Farmstrong Fifth Year Monitoring Report

Report prepared for

Farmstrong

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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 five years, to June 2020.
- The Farmstrong mission is to: Improve the wellbeing of people working in farming and growing.

RESEARCH METHOD

- National telephone surveys of farmers and growers[1] 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

- The results were very positive, reflecting an increasing impact of Farmstrong.
- Awareness continued its upward trend, with statistically significant increases in unprompted awareness of Farmstrong (up by 6% to 24%), total Farmstrong awareness (up 10% to 71%) and total awareness after including awareness of Sam Whitelock resources/messages (up 8% to 87%) – see graph below.
- 31% of farmers reported having ever engaged with Farmstrong, continuing an upward trend. The data equates with approximately 20,600 farmers and farm workers who have ever engaged and 18,100 in the last year.
- A new question identified the main forms of engagement in the last 12 months as Farmers Weekly/other farming magazines (23% of all the farmers), radio/TV/newspapers (18%), Facebook (8%) and e-newsletters (6%), while just 2% had engaged with the Farmstrong website – see graph below.
- The number of video viewings (328,454) was more than three times the level in 2019, following the development of a lot more videos. All but 3% were viewed on Facebook.
- Following the major refresh of the website in September 2018, unique website visitors are now 10% above the May 2018 levels. Numbers visiting for at least five minutes (time to have potentially impactful engagement) were up 21% on 2018.
- There was a continued upward trend in the proportion of farmers attributing some level of improvement to Farmstrong – now 22% of all farmers. (This is one of the strongest pieces of evidence of the impacts of Farmstrong, as this is the farmers themselves attributing causality to the impacts of Farmstrong in their own lives.)
- The proportion attributing Farmstrong with some level of improvement for 'ability to cope with the ups and downs of farming' remained at the 2019 level (11%).
- Those who had three or more forms of engagement with Farmstrong in the last 12 months attributed higher numbers of improvements to Farmstrong – see graph below.

[1] For simplicity of reporting, referred to as 'farmers' for the rest of the report.

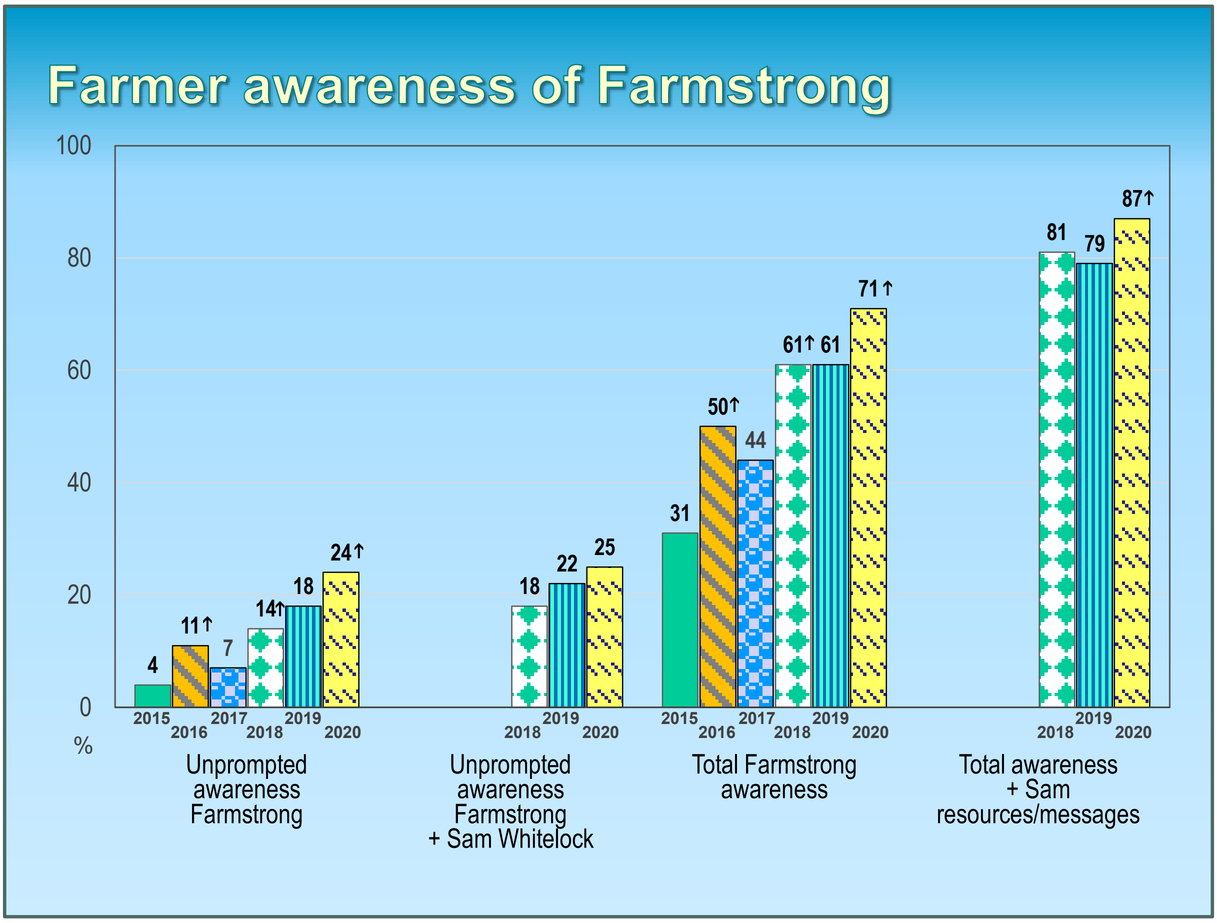
RECOMMENDATIONS

- **Continue to provide multiple forms of engagement with Farmstrong**
- **Review the role of the Farmstrong website in the overall strategy**
- **Repeat the sources of engagement question in future surveys, to build up a larger sample size for confirmation of the current findings**

OTHER FINDINGS

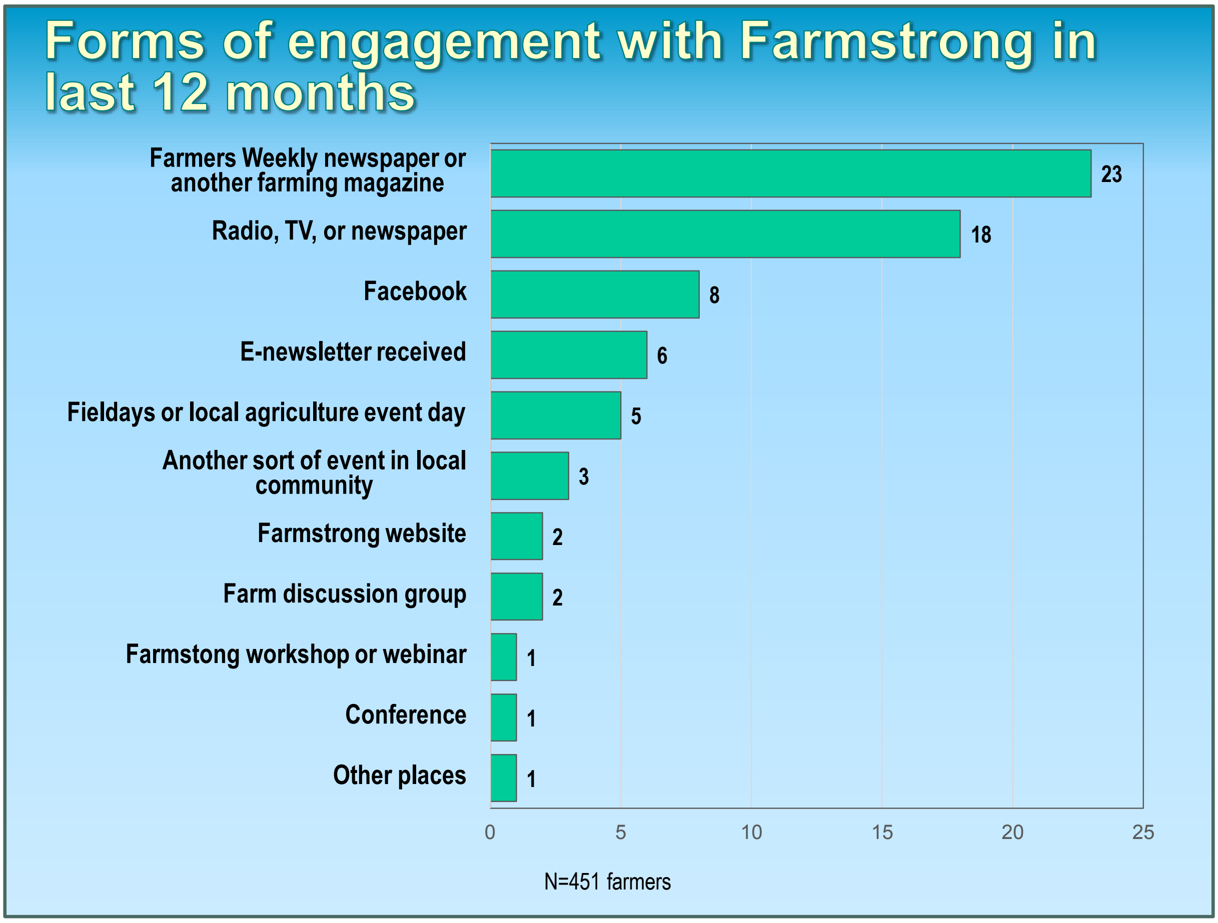
Awareness

- The graph below shows the upward trends and significant changes in awareness since the previous survey.



Engagement with Farmstrong initiatives

- At the end of June 2020 there were 10,536 fans of Farmstrong Facebook, which was a three percent increase over the previous 12 months.
- Webinars were introduced for the first time in 2019/20 and 393 persons participated in the three which were presented. There was also a 51% increase in workshop participation (237 participants). Approximately 400 also attended the seven talks, which was a similar level to the previous year.
- There was a 34% decrease in media articles and a 23% decrease in estimated total media audience reach for the 12 month period.
- 27% of the surveyed farmers had engaged with Farmstrong in the previous 12 months, which was similar to 2019.
- The forms of engagement in the last 12 months (for all farmers) are shown on the graph below.
- Engagement with the Farmstrong website was greater among women (7% vs less than 1% for men).

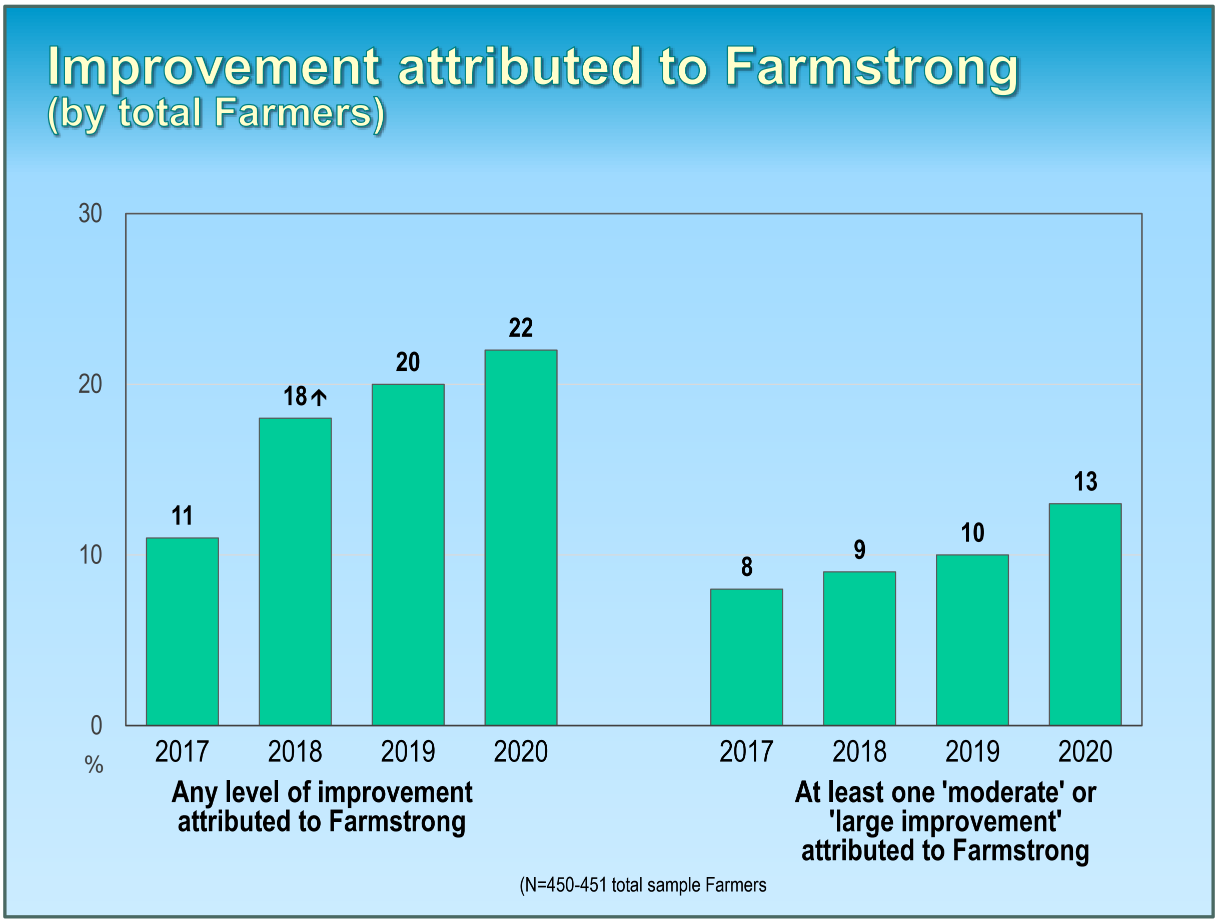


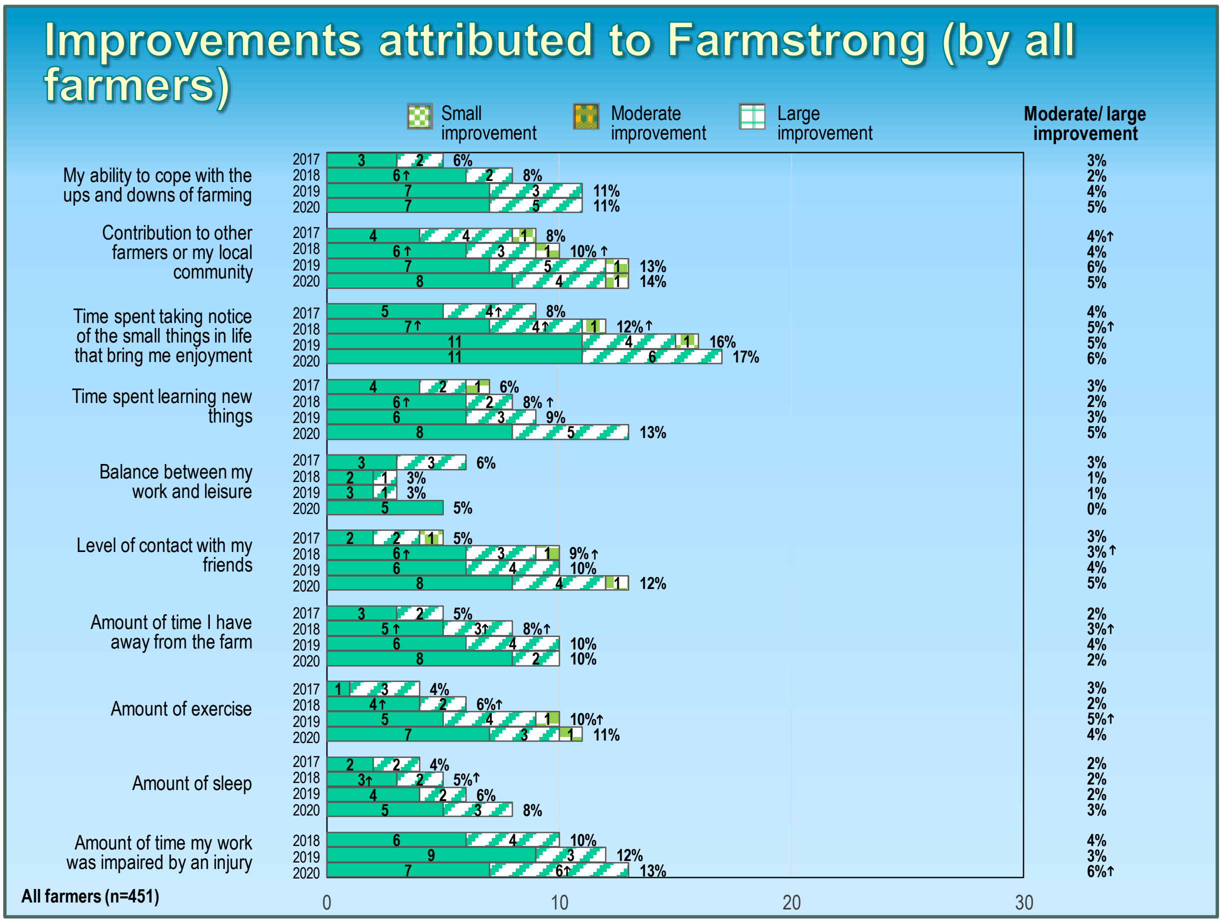
National dashboard measures

- The proportion of farmers reporting improvements (18%) or worsening (14%) over the last 12 months for the key measure of 'ability to cope with the ups and downs of farming' showed no significant changes since the previous survey.
- Reflecting the impact of covid, there were higher levels reporting a worsening for: 'Balance between work and leisure', 'Contribution to other farmers or my local community', 'Level of contact with my friends' and 'Amount of time I have away from the farm'.
- 'Amount of time my work was impaired by an injury' had a reduction in the proportion reporting a decrease, which was a negative result.
- Those farmers who had engaged with Farmstrong via three or more forms in the previous 12 months were significantly more likely to report the following improvements over the last 12 months:
    - Improved ability to cope with the ups and downs of farming
    - Improvement in the balance between their work and leisure
    - An increase in the amount of exercise they do
    - An increase in time spent taking notice of the small things in life which bring them enjoyment
- Those who had not engaged with Farmstrong in the last 12 months had several results which were consistent with them having less improvement in their wellbeing than those who had engaged:
    - Less likely to report an improvement in the balance between their work and leisure
    - Less likely to report an increase in their contribution to other farmers or their local community
    - Less likely to report an increase in the time taking notice of the small things in life that bring them enjoyment
    - Less likely to report an increase in the amount of exercise they do
    - More likely than others to report an increase in the amount of time their work was impaired by an injury

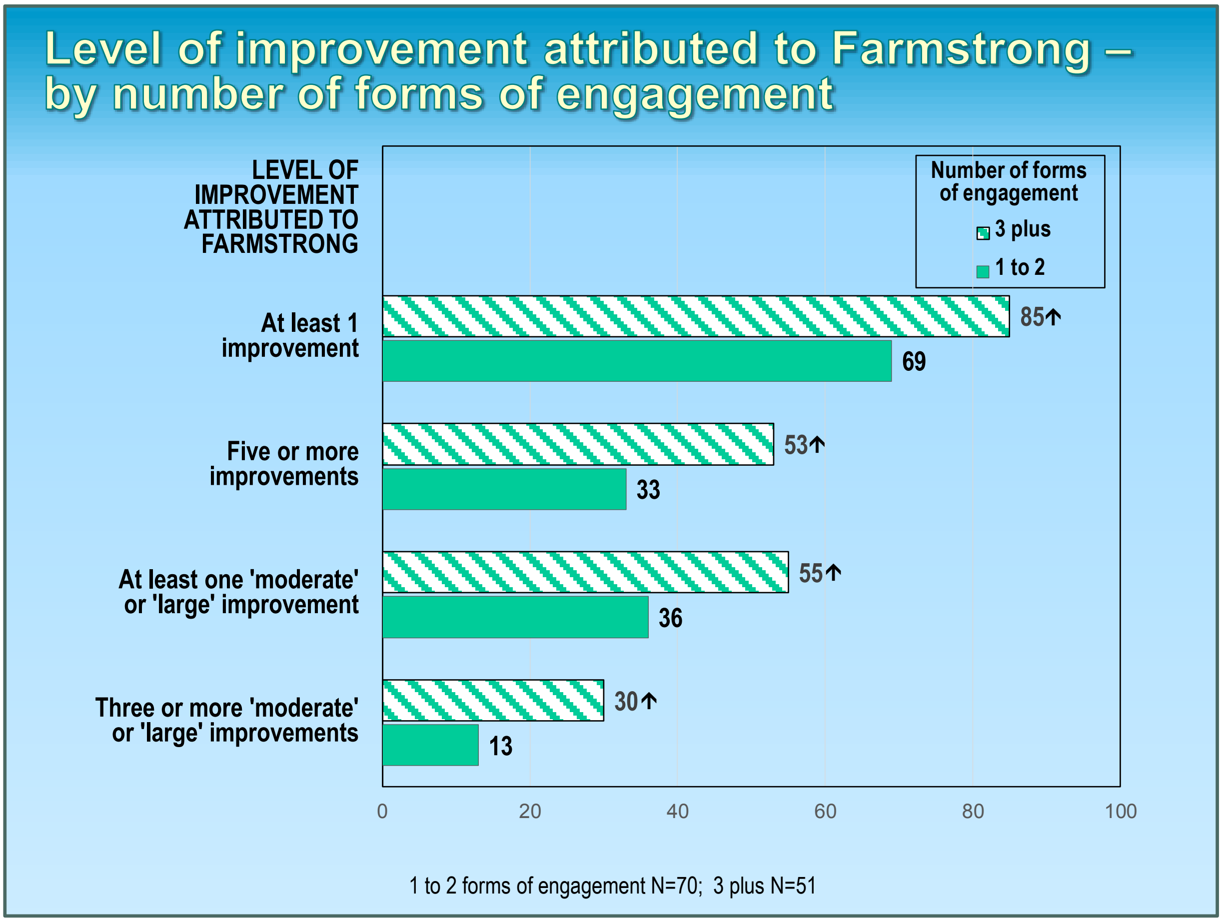
Improvements attributed to Farmstrong

- The 22% of all farmers attributing some level of improvement in their wellbeing to Farmstrong included 13% (of all farmers) who reported at least one 'moderate' or 'large' level of improvement to Farmstrong, both of these measures again showing upward trends (see graph below).
- The percentage reporting five or more items at any level of change is showing indications of an upward trend (from 5% in 2016/17 to 12% now).
- The proportion of the farmers attributing an improvement in their wellbeing to Farmstrong is shown for each item in the second graph below (this is based on all 451 farmers in the survey). Most of the measures showed indications of increasing trends, however the only item with a significant increase since 2019 was for a 'moderate' or 'large' improvement in the 'amount of time my work was impaired by an injury'.


Improvement attributed to Farmstrong
(by total Farmers)
30
20
10
0
%
11
18↑
20
22
2017
2018
2019
2020
Any level of improvement attributed to Farmstrong
8
9
10
13
2017
2018
2019
2020
At least one 'moderate' or 'large improvement' attributed to Farmstrong
(N=450-451 total sample Farmers)


Improvements attributed to Farmstrong (by all farmers)
Small improvement
Moderate improvement
Large improvement
Moderate/ large improvement
My ability to cope with the ups and downs of farming
2017 3 2 6% 3%
2018 6↑ 2 8% 2%
2019 7 3 11% 4%
2020 7 5 11% 5%
Contribution to other farmers or my local community
2017 4 4 1 8% 4%↑
2018 6↑ 3 1 10%↑ 4%
2019 7 5 1 13% 6%
2020 8 4 1 14% 5%
Time spent taking notice of the small things in life that bring me enjoyment
2017 5 4↑ 8% 4%
2018 7↑ 4↑ 1 12%↑ 5%↑
2019 11 4 1 16% 5%
2020 11 6 17% 6%
Time spent learning new things
2017 4 2 1 6% 3%
2018 6↑ 2 8%↑ 2%
2019 6 3 9% 3%
2020 8 5 13% 5%
Balance between my work and leisure
2017 3 3 6% 3%
2018 2 1 3% 1%
2019 3 1 3% 1%
2020 5 5% 0%
Level of contact with my friends
2017 2 2 1 5% 3%
2018 6↑ 3 1 9%↑ 3%↑
2019 6 4 10% 4%
2020 8 4 1 12% 5%
Amount of time I have away from the farm
2017 3 2 5% 2%
2018 5↑ 3↑ 8%↑ 3%↑
2019 6 4 10% 4%
2020 8 2 10% 2%
Amount of exercise
2017 1 3 4% 3%
2018 4↑ 2 6%↑ 2%
2019 5 4 1 10%↑ 5%↑
2020 7 3 1 11% 4%
Amount of sleep
2017 2 2 4% 2%
2018 3↑ 2 5%↑ 2%
2019 4 2 6% 2%
2020 5 3 8% 3%
Amount of time my work was impaired by an injury
2018 6 4 10% 4%
2019 9 3 12% 3%
2020 7 6↑ 13% 6%↑
All farmers (n=451)
0
10
20
30

- Those who had at least three forms of engagement with Farmstrong in the last 12 months were more likely to attribute improvements to Farmstrong, compared with those who had 1-2 forms of engagement (see graph below). While this trend was evident for most of the specific improvements, the items where there were significant differences were as follows:
    - Time spent learning new things
    - Level of contact with my friends
    - Amount of exercise
    - Amount of time my work was impaired by an injury



Limitations of the research

- The dashboard sample is selected from a panel which contains over 15,000 farmers, mostly farm owners. Those who choose to be on a panel may not be representative of all farmers. The same applies for those who agree to be interviewed.
- While farm 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 and farm workers impacted are informed by the relative levels for farm owners and non-owners in the separate survey of recently injured farmers, 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.

Context for interpreting these findings

The last 12 months have been a particularly challenging time for farmers. Some experienced very bad drought conditions and all were impacted by the covid lockdown, which resulted in the cancellation of a lot of events. The lockdown also came at a time when farmers often went on holiday, so some have had no break from the farm all year.

Good progress being made

The increase in recall was particularly impressive, especially the relatively large increase in unprompted recall of Farmstrong. Some of this seems to be due to farmers now being more aware that the Sam Whitelock resources/messages are part of Farmstrong. Previously adding recall of Sam Whitelock to the unprompted Farmstrong recall added four percent, but now it only adds one percent.

The continuing upward trend for having ever engaged with Farmstrong is also positive. That engagement in the last 12 months held at its previous level despite the impacts of the covid lockdown, is also a positive result.

Of more significance is the continued upward trend in the proportion of all the surveyed farmers who attributed some level of improvement on wellbeing issues to Farmstrong. There was also a continuation of the upward trend for attributing at least one 'moderate' or 'large' improvement to Farmstrong.

Importance of multiple forms of engagement with Farmstrong

The new question on forms of engagement with Farmstrong has provided a range of valuable information. It has reinforced the importance of the Farmers Weekly content in reaching large numbers of farmers. Having FMG gifting Farmstrong some of their advertising slots linked to the TV weather report, is likely to be making an important contribution to the impacts that are being achieved.

The finding that three or more forms of engagement is associated with greater levels of improvements attributed to Farmstrong, emphasises the importance of providing multiple channels and getting them used. While these results can't establish causality, it is likely that reinforcement of messages from multiple sources will increase the chances of behaviour change. The importance of using multiple channels is well recognised in the Farmstrong five year plan.

Utilising multiple forms of engagement is consistent with farmers being busy people who are unlikely to go looking for information, such as on the 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.

Most useful measure of engagement

These results have shown that having three or more forms of engagement is associated with marked increases in the impact of Farmstrong on improving wellbeing. Therefore, consideration could be given to changing the impact measure in the five-year plan from 'Participation in Farmstrong' to 'Having three or more forms of engagement with Farmstrong in the last 12 months'. However, as these results are based on relatively small numbers, it may be advisable to wait until there is another set of data to confirm these results. A combined sample will also provide the opportunity to examine how those who engage with face-to-face initiatives differ from others, as the numbers in the current study were too small to allow for this analysis.

There may well be other ways of measuring what is an effective level of engagement with Farmstrong, such as measuring the frequency of all forms of engagement. For example, it may be that more frequent engagement just on the website will be as impactful, or more impactful, than having three or more forms of engagement. However, it would require lot more survey questions to measure frequency for each type of engagement. The current measure based on number of forms of engagement has been shown to provide good differentiation between those who are being impacted by Farmstrong and those who are not, so there is no reason not to continue to use it.

Facebook videos playing key role

Most of the Farmstrong videos are viewed on Facebook and it would seem likely that the large increase in video viewings this year has been a key contributor to the impressive results achieved. Farmstrong made a lot more videos in the last year and this has obviously been a key factor in the tripling of the numbers of videos viewed. Video is likely to be a more enticing communication tool than the printed word, especially for busy farmers who may well not have the inclination to read a full print article.

However, Facebook does have limited reach among farmers, particularly as many farmers, including those interviewed, are aged over 50 years. This again reinforces the importance of using multiple forms of engagement.

Mixed findings for website

There have been good improvements on key website measures following the September 2018 upgrade. However, the finding that only two percent of farmers had used the website in the last 12 months gives cause for reflection. This is particularly in light of the five-year communication and marketing plan for 2020-2025 emphasising 'Maintain, develop and sustain the website as the "go to" resource for all things Farmstrong'. The survey question asked about engagement in the last 12 months, so it is quite possible that some of these farmers had engaged with the website prior to this, particularly when they first became aware of Farmstrong. However, these results do suggest that for many farmers it is not currently perceived to be the "go to" resource for all things Farmstrong'.

The two percent equates with approximately 1,000 farmers. This is obviously hugely different from the 67,542 unique website visitors in the past 12 months, but it is more consistent with the 2,718 who visited the website for at least five minutes. This suggests that it is this latter form of measure that should be the main focus when monitoring website usage. Staying on the website for at least five minutes is the sort of engagement that people are likely to remember when asked in a survey such as this. It is also a period of time where they are more likely to gain some benefit from the website.

A lot of time and resources have been invested in developing a high quality website, so it is important to ensure the material that has been developed for the website is disseminated as much as possible via other channels as well. Facebook is the most obvious option and this is already being well utilised. Other options for disseminating website material are also specified in the Farmstrong five-year plan. Consideration also needs to be given to whether more of the target audiences can be encouraged to visit the website, although this is likely to be challenging for the reasons mentioned above. This encouragement could possibly be as part of the communications that go out through Facebook and e-newsletters.

Reduction of Injuries

This report provides further evidence in support of Farmstrong playing a role in reducing the amount of time farmers' work is impaired by injury. The increase in the proportion attributing a 'moderate' or 'large' improvement to Farmstrong on this item was the only significant change among all ten items asked about. This increase was despite farmers overall reporting a worsening on this measure over the last 12 months. Those who had not engaged with Farmstrong were more likely than others to report an increase in the amount of time their work was impaired by an injury. Further evidence of the positive influence of Farmstrong was those who had three of more forms of engagement with Farmstrong being more likely to attribute Farmstrong with an improvement in the amount of time their work was impaired be an injury.

Increasing knowledge about Farmstrong

The new question in the 2019 report identified the need to increase knowledge of Farmstrong. It is unfortunate that a programming error by Kantar TNS in this current survey resulted in this question only being asked of those who had engaged with Farmstrong, instead of all those who were aware of it. Among this sub-group who were asked, there was no significant change in knowledge levels.

Conclusions

There is good reason for the Farmstrong team and their supporters to be very pleased with these results. They suggest that the strategies being used by Farmstrong are working, particularly the increased emphasis on videos.

The research has confirmed that farmers need to be targeted via multiple channels. The Farmstrong team are aware of the importance of using multiple channels to impact the target audiences and this is already a key part of their strategy.

In light of the relatively low engagement levels with the website, it would seem appropriate to review the extent to which the website remains the 'go to' resource for all things Farmstrong.

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

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 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.

For this 2020 survey gender was added as a weighting variable and the historic data was rerun with the gender weighting included. This resulted in some changes of one percent from those previously reported.

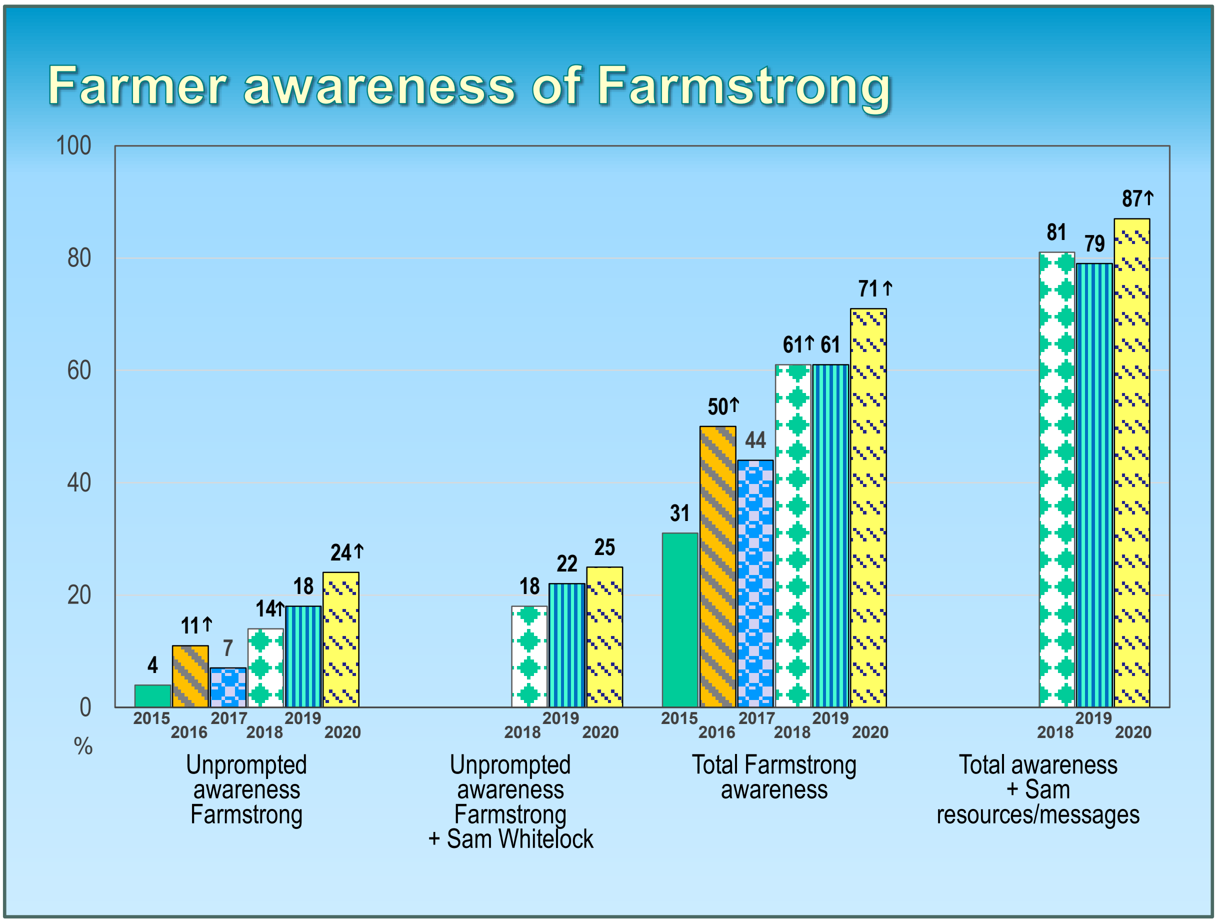
On the tables in this report, an upward arrow ↑ denotes a statistically significant higher level than the comparison group and a downward arrow ↓ a statistically significant lower level (at the 95% confidence level). All differences reported in the commentary will be statistically significant, unless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

4 MAIN FINDINGS

4.1 AWARENESS OF FARMSTRONG

As shown in the graph below, there has been a statistically significant increase in unprompted awareness of Farmstrong (up by 6% to 24%), total Farmstrong awareness (up 10% to 71%) and total awareness after including awareness of Sam Whitelock resources/messages (up 8% to 87%) [2]. There is now only a one percent difference between unprompted awareness of Farmstrong and the unprompted awareness of Farmstrong plus Sam (it was a 4% difference in 2019).

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.



2 To measure unprompted awareness, participants were asked 'What programmes or initiatives are you aware of that are designed to support farmer and grower wellbeing?' Those who did not mention Farmstrong were then asked 'Have you heard of a programme for farmers and growers called Farmstrong?' The 'Total Farmstrong awareness' (unprompted plus prompted) is the sum of those mentioning Farmstrong to either question. From 2018 a further question was asked of those who had not heard of Farmstrong, which was 'Have you ever seen or read about All Black Sam Whitelock talking about things to help farmers cope with the ups and downs of farming?' This was added because some farmers may not have realised that things they had seen involving Sam and farming had been part of Farmstrong. The 'Total awareness + Sam resources/messages' is the sum of those saying yes to any of the three questions.

Sub-group differences in 2020

Unprompted awareness of Farmstrong was higher among those aged under 45 years (35%) and lower among those aged 65 years and over (13%). Total awareness showed a similar trend (81% among the youngest group and 59% among the oldest group). Men and women had similar unprompted awareness (24% men and 22% women), but men were higher for total awareness (74% men and 62% women).

Sheep/beef farmers had higher unprompted recall of Farmstrong (38%), while it was lower among horticulture (4%) and 'other' (3%). For dairy the level was 24%. When considering total awareness, both sheep/beef (84%) and dairy (77%) were higher, while horticulture (42%) and 'other' (50%) were lower.

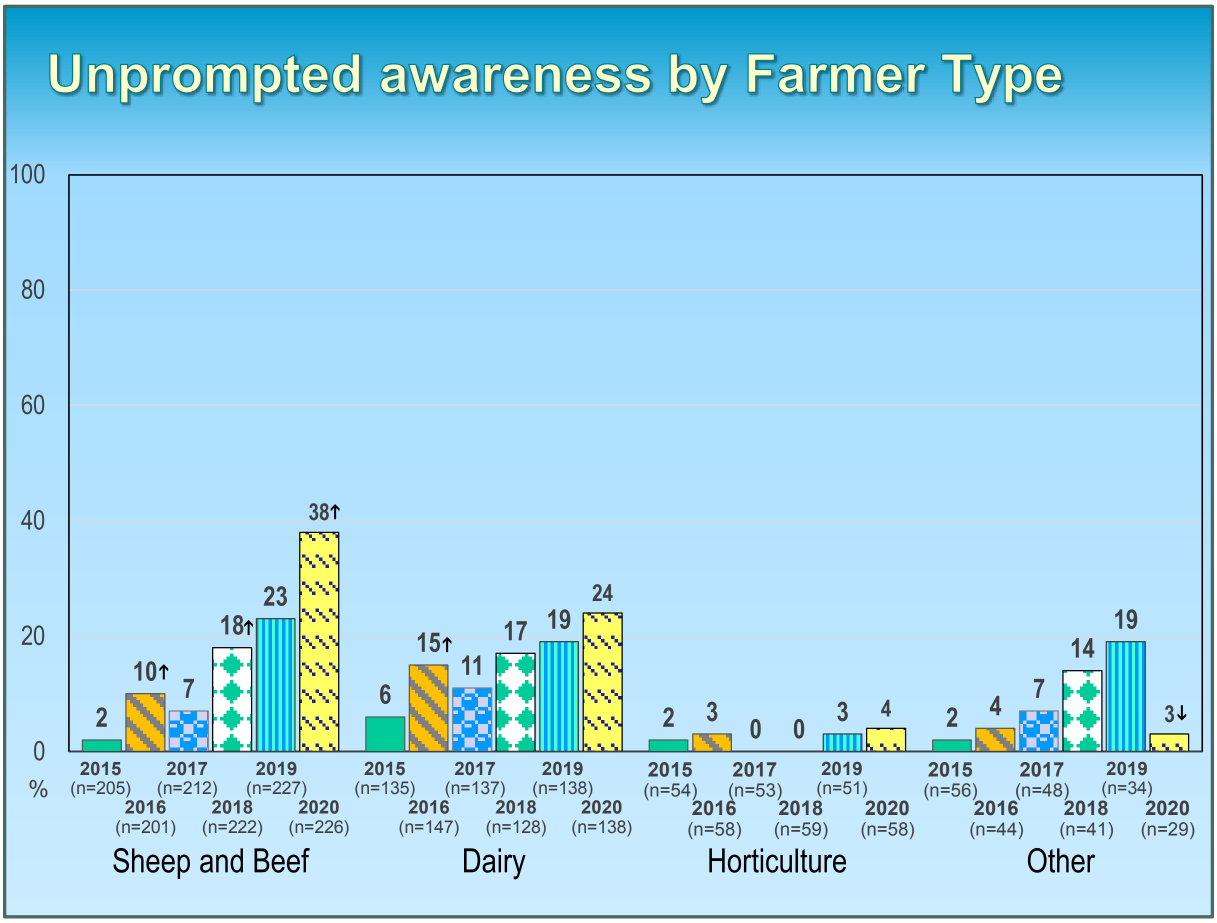
Awareness was higher in the Lower South Island (37%) for both unprompted recall (37%) and total awareness (84%), while total awareness was lower in the Upper South Island (60%). Unprompted recall was higher in the $500k to under $1m income bracket (37%), as was total awareness (86%). Those with the lowest income had the lowest total awareness of Farmstrong (56%).

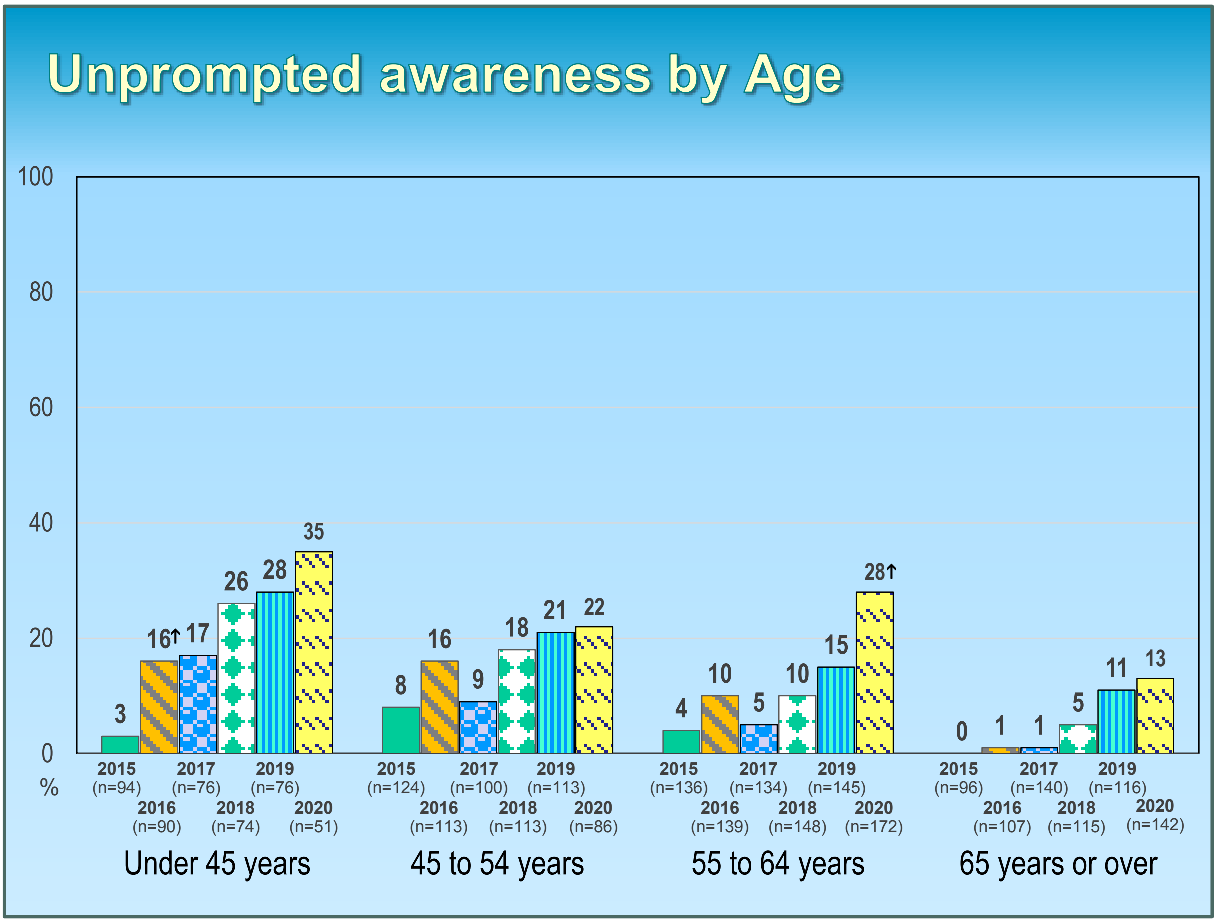
Changes in sub-groups since previous survey

As unprompted awareness of Farmstrong is one of the three key performance measures, the graphs which follow are now reported for this, rather than total awareness as previously. Unprompted awareness increased significantly in the last year for the following groups:

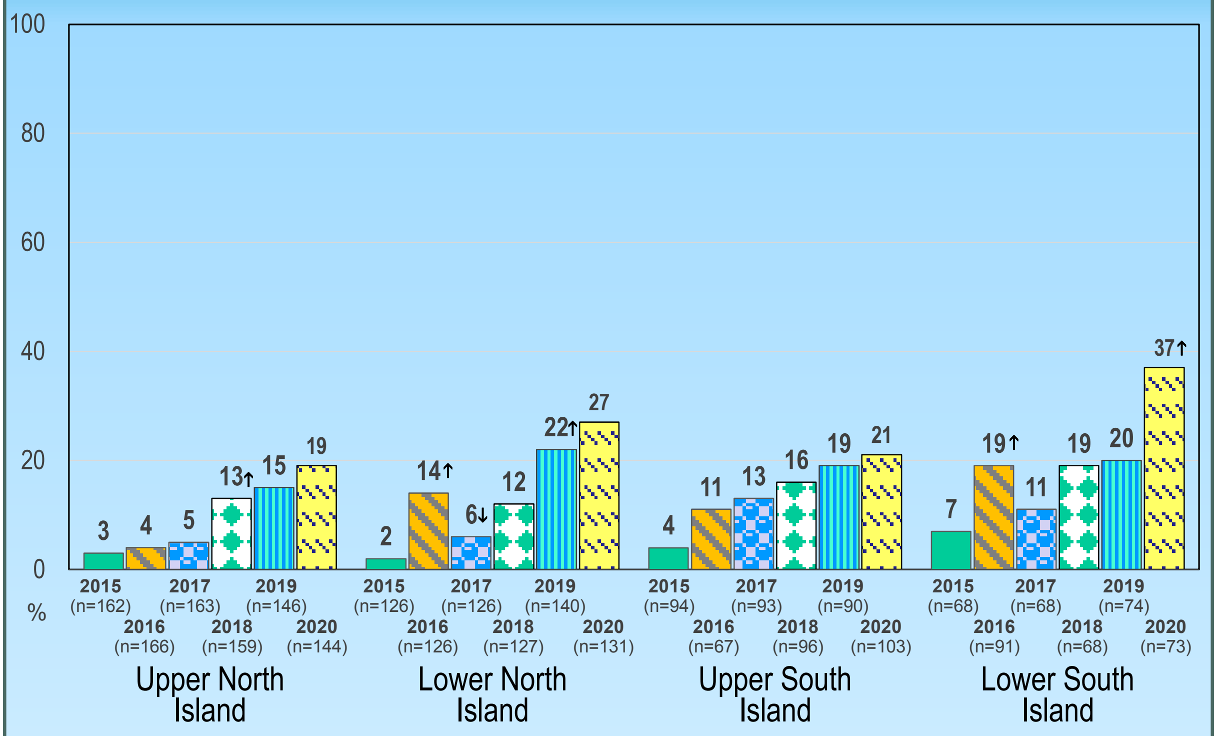
- Those aged 55 to 64 years (up 13% to 28%)
- Sheep and beef farmers (up 15% to 38%)
- Those in the Lower South Island (up 17% to 37%)
- Those in the $500k to under $1m income category (up 19% to 37%)

'Other' types of farmers reported a decrease since 2019 (down by 16% to 3%), but as there were only 29 farmers in this category in 2020 the results for this group need to be interpreted with some caution.

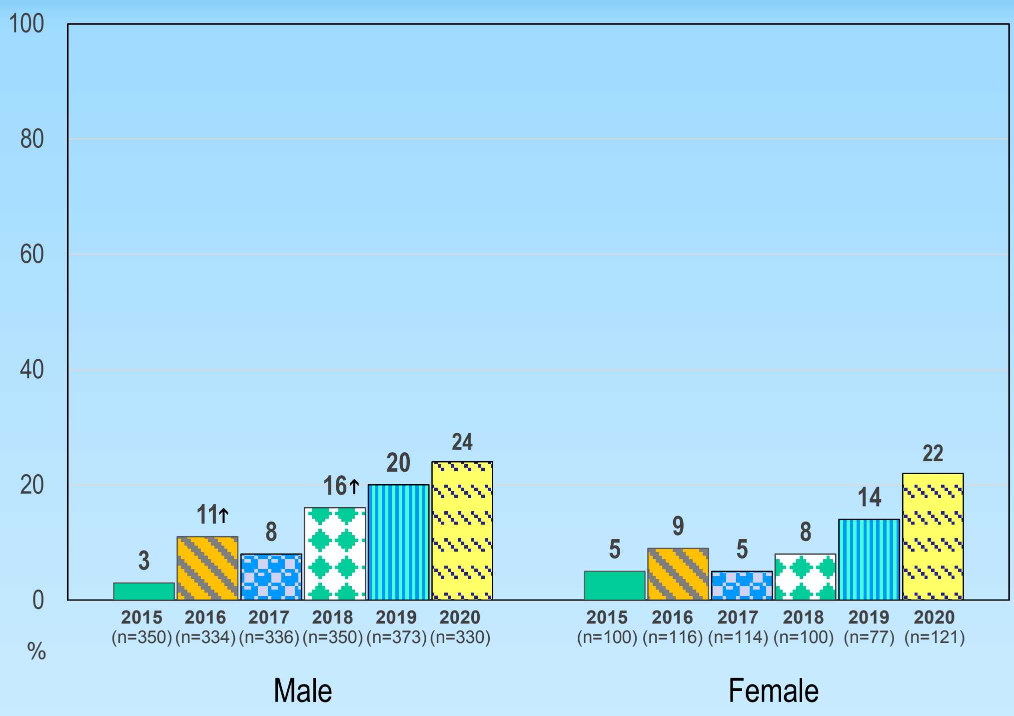

Unprompted awareness by Farmer Type
100
80
60
40
20
0
%
2
10↑
7
18↑
23
38↑
6
15↑
11
17
19
24
2
3
0
0
3
4
2
4
7
14
19
3↓
2015 (n=205)
2016 (n=201)
2017 (n=212)
2018 (n=222)
2019 (n=227)
2020 (n=226)
2015 (n=135)
2016 (n=147)
2017 (n=137)
2018 (n=128)
2019 (n=138)
2020 (n=138)
2015 (n=54)
2016 (n=58)
2017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

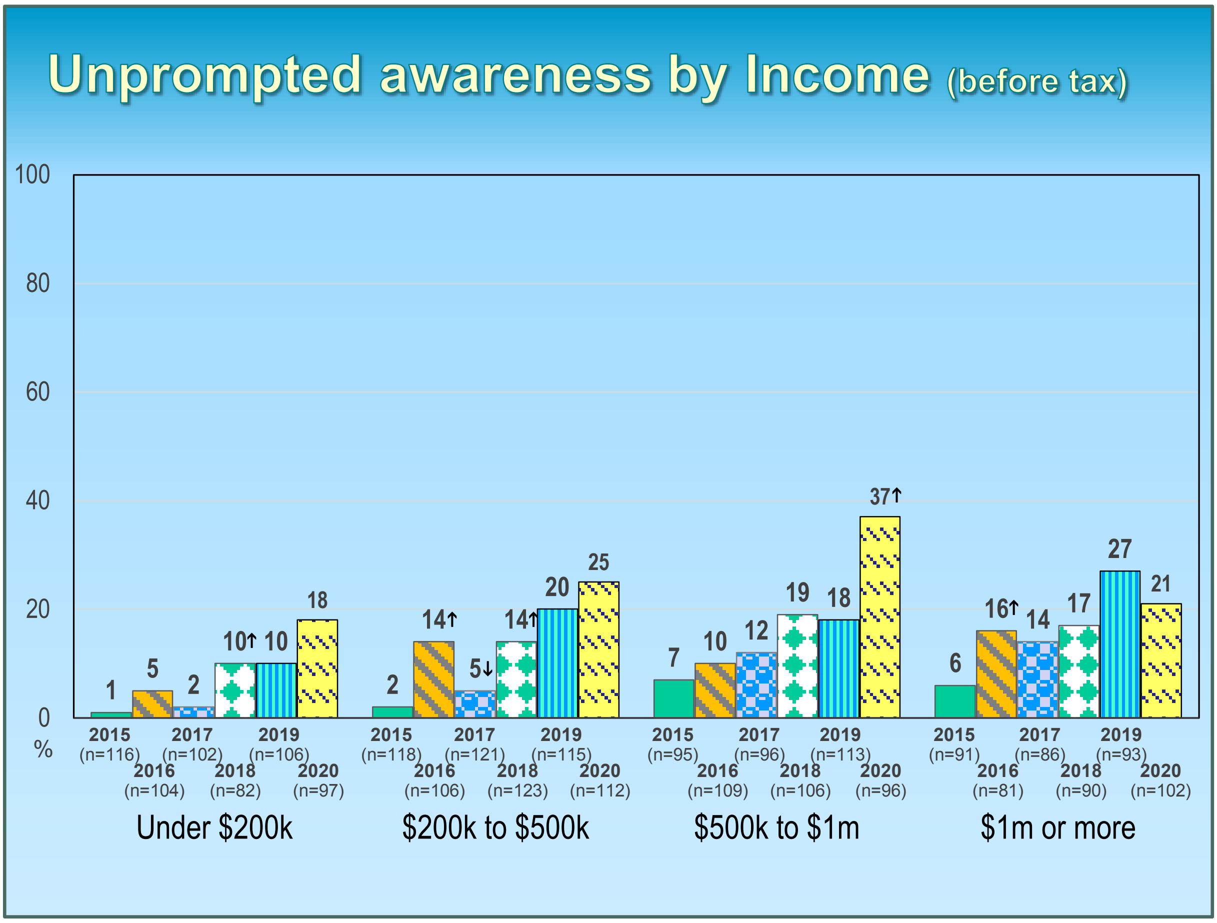

Unprompted awareness by Age
100
80
60
40
20
0
%
3
16↑
17
26
28
35
8
16
9
18
21
22
4
10
5
10
15
28↑
0
1
1
5
11
13
2015 (n=94)
2016 (n=90)
2017 (n=76)
2018 (n=74)
2019 (n=76)
2020 (n=51)
2015 (n=124)
2016 (n=113)
2017 (n=100)
2018 (n=113)
2019 (n=113)
2020 (n=86)
2015 (n=136)
2016 (n=139)
2017 (n=134)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

Unprompted awareness by Region



Unprompted awareness by Gender





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. After showing evidence of downward trends over time, DairyNZ/Dairy Connect has increased by 7% to 9%. Those who could not name any programmes or initiatives decreased by 8% to 43%.

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

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?'* Unfortunately, a computer programming error by Kantar TNS in the current survey resulted in this question only being asked of those who had ever engaged with Farmstrong. Within this group there were no significant changes in the last year. Three percent knew 'a lot', 33% 'a moderate amount', 58% 'a little' and 7% 'nothing'.

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 website had a major refresh in September 2018. In the 2019 survey the number of unique website visitors had decreased by seven percent from the 2018 level, but it has now increased 18% since 2019 to 69,612. This current level is 10% above the 2018 level. Of even more note are the increases in numbers of visits that are long enough to be having potentially impactful engagement. All three measures were at their highest levels ever. There were 5093 website visits of at least three minutes duration, which was a 23% increase on the previous year, which was the first year it was measured. Visits of at least five minutes also increased 23% in the last 12 months and 21% since the 2018 survey. Visits of at least 10 minutes increased six percent since 2019 and 12% since 2018. Another positive result was the proportion of repeat visitors increasing by three percent to 13%, which was on top of a seven percent increase the year before, following the website refresh.

At the end of June 2020 there were 10,536 Farmstrong Facebook fans, which was a three percent increase over the previous 12 months. There were 118,159 engagements with Farmstrong Facebook content. The average engagement rate for Facebook over the four quarters of the last 12 month period was 4.8%, which compared with an industry benchmark of 1%[3]. The three top posts on Facebook included two episodes of Farmstrong chats with Sam Whitelock, these having 16,643 and 13,094 engagements. The third was a Sleepwell podcast with 10,715 engagements.

The number of video viewings (328,454) was more than three times the level in 2019. The number viewed on the Farmstrong website only increased two percent and only accounted for three percent of the video viewings. The rest were via Facebook. The most viewed video on Facebook was a joint one done with the Tahi Ngātahi initiative to decrease injuries in woolsheds (25.4k minutes). The next most viewed were the first two Farmstrong chats with Sam (13.2k and 11.9k minutes).

Farmstrong has had very little activity on Twitter in the last 12 months and that was reflected in just 26 new followers added.

Webinars were introduced for the first time in 2019/20 and 393 persons participated in the three that were presented. There was also a 51% increase in workshop participation (237 participants). Approximately 400 also attended the seven talks, which was a similar level to the previous year. These results were despite the interruption due to covid. There was a 34% decrease in media articles and a 23% decrease in estimated audience reach for the 12 month period.[4]

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)

[3] These engagement data are not included in the table.

[4] 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.

MEASURE	First 13 months 3/6/2016 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)
Website unique visitors	51,451	71,135	61,547	57,366	67.542
Total website sessions	65,866	79,955	67,578	68,938	79,201
Average engagement per visit	1 minute 22 seconds	48 seconds	39 seconds	50 seconds	1 minute 37 seconds
Bounce rate (single page only)	75%	84%	84%	80%	83%
Proportion of repeat visitor sessions	22%	12%	6%	10%	13%
Average number of pages viewed	1.7	1.4	1.3	1.5	1.5
Number of website visits of at least 3 minutes	NR	NR	NR	4,129	5,093
Number of website visits of at least 5 minutes	2,452	2,165	2,250	2,201	2,718
Number of website visits of at least 10 minutes[5]	946	1,684	1,701	1,805	1,908
Facebook fans	6,205	NR[6]	9,527	10,184	10,536
New Facebook fans in 12 month period	6,205	2,130	1,616	735	369
Twitter followers	1,101	NR	1,879	1,969	1,995
New Twitter followers in 12 month period	1,101	572	210	90	26
Total video views in 12 month period	68,400	137,000	114,000	108,216	328,454
Video views via Farmstrong website	NR	NR	NR	10,016	10,245
Media articles (total volume)	659	NR	NR	246	163
Newspaper/print articles	NR	NR	NR	137	95
Online articles	NR	NR	NR	104	67
Broadcast stories (radio/TV)	NR	NR	NR	5	1
Total media audience reach for 12 month period	NR	NR	NR	4,112,942	3,181,894
Talks/workshops given	31 Healthy Thinking	14 Healthy Thinking	NR	9 FS talks 5 FS 2 hr workshops	7 Talks 8 workshops 3 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
Number attending rural comedy shows	3,150	3,793	300	N/A	N/A
Number of events attended	NR	NR	32	58	64
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

NR=Not reported; NA=Not applicable

[5] Also included in the 3 and 5 minute totals.

[6] 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.

The most visited pages on the website in 2020 were as listed below, with comparisons with 2019. A cut-off point of 750 viewings has been used.

PAGE	Number of views		Average time on page (mins)	
	2019	2020	2019	2020
Wellbeing topics/healthy thinking	3,284	8,563	1:50	1:40
Wellbeing topics	2,461	4,058	0:52	0:52
Resources	2,118	3,349	2:14	2:08
Oh Baby – Sam's top sleep tips	-	2,866	-	1:45
Farm for Life	-	2,565	-	2:46
Contact-support	1,421	1,954	1:44	1:53
Health Thinking for better farming	-	1,826	-	3:46
Wellbeing – getting started	3,282	1,730	0:57	0:42
Blog	1,081	1,715	0:43	0:48
Events	1,487	1,228	1:01	0:44
Oxman fundraiser for Farmstrong	-	1,094	-	1:35
About	1,142	1,091	1:19	1:17
Partners	864	1,069	1:19	1:07
Managing stress and uncertainty	-	1,059	-	2:43
Making the same different	-	996	-	1:53
Thinking outside the box	-	947	-	1:50
Creating habits	-	803	-	3:29
Over 750 views in 2019 but not 2020				
Sam Whitelock – summer break plans	1,792	-	2:30	-
Keeping Christmas simple and stress free	1,558	-	2:24	-
Stay connected and keep Farmstrong	1,401	-	2:27	-
Sam Whitelock: Three thoughts on dealing with disappointment	1,365	679	1:57	2:07
Wellbeing check list	1,343	638	1:33	1:23
Three things to lock in to manage busy season	1,236	-	2:50	-
Turn on your core	1,124	246	3:48	3:50
Work smarter and look after your wellbeing	1,050	-	2:39	-
Sam Whitelock says give yourself a break	837	-	1:51	-
Wellbeing topics - burnout	779	-	2:59	-
Fit for Calving programme	750	513	2:49	-

While many of the pages address aspects of diminished wellbeing which can impact injuries, there were two new pages that directly addressed farm injuries. 'Farmstrong and VetSouth – injury preventions series' had 610 viewings and 'Reducing stress and fatigue to avoid accidents' had 504.

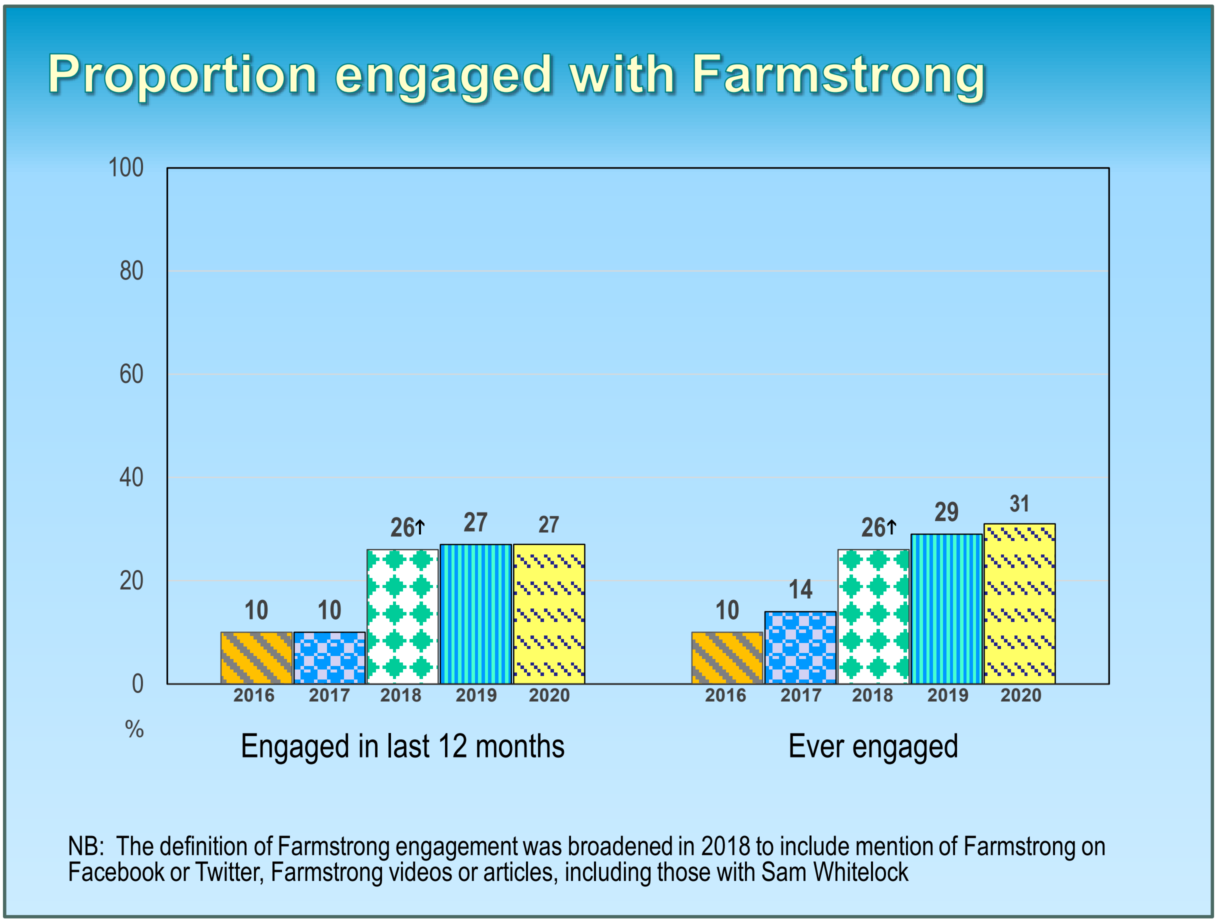
Level of engagement reported in surveys

In 2019 there were 30.7% who reported having ever engaged with Farmstrong initiatives. This continued an upward trend, although the increase since 2019 was not large enough to be statistically significant (see graph below). There were 27.0% who had engaged in the previous 12 months, which was similar to 2019.

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).

After increases in the previous two surveys, the proportion who had engaged in both the last 12 months and prior to this had a decrease in 2020 (down from 11.9% to 7.5%).

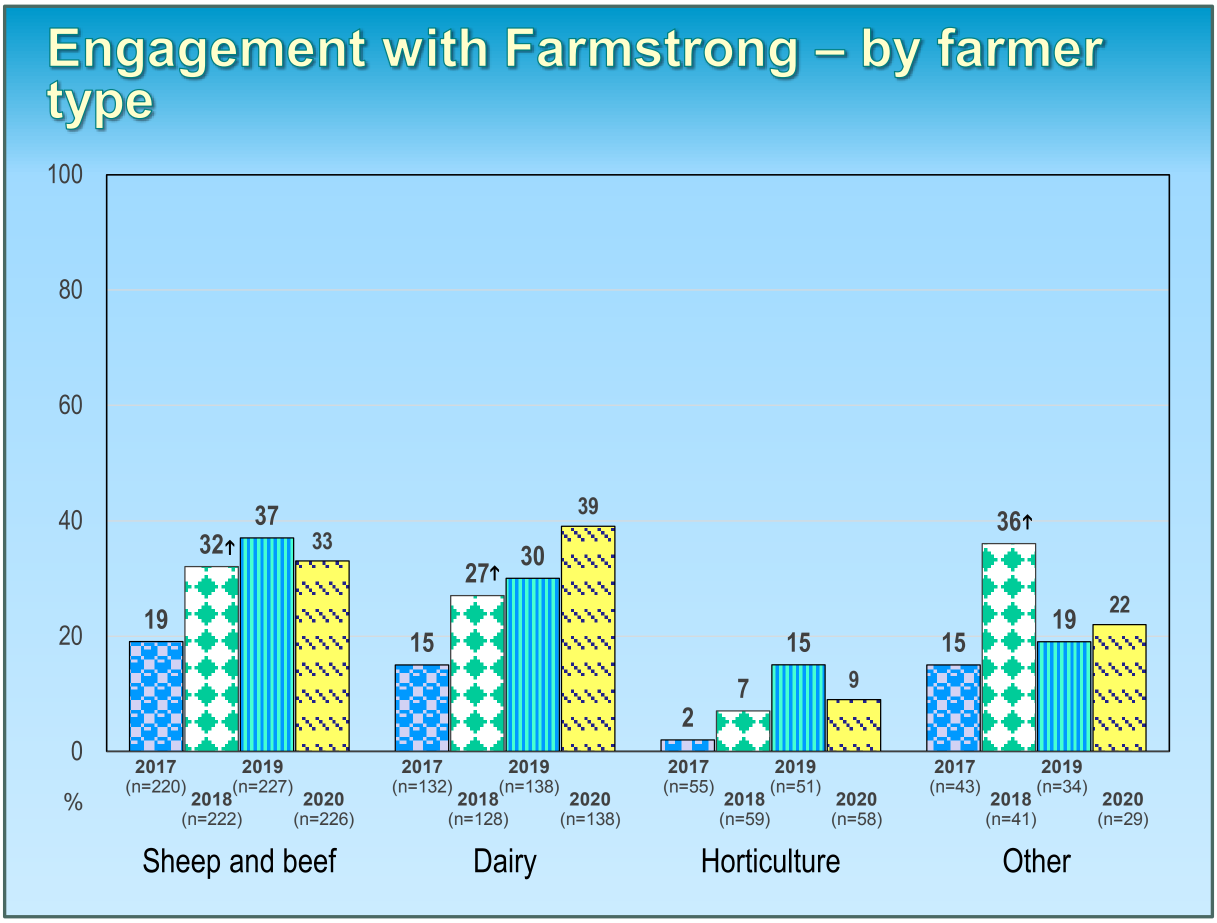
The best estimate of the total farmers/farm workers who have ever engaged with Farmstrong is approximately 20,600 and for the last 12 months it is approximately 18,100. Details on how these estimates are calculated are included as Appendix B.

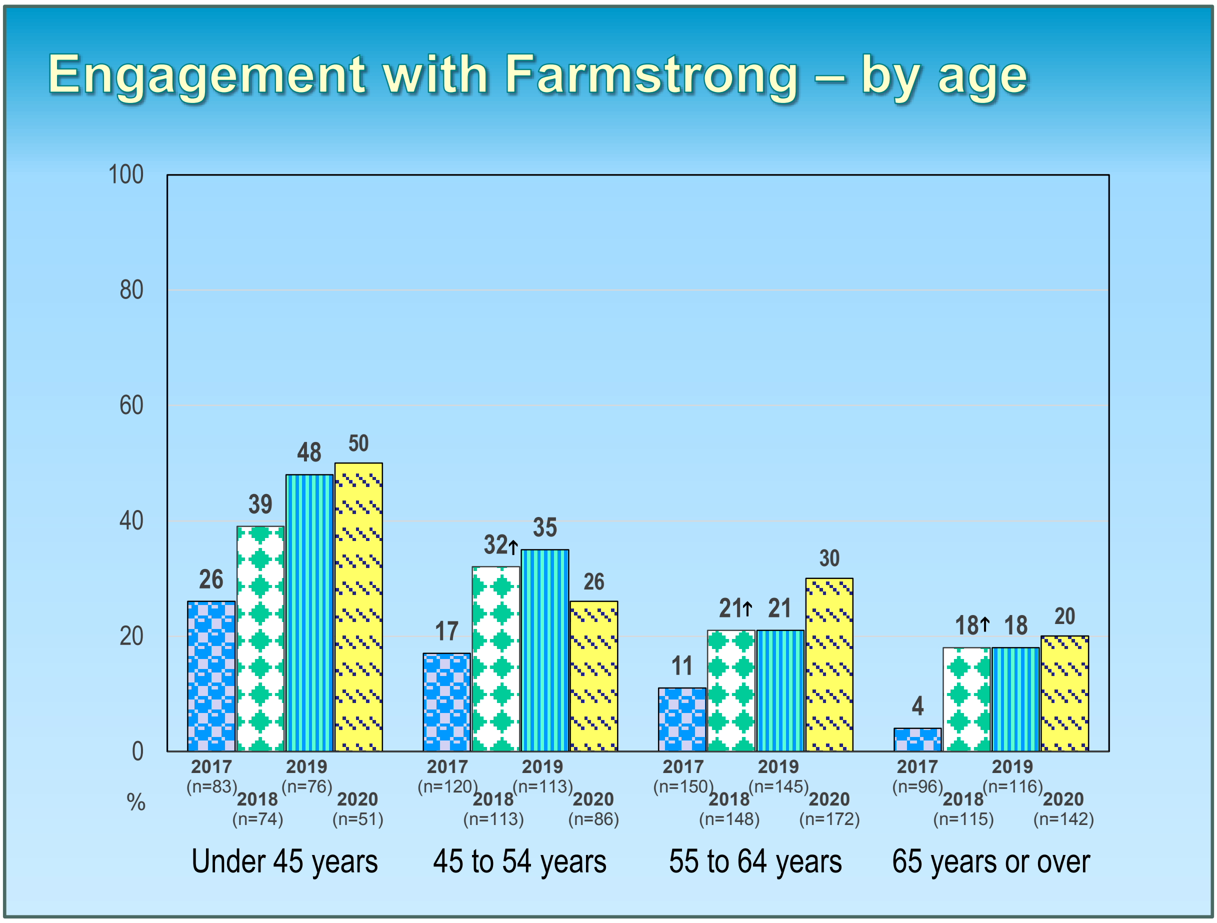


WHEN ENGAGED IN FARMSTRONG INITIATIVES	2017 450 %	2018 450 %	2019 450 %	2020 451 %
Ever engaged	14.4	26.4↑	29.1	30.7
In last 12 months	9.7	25.6↑	26.5	27.0
First time in last 12 months	8.0	19.4↑	14.6	19.5
Both last 12 months and before	1.7	6.2↑	11.9↑	7.5↓
Only prior to last 12 months	4.4	0.8↓	2.6↑	3.5

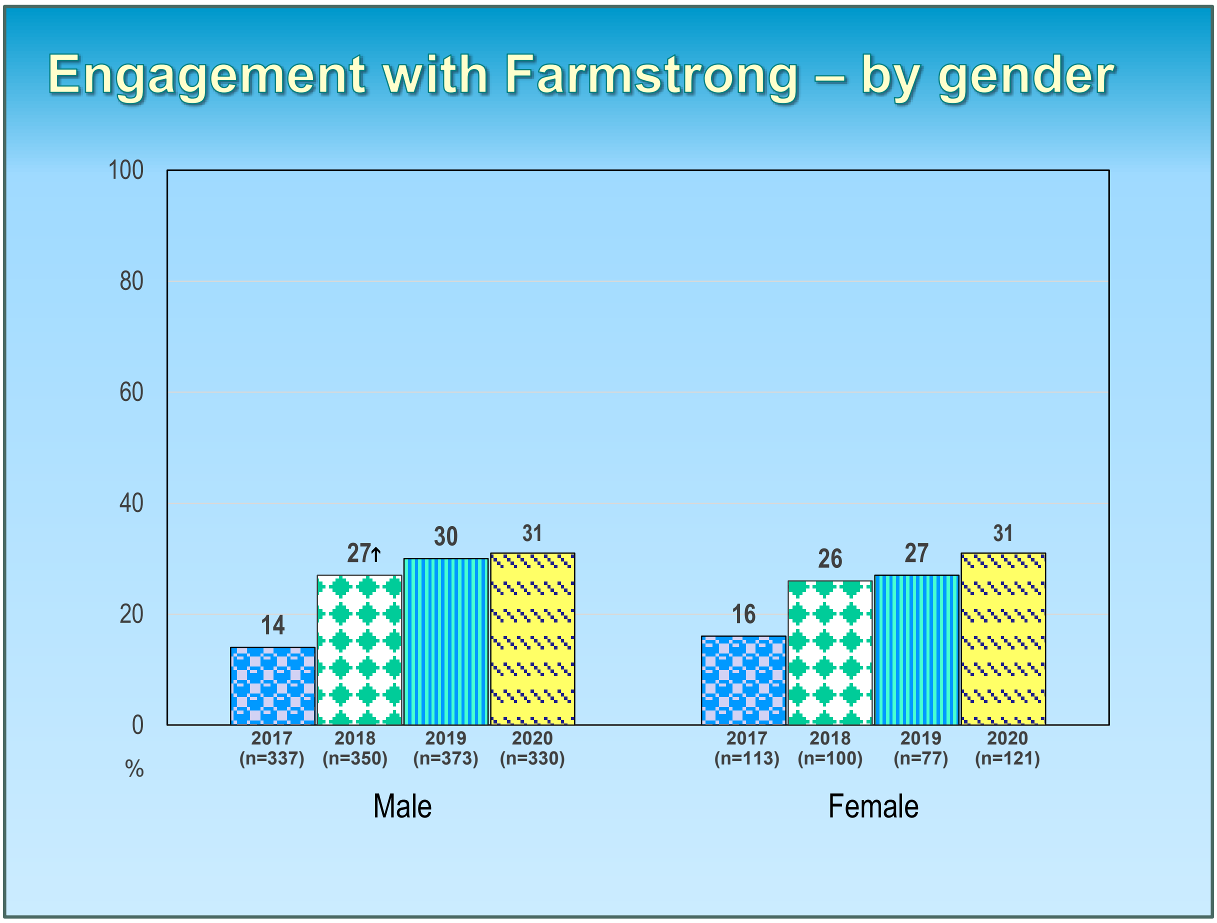
Changes in sub-groups since previous survey

As the level of having ever engaged with Farmstrong is now one of the three key performance indicators, graphs have been added to the report to show changes since the previous survey and trends over time. Engagement increased in the Upper North Island (by 11% to 35%). Although there was a nine percent increase for dairy farmers, this was not large enough to be statistically significant.

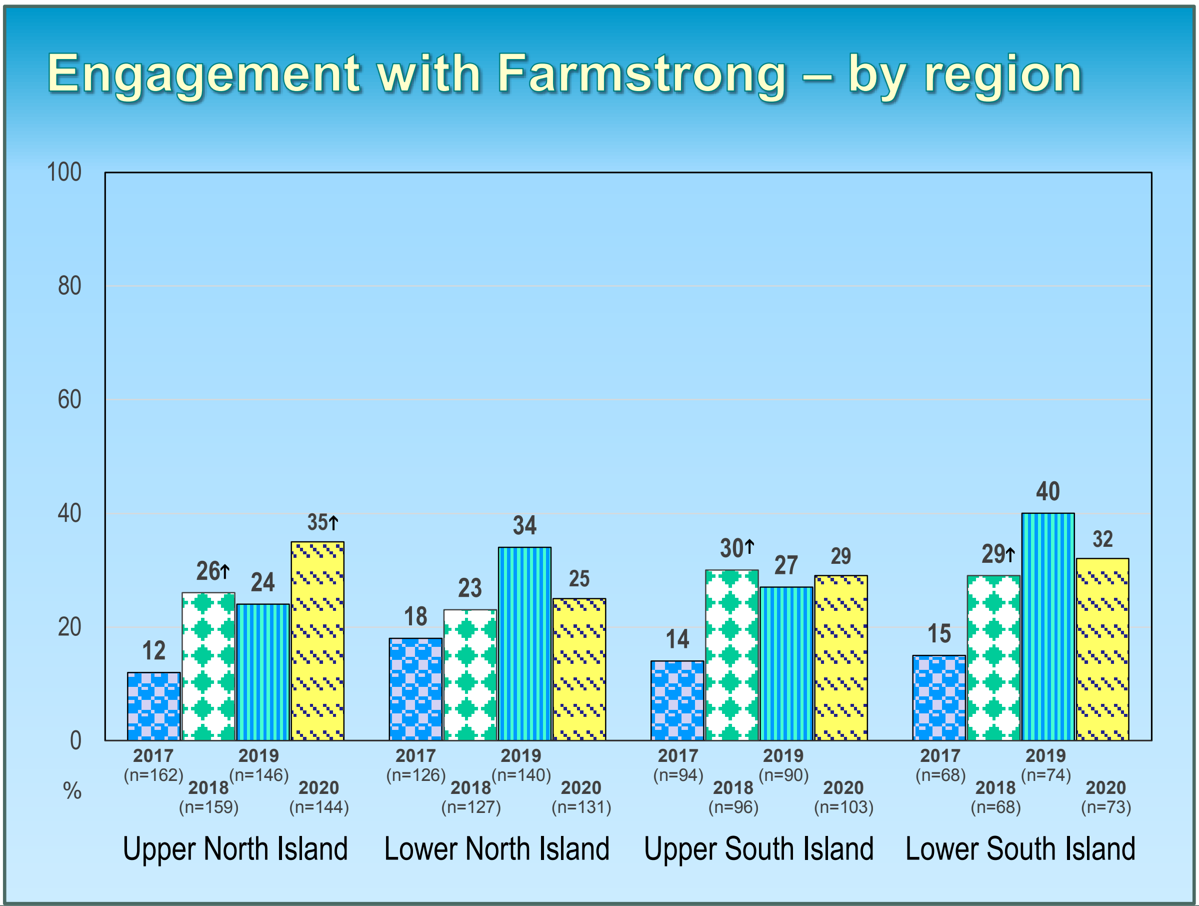


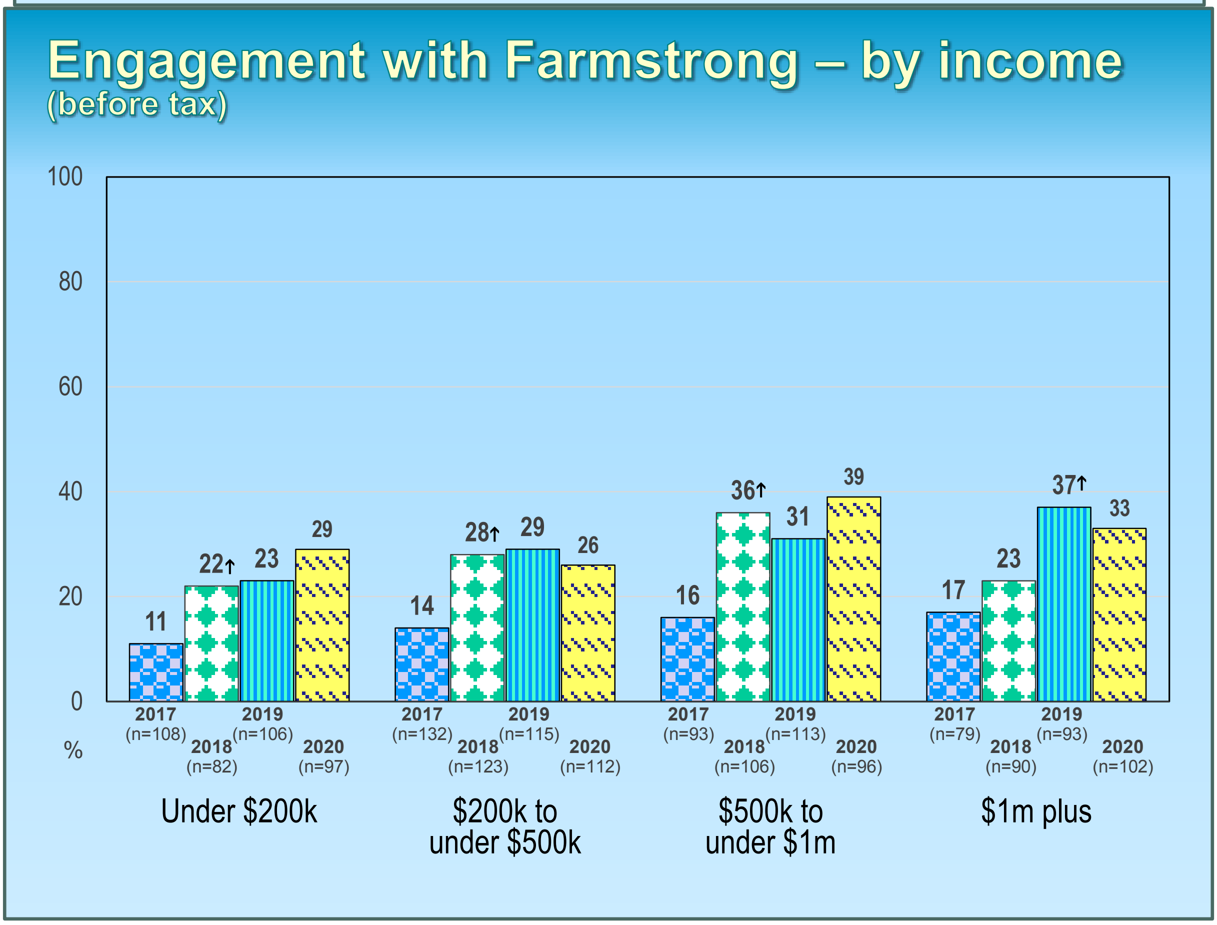


Engagement with Farmstrong – by age
100
80
60
40
20
0
%
26
39
48
50
17
32↑
35
26
11
21↑
21
30
4
18↑
18
20
2017 (n=83)
2018 (n=74)
2019 (n=76)
2020 (n=51)
2017 (n=120)
2018 (n=113)
2019 (n=113)
2020 (n=86)
2017 (n=150)
2018 (n=148)
2019 (n=145)
2020 (n=172)
2017 (n=96)
2018 (n=115)
2019 (n=116)
2020 (n=142)
Under 45 years
45 to 54 years
55 to 64 years
65 years or over



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

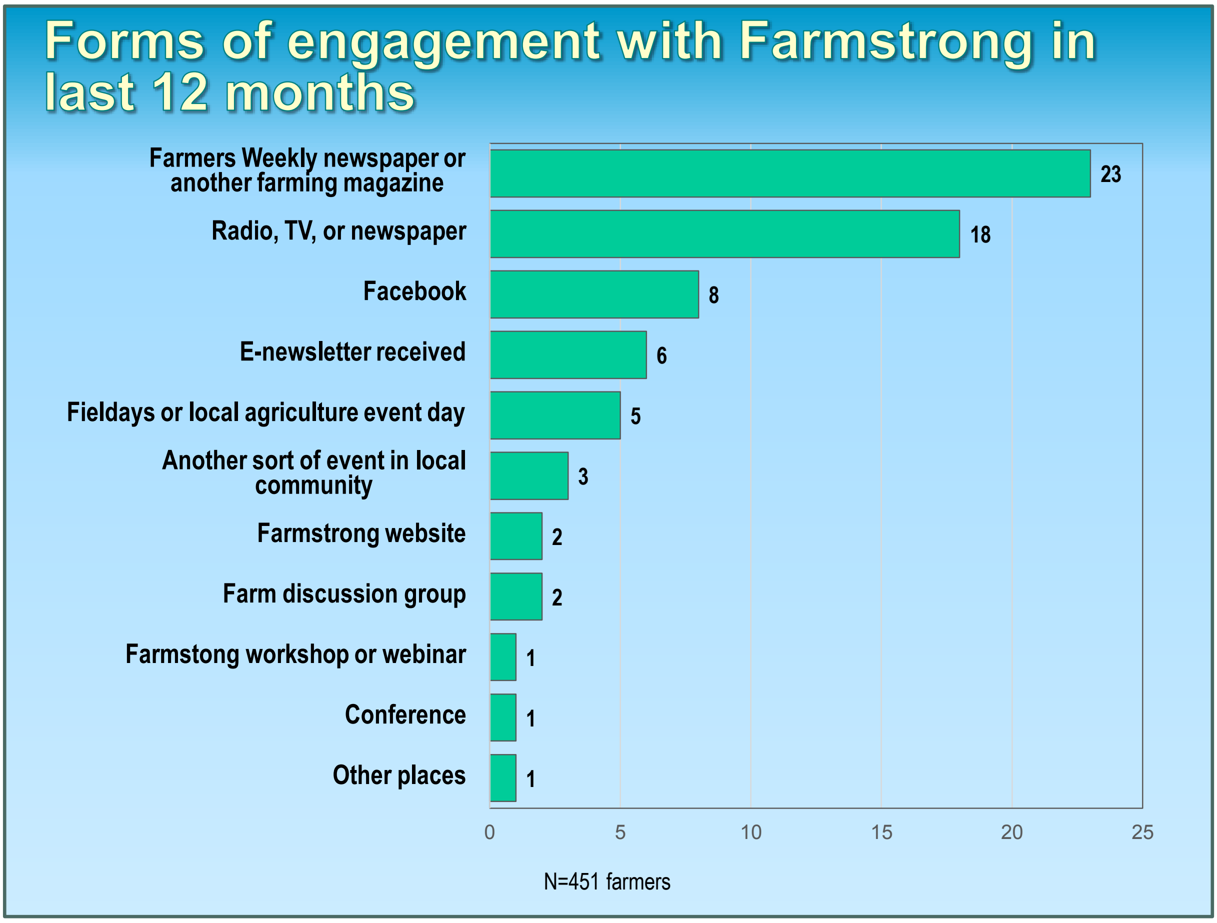




Forms of engagement reported in survey

A new question 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?'* As shown in the graph below, the two most prevalent reported forms of engagement with Farmstrong were via Farmers Weekly or another farming magazine (23% of all the farmers surveyed) and radio, TV, or newspapers (18%). Facebook was mentioned by 8%, but the Farmstrong website by only two percent.

Farmers Weekly/farming magazine was more mentioned by sheep/beef farmers (30%). Dairy farmers did not differ significantly at 25%. The Farmstrong website was more likely to be mentioned by women (7% vs less than 1% for men) and those in the top income bracket (5%). Facebook levels were higher for those in the two younger groups (14% for those under 45 years and 13% for 45 to 54 year olds) and lower for those aged 65 years and over (1%). Fieldays/local agriculture event days were more mentioned by women (10% vs 4% for men) and those aged under 45 years (12%) and less by 55 to 64 year olds (2%) and those in the Lower North Island (1%). E-newsletters were more mentioned by the youngest age group (15%) and less by the 55 to 64 year olds (2%). 'Another sort of event in the local community' was higher for men (4% vs less than 1% for women) and also higher in the Upper South Island (8%).



Thirteen percent of the farmers surveyed reported three of more forms of engagement with Farmstrong and 14% mentioned one to two forms. Those more likely to mention three or more forms were: aged under 45 years (24%) and in the second to top income bracket (19%). Those less likely to mention three or more were: aged 55 to 64 years (8%), living in the Lower North Island (7%) and be in the second lowest income bracket (4%).

Seven 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 (451) %
1 form of engagement	7
2 forms	8
3 forms	6
4 forms	4
5 forms	2
6 forms	1
Face-to-face engagement	7

4.4 NATIONAL DASHBOARD MEASURES

Changes over time

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

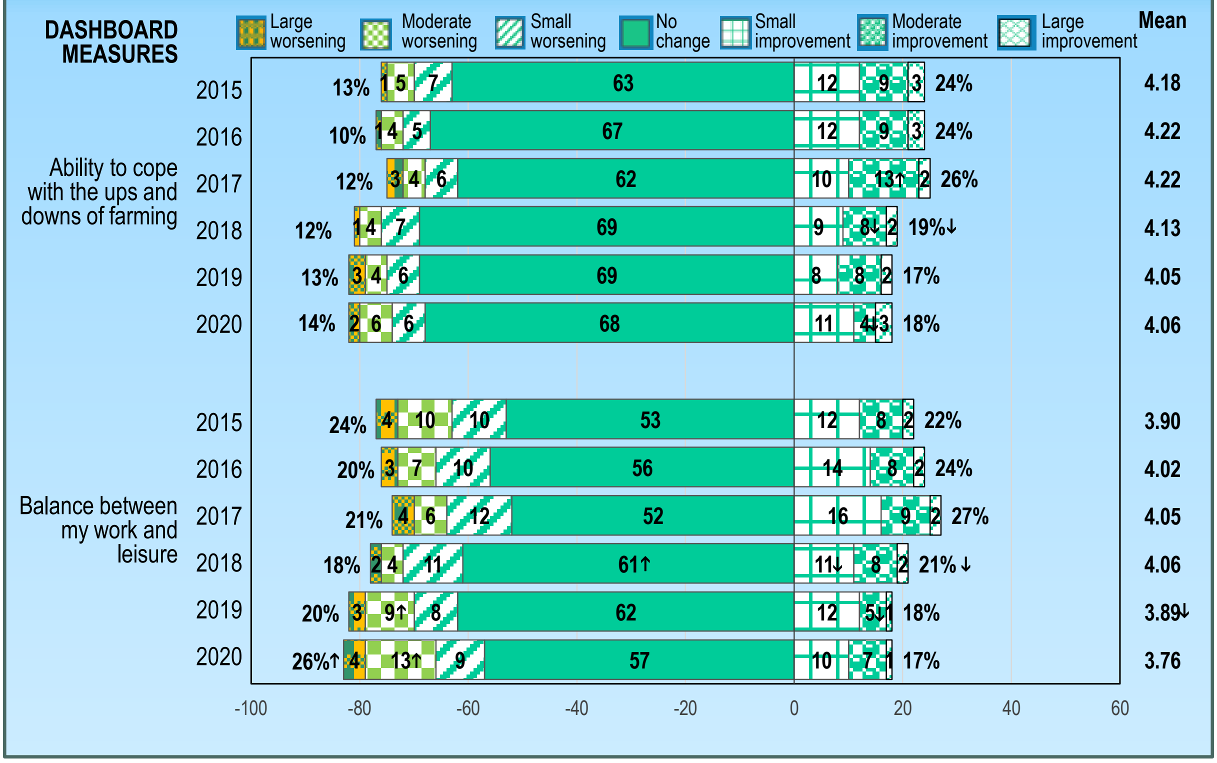
The proportion of farmers reporting improvements (18%) or worsening (14%) over the last 12 months for the key measure of 'ability to cope with the ups and downs of farming' showed no significant changes since the previous survey.[7] The changes which were evident were as follows (also see graphs below)[8]:

- 'Balance between work and leisure' had higher levels reporting a worsening (up by 6% to 26%)
- 'Contribution to other farmers or my local community' had a greater proportion reporting a decrease (up 7% to 13%), a corresponding reduction in the proportion reporting an increase (down by 9% to 17%), and a reduced mean rating (down by 0.28 to 4.05)
- 'Level of contact with my friends' had a greater proportion reporting a decrease (up by 24% to 36%), a corresponding reduction in the proportion reporting an increase (down by 8% to 7%), and a reduced mean rating (down by 0.49 to 3.54)
- 'Amount of time I have away from the farm' had more people reporting a decrease (up 17% to 39%), a corresponding reduction in reporting of an increase (down by 14% to 14%) and a reduced mean rating (down by 0.57 to 3.54)
- With 'Amount of time my work was impaired by an injury' a decrease is a positive result, so the fact that there was a reduction in the proportion reporting a decrease (down by 6% to 5%) was a negative result

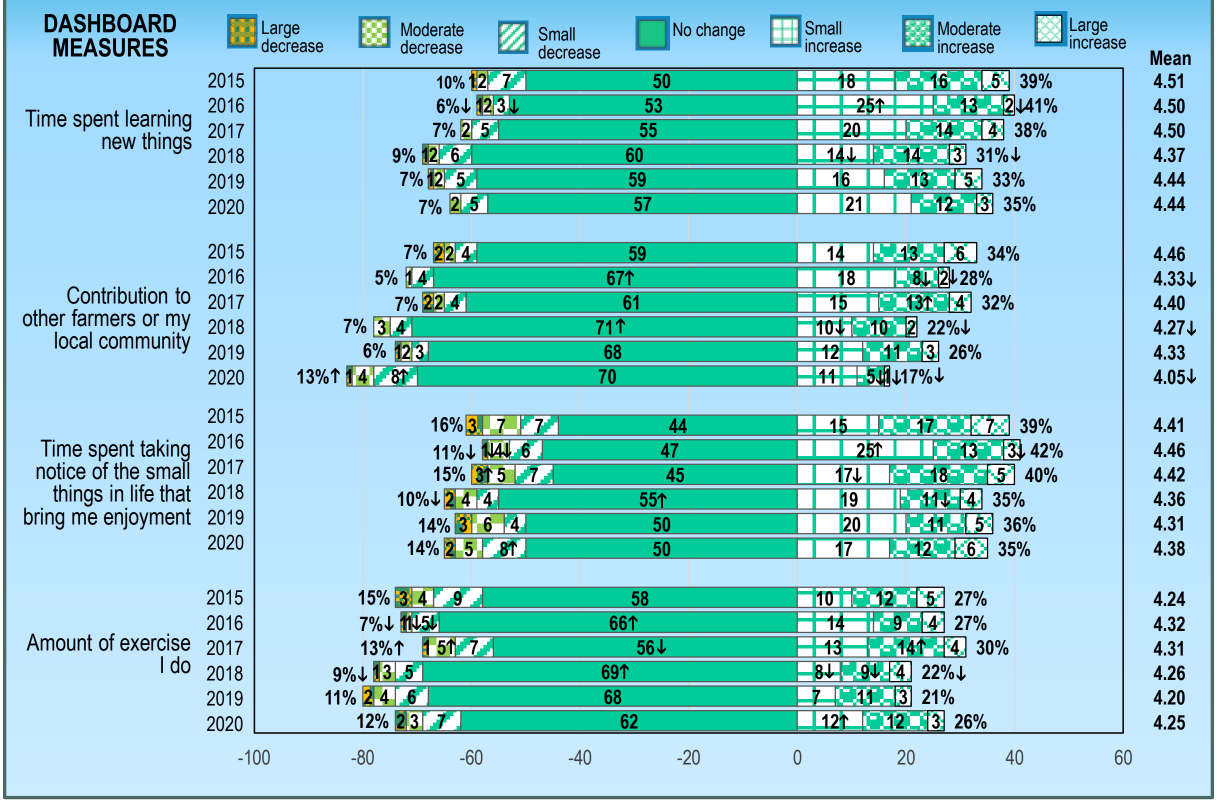
7 The national dashboard measures were included in surveys in late May/early June in each of the six years from 2015 to 2020. In these measures farmers were asked to report their level of change over the previous 12 months. The questions were asked via two questions, as the responses needed to vary for two of the items. Firstly they were asked: *'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. The increase or decrease can be just a small change. Was that increase/decrease in the last 12 months small, moderate or large?'* The second question asked about the two items shown on the first graph below: *'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. Was that improvement/worsening in the last 12 months small, moderate or large?'*

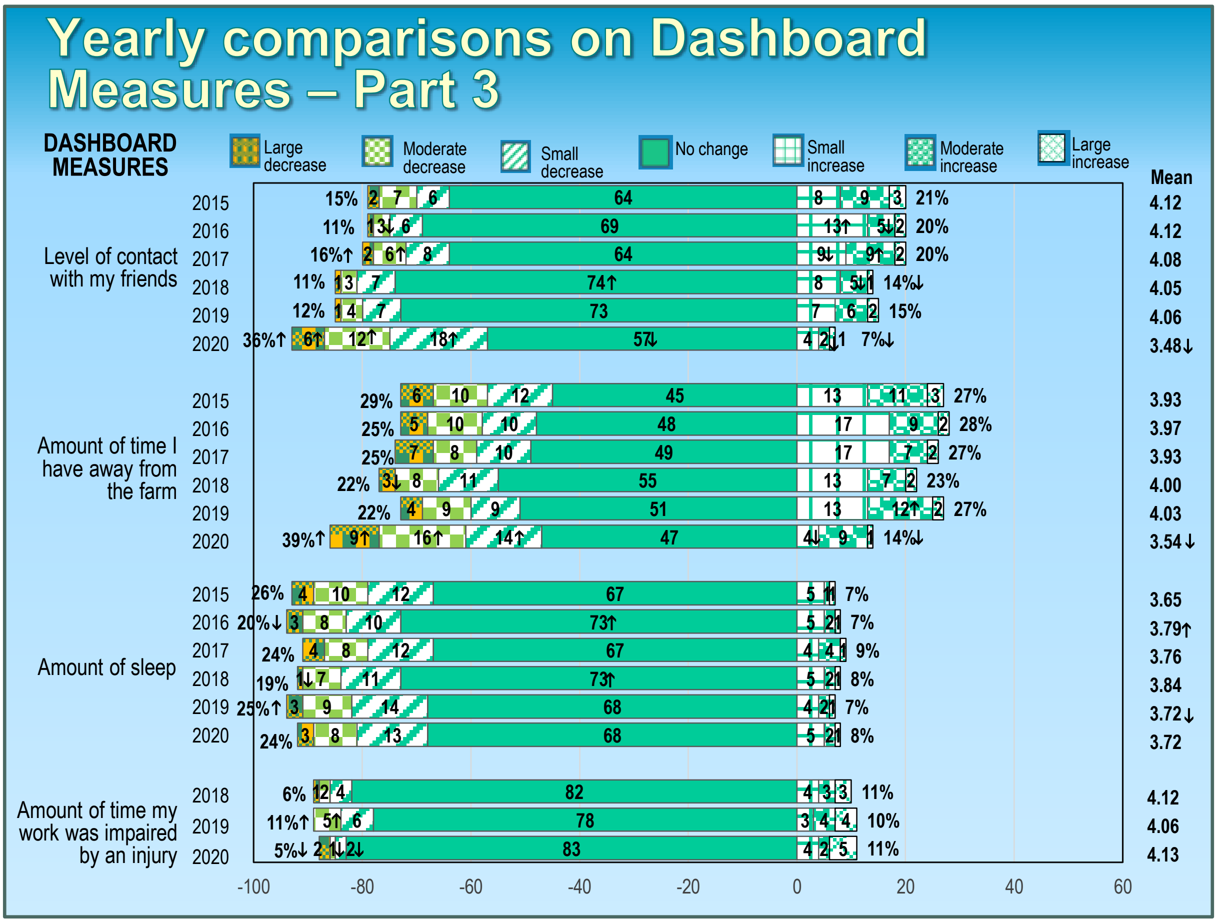
8 The two items in the first graph were rated on a seven point scale where 1 was 'large worsening' and 7 'large improvement'. The percentage reporting any level of increase is shown to the immediate right of the bars and the percentage reporting any level of decrease to the immediate left of the bars. The mean scores are shown on the right hand side of the graph. The data for each year is based on 450 farmers, except for 2016 which had 455 and 2020 which had 451. The measures in the second and third graphs were also rated on a seven point scale, but with 1 being 'large decrease' and 7 'large increase'.

Yearly comparisons on Dashboard Measures – Part 1



Yearly comparisons on Dashboard Measures – Part 2





Differences by number of forms of engagement with Farmstrong

Those farmers who had engaged with Farmstrong via three or more forms in the previous 12 months were significantly more likely to report the following improvements over the last 12 months[9]:

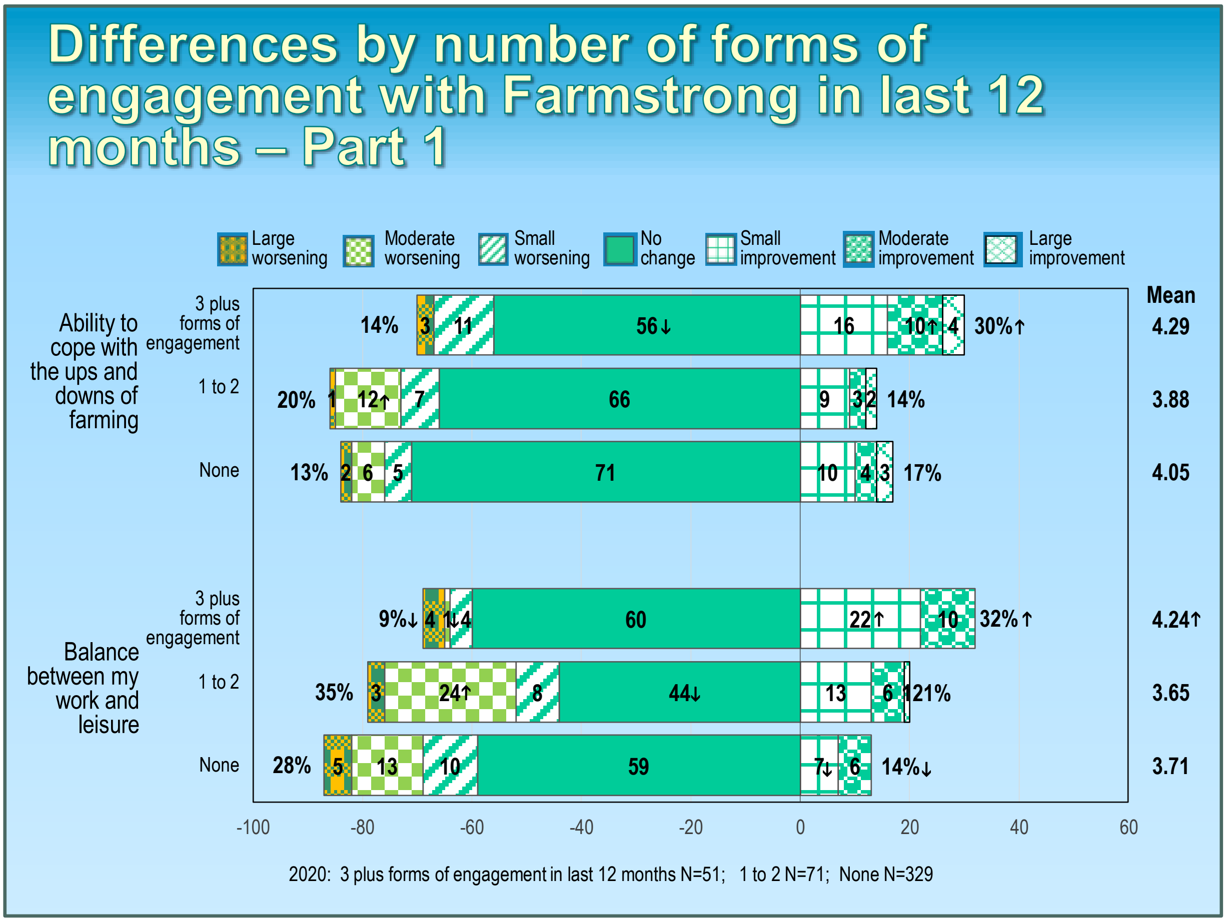
- Improved ability to cope with the ups and downs of farming (30%)
- Improvement in the balance between their work and leisure (32%, plus a higher mean)
- An increase in the amount of exercise they do (37%, plus a higher mean)
- An increase in time spent taking notice of the small things in life which bring them enjoyment (higher mean)

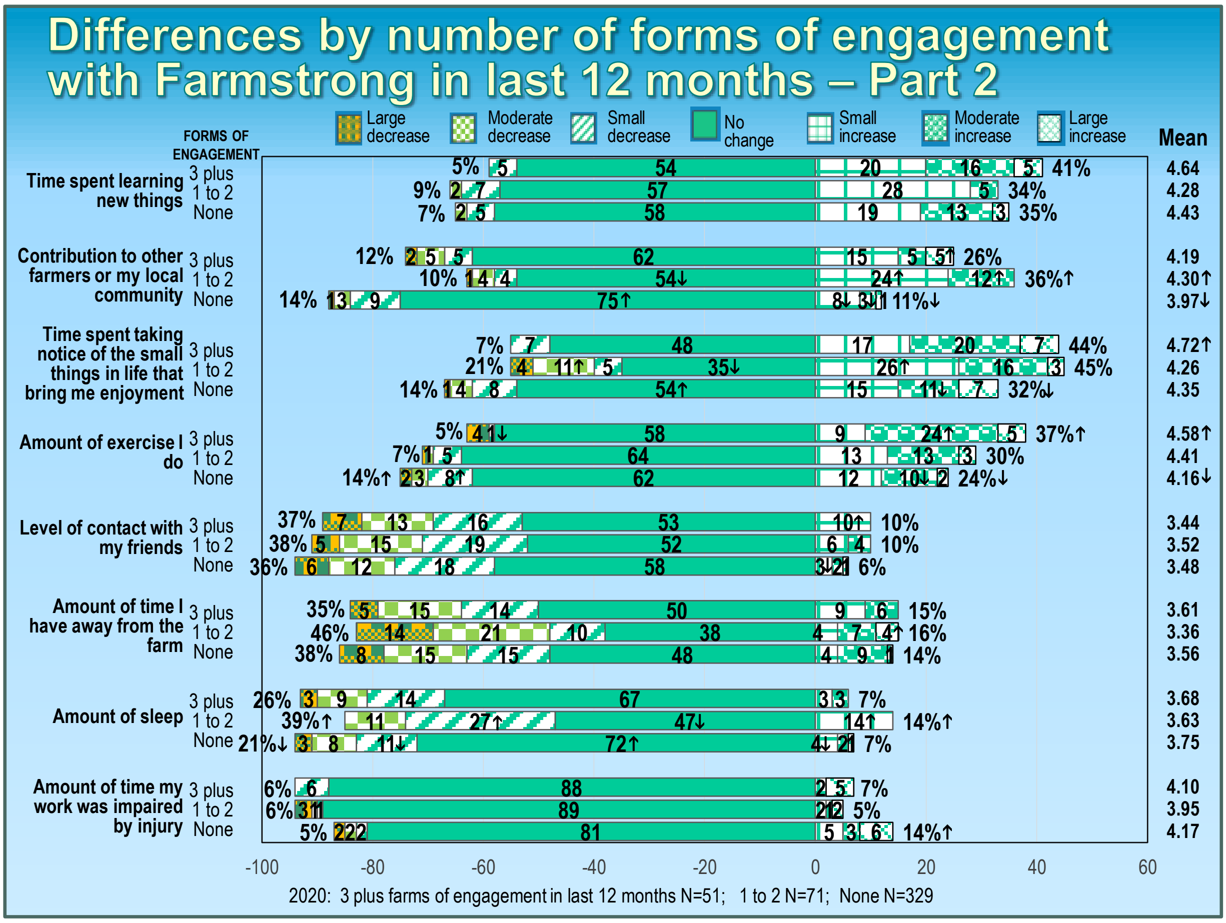
Those who had not engaged with Farmstrong in the last 12 months had several results which were consistent with them having less improvement in their wellbeing than those who had engaged:

- Less likely to report an improvement in the balance between their work and leisure (14%)
- Less likely to report an increase in their contribution to other farmers or their local community (11%, plus a lower mean)
- Less likely to report an increase in the time taking notice of the small things in life that bring them enjoyment (32%)

9 In previous reports this analysis was just a comparison between those who had engaged with Farmstrong in the last 12 months and those who had not.

- Less likely to report an increase in the amount of exercise they do (24%, plus a lower mean)
- More likely than others to report an increase in the amount of time their work was impaired by an injury (14%)





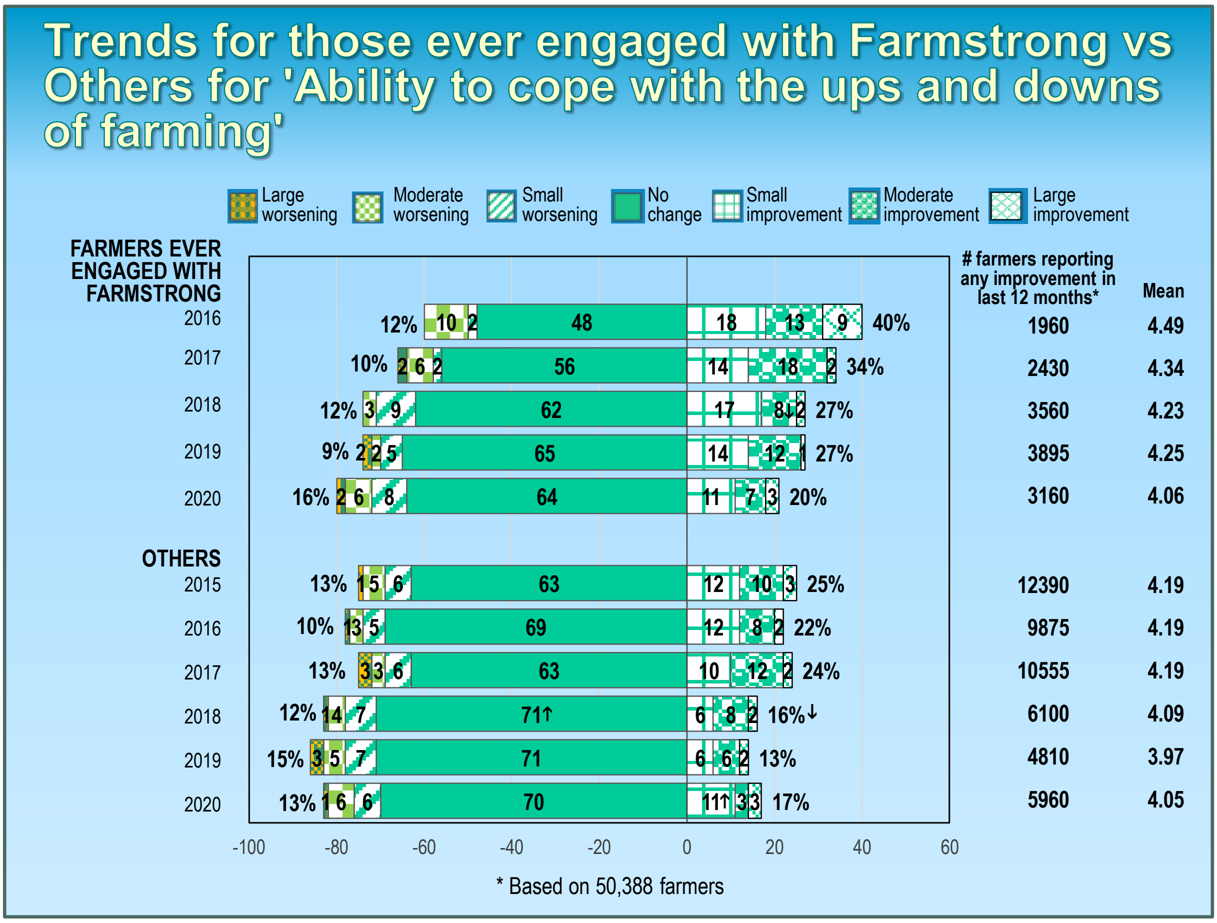
Trends for those who had ever engaged with Farmstrong versus others

This analysis has been limited to the key measure of 'Ability to cope with the ups and downs of farming'. The graph below shows the trends since the dashboard monitoring began. This analysis is based on those who had ever engaged with Farmstrong, as opposed to those who had engaged in the previous 12 months [10]. The gap between those who have ever engaged and the others has continued to narrow. It was 12% in 2016 and is now three percent.[11] However, the above analyses have identified that it is the persons engaging on multiple levels who are the ones being most impacted by Farmstrong, so these comparisons treating all persons engaging as one group are of limited value. Obviously we don't yet have any trend data for number of forms of engagement.

When the percentages reporting improvement is translated to actual numbers of farmers, as shown in the first column to the right of the graph, the number of farmers who have ever engaged with Farmstrong and reporting improvements on this measure over the last 12 months has increased from 1,960 in 2016 to 3,160 in 2020. Although the percentage of those who had ever engaged who were reporting improvement has decreased over that time period, more farmers have engaged, so overall there are increased numbers reporting improvements in their ability to cope with the ups and downs of farming.

[10] The 'ever engaged' measure was used for this trend data, to allow the 2015 benchmark data to be included.

[11] The upward and downward arrows on the graph indicate significant differences between years, rather than between those who had ever engaged with Farmstrong and others.



Sub-group differences in 2020

In the current 2020 survey the following subgroups reported significantly higher or lower levels of change in the previous 12 months compared with the rest. The table only includes measures where there were significant differences for the means.

MEASURE	Higher than others	Lower than others
'Ability to cope with ups and downs of farming'	Men (4.1 vs 3.8 for women) Under 45 year olds (4.4)	
'Balance between work and leisure'	Aged 65 years & over (3.97)	45-54 year olds (3.56)
'Time spent learning new things'	Lower North Island (4.62)	Lowest income group (4.27)
'Contribution to other farmers or community'	Under 45 year olds (4.33)	55-64 year olds (3.92)
'Amount of exercise'	Men (4.32 vs 4.02 for women)	Upper North Island (4.11)
'Amount of time away from farm'	Men (3.65 vs 3.16 for women) Aged 65 years and over (3.79) Highest income level (3.74)	Under 45 year olds (3.26) Income $200k to under $500k (3.19)
'Time spent taking notice of the small things in life that bring me enjoyment'	Aware of Farmstrong unprompted (4.66)	Upper North Island (4.17) Lowest income (4.15)
'Level of contact with friends'		45-54 year olds (3.25) Upper North Island (3.35)

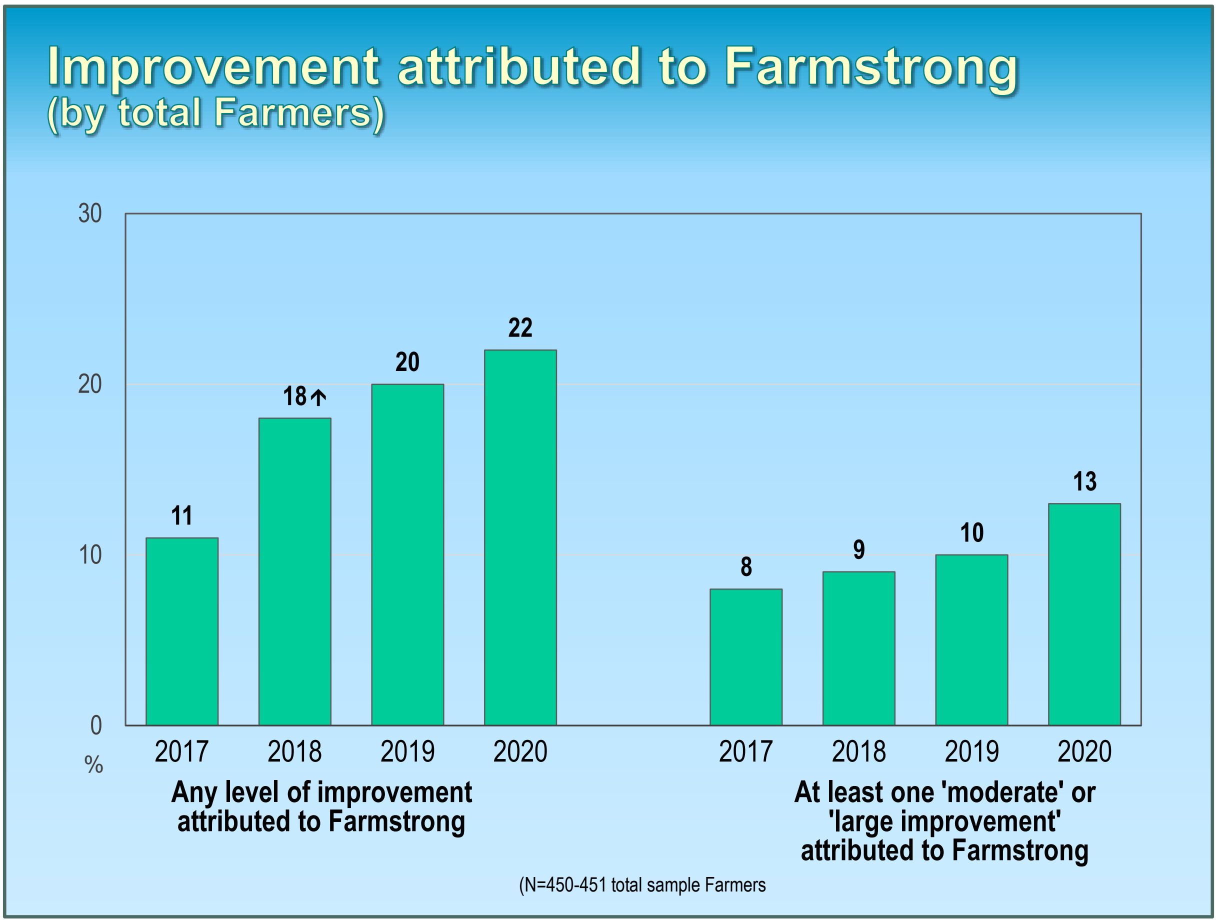
Where farmers making most and least progress

These results also indicate which measures farmers were making the most and least progress on improving. For all farmers the most progress (highest mean ratings) was being made on: 'time spent learning new things' (4.44 in 2020), 'time spent taking more notice of the small things in life that bring enjoyment' (4.38) and 'exercise' (4.25). They were making least progress on: 'amount of time away from the farm' (3.54), 'amount of sleep' (3.72) and 'balance between work and leisure' (3.76). 'Ability to cope with the ups and downs of farming' was at 4.06. [12]

[12] 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 in the survey, 22% attributed some level of improvement to Farmstrong on at least one of the ten items (i.e. 'small', 'moderate' or 'large' improvement).[13] While this continued an upward trend, the two percent increase since 2019 was not large enough to be statistically significant. There were 13% who reported at least one 'moderate' or 'large' level of improvement to Farmstrong, this result again showing an upward trend.



The table below shows the number of improvements being attributed to Farmstrong, out of the nine or ten asked about. As the measure relating to injuries was not in the 2017 survey, trend data is presented for when this measure is and is not included. With this measure included there was more opportunity for higher numbers to be reported.

The percentage reporting five or more items at any level of change (excluding the injury item) is showing indications of an upward trend (from 5% in 2016/17 to 12% now), even though none of the annual increases are large enough to be significant.

Most of the farmers who have ever engaged with Farmstrong are attributing some change to the initiative. There are currently 9% who have ever engaged with Farmstrong but are not attributing any changes, which is at a similar level to the previous two years.

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13 Since 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?"*

CHANGES ATTRIBUTED TO FARMSTRONG	Without injury item				With injury item		
	2016/ 2017 450 %	2017/ 2018 450 %	2018/ 2019 450 %	2019/ 2020 451 %	2017/ 2018 450 %	2018/ 2019 450 %	2019/ 2020 451 %
Any level of change							
1-2	3	7↑	4↓	6	6	3↓	6↑
3-4	3	5	7	4	4	7	4
5 or more	5	6	9	12	8	10	12
At least one change	**11**	**18↑**	**19**	**22**	**18**	**20**	**22**
'Moderate' or 'large' level of change							
1-2	3	5	4	7↑	5	4	7↑
3 or more	4	3	6	5	4	6	6
At least one 'moderate' or 'large' change	**8**	**9**	**9**	**13**	**9**	**10**	**13**
Ever engaged with Farmstrong but attributing no changes	**3**	**8↑**	**10**	**9**	**8**	**9**	**9**
Never engaged with Farmstrong	**86**	**74↓**	**71**	**69**	**74**	**71**	**69**

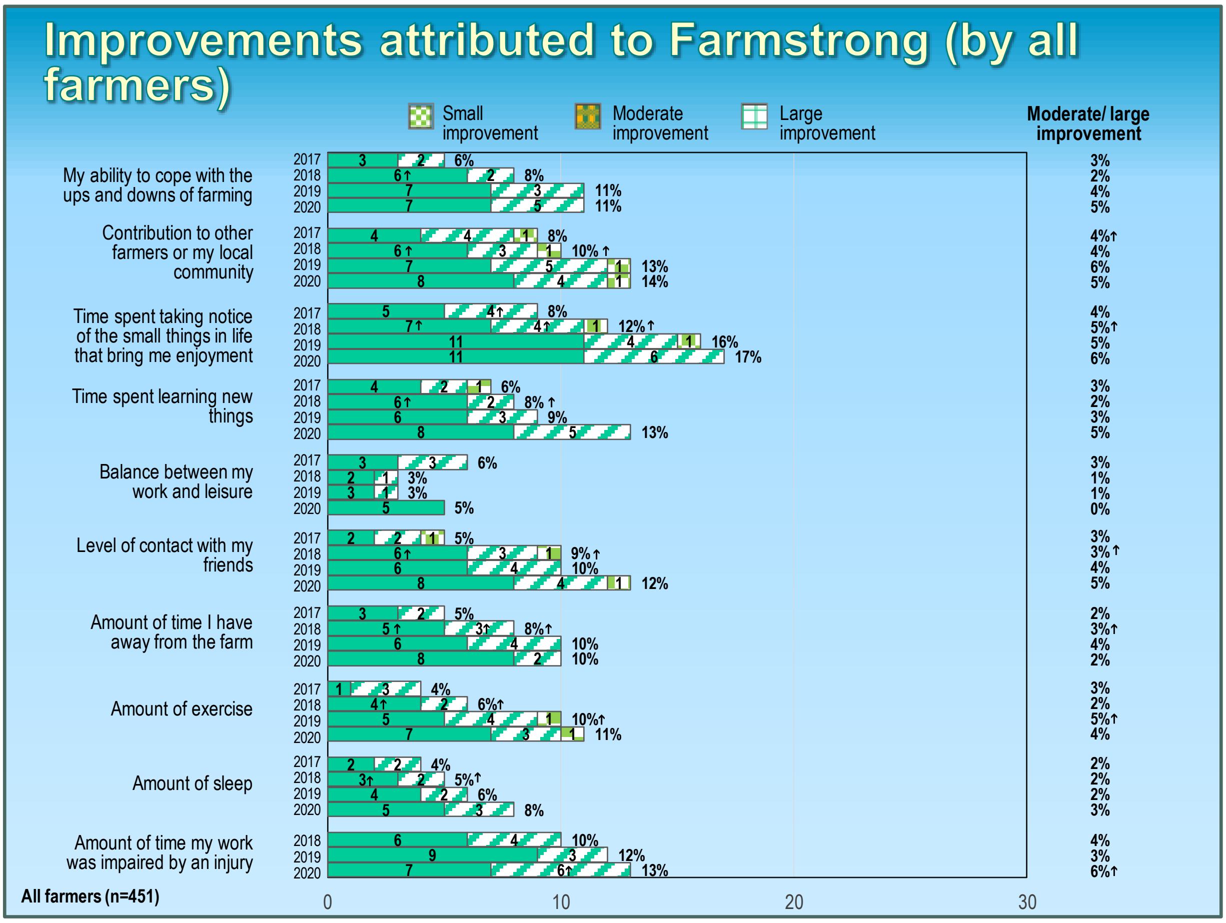
The graph below shows the responses to the individual items asked about. Most of the measures showed indications of increasing trends (see figures at the ends of the bars in the graph below). The only increase since 2019 which was large enough to be significant was the 6 percent (up by 3%) reporting a moderate or large improvement due to Farmstrong for 'amount of time my work was impaired by an injury'.

In 2020 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' (17% of all farmers)
- 'Contribution to other farmers or my local community' (14%)
- 'Amount of time my work was impaired by an injury' (13%)
- 'Time spent learning new things' (13%)

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

- 'Amount of time my work was impaired by an injury' (6%)
- 'Time spent taking notice of the small things in life that bring me enjoyment' (6%)
- 'My ability to cope with the ups and downs of farming' (5%)
- 'Contribution to other farmers or my local community' (5%)
- 'Time spent learning new things' (5%)
- 'Level of contact with my friends' (5%)

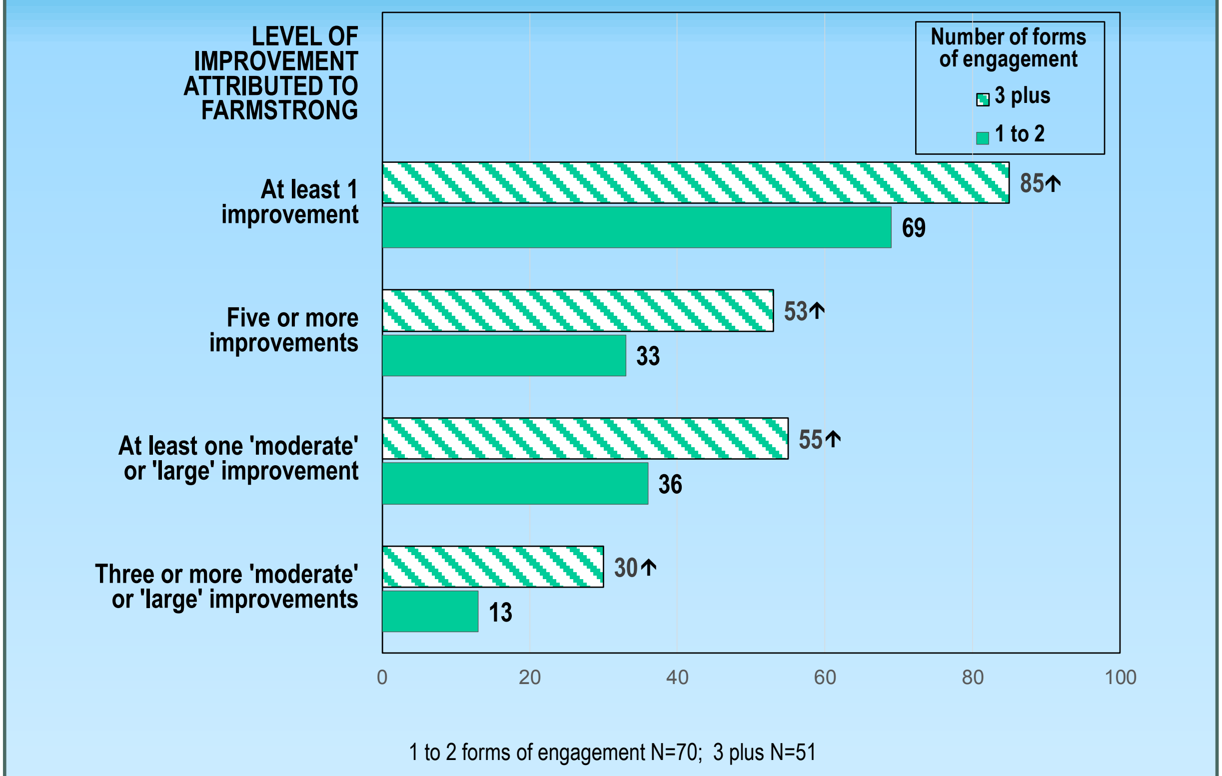


Subgroup differences

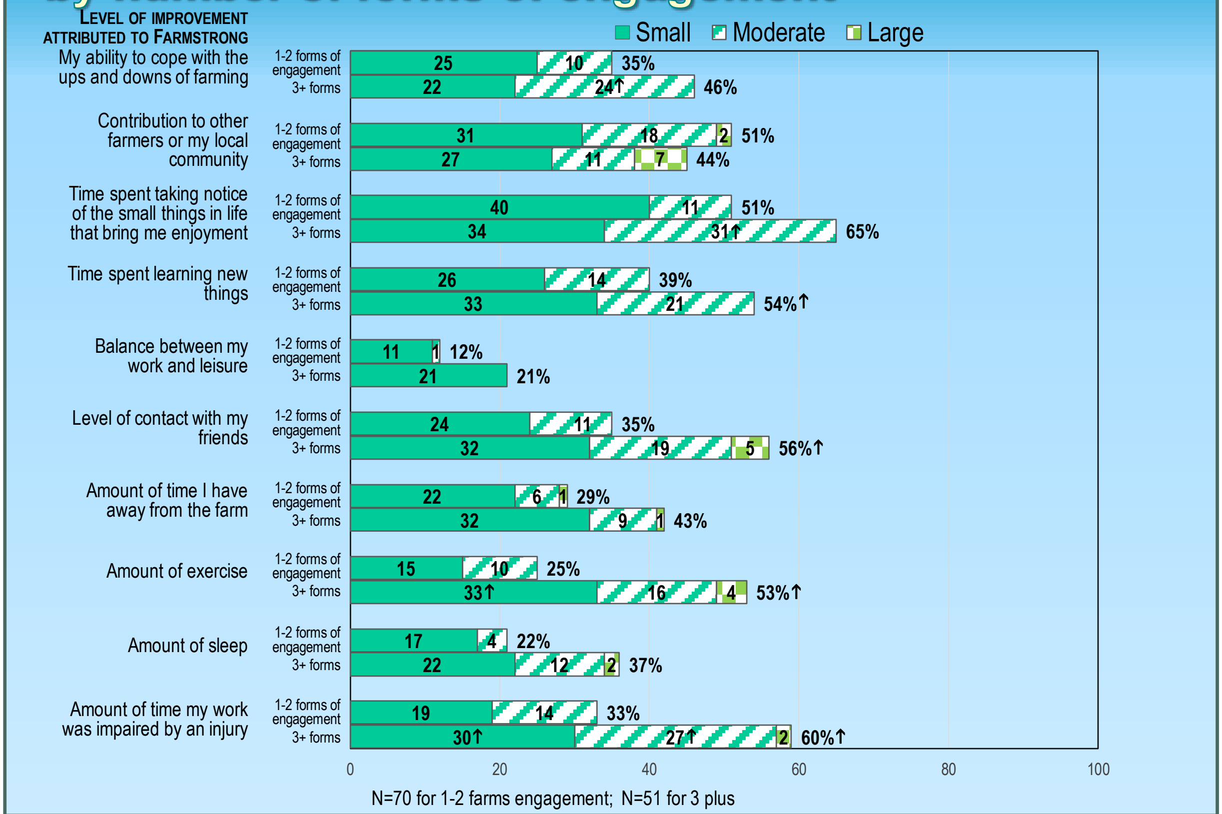
Those who had at least three forms of engagement with Farmstrong in the last 12 months were more likely to attribute improvements to Farmstrong, compared with those who had 1-2 forms of engagement (see first graph below). While this trend was evident for most of the specific improvements (see the second graph below), the items where there were significant differences were as follows:

- Time spent learning new things (54% for those with 3+ forms of engagement vs 39% for those with 1-2 forms)
- Level of contact with my friends (56% vs 35%)
- Amount of exercise (53% vs 25%)
- Amount of time my work was impaired by an injury (60% vs 33%)

Level of improvement attributed to Farmstrong – by number of forms of engagement



Types of improvements attributed to Farmstrong – by number of forms of engagement



Those who had ever engaged with Farmstrong, but attributed no changes to Farmstrong, were more likely to be: aged under 45 years (24%), be dairy farmers (14%) and live in the Upper North Island (12%).

There were no demographic differences of note for those attributing five or more improvements to Farmstrong. Those attributing three or more 'moderate' or 'large' improvements to Farmstrong were more likely to be men (8% vs 1% for women), sheep and beef farmers (10%) and in the second highest income bracket (13%).

Those who were more likely to attribute 'moderate' or 'large' improvements to Farmstrong for 'ability to cope with the ups and downs of farming' were: men (6% vs 1% for women), sheep and beef farmers (8%) and those in the highest income bracket (9%). There were no significant differences when considering any level of improvement on this item.

4.6 NATIONAL WELLBEING MEASURES

In the 2020 survey three new questions were added which were a selection of wellbeing measures used in the New Zealand General Social Survey (NZGSS). The purpose is over time to also be able measure the wellbeing of farmers using internationally recognised wellbeing measures that can track relevant and detailed changes in farmer wellbeing. This will also enable some comparisons with rural and the general population, and within the farmer population. These questions are currently asked in the New Zealand General Social Survey. This survey is based on face to face interviews of approximately 8000 persons aged 15 years and over and is undertaken every two years by Statistics NZ.

Life satisfaction

The question asked: '*I am going to ask you a very general question about your life as a whole these days. This includes all areas of your life. Where zero is completely dissatisfied, and ten is completely satisfied, how do you feel about your life as a whole?*'

The dashboard farmers had a mean rating of 7.7. There were no significant differences for those who were aware of Farmstrong (either unprompted or total awareness), or had engaged with Farmstrong. The only demographic which was significantly different was a higher mean level of satisfaction reported by those in the highest income bracket (7.9).

SATISFACTION RATING	Farmstrong Dashboard (n=451) %
0-6	15
7	23
8	37
9	12
Fully satisfied	12
Mean rating	**7.7**

Loneliness

This question asked: *'People who have contact with family and friends can still feel lonely sometimes, while those who have little contact may not feel lonely at all. In the last four weeks, how much of the time have you felt lonely?'* The answer options were as shown in the table below.

HOW OFTEN FELT LONELY (IN LAST 4 WEEKS)	Farmstrong Dashboard %
None of the time	67
A little of the time	19
Some of the time	12
Most/all of the time	1

The following differences were evident for the percentage who reported feeling lonely 'some', 'most', or 'all' of the time.

- Those who were aware of Farmstrong or Sam messages/resources were *less* likely to report feeling lonely this often (12% vs 24%)
- Those who had engaged with Farmstrong in the last 12 months were *less* likely (8% vs 16%)
- Those in the highest income bracket were *less* likely (8%)
- Women were *more* likely than men (25% vs 10%)
- 45 to 54 year olds were *more* likely (20%)

Mental wellbeing

The WHO-5 questions were used to measure mental wellbeing. Participants were asked to report how often they had experienced each of the five items listed in the table below over the last two weeks.

The scores on each item range from 0 to 5 and the total of these is multiplied by 4 to give a score out of 100. The mean score for all the farmers surveyed was 65. The following differences were evident for the mean and the combined percentage reporting 'more than half', 'most' or 'all'.

- Those with total awareness of Farmstrong or Sam were more likely to report a higher mean (66 versus 58 for others), plus they were higher for feeling 'cheerful and in good spirits' (88% vs 74% for those not aware), 'active and vigorous' (71% vs 55%), 'waking up feeling fresh and rested' (72% vs 56%), and their 'daily life being filled with things that interest you' (85% vs 73%).
- Those who had three or more forms of engagement with Farmstrong were more likely to report feeling 'cheerful and in good spirits' (95%).
- Men had a higher mental wellbeing score than women (66 vs 61) and were more likely to report feeling 'cheerful and in good spirits' (88% vs 79% for women), and 'active and vigorous' (72% vs 60%).
- Those in the 55 to 64 and 65 years and over age brackets had higher mental wellbeing means (67 and 69 respectively).
- Sheep/beef farmers were more likely to report feeling 'active and vigorous' (79%) and dairy farmers less likely (63%). Dairy farmers were more likely to report 'waking up feeling fresh and rested' (78%). It should be noted that this survey was done in late May/early June and the question only asked about the previous two weeks, so it was a period when most dairy farmers were not milking and may have recently had a holiday (while the cows were dried off).

WHO-5 (over the last 2 weeks)	FARMSTRONG DASHBOARD 2020 (N=448)				
	Felt cheerful and in good spirits	Felt calm and relaxed	Felt active and vigorous	Wake up feeling fresh and rested	Daily life been filled with things that interest you
	%	%	%	%	%
All of the time	7	6	8	9	14
Most of the time	56	49	35	42	50
More than half of the time	24	21	26	19	20
Less than half of the time	7	12	15	14	7
Some of the time	5	11	14	13	8
At no time	1	1	1	4	1
More than half/most/all	86	75	69	70	83

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 six 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 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, 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. This has resulted in some changes of one percent in data from previous surveys.

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[14]. 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 from each type of farm remained the same in all surveys, as it was subject to quotas and weighting.

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

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

In the following region table, Upper North Island includes Northland, Auckland, Waikato and Bay of Plenty. Lower South Island includes Otago and Southland. The Dashboard survey sample was a reasonable match to the SNZ occupation profile (SNZ farm type data was not available).

REGION	Dashboard survey 2015	Dashboard survey 2017	Dashboard survey 2019	Dashboard survey 2020	SNZ 2013 Census occupations	FMG clients
	450	450	450	451	50,388	20,357
	%	%	%	%	%	%
Upper North Island	42	42	41	41	38	34
Lower North Island	24	24	25	25	25	27
Upper South Island	19	20	20	20	21	20
Lower South Island	15	14	14	14	16	19

GENDER	Dashboard surveys	SNZ 2013 Census occupations
	450	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.

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

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 reported if they are statistically significant at the 95% level of confidence, unless otherwise stated. With demographic comparisons within the 2020 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, 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% (ie 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, would have a margin of error of plus or minus 3.7%. For smaller sub-samples the margin of error it greater. For example a figure of 50% reported by 150 farmers would have a margin of error of plus or minus 8.0%.

APPENDIX B: CALCULATION OF NUMBERS OF FARMERS 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 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 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. 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', based on what they enter on their Census form. However, as we don't have data to differentiate between the different types of farmers, we have used the 29.6% farm owner rate for all farmers. Based on the 50,388 farmers in the 2013 Census, there are an estimated 15,500 farmers who have ever engaged with Farmstrong. The 27.0% having engaged with Farmstrong in the previous 12 months equates with approximately 13,600 farmers.

The survey of recently injured farmers is the only survey we have which included all types of farmers 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. This would take the 30.7% rate for farm owners measured in this dashboard survey down to 18.4%. Based on the 27,636 farm workers in the 2013 Census, this equates with an estimated 5,100 non-farm owners who have ever engaged with Farmstrong and 4,500 engaged in the last 12 months.

Therefore the best estimate of the total farmers/farm workers who have ever engaged with Farmstrong is approximately 20,600 and for the last 12 months it is approximately 18,100.

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 FSAGE

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
4. At Fieldays
5. In a farm discussion group
6. At a Farmstrong workshop
7. At another sort of event in your local community
8. Any other places *(please specify)*
9. 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
- Amount of time my work was impaired by an injury
- 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

ASK ALL

QFS7. I am going to ask you a very general question about your life as a whole these days. This includes all areas of your life. Where zero is completely dissatisfied, and ten is completely satisfied, how do you feel about your life as a whole? *Record number between 0 and 10*

QFS8. Over the last two weeks, how often have you felt cheerful and in good spirits?

Read:

5. All of the time
4. Most of the time
3. More than half of the time
2. Less than half of the time
1. Some of the time
0. At no time

Do not read:

- Don't know
- Refused

Repeat for the following items:

And over the last two weeks how often have you felt calm and relaxed?

And over the last two weeks how often have you felt active and vigorous?

And over the last two weeks did you wake up feeling fresh and rested?

And over the last two weeks how often has your daily life been filled with things that interest you?

FS9. . People who have contact with family and friends can still feel lonely sometimes, while those who have little contact may not feel lonely at all. In the last four weeks, how much of the time have you felt lonely?

Read

1. None of the time
2. A little of the time
3. Some of the time
4. Most of the time
5. All of the time

Don't read

- Don’t know
- Refused

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