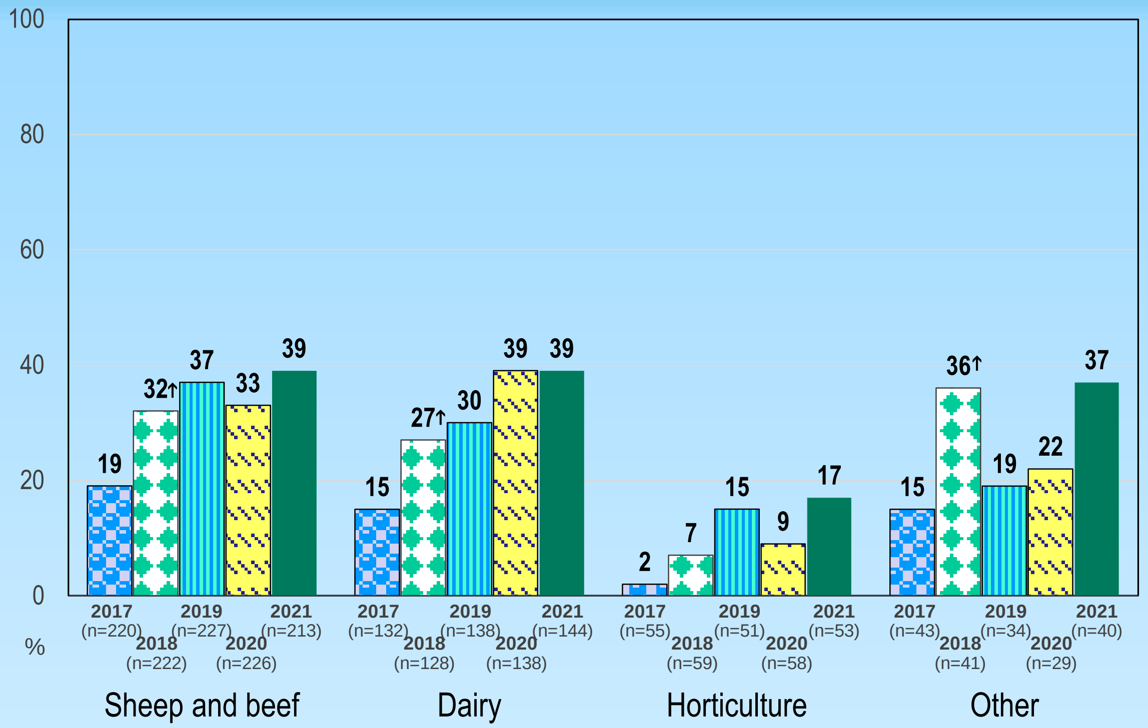


WHEN ENGAGED IN FARMSTRONG INITIATIVES	2017 450 %	2018 450 %	2019 450 %	2020 451 %	2021 450 %
Ever engaged	14.4	26.4↑	29.1	30.7	35.6
In last 12 months	9.7	25.6↑	26.5	27.0	32.2
First time in last 12 months	8.0	19.4↑	14.6	19.5	18.3
Both last 12 months and before	1.7	6.2↑	11.9↑	7.5↓	13.9↑
Only prior to last 12 months	4.4	0.8↓	2.6↑	3.5	3.3

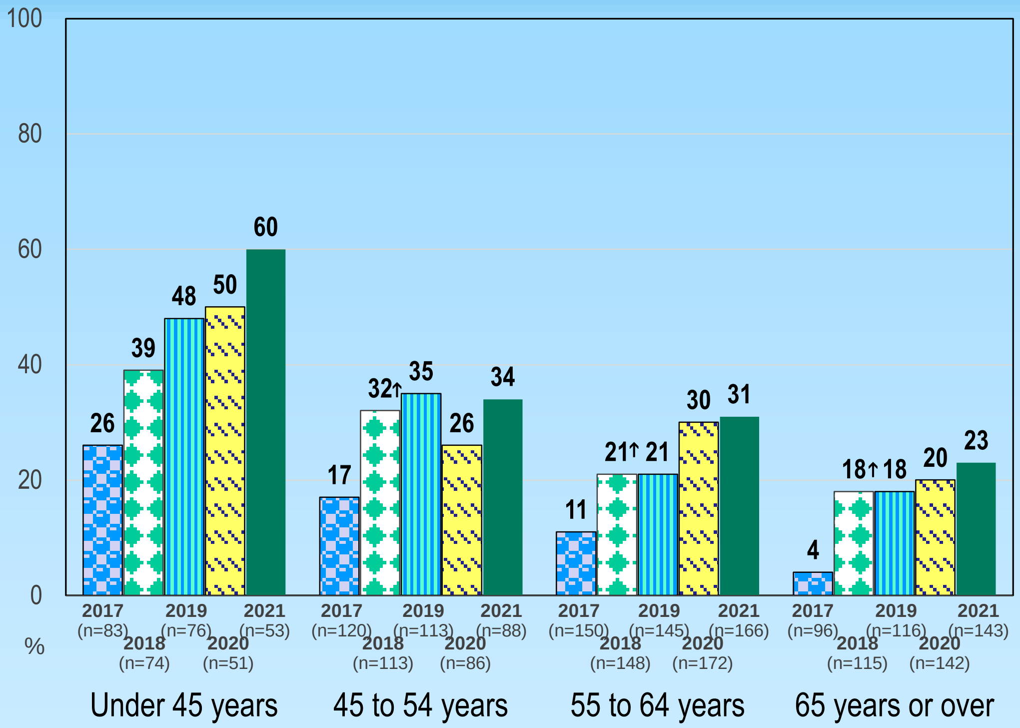
Ever engaged sub-group changes since previous survey

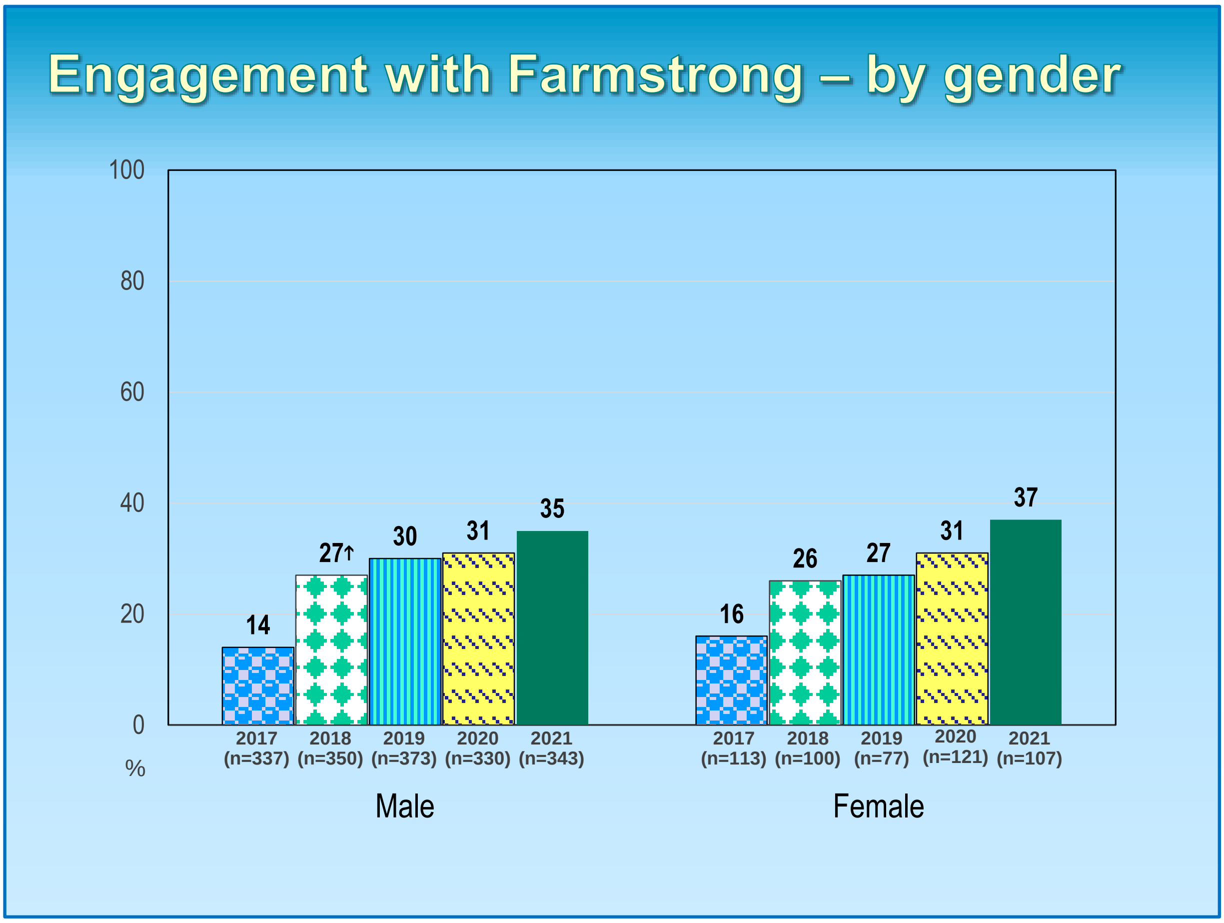
While still being lower than other forms of farming/growing, engagement by the horticulture sector had a non-significant increase of 8%, up to 17%. As with the unprompted awareness, engagement levels showed an upward trend for under 45 year olds, with a non-significant increase of 10% to 60%, this level being much higher than any other age group. Both males and females showed upward trends in levels of having ever engaged.

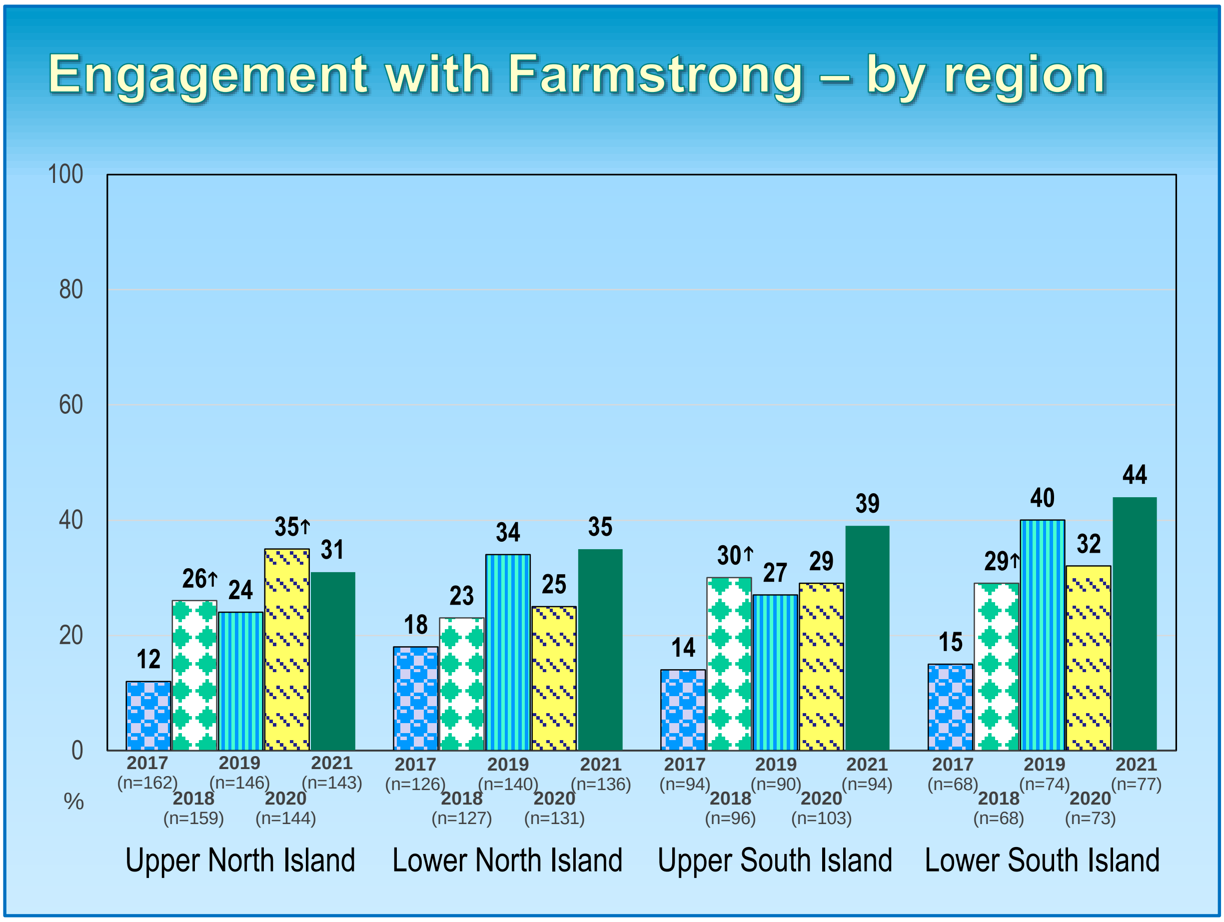
Engagement with Farmstrong – by farmer type

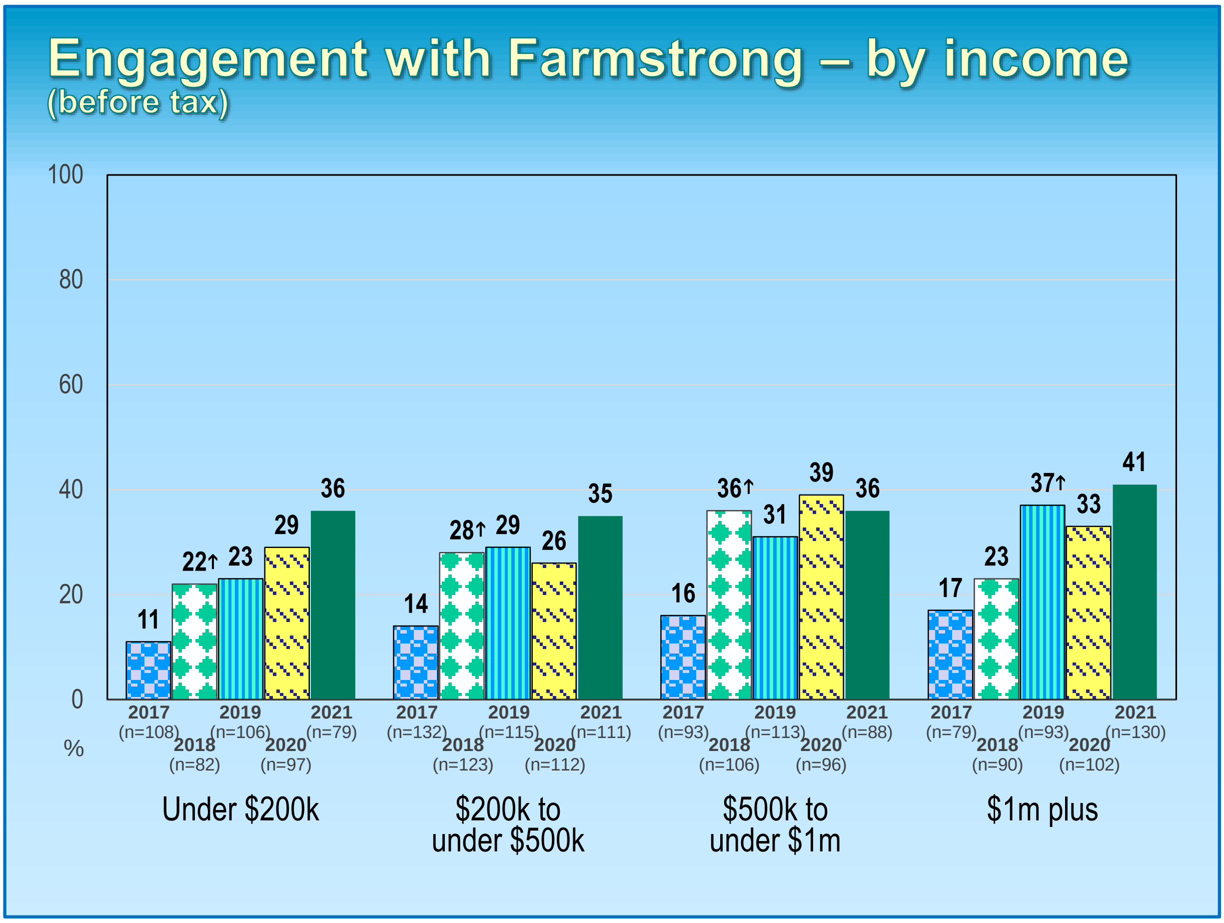


Engagement with Farmstrong – by age




Engagement with Farmstrong – by gender
100
80
60
40
20
0
%
14
27↑
30
31
35
16
26
27
31
37
2017 (n=337)
2018 (n=350)
2019 (n=373)
2020 (n=330)
2021 (n=343)
2017 (n=113)
2018 (n=100)
2019 (n=77)
2020 (n=121)
2021 (n=107)
Male
Female


Engagement with Farmstrong – by region
100
80
60
40
20
0
%
12
26↑
24
35↑
31
18
23
34
25
35
14
30↑
27
29
39
15
29↑
40
32
44
2017 (n=162)
2018 (n=159)
2019 (n=146)
2020 (n=144)
2021 (n=143)
2017 (n=126)
2018 (n=127)
2019 (n=140)
2020 (n=131)
2021 (n=136)
2017 (n=94)
2018 (n=96)
2019 (n=90)
2020 (n=103)
2021 (n=94)
2017 (n=68)
2018 (n=68)
2019 (n=74)
2020 (n=73)
2021 (n=77)
Upper North Island
Lower North Island
Upper South Island
Lower South Island

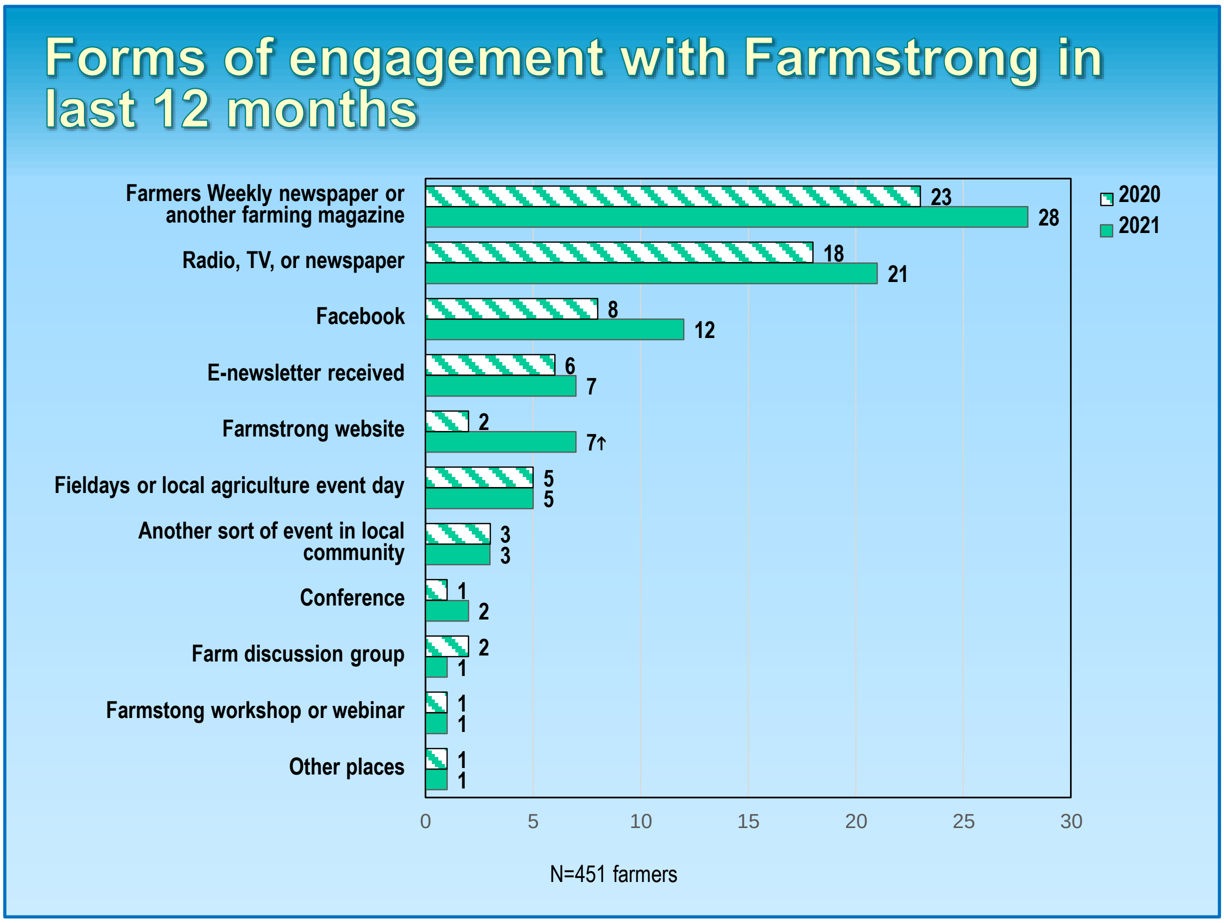


Forms of engagement reported in survey

A new question in 2020 asked: 'In the last 12 months, at which of the following places have you obtained information about Farmstrong or seen Sam Whitelock talking about things to help farmers cope?' Most of the main forms of engagement with Farmstrong over the last 12 months showed indications of increases since 2020. There was a significant increase for the Farmstrong website (up by 5% to 7% of all farmers/growers). There were also non-significant increases for 'Farmers Weekly newspaper or another farming magazine' (up by 5% to 28%) and Facebook (up by 4% to 12%).

Sixteen percent of the farmers/growers surveyed reported three of more forms of engagement with Farmstrong and 16% mentioned one to two forms (see table below).

Nine percent had some form of face to face engagement, which included those mentioning at least one of the following categories: fieldays, Farmstrong workshops, farm discussion groups, other community events and conferences.



NUMBER OF FORMS OF ENGAGEMENT	All farmers 2020 (451) %	All farmers 2021 (450) %
1 form of engagement	7	7
2 forms	8	9
3 forms	6	9
4 forms	4	2
5 forms	2	3
6 forms	1	1
Face-to-face engagement	7	9
Mean number of forms of engagement	0.70	0.87

Differences between sub-groups in 2021

Under 45 year olds were higher than others for most of the forms of engagement with Farmstrong. The levels of engagement with each form tended to decrease across the age groups. There were no significant gender differences. Sheep/beef farmers were more likely than others to mention Facebook (16%), although dairy was at 13%. Dairy were more likely than others to mention conferences, but the level was still only 4%. Those in the Lower North Island were more likely to mention the Farmstrong website (11%), and those in the Upper North Island less likely to do so (1%). Those in the Lower South Island were higher than others for Facebook (28%), fieldays (14%) and farm discussion groups (7%), while those in the Upper South Island were higher than others for a Farmstrong workshop or webinar (3%). Those in the highest income group were the most likely to mention the Farmstrong website

(13%), while those in the lowest income group were more likely than others to mention e-newsletters (15%), community events (8%) and conferences (5%).

Under 45 year olds were much more likely to report three or more forms of engagement (36%), with the level decreasing to 9% for the two upper age groups (those aged 55 years and over). Sheep/beef farmers were also more likely to report three plus forms of engagement (21% - dairy farmers were at 14%). This higher number of forms of engagement was also more evident among those in the Lower South Island (26%) and less so in the Upper North Island (12%). There were again no significant gender differences.

Subgroup changes

Under 45 year olds reported significant increases since 2020 for the website (up by 12% to 14%) and Facebook (up by 25% to 39%). The website increase was also significant for males (up from nil to 7%), sheep & beef farmers (up by 5% to 8%), the highest income group (up by 8% to 13%) and all the regions except the Upper North Island. The Facebook increase was also evident for females (up by 9% to 16%), but females had a decrease for fieldays (down by 8% to 2%). Horticulture reported a significant increase for 'radio, TV or a newspaper' (up by 9% to 12%).

In terms of numbers of forms of engagement, the only significant change since 2020 was for the $200k to under $500k income group, where the number reporting three or more forms of engagement increased by 10% to 14%.

4.4 NATIONAL DASHBOARD MEASURES

Changes over time

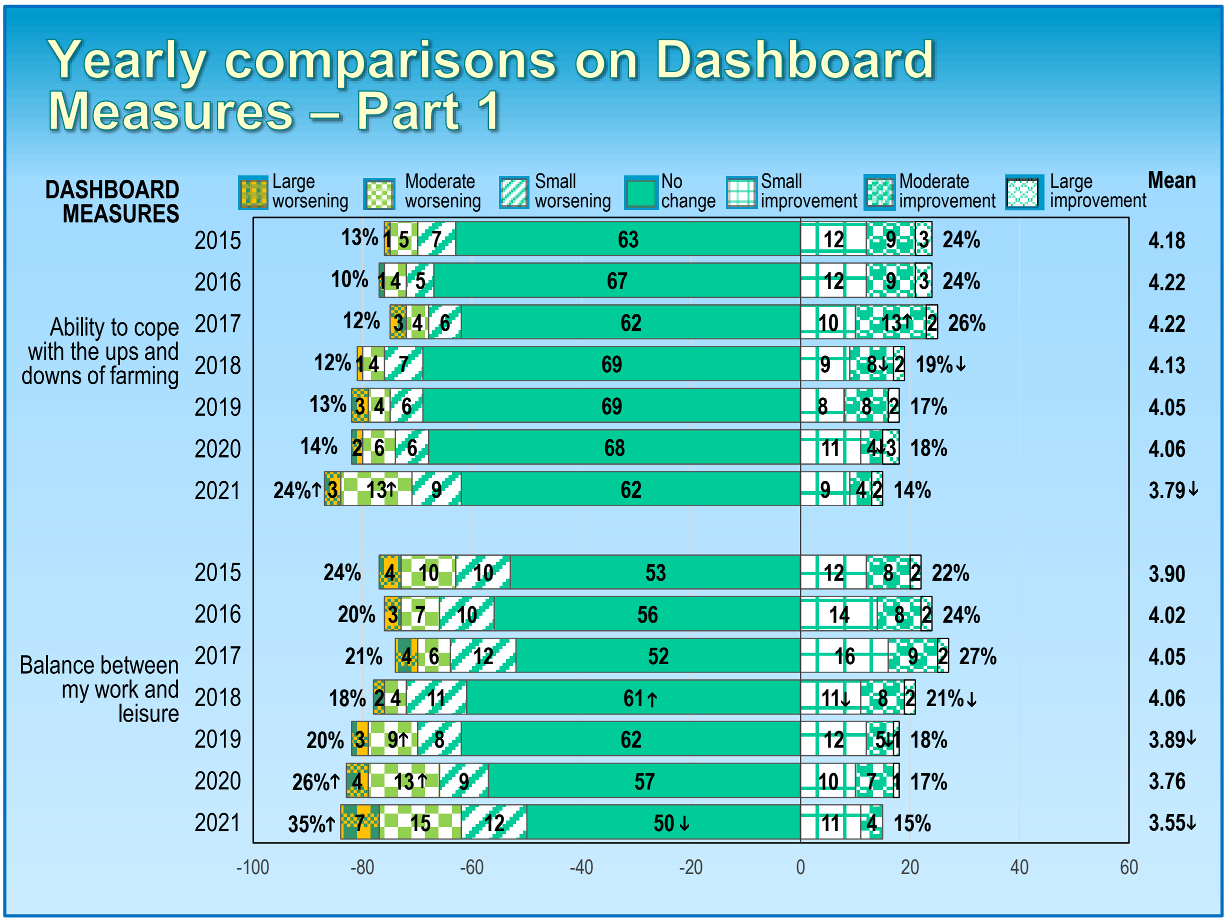
This section provides findings for all the farmers/growers to examine overall trends. Subsequent sections examine how these differed based on level of engagement with Farmstrong.

There were four of the measures where the mean rating[9] decreased over the last 12 months, reflecting a **worsening** situation:

- 'Ability to cope with the ups and downs of farming'
- 'Time taking notice of the small things in life that bring me pleasure'
- 'Balance between my work and leisure'
- 'Amount of sleep'

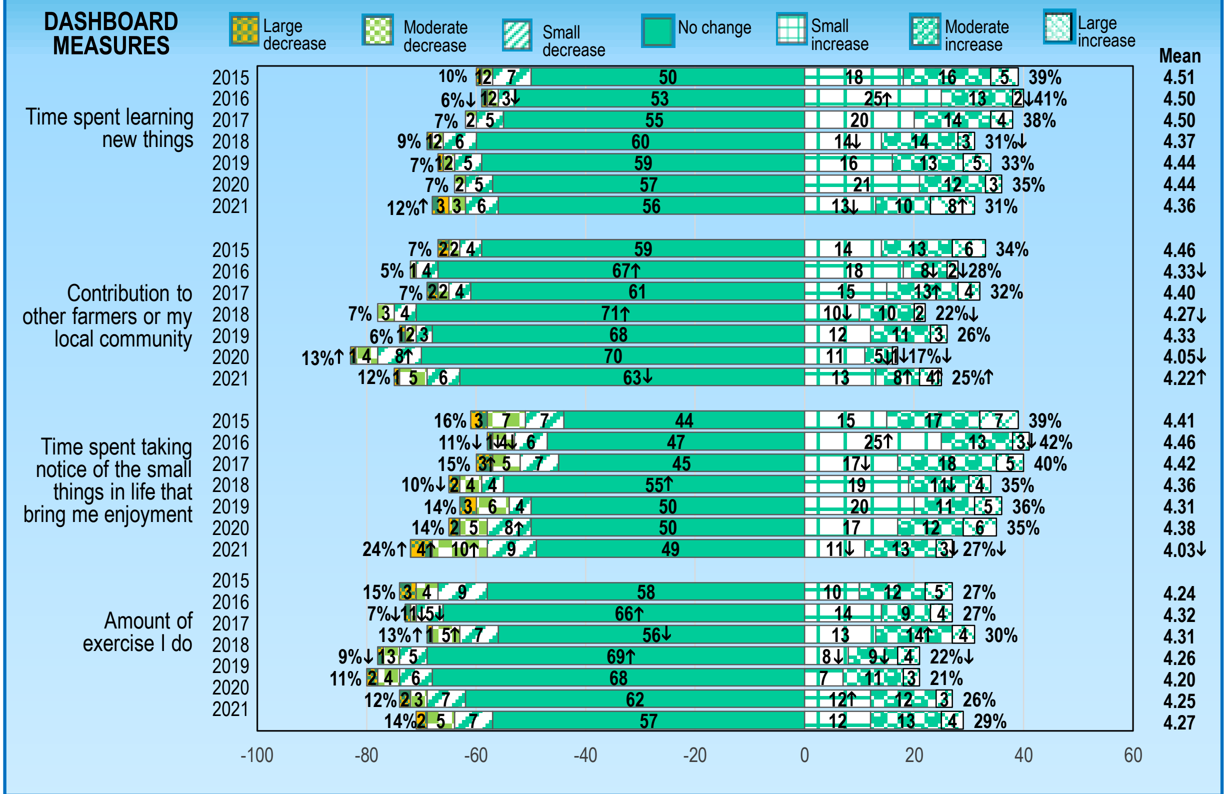
Against this trend there were **increases**, following decreases last year, presumably due to covid lockdowns, for:

- 'Contributions to other farmers or my local community'
- 'Level of contact with my friends'

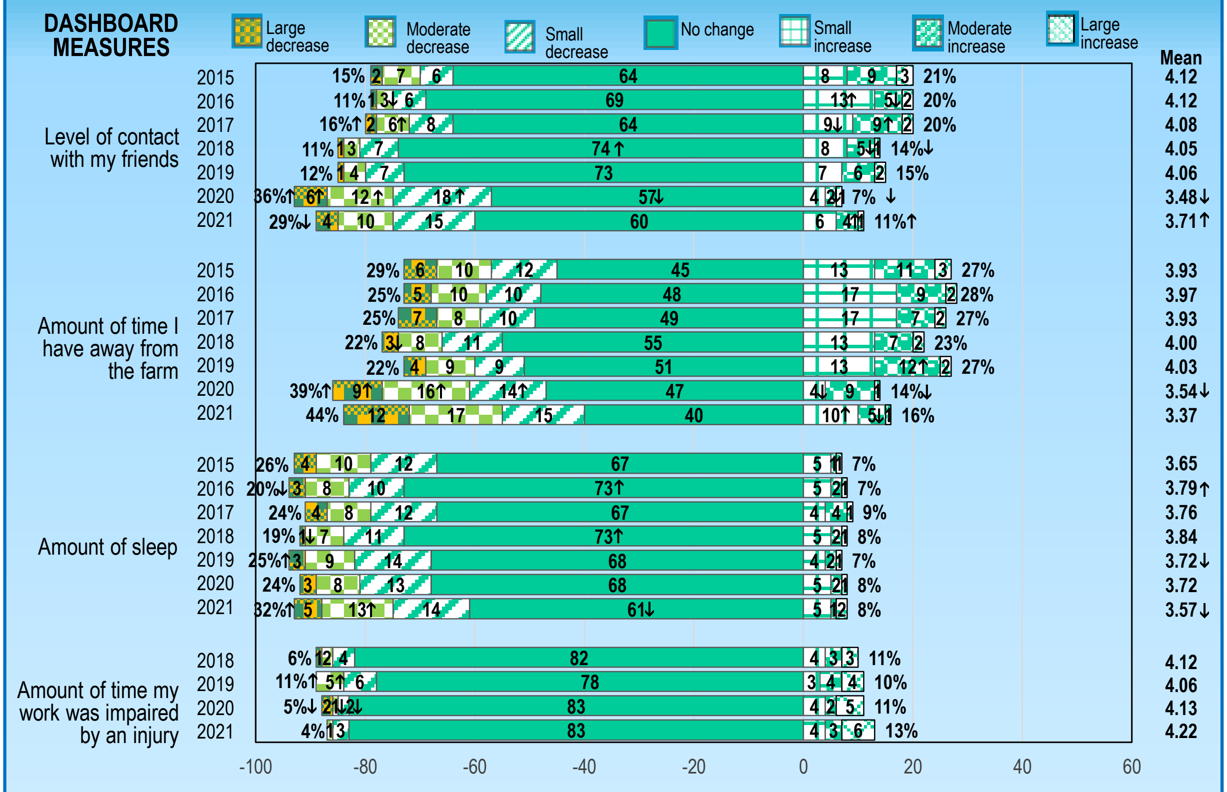


[9] The reporting is based on the means (shown in the right hand column on the graph), as they provide the most accurate picture of overall change, taking into account both changes in the percentage reporting increases/improvements, those reporting no change and those reporting decreases/worsening.

Yearly comparisons on Dashboard Measures – Part 2



Yearly comparisons on Dashboard Measures – Part 3



Differences with greater numbers of forms of engagement with Farmstrong

The research has identified that significant differences tend to emerge between those who have and have not ever engaged with Farmstrong when the number of different forms of engagement is greater.[10] While it varies across different dashboard measures, three or more forms of engagement has been identified as a level when several differences emerge[11]. Those farmers/growers who had engaged with Farmstrong via three or more forms in the previous 12 months were significantly more likely to report higher means scores (compared with those who had never engaged) for the following, reflecting either a higher level of improvement or a lower level of worsening[12]:

- Ability to cope with the ups and downs of farming
- Balance between work and leisure
- Amount of exercise
- Contribution to other farmers or local community
- Level of contact with friends

Differences in change in last 12 months between never engaged and 3 plus forms of engagement

As the question on forms of engagement was only included in 2020, this analyses of changes over time comparing never engaged with three plus forms of engagement can only be done for 2020 versus 2021. In the graphs which follow, significant changes between the two years are shown with upward green triangles or downward red triangles. What is of most interest is changes in the size of the gap between the two groups. For the key measure of 'ability to cope with the ups and downs of farming', both groups decreased at a similar rate over the last 12 months.

The gap between those who had ever engaged and those with three plus forms of engagements in the last 12 months *increased* from a non-significant level in 2020 to a significant level in 2021 for:

- Contribution to other farmers or my local community
- Level of contact with friends

There were two other measures which showed indications of a widening gap:

- Amount of time away from the farm
- Amount of sleep

The gap *decreased* from a significant difference in 2020 to a non-significant difference in 2021 for:

- Balance between work and leisure

Other measures which showed indications of a decrease in the gap were:

- Time spent learning new things
- Amount of exercise

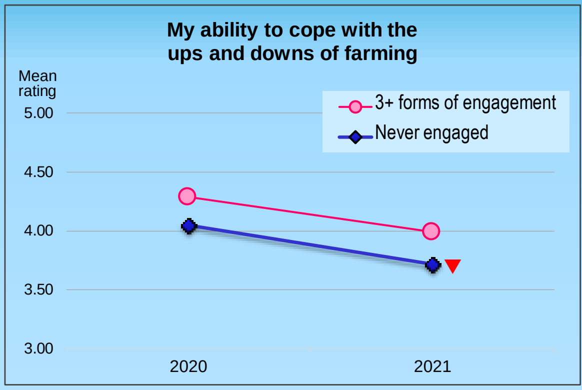
A higher rating for 'amount of time my work was impaired by injury' is a more negative result, so the three plus group had indications of a negative change while the never engaged group had no change. However, the change between years for the three plus group was not large enough to be significant.

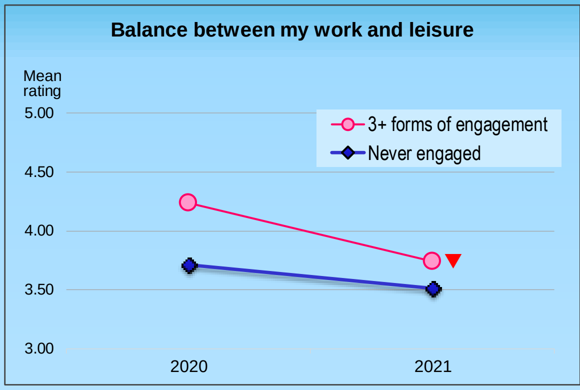
[10] The findings in this section are based on combining the 2020 and 2021 data bases to provide larger sub-samples who had different numbers of forms of engagement.

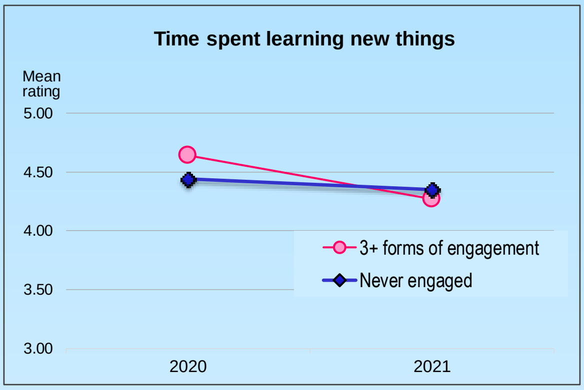
[11] The different forms of engagement are those reported in the previous section.

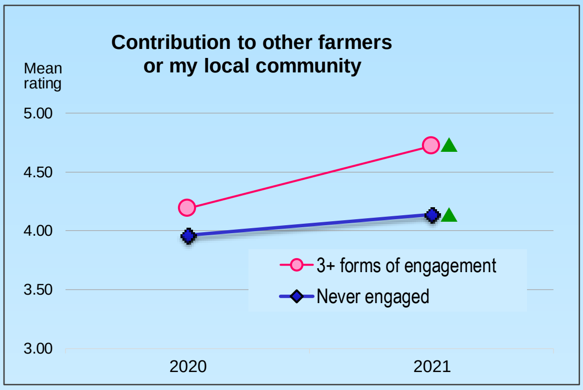
[12] This analysis was based on combined 2020 and 2021 data, comparing those who had no engagement, those who had 1-2 and those who had 3 or more.

Dashboard means by – '3 plus forms of engagement' versus 'never engaged' (1)

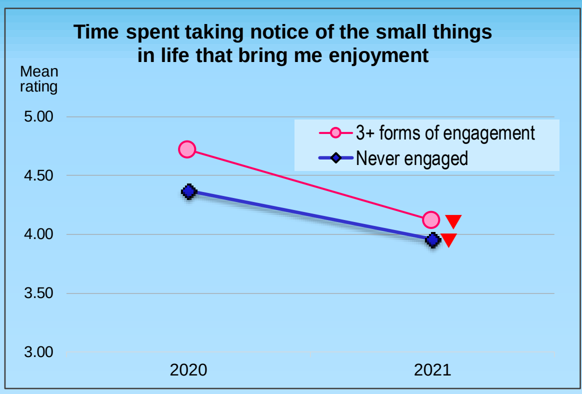


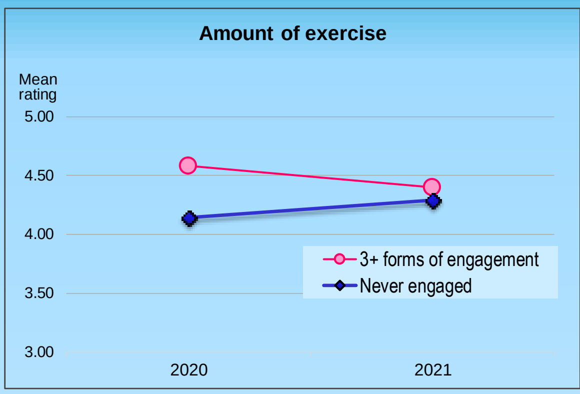


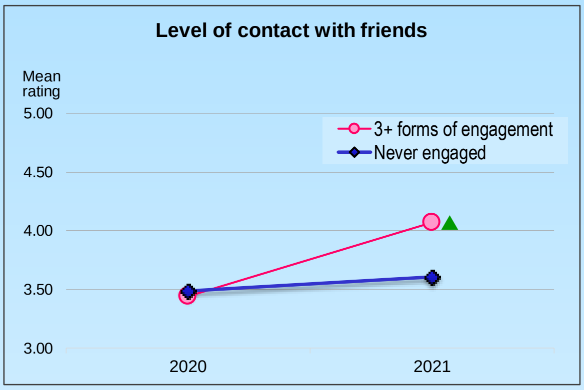


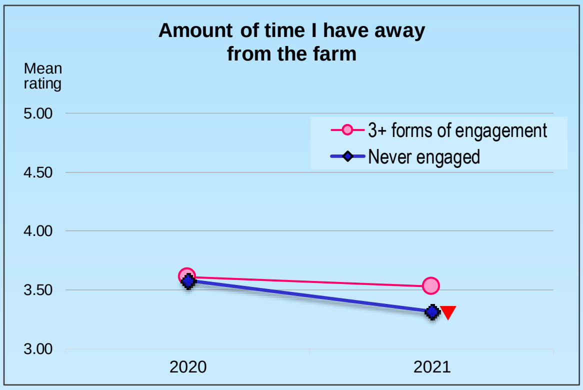


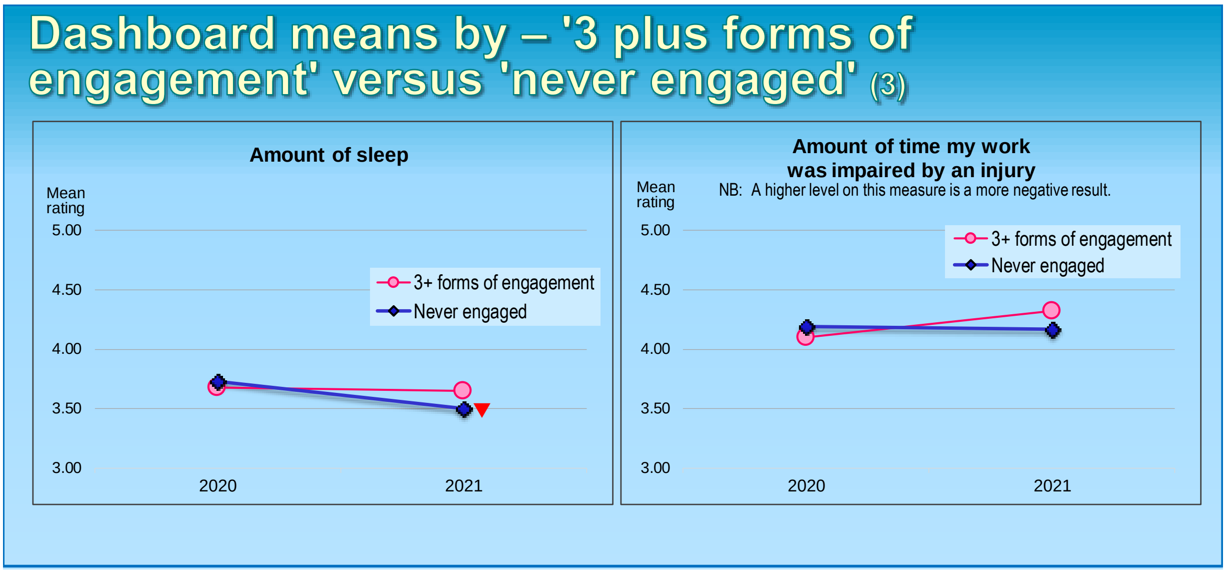
Dashboard means by – '3 plus forms of engagement' versus 'never engaged' (2)











Sub-group differences in 2021

In the current survey the following subgroups reported significantly higher or lower mean ratings in 2021, compared with the rest.

MEASURE	Higher than others	Lower than others
'Ability to cope with ups and downs of farming'	Income of $500k to under $1m	
'Balance between work and leisure'	Lower North Island	
'Time spent learning new things'	Females	Income $1m plus
'Contribution to other farmers or community'	Under 45 years, females	Horticulture, Income $200k to under $500k
'Time spent taking notice of the small things in life that bring me enjoyment'	Sheep & beef	$1m plus
'Amount of exercise'		
'Level of contact with friends'	Under 45 years, Lower North Island. $500k to under $1m	
'Amount of time away from farm'	Males, horticulture, $500k to under $1m	$1m plus
'Amount of sleep'	55-64 year olds, $500k to under $1m	Upper South Island, $200k to under $500k
'Amount of time that was impaired by an injury'	Upper North Island	

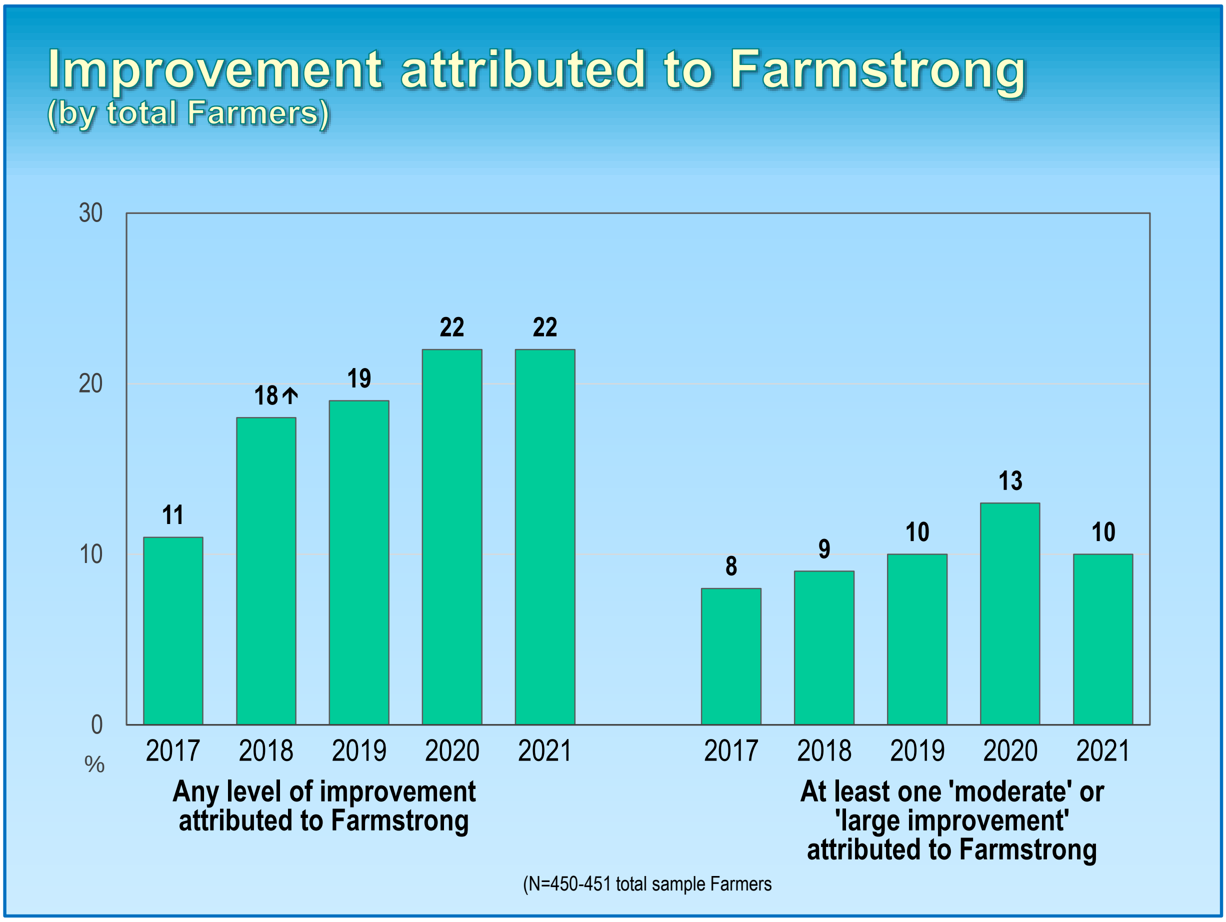
Where farmers/growers making most and least progress

These results also indicate which measures farmers/growers were making the most and least progress on improving. For all farmers/growers the most progress (highest mean ratings) was being made on: 'time spent learning new things' (4.36) and 'exercise' (4.27). They were making least progress on: 'amount of time away from the farm' (3.37), 'balance between work and leisure' (3.55) and 'amount of sleep' (3.57). 'Ability to cope with the ups and downs of farming' was at 3.79.[13]

13 It is not possible to include 'amount of time my work was impaired by injury' in this analysis, as this is the only measure where a lower mean is a more positive result.

4.5 IMPROVEMENTS ATTRIBUTED TO FARMSTRONG

When considering all the farmers/growers in the survey, 22.2% attributed some level of improvement to Farmstrong on at least one of the nine items (i.e. 'small', 'moderate' or 'large' improvement).[14] This equates with approximately 14,900 farmers/growers/farm workers. There were 9.7% who attributed at least one 'moderate' or 'large' level of improvement to Farmstrong, which was a non-significant decrease of 3%, to return to the 2019 level. This equates with approximately 6,500 farmers/growers/farm workers.



The table below shows the number of improvements being attributed to Farmstrong, out of the nine asked about. Please note that as a result of the qualitative research which has recently been undertaken to increase understanding of how Farmstrong is improving farmer wellbeing, it has been identified that three of the items have been mis-reported by Kantar TNS (who collect the data and provide the tables) since 2018, when the injury item was added. The corrected figures showed very low percentages attributing Farmstrong with improvements for the 'amount of time my work was impaired by an injury', which is consistent with the qualitative research findings. The qualitative research has also identified that this measure in the monitor is not working as intended and so it has been removed from the analysis in this report. In the brief time available in a phone survey, it is not feasible for farmers to consider how Farmstong's impact on their wellbeing might be contributing to reduced injuries. Most get no further than saying they have had no injuries and they don't consider whether this might be due to Farmstrong. Therefore the ACC results reported in the following section,

[14] In the 2017 survey respondents who had ever engaged with Farmstrong were asked: "For each of the following how much, if any, improvement do you think is a result of your involvement with Farmstrong or Healthy Thinking?" Since 2018 the wording has been: "For each of the following how much, if any, improvement do you think is a result of your involvement with what you've heard from Farmstrong, Sam Whitelock or Healthy Thinking?"

will be used as the sole measure of the impacts of Farmstrong on injury. It should be noted that the earlier question in the monitor asking farmers to report changes in the amount of time their work was impaired by an injury in the last 12 months is a question that farmers can readily answer and so this measure will be retained.

The two other items which have been previously mis-reported are 'ability to cope with the ups and downs of farming', which is now reporting slightly more positive results, and 'balance between work and leisure which is now reporting much more positive results.

The percentage that had ever engaged with Farmstrong but were attributing no improvements to Farmstrong, increased significantly in 2021, by 4% to 13%.

IMPROVEMENTS ATTRIBUTED TO FARMSTRONG	2016/ 2017 450 %	2017/ 2018 450 %	2018/ 2019 450 %	2019/ 2020 451 %	2020/ 2021 450 %
Any level of improvement					
1-2	3	6↑	3↓	6↑	9
3-4	3	4	7	4	4
5 or more	5	8	10	12	10
At least one improvement	**11**	**18↑**	**19**	**22**	**22**
'Moderate' or 'large' level of improvement					
1-2	3	5	4	7↑	5
3 or more	4	3	6	6	5
At least one 'moderate' or 'large' improvement	**8**	**9**	**9**	**13**	**10**
Ever engaged with Farmstrong but attributing no improvements	**3**	**8↑**	**10**	**9**	**13↑**
Never engaged with Farmstrong	**86**	**74↓**	**71**	**69**	**64**

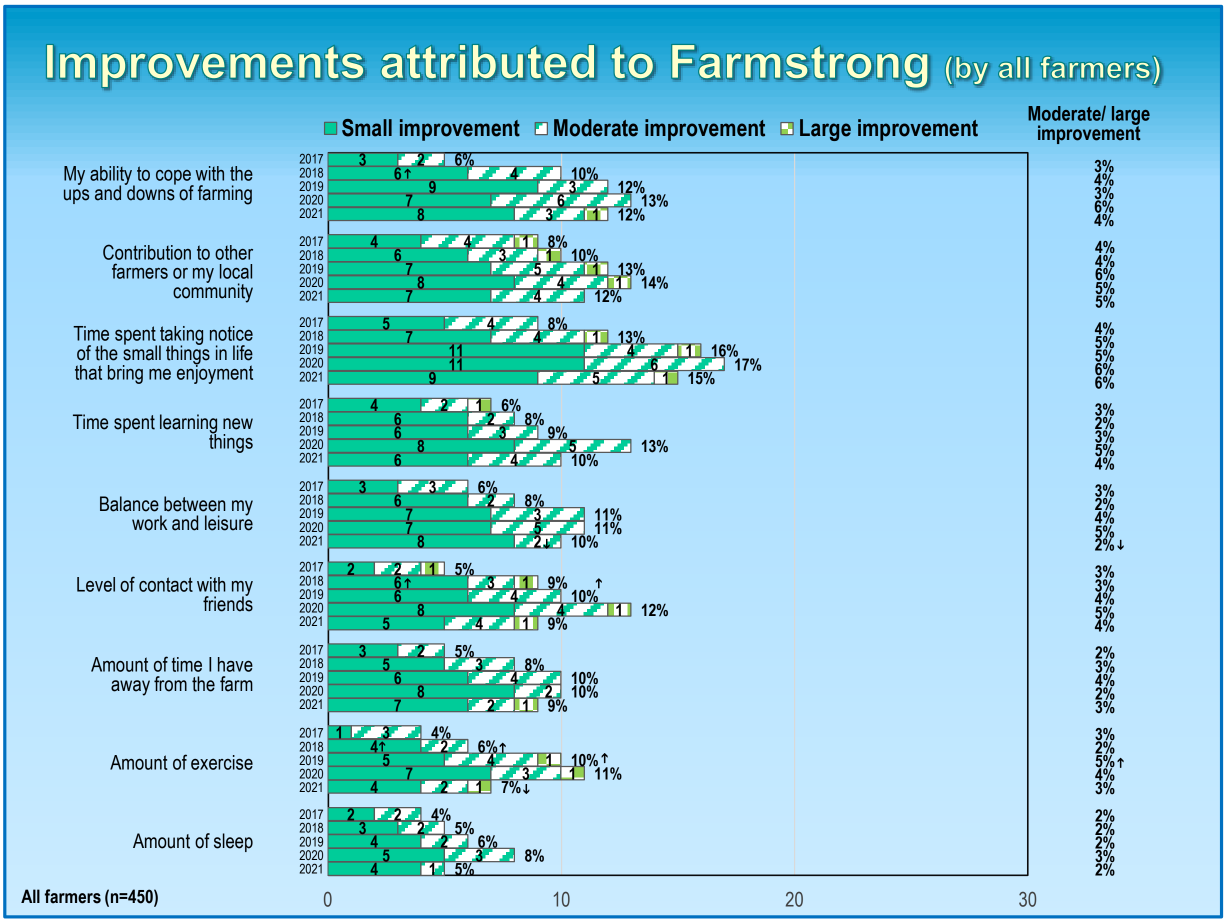
The graph below shows the responses to the individual items asked about. Most of the items showed indications of decreases since 2020, although the 4% decrease in those attributing any improvement for exercise to Farmstrong was the only significant decrease for attribution of 'any improvement'. There was a significant 2% decrease in those attributing a 'moderate/large' improvement to Farmstrong for 'balance between my work and leisure'.

In 2021 the greatest numbers attributing some level of improvement to Farmstrong were for:

- 'Time spent taking notice of the small things in life that bring me enjoyment' (15% of all farmers/growers)
- 'My ability to cope with the ups and downs of farming' (12%)
- 'Contribution to other farmers or my local community' (12%)

When considering just the 'moderate' or 'large' responses, the most mentioned were:

- 'Time spent taking notice of the small things in life that bring me enjoyment' (6%)
- 'Contribution to other farmers or my local community' (5%)



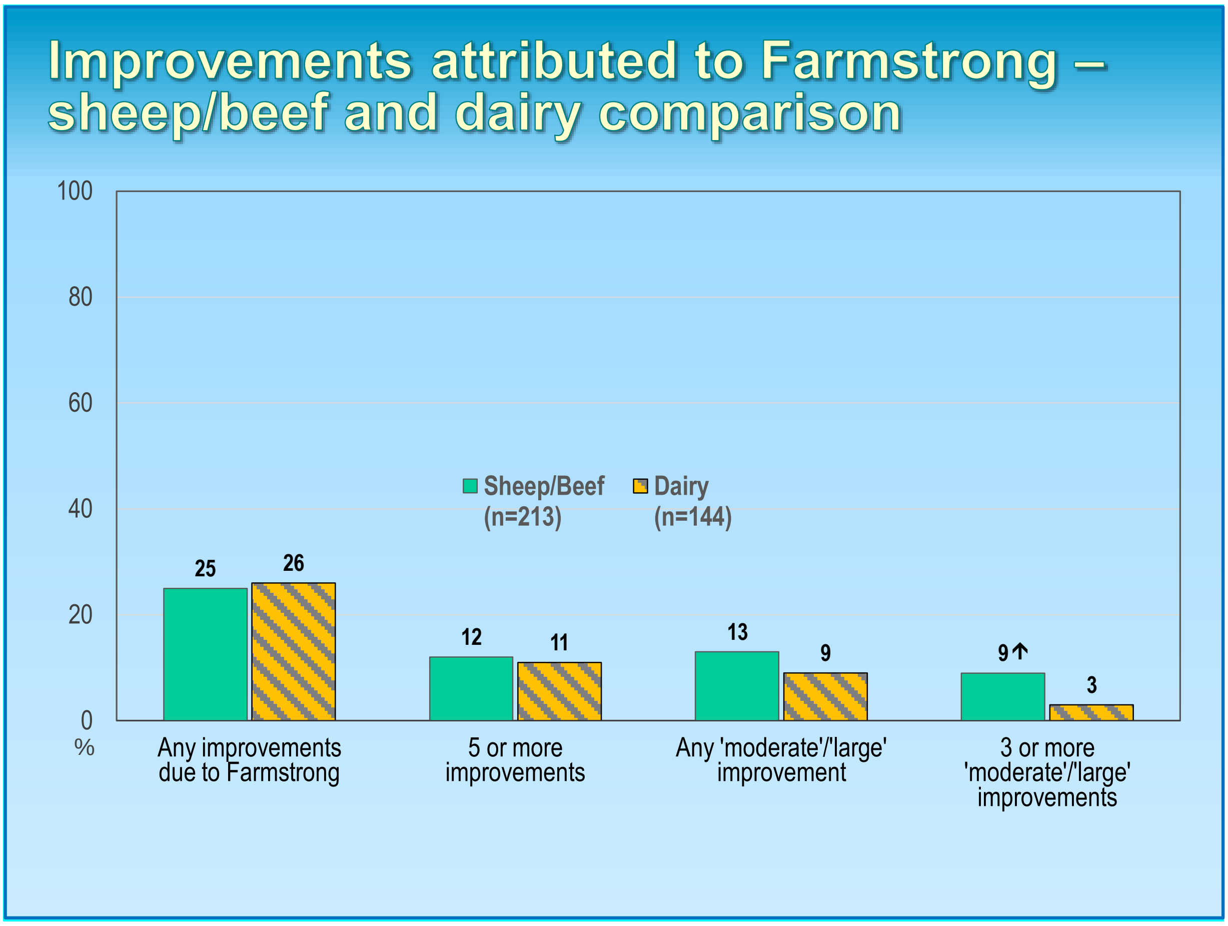
Sub-group differences

Farmstrong appears to be working more successfully for sheep/beef farmers than dairy. While both were are similar levels for the percentage who reported any improvements and five or more improvements due to Farmstrong, there was a non-significantly higher level for sheep/beef for reporting any 'moderate/large' improvements (13% vs 9% for dairy). This trend was even more apparent when considering those who attributed three or more moderate improvements to Farmstrong, where the sheep/beef level of 9% was significantly higher than the 3% for dairy (see graph below).

Females were more likely to be in the group who had engaged with Farmstrong but were attributing no improvements to Farmstrong (20% all the female farmers/growers vs 10% for males). However, when it came to attributing any 'moderate/large' improvements to Farmstrong women and men were at similar levels (both 10%).

A similar pattern was evident for those aged under 45 years, with higher proportions having engaged but attributing no improvements to Farmstrong (22%, compared with 4-16% for other age groups), but being at similar levels to other age groups for attributing any 'moderate/large' improvements to Farmstrong (9%, compared with 8-11% for other age groups).

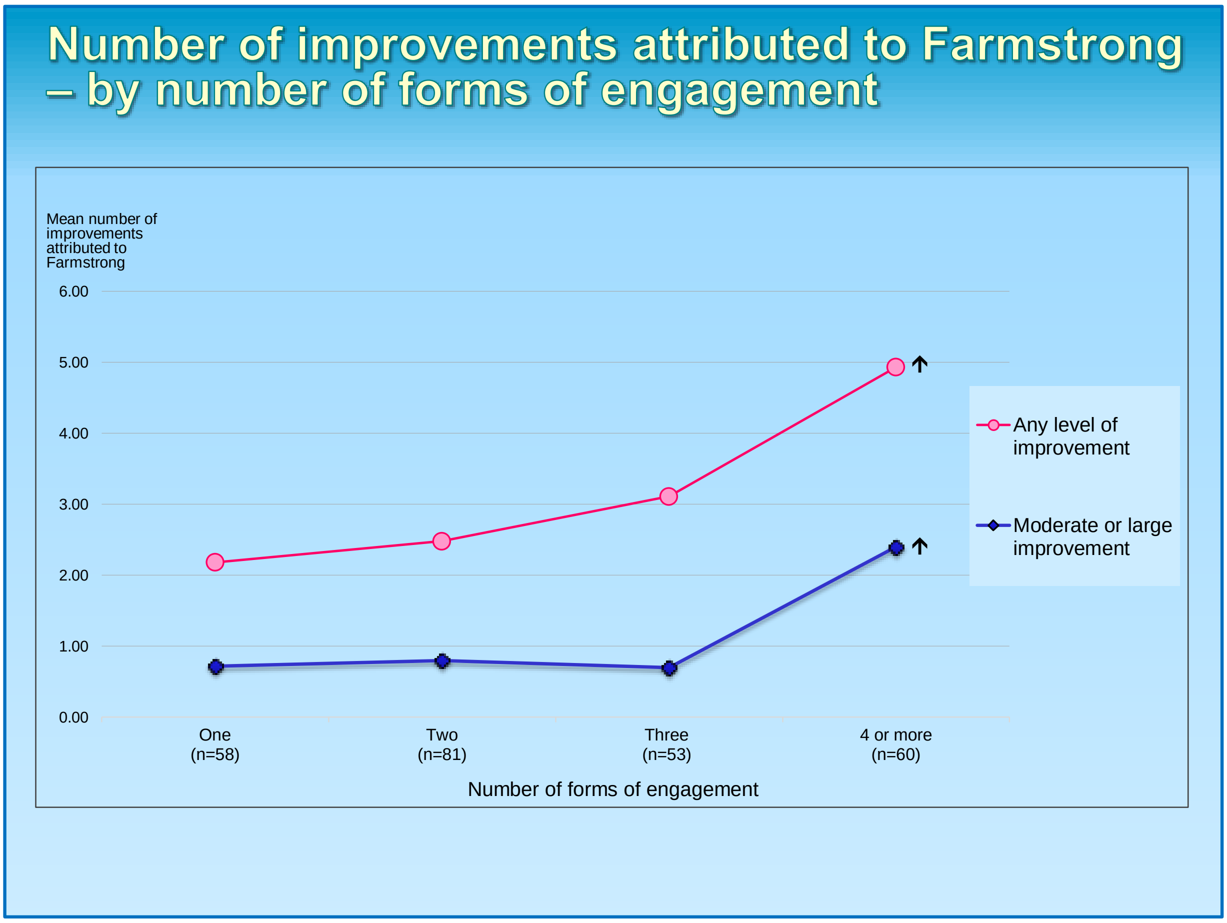
Those in the upper South Island were also over-represented in the engaged but no improvements group (21%).



Differences by level of engagement with Farmstrong

As can be seen from the graph below, the mean number of improvements attributed to Farmstrong increased markedly when there were four or more forms of engagement with Farmstrong. For any level of improvement being attributed to Farmstrong, there was some indication of an increasing trend for two and three forms of engagement, which increased much more for four plus. However, for moderate/large improvements the level remained similar until the marked increase for four plus.[15]

15 These analyses were based on combined 2020 and 2021 data, to provide large numbers in each sub-group for numbers of forms of engagement.



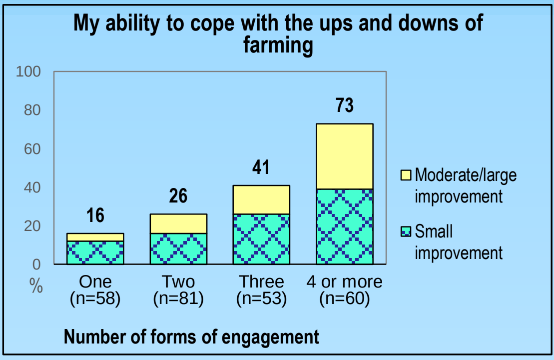
In the graphs which follow for each item, the number on the top of each bar is the percentage attributing any level of improvement to Farmstrong. Within the bars are the proportions attributing a 'moderate' or 'large' improvement to Farmstrong and those attributing a 'small' improvement to Farmstrong.

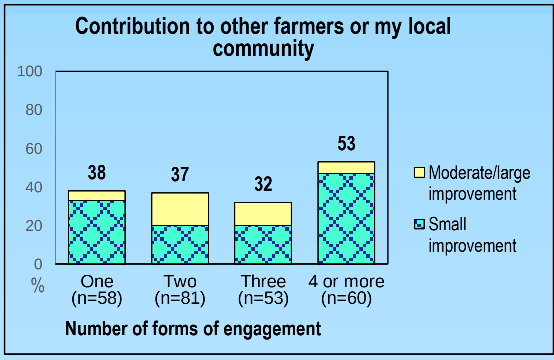
- Several of these graphs show a similar trend to the above graph, but for 'Amount of exercise' there was more evidence of increasing moderate/large improvement with each increased form of engagement, rather than just for four plus:

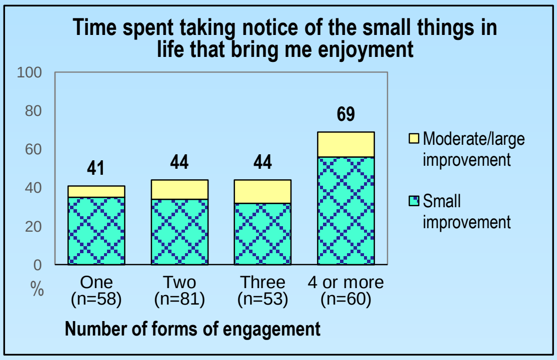
Three other items tended not to show the marked increase for 'moderate/large' improvements with four plus forms of engagement, these being:

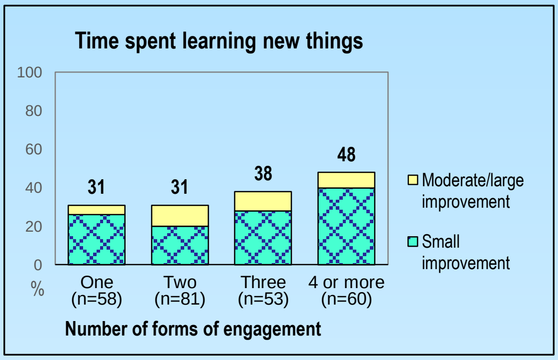
- 'Time spent learning new things'
- 'Time spent taking notice of the small things in life that bring me enjoyment'
- 'Contributions to other farmers or my local community', which was the item which was most inconsistent with the general trend.

Improvements attributed to Farmstrong – by number of forms of engagement (1)

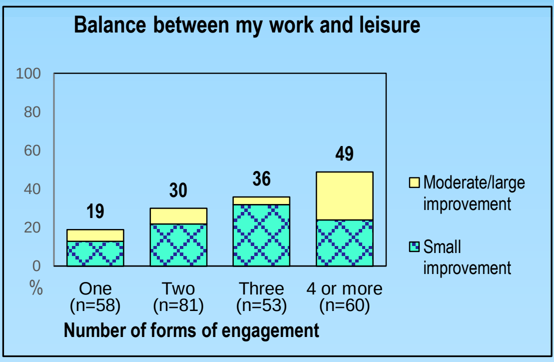


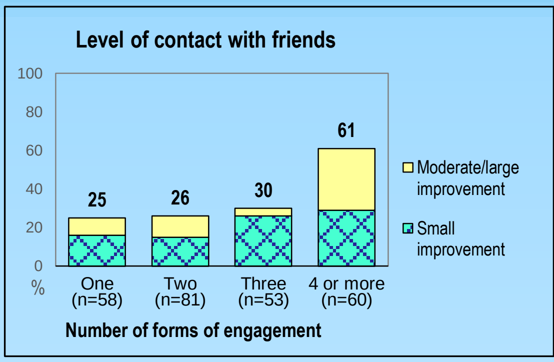


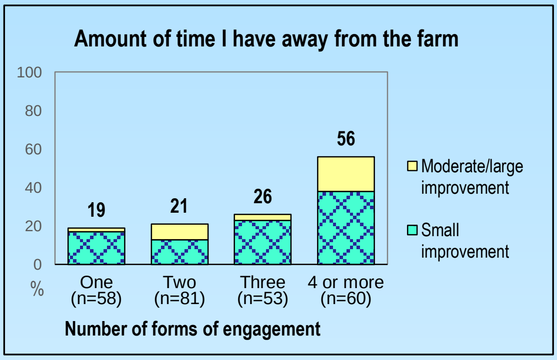


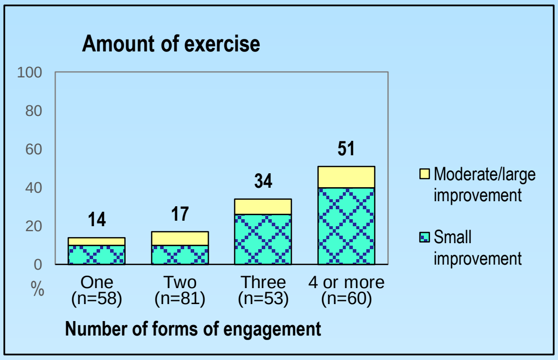


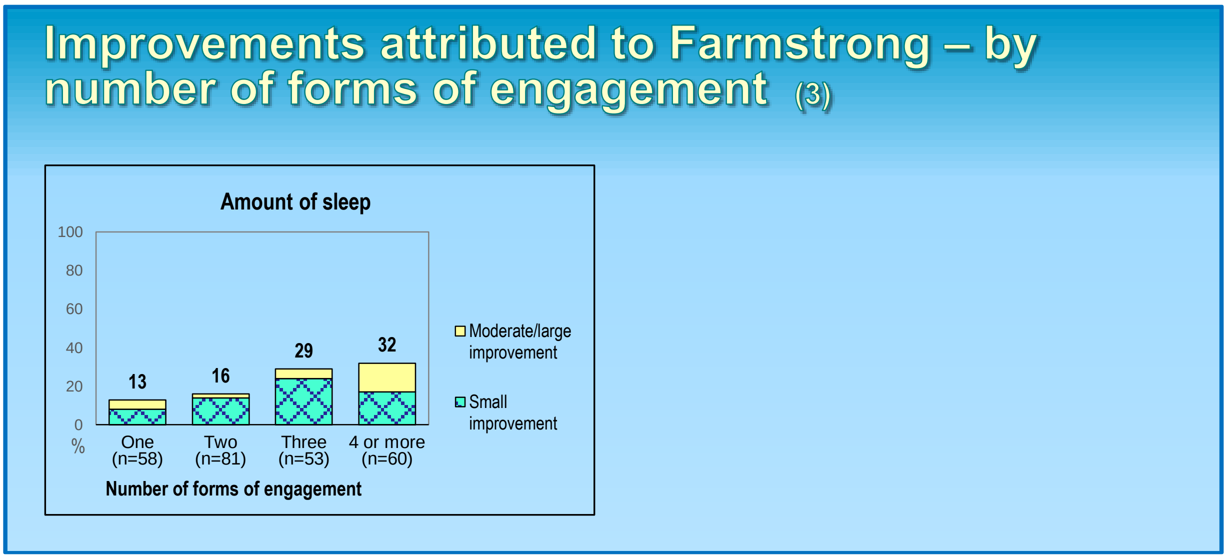
Improvements attributed to Farmstrong – by number of forms of engagement (2)











Farmstrong impacts on farmer injury

Results from the ACC Farmstrong Return on Investment (ROI) model for expected reduction in farmer/grower claims for 2020/21 exceeded the expected by 560%. ACC use a model that compares agriculture with a peer group (from a range of industry groups) who have a similar injury profile, but don't have a wellbeing programme. Based on their modelling, ACC were expecting 195 fewer claims for 2020/21. There were in fact 1,103 fewer, a 560% better result than predicted in the total number who have been 'saved' from having an injury.

APPENDIX A: RESEARCH METHOD

Data has been collected from national surveys since 2015. What is known as the Dashboard Survey has been undertaken in each of the seven years in late May/early June. As most of the interviews are in May, they will be referred to as May surveys. Awareness was included in this survey for the first time in 2018. Prior to that, it had been measured in a separate survey in November each year, using the same methodology as the May surveys.

The random national phone surveys of approximately 450 farmers/growers were undertaken for KantarTNS Research Company, using their Farm Market Index Panel. This panel has more than 15,000 farmer contacts built up over the years, from which survey participants were randomly selected.

Kantar TNS have quotas which they say makes their data representative of the population by farm activity and region and they also weight the data to ensure it is representative on these two variables. However, they are basing their quotas and weighting on data from another random digit dialling survey of farmers/growers, rather than Statistics New Zealand data.

At the request of Wyllie & Associates the data is also weighted by age and gender. The gender weighting was added in 2020, but all the previous surveys were then reweighted.

The profile of survey participants was as listed below, where the weighted Kantar TNS data for the dashboard surveys is compared with Statistics NZ (SNZ) data (where available) and FMG client base data[16]. Where the sample composition was the same in all the dashboard surveys, only one set of data is shown. The SNZ occupation data came from the analyses of Census data commissioned by Farmstrong. This analysis did not get the horticulture/viticulture percentages separately identified, so this is included in the 'Other' category. The SNZ farm type came from FMG analyses of 2012 SNZ data which they obtained. (Some columns don't add to exactly 100% due to rounding.)

The SNZ profile differs considerably when comparing farm types versus persons who listed their occupation as farmers or farm managers. For dairy the dashboard survey level (41%) was the same as the SNZ Census occupation data (41%), but much less than the SNZ farm type data (23%). The 35% in the dashboard survey for sheep & beef was a reasonable match with the 39% for SNZ occupations, but again the SNZ farm types differed.

On the tables in this report, an upward arrow ↑ denotes a statistically significant higher level than the comparison group and a downward arrow ↓ a statistically significant lower level.

The percentages of farmers/growers from each type of farm remained the same in all surveys, as it was subject to quotas and weighting.

TYPE OF FARM	Dashboard surveys 2015-21 450 %	SNZ 2012 farm types 53,157 %	SNZ 2013 Census occupations 50,388 %	FMG clients 20,357 %
Dairy	41	23	41	41
Beef/sheep	35	47	39	38
Horticulture/Viticulture	15	17	NR	7
Cropping/Other	9	14	20	15

In the following region table, Upper North Island includes Northland, Auckland, Waikato and Bay of Plenty. Lower South Island includes Otago and Southland. Survey levels vary by up to two percent for

16 No statistical significance testing has been undertaken on these comparisons between surveys and the Census.

the different years. The Dashboard survey sample was a reasonable match to the SNZ occupation profile (SNZ farm type data was not available).

REGION	Dashboard survey 2021 450 %	SNZ 2013 Census occupations 50,388 %	FMG clients 20,357 %
Upper North Island	42	38	34
Lower North Island	24	25	27
Upper South Island	21	21	20
Lower South Island	13	16	19

GENDER	Dashboard surveys 450 %	SNZ 2013 Census occupations 50,388 %
Male	76	72
Female	24	28

Most of the participants in the Dashboard surveys were aged 45 years and over (80%), after weighting.

AGE	Dashboard surveys 450 %
Under 35 years	4
35 to 45 years	16
45 to 54 years	25
55 to 64 years	31
65 years and over	24

The following table shows income from the farm before tax and operating expenses are taken out, excluding those who refused the question. The current survey had a lower proportion of the lowest income group, compared with the 2020 survey.

INCOME	Surveys 2015 845 %	Surveys 2016 817 %	Surveys 2017 817 %	Survey 2018 401 %	Survey 2019 426 %	Survey 2020 407 %	Survey 2021 408 %
Under $200k	25	26	25	19↓	26↑	24	18↓
$200k to $500k	28	29	29	28	26	25	27
$500k to $1m	23	26	24	28	27	25	24
More than $1m	24	19↓	22	24	22	26	31

The 2015 dashboard survey also included a question to ascertain role on the farm. This identified that the survey was completed by predominantly farm owners (92%). The remainder consisted of family members of the farm owners (2%), farm managers (2%), sharemilkers (2%) and other (2%), but none classified themselves as farm workers/labourers/milkers.

Statistical significance

Differences between years, surveys and demographic sub-groups are only mentioned in the written reporting if they are statistically significant at the 95% level of confidence, unless otherwise stated. With demographic comparisons within the 2021 survey, the value for the sub-group being reported as significant has been compared with the combined value for the rest of the sample. For a figure of 50% reported by 450 farmers/growers, the margin of error at the 95% confidence level is plus or minus 4.6%. This means that, if the survey was repeated, 95 times out of 100 the result would be between 45.4% and 54.6% (i.e. between 50% - 4.6% and 50% + 4.6%). For higher or lower figures the margin of error is less. For example a figure or 20% or 80%, based on 450 farmers/growers, would have a margin of error of plus or minus 3.7%. For smaller sub-samples the margin of error is greater. For example a figure of 50% reported by 150 farmers/growers would have a margin of error of plus or minus 8.0%.

APPENDIX B: CALCULATION OF NUMBERS OF FARMERS/GROWERS ENGAGED WITH FARMSTRONG

The target audience for this programme is all those living and working in the rural sector, but with a particular emphasis on farmers, farm workers and growers. It is therefore important to ascertain the size of this target audience.

Farmstrong purchased some analyses of the 2013 Census data by StatsNZ, to identify the numbers of farmers/growers and farm workers living in rural areas. 'Rural' for these purposes was defined as persons living in rural areas or towns of less than 10,000 persons. There were 50,388 who had their occupation classified as 'farmer' and another 27,636 as 'farm workers', giving a total of 78,024. The 'farmer' grouping includes growers.

As well as this national dashboard survey, this question on participation in Farmstrong was also asked in the survey of recently injured farmers/growers undertaken in June/July 2018 and February 2019. This survey produced a higher level for farm owners of 41%, compared with the 30% in the 2019 dashboard survey (most of the dashboard participants are farm owners). What we don't know is how those who get injured and report their injuries differ from other farmers/growers. We also don't know what biases are present in the sample that is used for the dashboard surveys. Given the dashboard survey is our on-going source of trend data, we have used the figures from this survey. These are the more conservative figures.

Obviously farm owners are only part of the group who are classified as 'farmers/growers', based on what they enter on their Census form. However, as we don't have data to differentiate between the different types of farmers/growers, we have used the 2021 survey level of 35.6% for all farmers/growers. Based on the 50,388 farmers/growers in the 2013 Census, there are an estimated 18,000 farmers/growers who have ever engaged with Farmstrong. The 32.2% having engaged with Farmstrong in the previous 12 months equates with approximately 16,000 farmers/growers.

The survey of recently injured farmers/growers is the only survey we have which included all types of farmers/growers and farm workers. In that survey non-farm owners reported a rate of participation with Farmstrong that was 40% lower than the farm owner rate. We have therefore added 60% of the 27,636 farm workers in the 2013 Census to the farm/grower owner 50,388, giving a total of 66,970.

On this basis the best estimate for the number of farm/grower owners and farm workers who had ever engaged with Farmstrong is 23,800 and for engagement in the last 12 months it is 21,600.

On the same basis, the 22.2% attributing any level of improvement to Farmstrong equates with approximately 14,900 farmers/growers/farm workers and the 9.9% attributing moderate/large improvements to Farmstrong equates with approximately 6,600.

APPENDIX C: QUESTIONNAIRE

FS1a. Now we are moving on to a new topic. Thinking about the last 12 months, for each of the following behaviours, please tell me whether for you they have increased, decreased or stayed the same. Was that increase/decrease in the last 12 months small, moderate or large?

[READ OUT. RANDOMISE ROWS. READ OUT CODEFRAME ONCE]

	Large decrease	Moderate decrease	Small decrease	No change	Small increase	Moderate increase	Large increase	Don't know
Level of contact with friends	1	2	3	4	5	6	7	98
Amount of exercise I do	1	2	3	4	5	6	7	98
Contribution to other farmers or my local community	1	2	3	4	5	6	7	98
Time spent taking notice of the small things in life that bring me enjoyment	1	2	3	4	5	6	7	98
Time spent learning new things	1	2	3	4	5	6	7	98
Amount of sleep	1	2	3	4	5	6	7	98
Amount of time I have away from the farm	1	2	3	4	5	6	7	98
Amount of time my work was impaired by an injury	1	2	3	4	5	6	7	98

FS1b. Still thinking about the last 12 months, for the following two behaviours, please tell me whether for you they have improved, worsened or stayed the same.

[READ OUT. RANDOMISE ROWS]

	Large worsening	Moderate worsening	Small worsening	No change	Small improvement	Moderate improvement	Large improvement	Don't know
Balance between my work and leisure	1	2	3	4	5	6	7	98
My ability to cope with the ups and downs of farming	1	2	3	4	5	6	7	98

FS5a. What programmes or initiatives are you aware of that are designed to support farmer and grower wellbeing?

[MULTIPLE RESPONSE. DO NOT READ OUT]

Farmstrong	1
Rural Support Trust	2
Doug Avery / Resilient Farmer	3
Ian Hancock / Fit for Farming	4
Dairy NZ programme / Dairy Connect	5
Dairy Women's Network	6
BNZ programme	7
NZ Farmer.co.nz / NZ Farmer	8
Federated Farmers	9
Farming Mums	10
Sam Whitelock	11
Young Farmers	12
Good Yarn	13
Other [SPECIFY]	90
None / don't know	98

[IF FS5a=1 SKIP FS5b]

FS5b. Have you heard of a programme for farmers and growers called Farmstrong?

Yes	1
No	2
Don't know	98

ASK IF 2-3 CODED AT FS5B, OTHERWISE SKIP TO FS4

FS5c. Have you ever seen or read about well known rugby player Sam Whitelock talking about things to help farmers cope with the ups and downs of farming?

Yes	1
No	2
Don't know	98
Refused	99

ASK FS4 IF CODE 1 AT FS5a, FS5b, FS5c

FS4. Have you ever visited the Farmstrong website, Facebook or twitter, seen any Farmstrong videos or articles, including those with Sam Whitelock, or attended any workshops or other activities associated with Farmstrong or Healthy Thinking?

(IF ASKED:: Sam Whitelock is an ambassador for Farmstrong)

Yes	1
No	2
Don’t know	98
Refused	99

ASK FS5a2-b2 IF YES AT FS4 – OTHERWISE SKIP TO FS6

FS5a2 Was this…

READ ALL OPTIONS

1. Within the last 12 months
2. Before then, or
3. Both the last 12 months and before?
4. Don't know
5. Refused

ASK FS5a3 IF 1 OR 3 CODED AT FS5A2

FS5a3 In the last 12 months, at which of the following places have you obtained information about Farmstrong or seen Sam Whitelock talking about things to help farmers cope?

READ AND CODE ALL THAT APPLY

1. The Farmstrong website
2. Facebook
3. In Farmers Weekly newspaper or another farming magazine
4. At Fieldays or at a local agriculture event day
5. In a farm discussion group
6. At a Farmstrong workshop or webinar
7. On radio, TV or in a newspaper
8. In an e-newsletter that you receive
9. At another sort of event in your local community
10. At a conference
11. Any other places (please specify)
12. Don't know

FS5b2. For each of the following how much, if any, improvement do you think is a result of what you've heard from Farmstrong, Sam Whitelock or Healthy Thinking?'

READ

- Level of contact with my friends
- Amount of exercise I do
- Contribution to other farmers or my local community
- Time spent taking more notice of the small things in life that bring me enjoyment
- Time spent learning new things
- Amount of sleep
- Amount of time I have away from the farm
- Balance between my work and leisure
- My ability to cope with the ups and downs of farming

CODE TO

1. None
2. Small
3. Moderate
4. Large improvement due to Farmstrong
5. Don't know
6. Refused

ASK IF YES AT FS4 OR CODE 1 AT FS5a, FS5b, FS5c

FS6. How much do you feel you know about what Farmstrong does?

1. Nothing
2. A little
3. A moderate amount
4. A lot

FSAge.Which of the following age groups do you fall into?

[SINGLE RESPONSE. READ OUT]

Under 35 years	1
35-44	2
45-54	3
55-64	4
65 years and over	5
Refused	99

Male	1
Female	2