

New Zealanders' views of the primary sector

Ministry for Primary Industries

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1. Purpose of Research



Purpose of research

- The primary purpose of this 2017 study was to repeat the 2008 benchmark study that explored urban and rural New Zealanders' views of rural New Zealand and the primary sector. The main objectives for this study include:
 - gaining an in-depth understanding of the beliefs and values held, across both urban and rural New Zealanders, regarding the primary sector (agricultural, horticulture, food, fishing, aquaculture and forestry industries)
 - exploring and identifying pathways in the development of beliefs and values
 - quantifying views of urban and rural New Zealanders across a range of focus areas
- To answer these objectives, and in keeping with the 2008 study, a combined qualitative (focus groups) and quantitative (telephone survey) approach was used
- To ensure an accurate measure of change, the sampling regime and the majority of questions have been kept as similar as possible
- Some questions have been amended to reflect changes in New Zealand and the Ministry for Primary Industries (MPI) (MAF in 2008)* over the last 10 years. This means for a few data points we are unable to make longitudinal comparisons
- A media and literature scan was also conducted for the 2017 study. Relevant parts of the scan are included in this report – the full media and literature scan is documented in a separate report

**Formed in April 2012, MPI is a merger of the Ministry of Agriculture and Forestry (MAF), the Ministry of Fisheries, and the New Zealand Food Safety Authority.*

Reporting notes

- The term ‘respondents’ in this report refers to those New Zealanders who responded to quantitative telephone survey questions
- The term ‘participants’ in this report refers to those New Zealanders who participated in the qualitative focus group discussions
- As much as possible, 2017 figures are compared to the 2008 results. In some cases, questions have been amended to reflect real-world changes. Whenever this has happened it is noted in the charts
- Throughout this report, direct verbatim quotes are used from the focus groups. Verbatim text is always in italics and there is an identifier at the end of the quote, which gives the participant’s location, type of group and gender
- This report focuses on the main findings from the study and data are presented in charts. More detail is provided in a full set of tables in an appendix report which is easily referenced as it follows the same order as this report
- Throughout this report, scale questions have been used to gather the data
 - For example – a 1 to 5 agreement scale where 1 means strongly agree and 5 means strongly disagree. For clarity purposes, we usually report on the positive part of the scale such as ‘total agreement’ which is the sum of 1 + 2 on the scale
- Throughout the report some findings from the media and literature scan are included – full references for these findings are documented at the end of this report
 - When information from the scan is cited we make it clear if it is from a media article or a research report

Statistical significance testing

Sub-sample differences

- Statistically significant differences in the percentages across demographics are reported on and are placed in text boxes next to the charts

Differences between 2017 and 2008

- Statistically significant differences between the 2017 and 2008 percentages are reported on and are placed in text boxes next to the charts

Open-ended multiple response questions

- Statistically significant differences in any open-ended multiple type response questions should be interpreted with care, this has been noted on the slides
- Comparing 2017 and 2008 results across open-ended multiple response questions over time can be inherently problematic. As these are coded questions, there is an element of subjectivity in the coding that can be managed but not completely eliminated
- To manage this going forward, in our methodological recommendations section we suggest reducing the number of open-ended questions in the quantitative (telephone) survey

Note: Multiple comparisons problem

- We have used t-tests to determine whether two percentages are different from each other. With each t-test that is done, we incur a probability of a Type I error (rejection of a true null hypothesis or in other words 'false positive'). The probability of committing a Type I error is the significance level of the test, which is set to 5%. When doing multiple tests, the Type I error rate is inflated. We have used the false discovery rate (FDR) method to control the expected proportion of 'discoveries' that are false
- In other words, based on this statistical testing method we have used whenever this report shows a statistically significant difference between 2017 and 2008 (between the urban and rural sub-samples) there is a 5% chance it will be a false positive

2. Executive Summary



Executive summary

Views of the primary sector

- Both urban and rural respondents were most positive about the horticulture industry and least positive about fisheries
 - In 2017, 69% of rural respondents up 11% (from 2008) and 66% of urban respondents up 6% (from 2008) held positive views about the horticulture industry
 - Positive views towards fisheries were 40% for rural respondents and 39% for urban respondents (this question was not asked in 2008)
- Views of both urban and rural respondents towards the pastoral farming industries were mildly positive, which have slipped from very positive in 2008*
 - In 2017, 63% of rural respondents and 59% of urban respondents held positive views towards sheep and beef farming, also 50% of rural respondents and 47% of urban respondents held positive views towards dairy farming
 - However, positive views towards the dairy sector are still twice as high as negative ones with corresponding negative ratings for dairy being 21% (rural) and 25% (urban)
 - These 2017 figures have slipped from 83% of rural respondents and 78% of urban respondents who held a positive view of farming in general in 2008

**Note: In 2008 the question was asked about 'farming' in general – this was split into two specific questions in 2017 that asked directly about 'sheep and beef' and also 'dairy' farming.*

Executive summary (cont.)

Views of the primary sector (cont.)

- A majority of urban and rural respondents (albeit a slightly smaller one than 2008) continued to agree that expansion of the primary sector in the future is good for New Zealand
 - However, the focus groups showed that this expansion did not necessarily mean growing in size, but also meant improving efficiencies and adding value to produce
- The quantitative results showed that many New Zealanders (both urban and rural) still hold overall positive views about the primary sector, however, over the last 10 years or so this positivity has decreased
 - The qualitative research suggests this was largely because of the critical role people felt the primary sector played in the economy

Main issues facing the primary sector

- The most significant change since 2008 was a doubling in the percentage of both urban (from 23% to 47%) and rural (from 26% to 53%) respondents who now see water pollution and quality as the most significant environmental issue facing New Zealand
- The most significant environmental issue facing the primary sector was also considered to be water pollution and quality by both urban (52%) and rural (58%) respondents
 - It was felt that the dairy industry was the main source of concern and the biggest issues were thought to be in the Canterbury region

Executive summary (cont.)

Main issues facing the primary sector (cont.)

- In the focus groups, there was also increasing concern about the ‘corporatisation’ of primary production in New Zealand
- ‘Corporatisation’ was in many cases used to indicate foreign ownership and this was linked to intensification and negative impacts on the environment
- Participants’ concerns about sustainability in the primary sector were conflicted because they viewed the sector as their current option for maintaining and growing the economy

Biosecurity

- The vast majority of all respondents were concerned about the threat of pests and diseases to New Zealand
- Almost all (87%) urban and (88%) rural respondents agreed that, *‘Pests and diseases are a threat to New Zealand’*
- Both urban and rural respondents also placed a high level of responsibility on all parts of society for helping to protect New Zealand from the entry or spread of pests and diseases
- There was strong support in the focus groups for taking measures to control pests and diseases
- Participants suggested talking more about biosecurity in schools, and making the issue more real for people by focusing on the impacts an incursion would have on local businesses, families and jobs

Executive summary (cont.)

Biosecurity (cont.)

- The media and literature scan reinforced these findings. It suggested that New Zealanders believed prevention was better than dealing with an incursion, and that most were willing to participate in passive surveillance, albeit with direction (research report; Yockney & Field, 2016)
- This research showed that ‘biosecurity’ appeared to be a term with which many New Zealanders were becoming familiar. However, references to the term were dominated more by border security and less by domestic measures for controlling the spread of pests and diseases

Climate change

- In 2017, both urban (19% down from 27%) and rural respondents (18% down from 21%) felt the importance of climate change as an environmental issue facing New Zealand has decreased slightly since 2008
 - However, a strong majority agreed that, *‘Responding to climate change is the responsibility of all New Zealanders’*
- The 2017 results also showed that both urban and rural respondents were now more likely to accept that climate change is the result of human activity and that there was something that a small country like New Zealand could do about climate change
- There was a significant decrease in the percentage of urban and rural respondents who considered natural weather cycles are more important than people, with only 28% of urban (down from 45%) and 38% of rural respondents (down from 51%) agreeing with this

Executive summary (cont.)

Animal welfare

- Almost all respondents (both urban and rural) agreed it was important that the welfare of all farmed animals in New Zealand is protected
- In 2017, the level of agreement that farm animals were treated well by farmers is less than in 2008. However, it still remains in strongly positive territory
 - Among rural respondents 73% (down from 82% in 2008) agreed farm animals were treated well by farmers; the comparable results among urban respondents was 68% agreement (down from 71%)
- In a new question this year, just over half of both urban (56%) and rural respondents (51%) agreed that, *'Generally, New Zealanders living in cities and towns treat their animals well'*
- In the qualitative research (focus groups):
 - Many participants admitted they did not really know how animals were treated on farms, but they felt that New Zealand led the world in animal welfare standards and performance
 - Participants felt most negative media reports about animal welfare were highlighting an exception rather than normal behaviour of New Zealand farmers
 - Concerns tended to focus on caged farming and corporate farming
 - Concerns in urban areas tended to focus around the mistreatment of dogs

Executive summary (cont.)

Working in the primary sector (skills)

- A majority of respondents agreed that, *'A wide range of skills are needed to work in the primary sector'*, (77% rural and 76% urban respondents), however; rural respondents were much more likely (64%) than urban respondents (48%) to indicate that they would recommend working in the primary sector to someone else
- There was strong acknowledgement that the, *'Primary industries involve cutting-edge thinking and technologies'*, (67% of rural and 66% of urban respondents agreed with this)
- Under half of both rural and urban respondents populations agreed that, *'Businesses in the primary sector are good employers'* (41% of rural and 37% of urban respondents)
- The percentage of both urban and rural respondents who were either currently or had previously worked in the primary sector has decreased since 2008

Views of urban and rural New Zealand

- Similar to the 2008 results, both urban and rural respondents are twice as likely to say that over the last five years their view of rural New Zealand had become more positive compared to those whose view had become more negative
- Most other results have remained relatively stable since 2008 except for a large* increase in the percentage of both urban and rural respondents who now cite, *'Pollution caused by dairying'* as the reason they hold a negative view of rural New Zealand

**Due to small sub-sample this figure needs to be interpreted with care, however its consistency with the qualitative research adds weight to the result*

Executive summary (cont.)

Views of urban and rural New Zealand (cont.)

- In 2017, there has been a significant increase in the percentage of urban respondents who agreed that everyone in New Zealand should have reasonable access to services regardless of the cost (81% up from 74% in 2008). Also 63% of urban respondents now agreed that they don't mind paying a bit more if it means rural people can access services at a reasonable cost, up from 52% in 2008
- The media and literature scan suggested an increasing polarisation of views between urban and rural New Zealanders and that dairying was causing some of this (media articles; Edmeades, 2017; Hart, 2017; Mackay & Maharey, 2017; Mackay, Rookes & Uden, 2017)
- However, this research suggests that the 'divide' between urban and rural populations may not be as big as some media reports indicate, instead showing few differences between urban and rural attitudes and views
- Instead, concerns about the impact of dairying were shared across urban and rural populations

Social License to operate

- The focus group discussions suggested that framing the way New Zealand seeks to manage its primary sector around a 'social licence to operate' was potentially useful
- Participants talked about the need for transparency and more accurate information to help guide useful conversations that currently were more influenced by partial and often negative information from media platforms

Executive summary (cont.)

Social License to operate (cont.)

- It was considered that the primary sector currently earns its 'social licence to operate' by providing employment opportunities, economic stability and food for New Zealanders
- In the qualitative research there was no questioning of the economic contribution of the primary sector to New Zealand. However, many questioned the lack of affordable and quality food that it provided locally

3. Views of the Primary Sector



Overview: Views of primary sector

- Despite concerns about the primary sector, overall both urban and rural respondent views remained mostly positive
- Across the individual industries respondents were most positive about the horticulture industry
 - Unlike the other primary industries, views about the horticulture industry are now more positive than recorded in 2008
 - In 2017, 69% of rural respondents held a positive view of the horticulture industry up from 58% in 2008 the corresponding figure for urban respondents was 66% up from 60% in 2008
 - Two new reasons emerged for a positive view of the horticulture industry that were not mentioned in 2008 and these were, *'The industry is booming'*, and *'I like horticulture/It is not hard on the environment'*
- In 2017, views towards the pastoral farming industries were mildly positive, which have slipped from very positive in 2008*
 - In 2017, 59% of urban respondents and 63% of rural respondents held positive views towards sheep and beef farming, also 47% of urban respondents and 50% of rural respondents held positive views towards dairy farming
 - Positive views towards the dairy sector are still twice as high as negative ones with corresponding negative ratings for dairy being 25% (urban) and 21% (rural)
 - These 2017 figures have slipped from 78% of urban respondents and 83% of rural respondents who held a positive view of farming in general in 2008

**Note: In 2008 the question was asked about 'farming' in general – this was split into two specific questions in 2017 that asked directly about 'sheep and beef' and also 'dairy' farming*

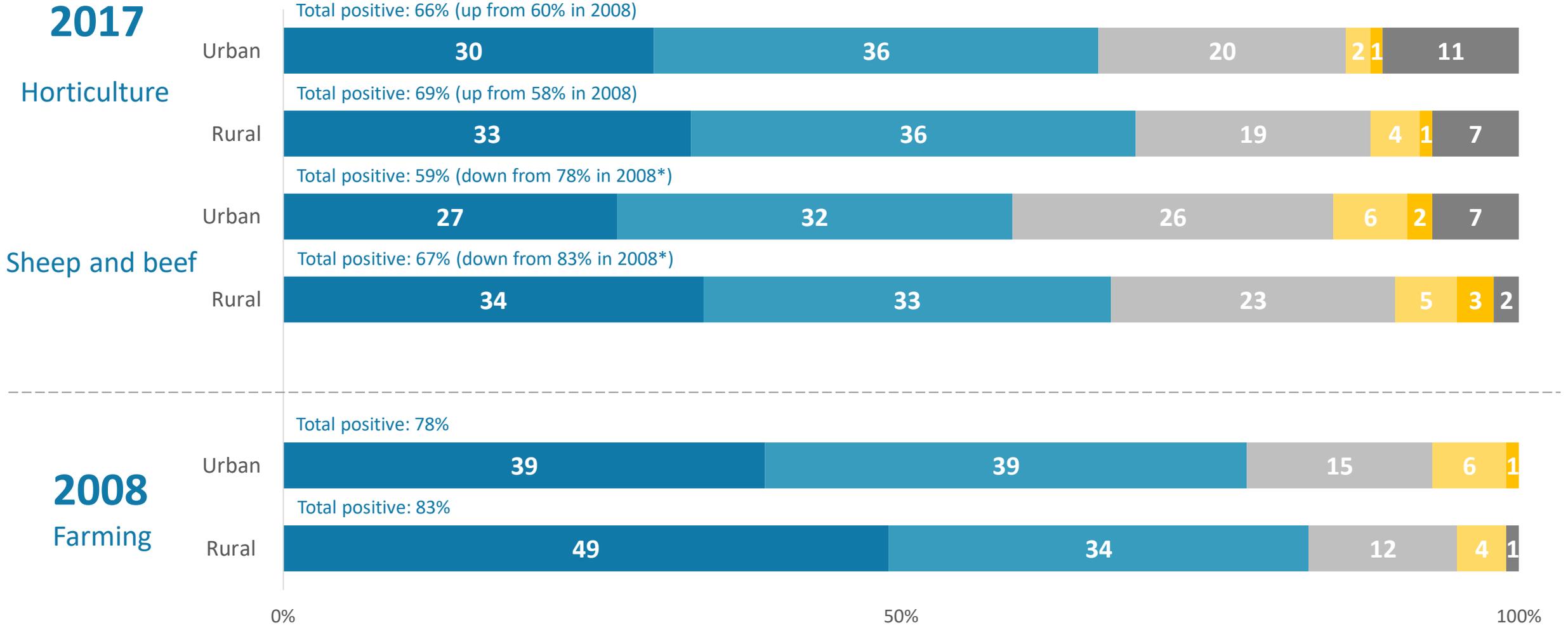
Overview: Views of primary sector (cont.)

- Respondents were least positive about fisheries
 - Well less than half of urban respondents (39%) and rural respondents (40%) held positive views about fisheries (not asked in 2008*)
- In 2017 significantly less urban respondents held a positive view of forestry than in 2008 (42% down from 52%), however only 13% held a negative view of this industry
- Other findings also suggest that overall there is a more positive than negative view of the primary sector
- A strong majority of all respondents continued to agree that, *'Expansion of the primary sector in the future is good for New Zealand'*, 69% of urban respondents compared to 74% in 2008 and 70% of rural respondents compared to 71% in the same year
- In the qualitative research, participants viewed growth as a focus on adding more value and becoming more efficient – as opposed to straight volume
- Almost two-thirds of urban respondents (64%) agreed that, *'If the rural sector is doing well people in the urban sector will be better off'* and 7% more urban respondents now 'strongly agreed' with this statement than was the case in 2008
- There was also an increase in rural respondents (30% in 2017 from 25% in 2008) that agreed that, *'If the urban sector is doing well people in the rural sector will be better off'*

*The 2008 benchmark study was carried out by MAF. Fisheries and aquaculture, which were managed under the Ministry of Fisheries at that time, were not included in the study.

Horticulture and sheep and beef industries were most positively viewed

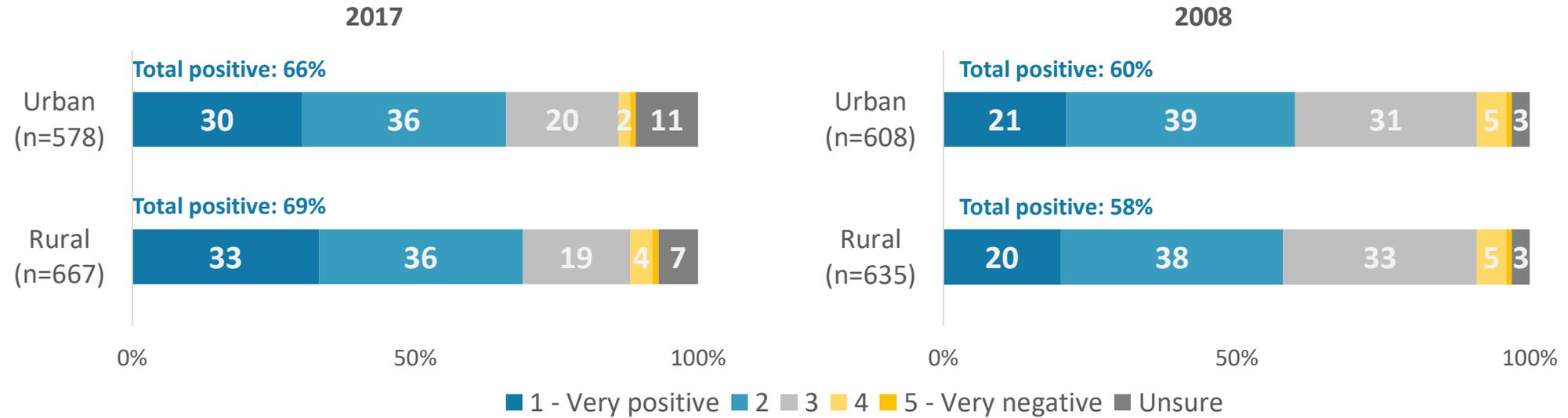
What is your opinion of the following industries?



2017 base: Urban respondents (n=578) and rural respondents (n=667)
 2008 base: Urban respondents (n=608) and rural respondents (n=635)

*2008 question read: "What is your opinion of the following sectors?" and did not differentiate farming into Sheep and Beef, and Dairy

Horticulture was viewed most positively



Main reasons for very positive view	2017		2008	
	Urban (n=174) %	Rural (n=219) %	Urban (n=129) %	Rural (n=129) %
Good for the economy	46	50	51	48
Products	44	39	37	40
Industry is booming	19	21	-	-
Like horticulture/ not hard on the environment	19	10	-	-
Hardworking	3	6	8	11

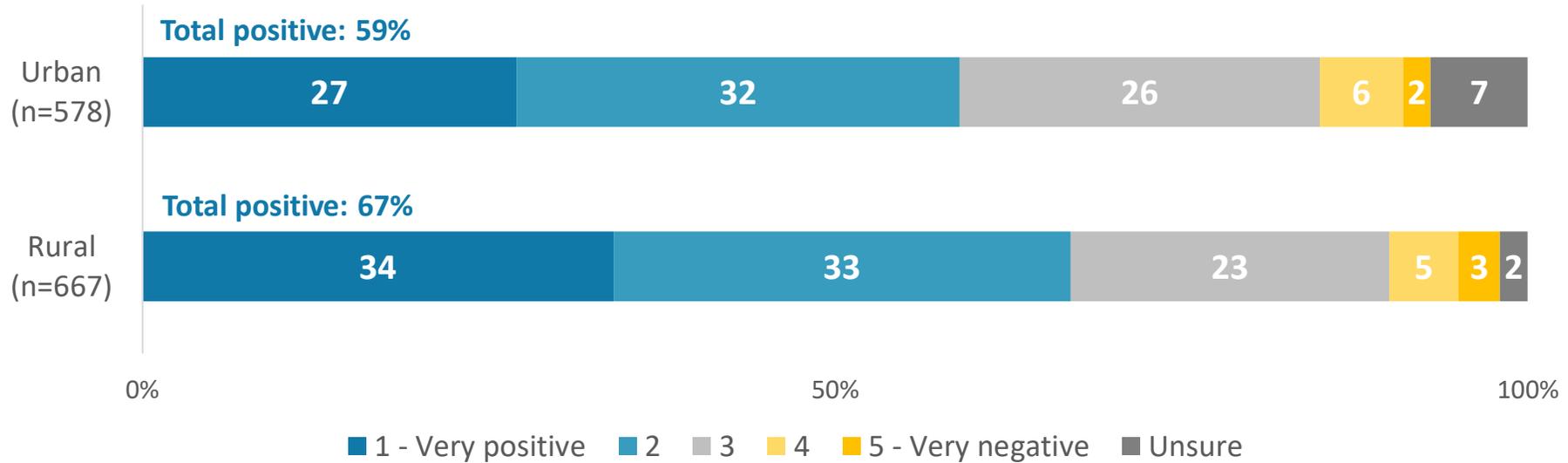
Base: Respondents who had a very positive view of horticulture.
Note: Multiple response question.

Main reasons for negative view	2017		2008	
	Urban (n=18) %	Rural (n=30) %	Urban (n=37) %	Rural (n=35) %
Environmental management	47	64	24	35
Not successful	4	12	29	31
Difficult industry	10	7	-	6
Poor employers	-	6	8	6
Limited resources	6	4	3	6

Base: Respondents who had a negative or very negative view of horticulture.
Note: Multiple response question. Extremely small sample sizes, interpret with care.

Majority view sheep and beef farming positively

2017



Main reasons for very positive view	2017	
	Urban (n=154) %	Rural (n=228) %
Good for the economy	34	35
Good quality products	30	25
Backbone of New Zealand	21	20

Main reasons for negative view	2017	
	Urban (n=51) %	Rural (n=54) %
Self-interested/ Profit seeking	37	27
Bad environmental record – general	32	33
Don't like industry/ Bad reputation	21	14

Base: Respondents who had a very positive view of sheep and beef farming.

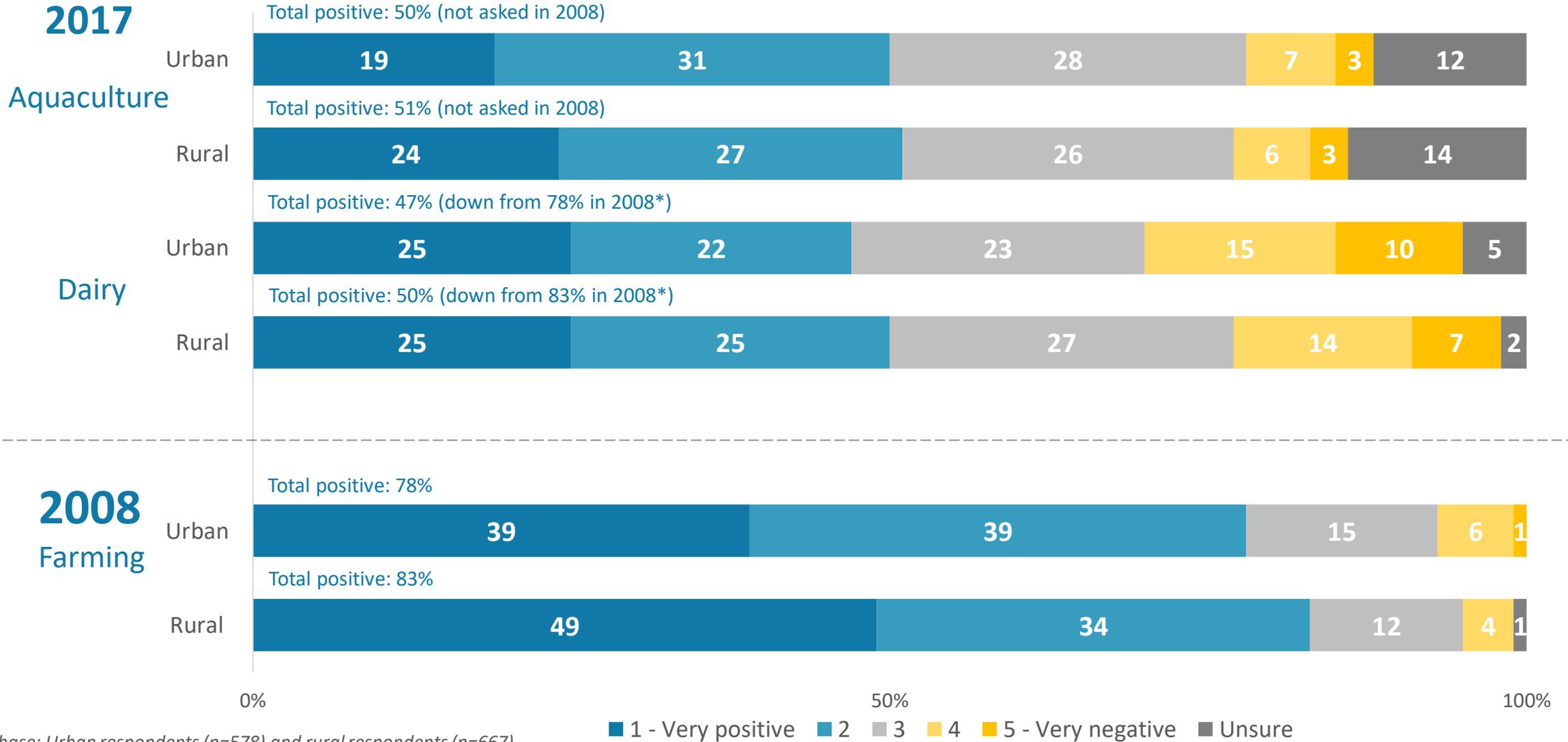
Note: Multiple response question.

Base: Respondents who had a negative or very negative view of sheep and beef farming.

Note: Multiple response question. Very small sample sizes, interpret with care.

Aquaculture and dairy were viewed moderately positively

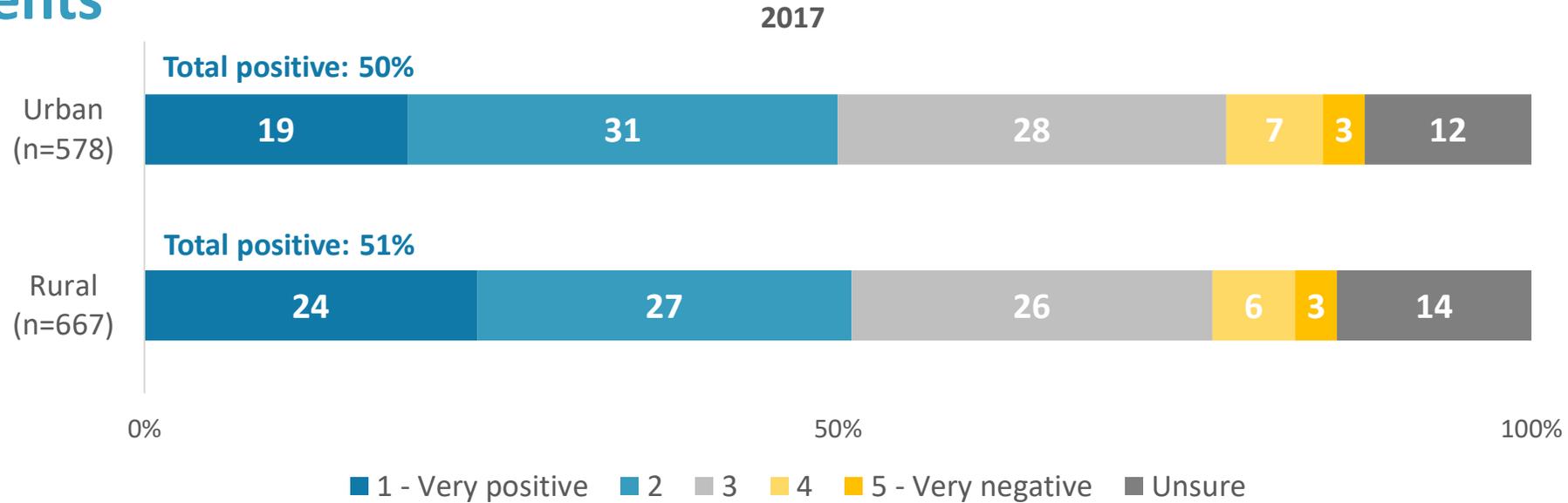
What is your opinion of the following industries?



2017 base: Urban respondents (n=578) and rural respondents (n=667)
 2008 base: Urban respondents (n=608) and rural respondents (n=635)

*2008 question read: "What is your opinion of the following sectors?" and did not differentiate farming into Sheep and Beef, and Dairy

Views of the aquaculture industry were similar across rural and urban respondents



Main reasons for very positive view	2017	
	Urban (n=110) %	Rural (n=158) %
Good products	33	27
Provides food for New Zealand	24	31
Innovative/diversified/valuable	22	21

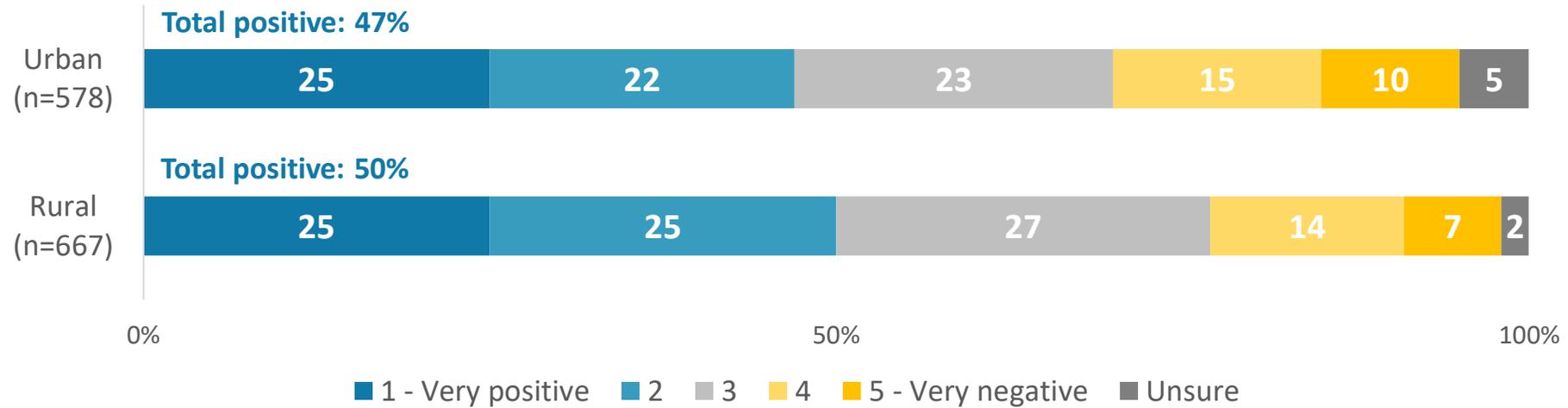
Base: Respondents who had a very positive view of aquaculture.
Note: Multiple response question.

Main reasons for negative view	2017	
	Urban (n=53) %	Rural (n=60) %
Bad for the environment	21	41
Creates pollution in the waterways	14	21
Creates biosecurity issues	22	9

Base: Respondents who had a negative or very negative view of aquaculture.
Note: Multiple response question. Very small sample sizes, interpret with care.

Views of dairy farming were similar across rural and urban respondents

2017



Main reasons for very positive view	2017	
	Urban (n=145) %	Rural (n=168) %
Good for the economy	48	47
Good quality products	33	26
Backbone of New Zealand	23	26
Opportunities	16	14

Base: Respondents who had a very positive view of dairy farming.
Note: Multiple response question.

Main reasons for negative view	2017	
	Urban (n=145) %	Rural (n=142) %
Bad environmental record	46	51
Run off into waterways/rivers	29	32
Self-interested/Profit seeking	25	18
Drain on natural resources (water)	19	22

Base: Respondents who had a negative or very negative view of dairy farming.
Note: Multiple response question.

Forestry and fisheries industries were least positively viewed

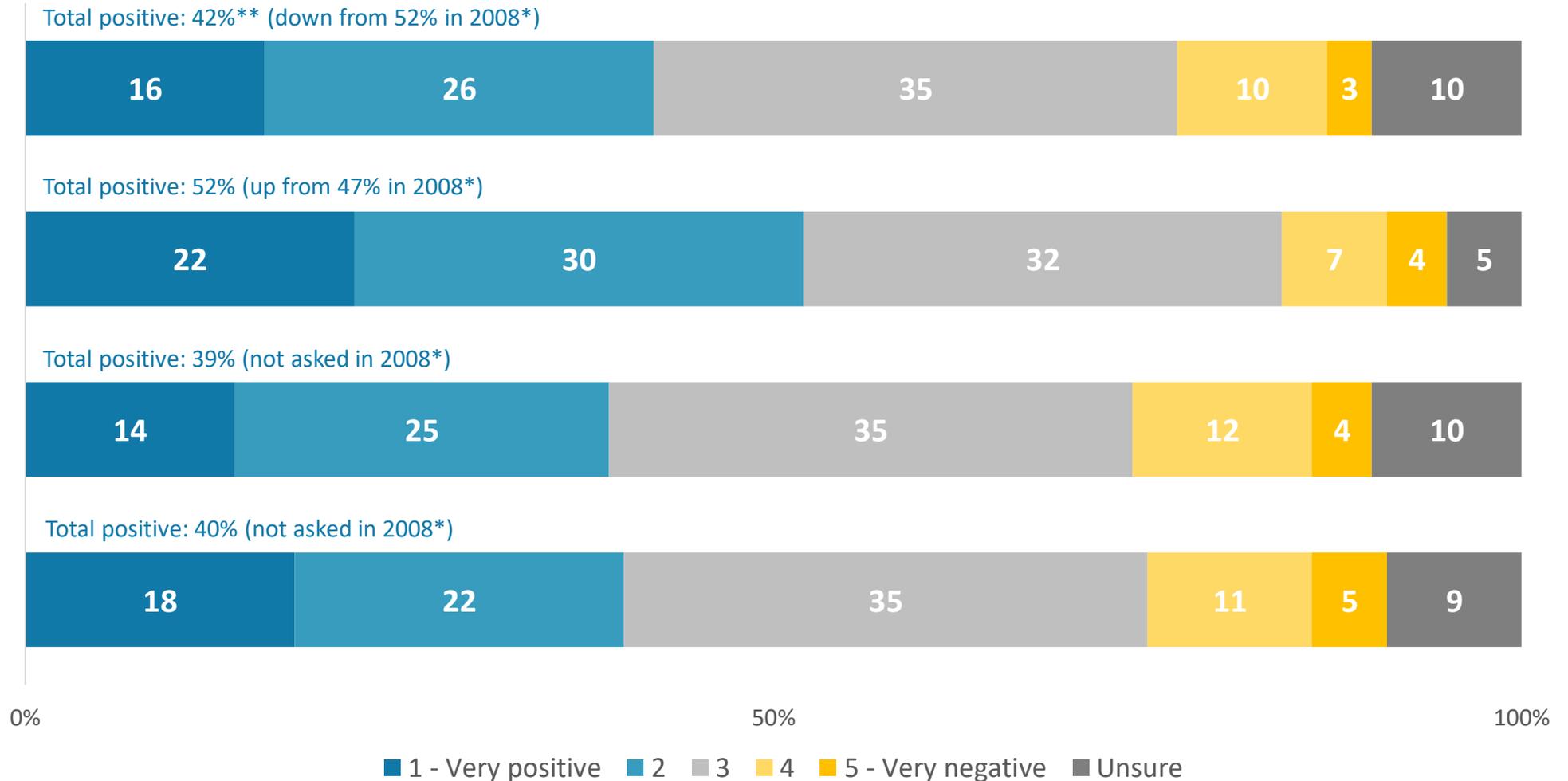
****Statistically significant difference between 2017 and 2008**

What is your opinion of the following industries?

2017

Forestry

Fisheries



2017 base: Urban respondents (n=578) and rural respondents (n=667)
 2008 base: Urban respondents (n=608) and rural respondents (n=635)

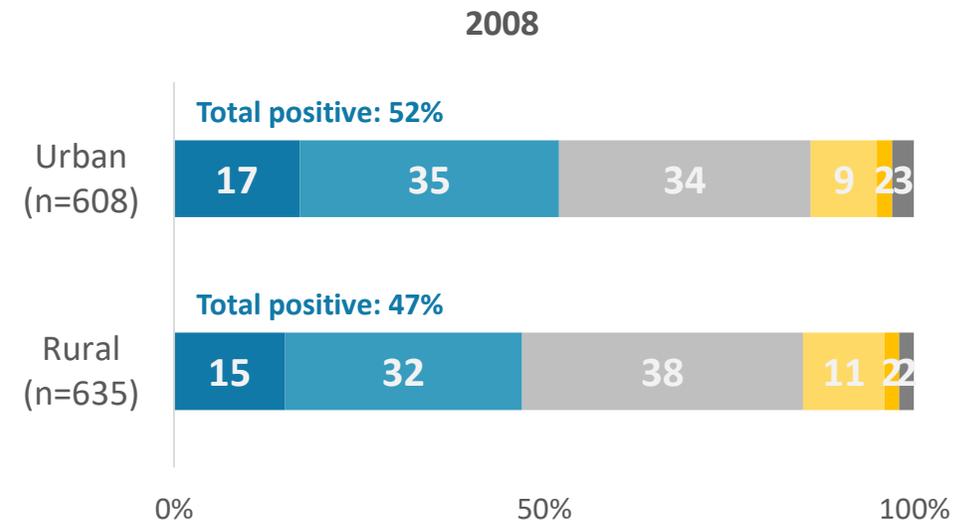
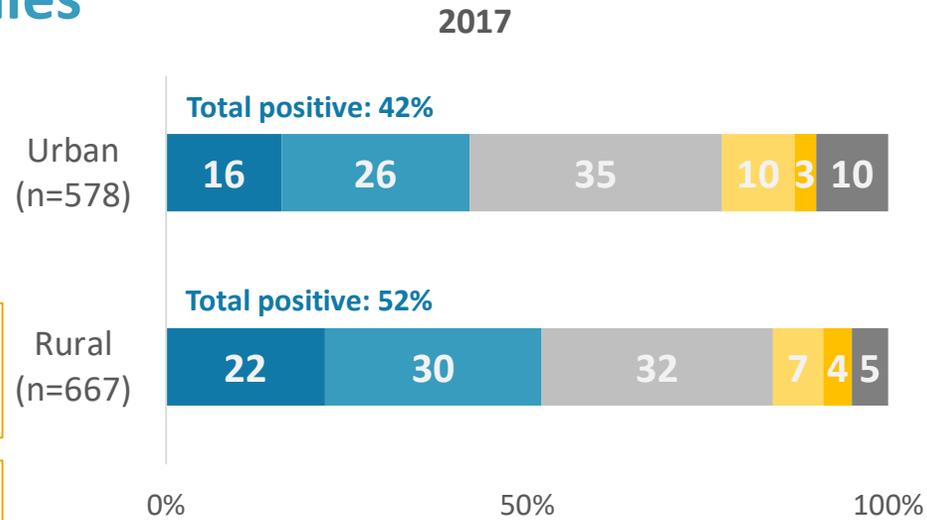
*2008 question read: "What is your opinion of the following sectors?"

Around half held a positive view about forestry, with males more positive than females

*Urban positive:
Male – 50%
Female – 34%

*Rural positive:
Male – 62%
Female – 41%

*Statistically significant



■ 1 - Very positive ■ 2 ■ 3 ■ 4 ■ 5 - Very negative ■ Unsure

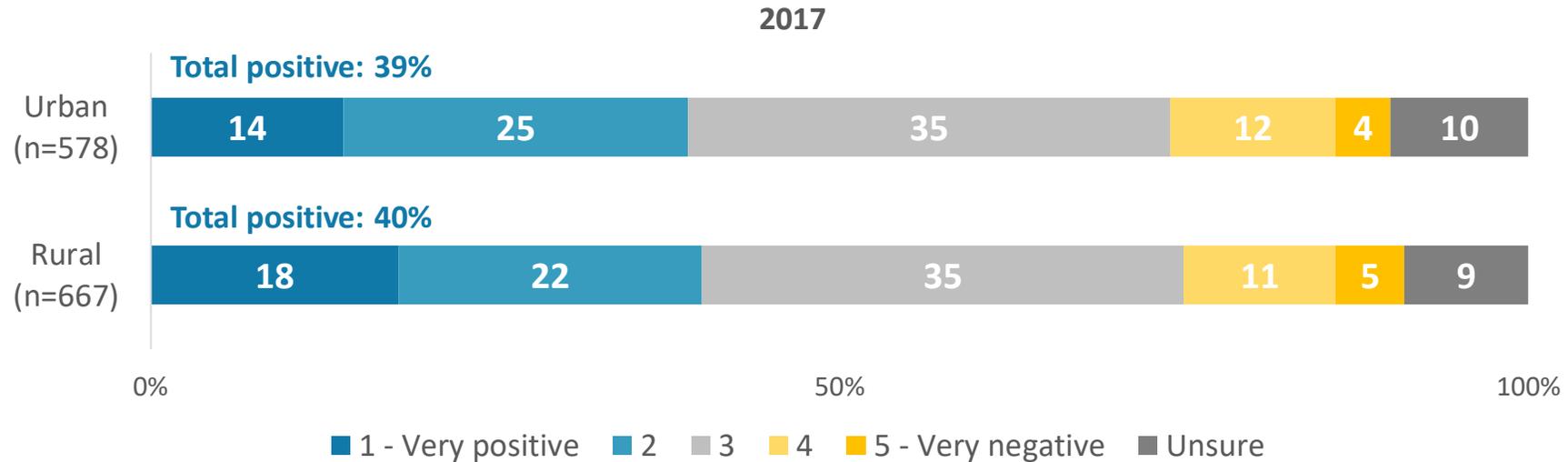
Main reasons for a very positive view	2017		2008	
	Urban (n=92) %	Rural (n=147) %	Urban (n=104) %	Rural (n=97) %
Good for the economy	50	52	48	39
Employment opportunities for rural areas	21	21	15	19
Positive for climate change	23	13	8	10

Base: Respondents who had a very positive view of forestry.
Note: Multiple response question.

Main reasons for negative view	2017		2008	
	Urban (n=77) %	Rural (n=73) %	Urban (n=62) %	Rural (n=84) %
Environmental management	56	48	57	45
Poor health and safety/ Drug use by workers	32	37	2	1
Foreign ownership	7	10	19	8

Base: Respondents who had a negative or very negative view of forestry.
Note: Multiple response question.

Views of fisheries were similar across urban and rural respondents



Main reasons for very positive view	2017	
	Urban (n=79) %	Rural (n=121) %
Innovative/diversified/valuable	49	40
Well managed with 'quota system management'	46	39
Good products	18	19

Base: Respondents who had a very positive view of fisheries.
Note: Multiple response question.

Main reasons for negative view	2017	
	Urban (n=93) %	Rural (n=108) %
Over fishing	48	50
Poorly managed 'quota system management'	33	33
High rates of bycatch/wasteful	22	15

Base: Respondents who had a negative or very negative view of fisheries.
Note: Multiple response question.

Most agreed that expansion of the primary sector in the future is good for New Zealand



2017 base: Urban respondents (n=578) and rural respondents (n=667)
 2008 base: Urban respondents (n=608) and rural respondents (n=635)

*In 2008 industries were asked separately. This figure is an average of all industries asked.

Adding value and efficiencies not just volume

- In the qualitative research, participants viewed growth more as a focus on adding value and increasing efficiencies – as opposed to growing by increasing volume

[You think there should be no more growth?] It is not about growth volume it could be growth as in more profitable same amount of stuff. Rather than pine trees why aren't there more unique woods? So things that get a higher margin, more bang for your buck. (Auckland, tertiary qualified/media consumer, female)

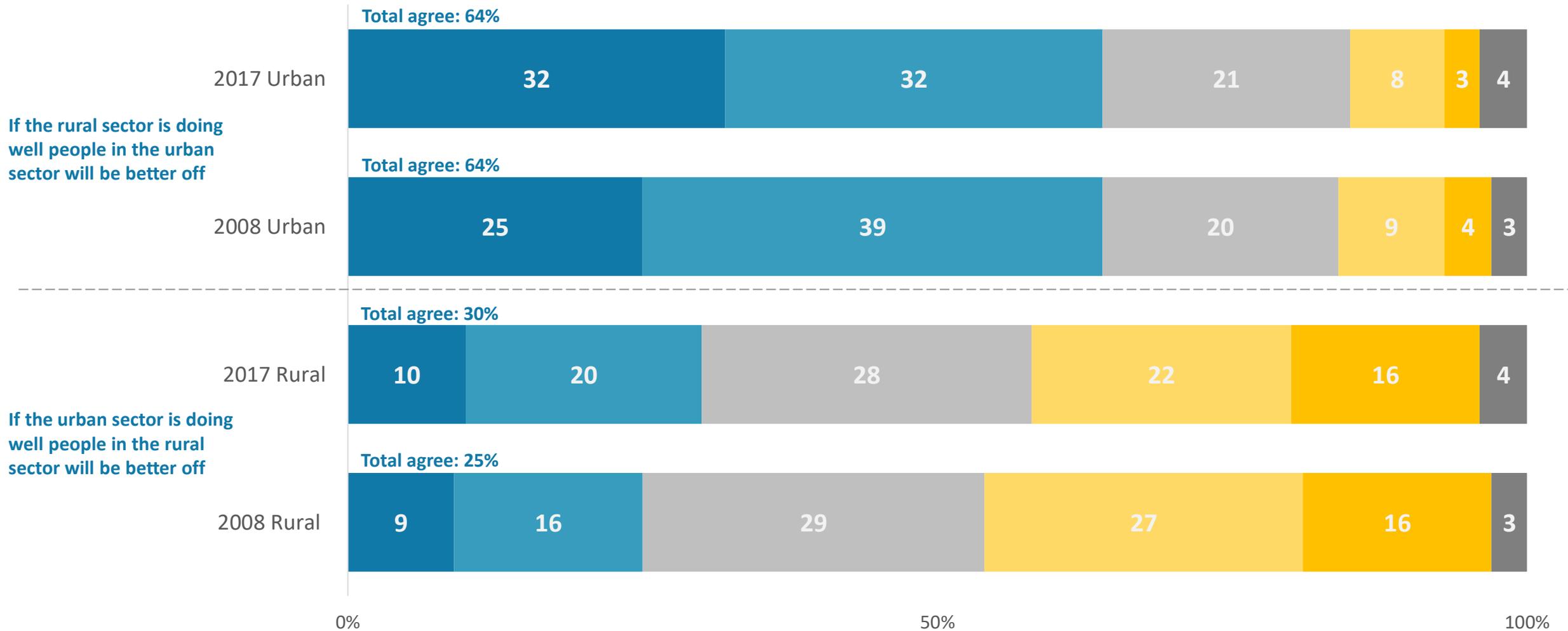
They are converting forest into dairy farms and they have been doing that for about 10 years so there just seems to be more and more because they are looking for more profit for the country. But again there must be a more economical way. [So do you think they have got enough cows in New Zealand?] Yes. (Auckland, tertiary qualified/media consumer, male)

[Room for growth?] Adding more value to the stuff that we already have. Doing it smarter and you can charge more for it. (Dunedin, general public, urban, male)

We should be competing on our clean, green image and producing products that have high value than just milk powder. (Whangarei, rural, tertiary qualified/media consumer, male)

Both urban and rural respondents strongly agreed that when the rural sector is doing well the urban sector will be better off

How much do you agree or disagree with the following statements?



2017 base: Urban respondents (n=578) and rural respondents (n=667)
 2008 base: Urban respondents (n=608) and rural respondents (n=635)

■ 1 - Strongly agree ■ 2 ■ 3 ■ 4 ■ 5 - Strongly disagree ■ Unsure

Primary sector rated highly for what it provides New Zealand

- There was a strong sense that the primary sector was critical to the New Zealand economy, as it generated many employment opportunities for New Zealanders and provided considerable tax revenue

We have got two dairy factories up here and they must have an easy 1000 jobs going between the two factories, which is perfect for places like here. (Whangarei, urban, general public, male)

The primary sector affects the whole economy of New Zealand. They export more they make more and that supports the Government of New Zealand and we pay less tax. That is very important so we must have more exports. (Auckland, low income, urban, male)

Primary sector rated highly for what it provides New Zealand (cont.)

- Many participants seemed to believe that when the primary industries did well, money flowed around the economy
- Provincial city residents were more likely to see direct benefits from a buoyant primary sector
- Even in main cities (Auckland and Christchurch) there was some acknowledgement of benefit

I kind of do feel it because if the milk prices are high the farmers are likely to spend more in construction and then the money cycle starts going around economically. So every time the milk prices come through well my industry construction just takes off. They are spending all around and you can feel it, especially in Whangarei. (Whangarei, rural, tertiary qualified/media consumer, female)

I think a large percentage of our income we earn from the primary industry...I don't know what the percentage is but I would assume that maybe 70% of New Zealand's income. (Dunedin, general public, rural, female)

I was on the fence whether I should give them 6 or 7 but I have given them a 6. I do appreciate them bringing in the money for New Zealand and as a result of it you have all of this infrastructure. (Auckland, general public, male)

Personifications of the primary sector focused on discussions around sustainability

- This exercise classified the personifications mainly on how farmers were perceived to treat the environment (this approach was taken as concerns about sustainability dominated discussions)
- Over three-quarters of the participants gave either positive (30) or more pragmatic (21) descriptions of their primary sector person, with the remaining 14 participants giving more negative descriptions
- Most personifications focused on pastoral farming, when type of farm was specified it was most likely to be dairy farming
- The vast majority of personifications were male with only a few female or gender neutral descriptions

Three main versions of the primary sector personifications emerged

I. Positive

- Focus on sustainability
- Family and community oriented
- Hard work needed to survive
- Many struggle to make a living
- Innovative

II. More pragmatic approach

- Sometimes sacrifice environment to feed family
- Must make profit to survive
- Business realities
- They farm with best intentions

III. Profit focused

- Profits before environment
- Wealthy go on overseas holidays

Examples of person descriptions

Environment

They protect our clean green image

They use it, maintain it and renew it

Always trying to improve it

Characteristics

Hardworking and honest

Man of the community played his part, loved by family

Environment

Needs to be looked after but not to the extreme

Tried to be concerned but had to make money

Loves the outdoors but finances may dictate things

Characteristics

Hard worker who lives off the land

Does what he can for the future generations

Environment

They care but not enough – money is more important

The environment is there to provide income

Don't care

Characteristics

Calculating – set in his ways

Hard working and grumpy

I. Positive characteristics

They are hardworking and have a good attitude for innovation and sustainability and maintaining the land they are on. (Dunedin, general public, rural, male)

Because he is one of those people who serves his family and his community because he has got that inbuilt sense. That nice Kiwi thing we have that we feel like we have to give back to the community. (Auckland, general public, female)

They care for the environment because the environment cares for them. Because they generally will have come from a long line of whanau who have gone back for generations and they have had to care for the environment to ensure their family continues. So from that perspective I feel they are focused on the family unit. That tends to be their main focus and caring for it and looking after it. (Whangarei, rural, tertiary qualified/media consumer, male)

I feel for the farmers, I feel for the dairy industry. I know that there is an 0800 suicide line for farmers. They have got a real tough job. I know people go “farmers have really nice cars and a great lifestyle” but no. And they still have the old Kiwi male attitude of I will just tough it out and say nothing. They work bloody hard for very little reward. (Christchurch, tertiary qualified/media consumer, urban, male)

II. Pragmatic characteristics

I think a lot of people in the primary industry are big on the environment and keeping it clean and green but know that in the environment where they work it doesn't always work that way and sometimes there are sacrifices that have to be made to the environment. As much as they don't want to, they know that it puts the bread on the plate. (Dunedin, general public, urban

[Does that make them different to other people?] Yes. Because if they don't produce they don't get anything. If their whole thing is around being a producer and they don't produce then they are failing themselves and their family and then they can't put food on their table. (Auckland, tertiary qualified/ media consumer, female)

Male, 50, European, single, no children, Type of work – farmer, drives a ute. Generally goes for holidays in Gore. Likes country music. What do they value in life – their farm, stock and animals. Views on the environment – they try to utilise it fully and put some minimal effort into maintaining its quality. (Christchurch, tertiary qualified/ media consumer, urban, male)

He tries to be concerned about the environment but he has to make money in the end, don't have time to be concerned. We have that lake up there, Lake Ellesmere is completely stuffed because of the farmers effluent but they have no other choice. (Christchurch, tertiary qualified/ media consumer, urban, male)

III. Focus on profit over environment

I think they would care about the environment but if it came down to the environment and profits, I think they would be more driven towards profit. (Auckland, general public, female)

[More focused on profit or environment?] They wouldn't alter their practises if it would cause them a loss. So it is a concern but not enough to change something. (Christchurch, tertiary qualified/ media consumer, urban, male)

He would be a National voter. Sport would probably be rugby. For the environment I don't think he would think much about the environment it would be more business. What he would be remembered for would probably be making lots of money. (Auckland, general public, female)

Perceptions of farmers – Media and literature scan

- The media and literature scan suggested that farmers' feel they are under stress and their stewardship of the land is not being recognised (media article; Waterworth, 2016)
- The scan also indicated there was too much finger pointing at farmers, and pollution caused by urban dwellers also needs to be acknowledged to move forward (media articles; Davidson, 2017; Edmeades, 2017; Tipa, 2017)
- However, this 2017 research suggests that negative media representations of the primary sector seems to more accurately reflect the views held by a minority
- While these findings indicate there is definitely concern about farmer impacts on the environment and in particular, the impact of dairy farmers on water quality it also shows that overall both urban and rural respondents were still more likely to hold a positive view of all primary industries than a negative one, and in many cases recognised farmer stewardship
- The highest negative ratings were recorded about the dairy industry

4. Main Issues Facing the Primary Sector



The most significant environmental issue facing New Zealand is pollution/water quality

What are the most important environmental issues facing New Zealand today?

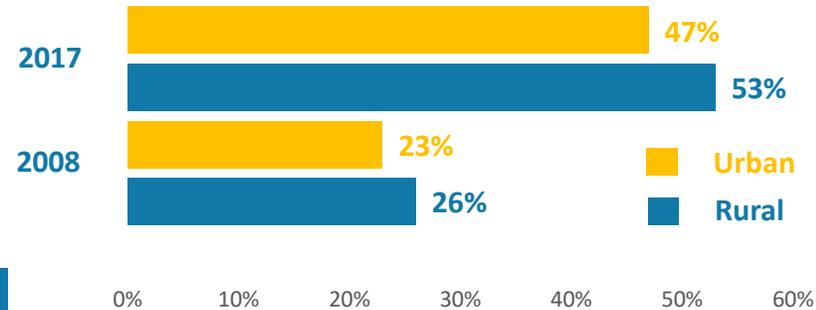
Pollution/Water quality*

2017 – Urban 78% and Rural 80%

2008 – Urban 68% and Rural 73%

- Water quality
- Air quality
- Run off from agricultural land
- Sewage discharge

Since 2008 concerns around water quality have doubled



*Statistically significant difference from 2008 for both urban and rural respondents (note: multiple response question, interpret with care)

1

Climate change/Global warming*

2017 – Urban 19% and Rural 18%

2008 – Urban 30% and Rural 25%

2

Water availability/Water shortage

2017 – Urban 8% and Rural 12%

2008 – Urban 7% and Rural 11%

3

2017 base: Urban respondents (n=578) and rural respondents (n=667). 2008 base: Urban respondents (n=608) and rural respondents (n=635). Note: Multiple response question.

The most significant environmental issue facing the primary sector is pollution/water quality

What are the most important environmental issues facing New Zealand's primary sector today?		
	Urban (n=578) %	Rural (n=667) %
Total Pollution/Water quality <ul style="list-style-type: none"> • Pollution (water)/Water quality (32% urban and 39% rural) • Pollution (air)/Air quality (9% urban and 6% rural) • Runoff from agricultural land use (9% urban and 12% rural) • Sewage discharge (2% urban and 1% rural) 	52	58
Global warming/Climate change	12	10
Land-use intensification	12	10
Water availability/Water shortage	5	9

Base: Urban respondents (n=578) and rural respondents (n=667).
 Note: Multiple response question.



Water pollution and use

- Participants were concerned about increasing levels of pollution in their waterways
- Some believed waterways were becoming unusable and this would impact on public use of this resource (included New Zealanders' freedom to swim and fish in their rivers and lakes coming under threat)

They [farmers] are making the rivers and streams and certainly the tributaries completely unusable.
(Christchurch, general public, urban, female)

It is a huge concern. The reports keep coming in around how polluted our water is and it is the source of everything. And I have two young kids growing up and I want to be able to enjoy the Kiwi holidays. In the summer visit a lake or a beach and by the sounds of it that is getting less and less by the day. And the way they [farmers] practice, the dumping of waste. (Auckland, general public, urban, male)

Water pollution and use – Māori view

- A few Māori participants talked about cultural values associated with gathering food being under threat

Days are gone when you could walk around with a 22 and pop off something to eat. Especially around Pukekohe all this industry coming in and it was big for mushrooms and puha and now there are houses popping up. (Whangarei, urban, general public, Māori, male)

Mine is probably more of a cultural thing, I like going to those rivers and fishing in those rivers so it is more that they need to be better looked after. The government needs to do more to make it sustainable for those farmers. [So you are not blaming the farmers for it totally?] Heck no. You can see where it started. But to say now, “hey farmers you sort it out” – come on my grandfather and his father were doing this. (Christchurch, tertiary qualified/ media consumer, urban, Māori, male)

Water pollution and use – Mainly a dairy issue

- The dairy industry was seen to be the main source of concern and Canterbury the main region under pressure
- Participants expressed concern about the rate of land-use change, the types of land being converted and intensification

They were talking about putting dairy farms down in the country (Mackenzie) and that to me is rape of the land really. That is a pristine environment and I don't think dairying belongs there. So to me the first thing is that before any more land is converted we really need to have some very strict rules. (Christchurch, tertiary qualified/media consumer, urban, male)

I find it a little bit upsetting driving through the South Island and you see all these beautiful places you remember as a kid and 10 years later - it is just mud and grass and those big sprinklers. I understand this is how they make money, but it is just a shame. (Dunedin, general public, urban, male)

One of the things with dairying is I wouldn't like to see more land converted without there being very strict requirements for them to meet. (Christchurch, tertiary qualified/media consumer, urban, male)

[This impact of intensification is that greater in some sectors than others?] Well it has been more on the news about dairy intensifying. I don't know about sheep I haven't heard too much about sheep. (Whangarei, rural, tertiary qualified/media consumer, male)

Credit given to farmers

- However, there was also credit given to pastoral farming (dairy, sheep and beef) for working to fix issues via fencing off waterways

I think it is really good that we have got the fencing and planting out waterways happening because with clearing all the land for dairy we got rid of that huge natural filtration system which they are trying a little bit to re-establish. (Whangarei, rural, tertiary qualified/media consumer, female)

I have given them a slightly higher score because again I agree it is not sustainable as we are doing it but we are learning. We are improving but we could do a lot better and I still don't think it is sustainable as it is. (Christchurch, tertiary qualified/media consumer, urban, male)

Water pollution mainly a dairy issue – Media and literature scan

- The media and literature scan suggested that the environmental effects from intensive dairy farming on water quality was seen as a key contributor to increasing the urban/rural divide
- A recent public perceptions survey found more people seeing farming as damaging waterways than in 2000 (academic report; Hughey, Kerr & Cullen, 2016)
- These public perceptions are partly reflected by Sir Peter Gluckman, Chief Science Advisor to the Prime Minister, who advised in a recent report (2017) that recent intensification in dairying was one of the main drivers of change in water quality (research report; Gluckman 2017)

Water use – Being treated as a commodity

- Participants were concerned that water was being treated as a commodity and we were exhausting our supplies
- Many raised concerns about water being increasingly bottled and exported

Water, where water is becoming the commodity and then on top of that farming tends to be quite water intensive with animals and how much water they are using. (Whangarei, rural, tertiary qualified/media consumer, female)

Water is becoming a much more rare resource even though we have got a ton of it. We shouldn't have an issue with the supply of water but it is looking more and more as though we will with farmers taking the water for irrigation or people bottling water and sending it overseas. I believe there needs to be a lot more control on it. They say that you can't own water but water still does have a value. (Christchurch, general public, rural, male)

Water pollution and use – Need to reassess how we value and use water

- Concerns about water pollution and the way it was being used led to calls for a reassessment of how we value and treat water in New Zealand

Water is going to become a product, we can see that quite clearly and it has to be managed. I guess the government will step in and do that. (Dunedin, general public, rural, male)

The way in which we farm needs to be reassessed because we are polluting our waterways and we project this clean green image 100% but we are not. (Christchurch, general public, urban, female)

Yes it is the backbone of the country but the pollution I think that is something the government should be regulating. I think individual companies maybe aren't the best to trust to do things well in that sort of side. (Christchurch, tertiary qualified/ media consumer, urban, male)

Concerns about negative impacts of corporate farming on primary sector

- ‘Corporate’ farming was seen to be a driving cause of many negative primary sector impacts. It was linked to intensification of dairy farming and increased threats to water quality

And going too big and making everything massive. The farms now are just getting too ridiculous and way out of hand. They want to try and keep disease down but they are making things bigger. When you make things bigger there are more diseases. (Auckland, general public, urban, female)

I kind of feel that farming has got more intense. So that is creating a bigger demand and water is becoming more scarce because of that. And that ties into the corporate ownership. (Christchurch, general public, rural, male)

Concerns about corporate farming and increased foreign ownership of primary sector

- The rise of 'corporate' farming was linked with foreign ownership of farms
- The concern was that the economics of farming was starting to put traditional land ownership out of reach for many New Zealanders

Now you have got the overseas buyers coming in and appointing managers to some of the bigger farms because it is just out of the question for a Kiwi guy to buy a place unless they inherit it and then it is at incredible cost. So you have the Chinese and American buyers coming in. (Christchurch, general public, urban, female)

I have got family who have worked for not quite overseas corporate people but other farmers have come together to purchase a huge amount of land for it to be farmed. So there are Kiwi people, New Zealand people who are trying to turn their farming into corporate stuff because financially you can't buy land like you used to. (Auckland, low income, urban, female)

So I think just like almost everything else in the world it is moving towards large scale mega ownerships, less mum and pops. But I don't think enough is being done to protect that. It is a really hard life and a financially difficult one and I do know that the people are getting on a bit. (Christchurch, general public, urban, female)

Concerns about corporate ownership also extended to land ownership rights

- This perceived rise of corporate farming was feeding into concerns about land ownership rights coming under threat for New Zealand citizens and more specifically for Māori

Foreign ownership, a lot of the things that get published in the media about Māori wanting their land back, it isn't so Māori can have it, it is so that people outside of this country can't buy it up. We have a few extreme people and for whatever reason the media interview them. But overall Māori people just don't want the land to be sold to foreign ownership. (Christchurch, tertiary qualified/media consumer, urban, female)

In New Zealand the government is not doing enough to protect the people. You have to protect your own not just let anybody come in and buy your land and buy this and that. In Singapore you are not allowed to sell all your land to foreigners; you keep it to yourself. (Auckland, low income, urban, male)

Concerns corporate farming causing traditional farms to disappear

- Increasing 'corporatisation' of farming led to concerns that traditional 'mum and dad' farms were disappearing
- It was thought absent owners would have less connection to the land and the massive scale would have a detrimental effect on the quality of farming practices
- Perceived traditional farming values were considered to be under threat, such as:
 - family-owned and operated businesses
 - strong focus on maintaining the land for future generations
 - strong focus on caring for workers and animals

I would say overseas buyers and corporate profit that is what they are after. And yes, they have to make a profit but the mum and dad owner in the back blocks they tend to look after things because they know how hard it is to get [there own farm]. If I was going to say snap shot of New Zealand probably 65% is corporate. (Christchurch, general public, rural, male)

Concerns amplified as limited options to underpin the economy

- Concerns about water pollution and corporate farming were amplified because participants felt New Zealand's economy was 'beholden' to the primary sector

And the lack of other options also makes us to a degree beholden. Because what else are we going to rely on. It is not like we have got a technology industry coming through that we can start to rely on that. It is not like you can vote for National or Labour or this party or this party. Primary industry or poverty that's our choice. (Whangarei, rural, tertiary qualified/media consumer, female)

I think our country needs the primary sector profit-wise but at the same time I think sustainability-wise it is probably not realistic. (Auckland, general public, urban, female)

It's hard though because what government is going to say, "You know what our primary sector is doing a lot of damage and we are going to sort that out" because so much of our country is based on farming so who is going to be the guy who is going to squash the farmers. It is kind of counter intuitive. (Whangarei, rural, tertiary qualified/ media consumer, female)

Limited options cause conflicted views

- Participants expressed concerns that over the last decade or so the way the primary sector has grown puts it directly into conflict with part of New Zealand's heritage – the environment
- Participants understood the need for a primary sector to both feed New Zealanders and drive the economy leaving them torn between protecting the environment and the realities of economic survival
- Therefore they wanted to see a more sustainable sector, but not by imposing unrealistic changes

We have over-fished the waters, polluted the rivers and stuff. It has taken a huge toll. I think they are starting to try and think a little bit more about it but I don't think they have done New Zealand a huge amount of favours long term. But it is what has made us the country that we are and it has given us a good basis. (Auckland, general public, female)

I have given it a 7 because we only have two money earners in this country, tourism which of course relies on the clean green image and the other one is mainly dairy. It is dairy that is keeping us buoyant and a bit of other stuff as well. But there is a price tag that we are handing forward to the next generation which is, "We will happily destroy the land and not think about sustainability". It is short-term thinking. [But you are still giving them a good mark of 7 out of 10?] We rely on them to keep us from going completely under. (Auckland, general public, female)

Issue deepens as some feel they are missing out on best produce

- Some participants feel cheated as they believed the best food was sent overseas and many New Zealanders were unable to afford 'their' local produce

I see it a lot especially for the low-earning income people like with my students, I see them struggling. I am sitting there on a good pay rate thinking what can I do to help you. If I had good connections I could say okay we will go and see uncle and see if he can knock you off a half a beef to feed your kids. (Whangarei, urban, Māori, general public)

I have spoken to quite a few people lately who are really bitter about all the good stuff going overseas and you can go overseas and buy really good top-quality export produce for cheaper than we can buy the second grade stuff here. (Whangarei, rural, tertiary qualified/media consumer, female)

The bit that upsets me most people overseas get the benefit of our best meat and goods. And we are left with more or less the second rate stuff. (Dunedin, general public, urban, female)

5. Biosecurity



Overview: Biosecurity

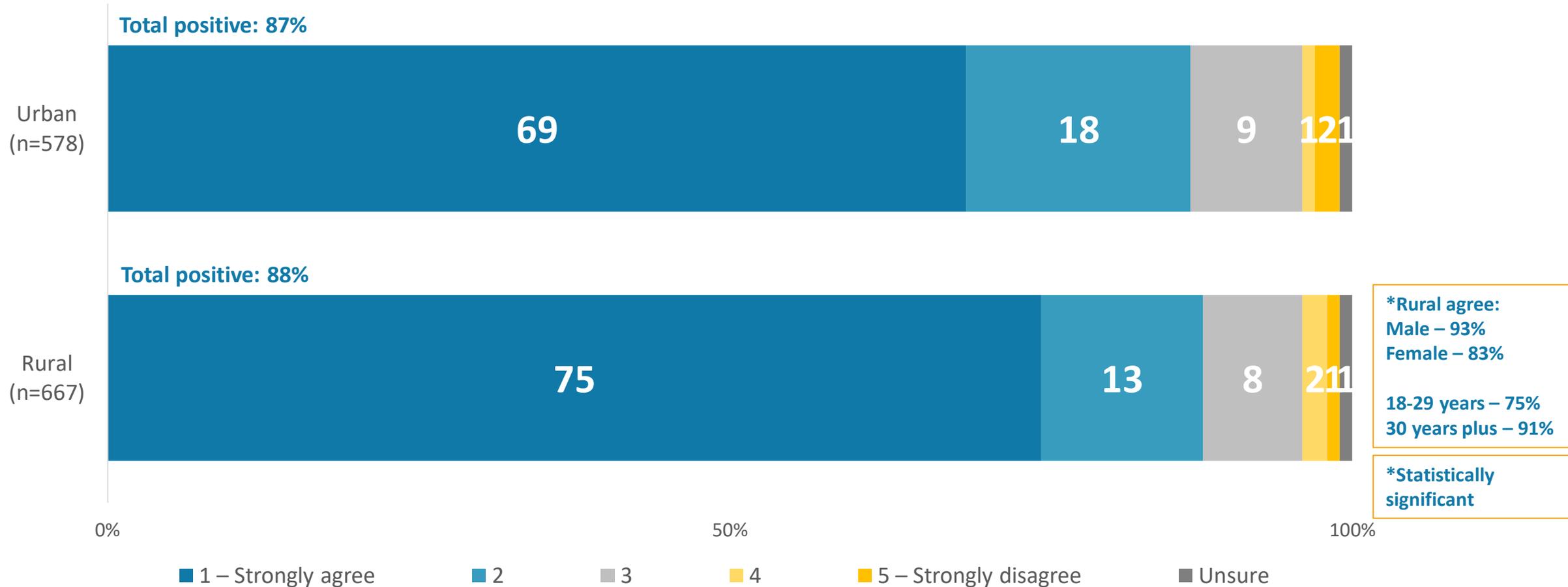
- The majority of respondents were concerned about the threat of pests and diseases to New Zealand
 - Almost all (87%) urban and (88%) rural respondents agreed that, *'Pests and diseases are a threat to New Zealand'*
- The highest level of responsibility for helping to protect New Zealand from the entry or spread of pests and diseases was placed on, *'Government agencies'* (97% rural and 96% urban respondents)
- The lowest level of responsibility was recorded by urban respondents for, *'Individual such as yourself'*, however; even in this instance 86% of urban respondents attributed responsibility to themselves and an even higher percentage (88%) of rural respondents answered the same way
- If an unusual pest or disease was found the three most common actions respondents reported they would do were:
 - call MPI hotline (37% urban and 44% rural respondents)
 - report to another organisation (MPI not mentioned) – (20% for both urban and rural respondents)
 - call the Department of Conservation – (14% urban and 15% rural respondents)
- *'Biosecurity'* appears to be a term many New Zealanders are becoming familiar with, however; most explanations or statements related to it were associated with border controls, with far fewer referring to internal measures and controls

Overview: Biosecurity (cont.)

- The media and literature scan suggested there was a range of views among the public regarding responsibility - from government through to individual citizens on all parts of society for helping to protect New Zealand from the entry or spread of pests and diseases (research report; Yockney & Field, 2016)

Majority agreed that pests and diseases are a threat to New Zealand

Using a scale of 1-5 where 1 means you strongly agree and 5 means that you strongly disagree, how much do you agree or disagree with the following statement? – Pests and diseases are a threat to New Zealand



Biosecurity considered a significant issue

- In almost every focus group, it was agreed that biosecurity was one of the most significant issues facing the primary sector (however, unlike water pollution we had to ask directly about pests and diseases before opinions on biosecurity emerged)
- There is considerable concern about the arrival of pests and diseases in New Zealand with a sense that this was an increasingly prevalent issue

But don't you think it is happening more and more. Twenty years ago there would be the odd pest or disease but now it is becoming more regular. (Dunedin, general public, urban, female)

I think they need to stomp on the biosecurity a bit more. That is getting a bit out of hand, we are hearing about too many new diseases way too close together. They need to dump more money into biosecurity and customs and pollution. (Whangarei, urban, general public, male)

[So you think it is important to have that border control?] More and more so when we have more people coming into the country. We don't know what they are bringing in with them. You only have to watch that thing on TV. They say no we have got nothing then boy what they do have. (Dunedin, general public, urban, female)

Biosecurity considered a significant issue – Several current incursions

- It was apparent that several current or recent biosecurity incursions were fuelling participants' perceptions of biosecurity issues in New Zealand
 - Unprompted, across the groups participants mentioned the following: myrtle rust, varroa mite, fruit fly, impact on oysters, PSA

It [myrtle rust] is going to affect all of our natives, our Pohutukawa, Manuka, where our Manuka honey comes from. Just like the Varroa mite got into the bees. (Auckland, low income, urban, female)

There is also risk in our primary sector too with Bluff oysters getting that disease and fruit so there is a bit of a risk with the primary sector. (Auckland, low income, urban, male)

[Pests and diseases impacts?] It depends what it does. If it [pest or disease] is that thing that bursts out of your fruit like an alien then I won't be eating any fruit. (Dunedin, general public, urban, female)

Impacts on wider economy makes biosecurity issues significant

- Participants also expressed concerns about the impact of an incursion on the economy – they talked of less profit in the sector, less spending in the local economy, fewer local jobs and local families suffering

[What would be the biggest threat?] Affecting productivity. There was that big kiwifruit scare and they could hardly produce any kiwifruit and then it drops down to people not being able to be employed which affects families. (Auckland, tertiary qualified/media consumer, male)

New Zealand is such a small country it is very important that we protect against the pests and the government has to spend more money to avoid all of this. Once it hits the primary industry is gone. There is a real risk there. (Auckland, low income, urban, male)

And the whole country, if it is a big industry like honey or kiwifruit the whole country suffers, our economy suffers badly. (Auckland, general public, urban, female)

Personal impacts of incursions made biosecurity more real for people

- Participants were concerned about food costs increasing, making healthy fruit and vegetables harder for New Zealand families to access
- There were also concerns about the increasing need for sprays and pesticides

Also the price of kiwifruit will rise through the roof and people won't be able to afford to buy local product. (Auckland, tertiary qualified/media consumer, urban, male)

[Outbreak?] I always think about the grocery bill going up again. (Dunedin, general public, urban, female)

When you look back to the day of my grandparents, we didn't have all of these chemicals and they lived off the land. Now we are all getting sick. What is in our food is quite scary. (Whangarei, urban, general public, female)

Biosecurity issues seen to also impact on flora and fauna

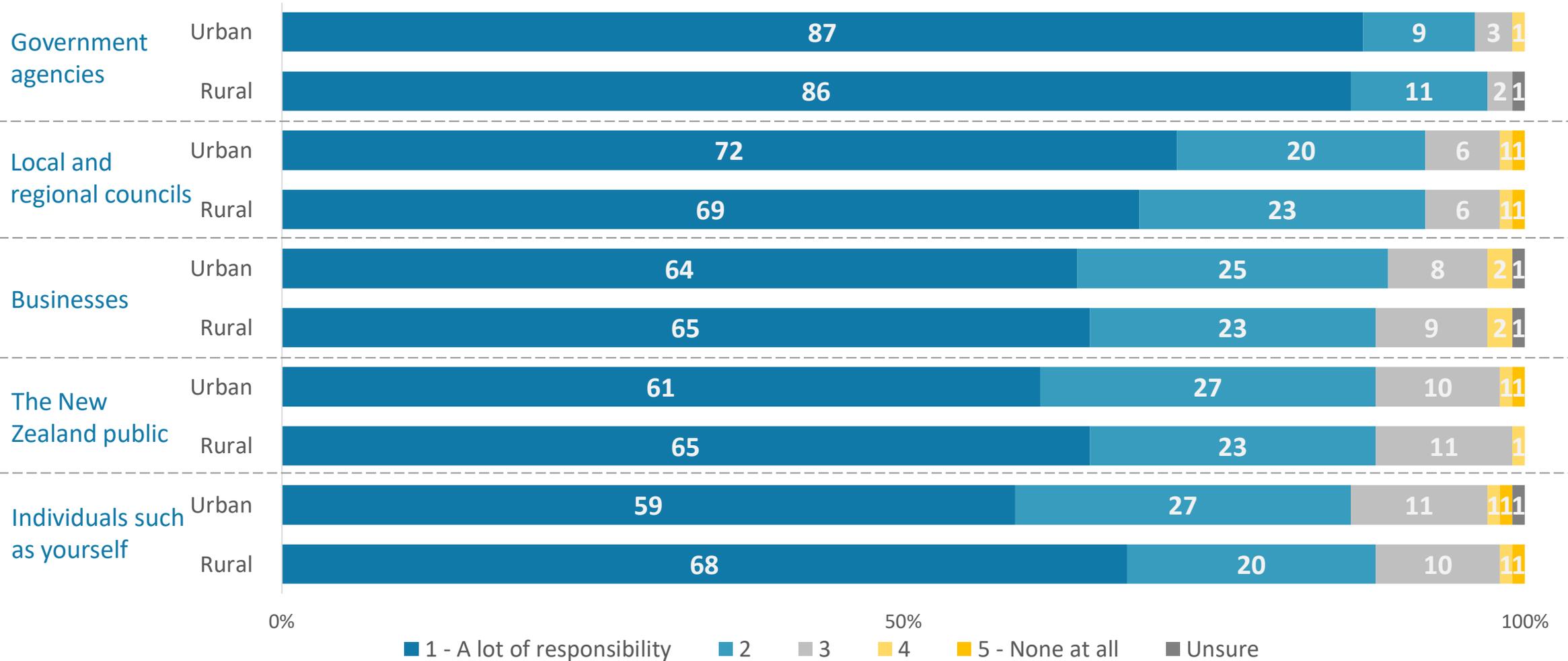
- While not a strong theme, there were some mentions of the impact of pest and disease incursions on New Zealand's native flora and fauna

They have got stricter and Australia and New Zealand have got the strictest border control. [Do you know the reasons why?] Biosecurity. Just because we have got so many vulnerable native species and stuff. I don't know about Australia because they are already inundated with things. (Dunedin, general public, urban, male)

Myrtle rust is more about the native trees. [Are you concerned?] Oh yes. All of nature is so intertwined that you lose one tree it doesn't seem important but it affects the whole environment. (Auckland, general public, urban, female)

All New Zealanders have a high level of responsibility for biosecurity

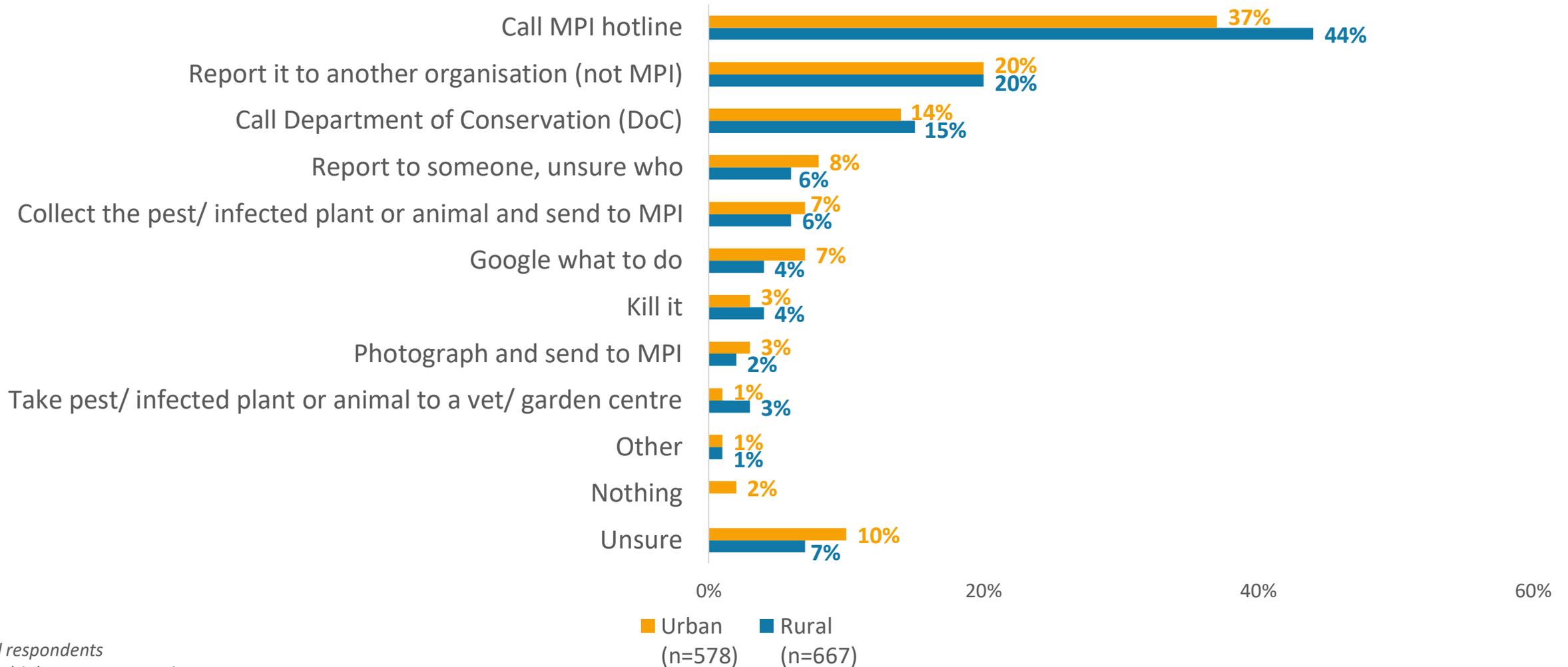
How much responsibility should each of the following have for helping to protect New Zealand from the entry or spread of pests and diseases?



Base: Urban respondents (n=578) and rural respondents (n=667)

Calling a MPI hotline was the most common declared response if an unusual pest or disease found

What would you do if you found an unusual pest or disease?



Base: All respondents
 Note: Multiple response question

Controlling pests and diseases

- There was strong support for mitigating measures to keep pests and diseases out of New Zealand
- There were favourable responses to people (even family and friends) being fined at the border

I have got zero tolerance for anyone bringing in fruit because it can wipe out our industry by pure arrogance. I am bleating on about my sister doing this. She is a New Zealander living in Australia and thinks one banana won't harm. (Dunedin, general public, rural, female)

If every person coming into New Zealand is very, very careful the government can't be there on every suitcase. We have to take responsibility and say I have to do it, you have to do. We all have the responsibility to look after our country. Someone has to be in charge but we all have to grow the balls to say, "I am going to do something about it because it affects me, it is my country, it is my life, my children's life, my grandchildren's life". (Auckland, general public, urban, female)

Controlling pests and diseases – Lack resources

- There was a perceived lack of resources for dealing with the mass of daily imports into New Zealand such as thoroughly checking containers
- Observing border security when travelling meant participants were generally more confident in the border controls for travellers

So do I, I think it is very casual and pot luck. There are containers coming into this country from all around the world every single day turning up in little places. The [name] Water Treatment Plant a container will come from overseas to this plant that has a bit of a sign on the door that says these people have been trained. They are not trained to find spiders and snakes. That is just a small sample so I think that our borders are open and I am surprised it hasn't become bigger. (Dunedin, general public, rural, male)

[So when you hear about those pests and diseases on the news what is your first reaction?] When you come from the airport they make sure you haven't got dirt on your shores or have fruits so the biosecurity is handled at the airports but what about the shipping side. It is not getting looked up as the containers come in. (Auckland, general public, male)

I think they probably come in more in the bigger shipping containers and that kind of thing. I don't think it is very often that a person brings in something specific. I know they often find spiders that have nearly got out and all that. (Dunedin, general public, urban, female)

Controlling pests and diseases – Raising awareness

- There was support for continuing to raise awareness via multiple channels, such as:
 - signage at airports
 - signage around New Zealand at affected locations such as signs at national parks and local reserves
- Many suggested more education about biosecurity suggesting it was important enough to be talked about in schools
- The main roles participants felt they had to play for managing biosecurity issues were sticking to the rules and encouraging others to do so

Perhaps it needs to be part of the school curriculum. We have got so many other things there. Is there a reason why once a year we couldn't do a unit on biosecurity. [Is it important enough do you think?] It is absolutely vital to New Zealand. It is really important. (Auckland, general public, urban, female)

[What can individuals do to protect this country from pests and diseases?] You have to follow the rules. The government has to set the rules what about what you cannot bring in. Border control they are very important to check thoroughly. (Auckland, low income, urban, male)

Also ongoing education doesn't hurt. They still keep going on about didymo and when you are out boating it is all around you with the advertising still, especially in the summer time that maybe they need to just keep going on and on about why it is important not to bring things into the country, why it is important to be checking your containers. (Dunedin, general public rural, female)

Communicating importance of biosecurity

- Participants in this research who were most engaged in the topic of biosecurity could more clearly see direct impacts on communities and peoples' lives from a biosecurity incursion
- To engage more cohorts of the general public, it is likely that they need to see the potential of direct impacts on their lives or the lives of people just like them

To educate the lay public really because if you don't see it affecting you in the immediate future then sometimes you are not corrective about it. (Dunedin, general public, urban, female)

We need to raise the profile. That thing with the oysters there has been a problem, they have dug them all up and that is all we hear about in the media. That sort of thing should stay high up and start explaining the numbers of families that will lose their jobs and the amount of millions of dollars of lost production and the damage. There has been a multi-million dollar business shut down because of the bug. Who cares? (Dunedin, general public, rural, male)

Communicating importance of biosecurity – Social media

- Some participants saw a role for social media, they suggested short Facebook clips to tell a dramatic story

There is something you can do, there is something everyone can do if you do it in the right way social media can be used as a very powerful tool. For example there was a spider that was found in New Brighton and it was the size of a deodorant can and someone posted it on Facebook to DOC and also to the press and within an hour both DOC and the press had shared this spider and the awareness of this spider and what it was went through the roof. (Christchurch, tertiary qualified/ media consumer, urban, female)

[Can you think of an example of a story and how that would be very effective?] you could use social media, Facebook mini clips, a quick video with dramatic music. It could be ads or joining different Facebook pages but get it out there through Facebook. A video that gets your story across in a short amount of time so people can quickly watch. (Christchurch, general public, urban, female)

Mixed views on developing a pest and disease identification app

- There was mixed support for an app to photograph and identify pests or diseases
 - Some thought it would be a great idea, but only if they got quick feedback as to what the pest or disease was
 - It also needed to be very easy to use and automatically include information such as location
 - Others suggested that it was unlikely they would download an app that they would hardly ever use

[If the government brought out that app would you be interested in that?] I think it is a good idea. As long as it is easy to use that would be the biggest thing because you would want it to be easy for all different demographics. Click take the photo and it GPS's your coordinates and where it was seen so you wouldn't have to do lots of typing. Then it would come up as this is what it is, thank you for your request. (Christchurch, general public, urban, female)

For me it is easier to take a picture and send it to someone. Not ring and have to talk to someone and get transferred. (Whangarei, urban, general public, female)

[If there was an app you could download and take a photo is that something?] But you would have to have the app to do it. Would you download the app just in case you see something? (Christchurch, tertiary qualified/media consumer, urban, male)

Realistically one of these things we are worried about you are only going to come across every three years. You are not going to have an app on your phone for three years that you have never used. (Whangarei, urban, general public, male)

Understandings of the term ‘biosecurity’

- ‘Biosecurity’ appears to be a term many New Zealanders are becoming familiar with
- In most groups, participants raised the term ‘biosecurity’ in discussions about the spread of pests and diseases before we prompted directly on the term
- Most understandings are associated with the border, only a few focused directly on internal controls

[Has everyone heard that word biosecurity?] *That means follow the rules and when someone says don't bring a banana into the country don't bring a banana*
(Dunedin, general public, rural, female)

[What does that word biosecurity mean to you?] *To me it envisages a ring fence around New Zealand.* (Whangarei, rural, tertiary qualified/ media consumer, male)

[Biosecurity?] *Airport the main place you see it.*
(Whangarei, urban, general public, male)

[Biosecurity?] *They had that fly didn't they because they had stops along the river side and you had to dump your fruit.*
(Whangarei, urban, general public, female)

New Zealanders willingness to engage in biosecurity – Supported by media and literature scan

- In the quantitative survey, a strong majority of respondents felt that individuals such as themselves had a high level of responsibility for protecting New Zealand from the entry or spread of pests and diseases
- In the focus groups, many indicated that they wanted to do their part to ensure pests and diseases were kept out of their country
- However, they indicated that for the public to engage further it needed to be made as easy as possible for them to do so
- The media and literature scan suggested that New Zealanders believed prevention was better than dealing with an incursion, and that most are willing to participate in passive surveillance, albeit with direction (research report; Yockney & Field, 2016)

6. Climate Change



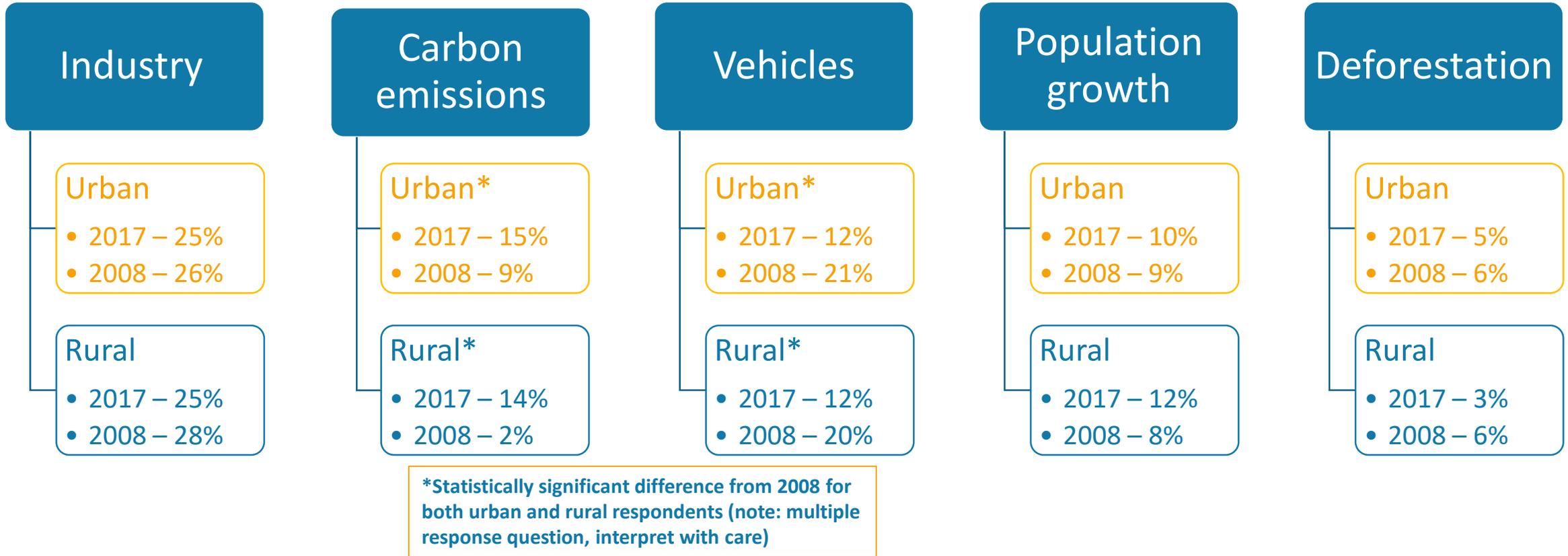
Overview: Climate change

- In 2017, the importance of climate change as an issue for respondents has slipped slightly from that reported in 2008
 - 19% of urban respondents in 2017 mentioned climate change as a significant environmental issue down from 27% in 2008
 - 18% of rural respondents in 2017 mentioned climate change as a significant environmental issue slightly down from 21% in 2008
- The biggest international contributors to climate change, as perceived by respondents, remained relatively unchanged since 2008
 - The main notable change was the perceived increased contribution of , *'Carbon emissions'* with 15% of urban respondents citing this reason, up from 9% in 2008 and 14% of rural respondents mentioning the same reason, up from 2% (statistically significant difference from 2008 for both urban and rural respondents)
 - Additionally, there are now significantly less respondents who said, *'Vehicles'* were a key contribution to climate change reported as 12% in 2017 down from 21% in 2008 among urban respondents and also 12% of rural respondents in 2017 down from 20% in 2008 (statistically significant difference from 2008 for both urban and rural respondents)
- In a new question, a strong majority of both urban (85%) and rural (83%) respondents agreed that, *'Responding to climate change is the responsibility of all New Zealanders'*

Overview: Climate change (cont.)

- Significantly less respondents today than in 2008 now agreed that, *'Natural weather cycles are more important in determining climate than anything people do'*
- Also, slightly fewer respondents now agreed that, *'There is nothing a small country like New Zealand can do about climate change'*

International contributors to climate change – Biggest increase between 2008 and 2017 recorded for ‘Carbon emissions’



2017 base: Urban respondents (n=578) and rural respondents (n=667)

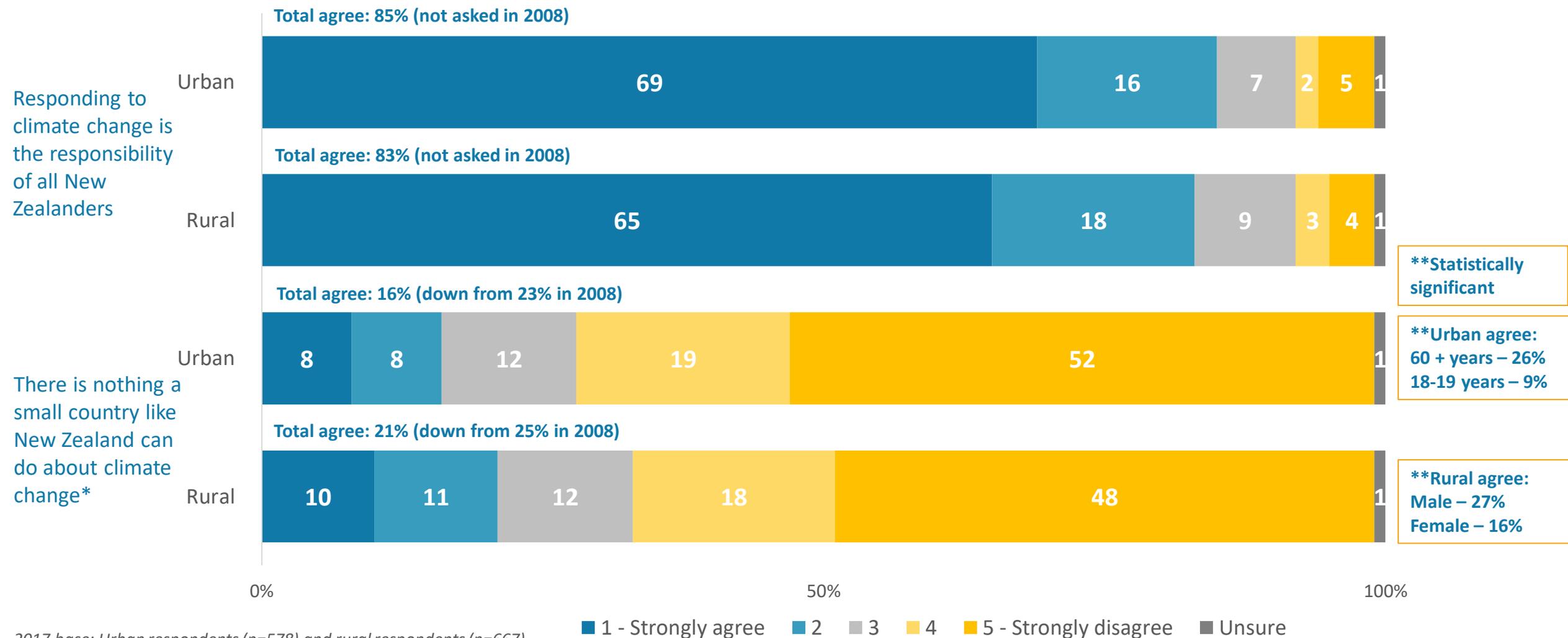
2008 base: Urban respondents (n=608) and rural respondents (n=635)

Note: Multiple response question

*2008 Question read: ‘Internationally, what do you think plays the biggest part in causing global warming or climate change?’

Strong agreement that responding to climate change is the responsibility of all New Zealanders

How much do you agree or disagree with the following statements?



2017 base: Urban respondents (n=578) and rural respondents (n=667)
 2008 base: Urban respondents (n=608) and rural respondents (n=635)

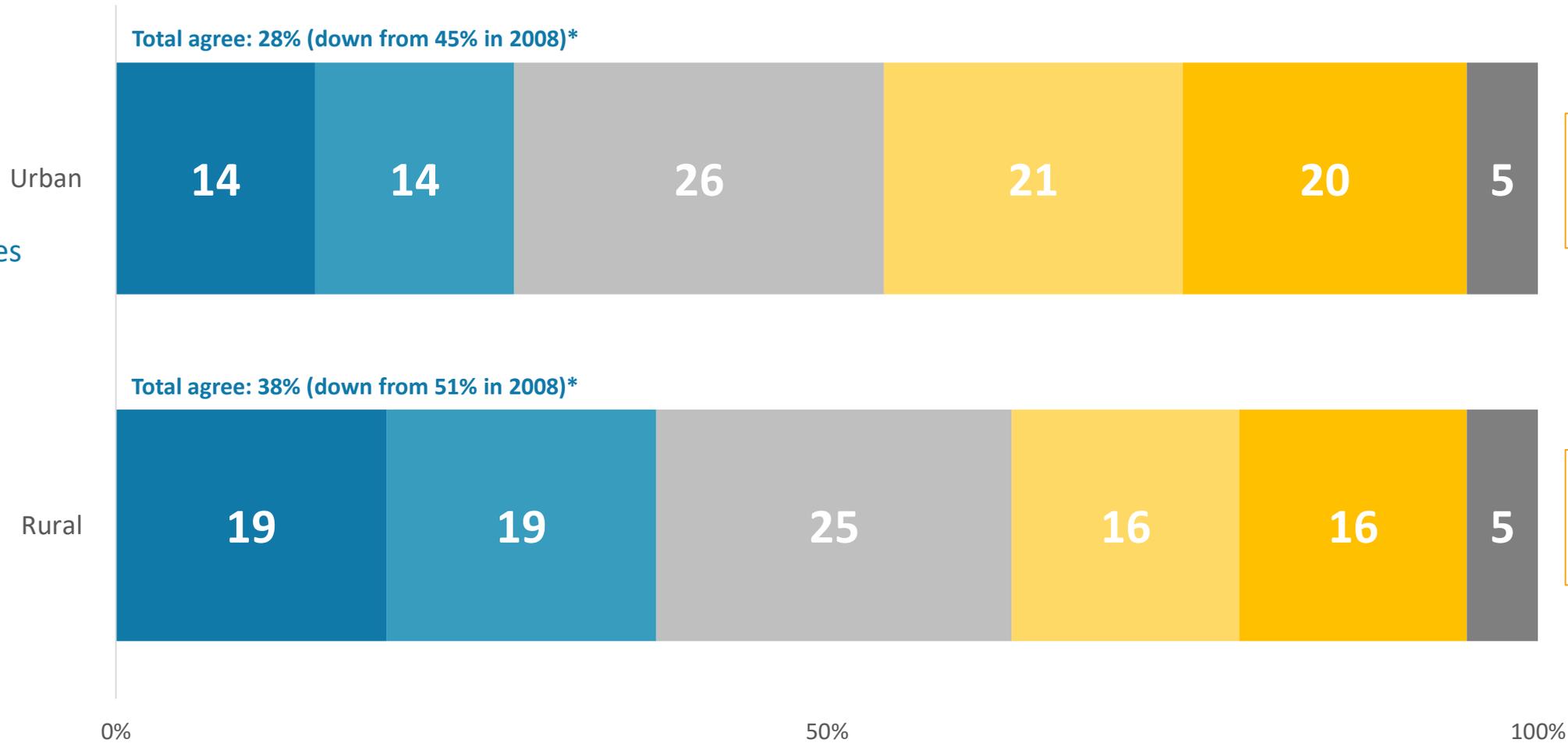
*2008 Statement read: 'There is nothing a small country like New Zealand can do about global warming'



In 2017, significantly lower agreement that natural weather cycles are a more important determining factor to climate change than people

How much do you agree or disagree with the following statements?

Natural weather cycles are more important in determining climate than anything people do



*Statistically significant difference from 2008

*Statistically significant difference from 2008

2017 base: Urban respondents (n=578) and rural respondents (n=667)
 2008 base: Urban respondents (n=608) and rural respondents (n=635)

General sense human impact mainly responsible for climate change

- The general tone of discussion about climate change in the focus groups was that people were now thinking they could do something about it and the impact of people was the main driver of this evolving environmental issue

Climate change is a thing nowadays that everyone gets in behind. (Dunedin, general public, rural, male)

We have been through a drought period and it has been going on longer than I have been down here so two years ago. So the environment is causing the droughts. You could argue that humans are causing it globally and causing us to have the dry weather conditions but that is a bigger issue. If you are drawing a lot of water out of the aquifer. It has to come from somewhere. And if the ground level water is dropping you end up having to irrigate more because you are not getting the water coming up from the water table to water your plants and grass. (Christchurch, general public, rural, male)

7. Animal Welfare



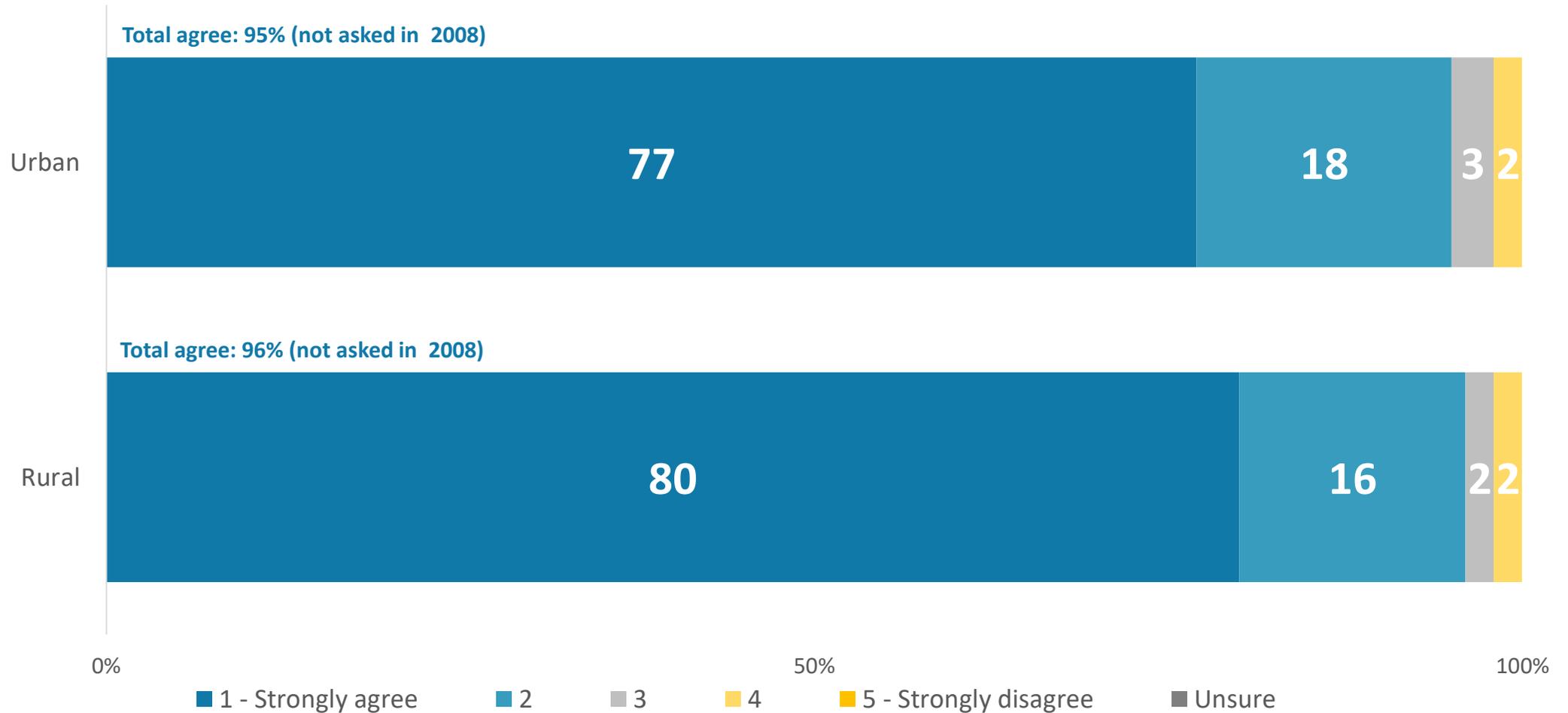
Overview: Animal welfare

- Ensuring we maintain high animal welfare standards on farms was important to all respondents
 - Almost all urban (95%) and rural (96%) respondents agreed that, 'It is important that the welfare of farmed animals in New Zealand is protected'
- In 2017, levels of agreement that farm animals were treated well by farmers has slipped slightly from levels recorded in 2008, however the result still remains in strongly positive territory (68% of urban respondents agreed down from 71% in 2008, and 73% of rural respondents agreed down from 82% in 2008)
- In a new question this year, just over half of both urban (56%) and rural respondents (51%) agreed that, *'Generally, New Zealanders living in cities and towns treat their animals well'*
- Significantly more rural respondents (60%) were aware that there was an Animal Welfare Act compared to just under half of urban respondents (48%)
- Also, significantly more rural respondents (48%) were aware that there were 'Codes of Welfare' in relation to animals compared to one-third of urban respondents (35%)

Strong agreement that welfare of farm animals needs to be protected

How much do you agree or disagree with the following statement?

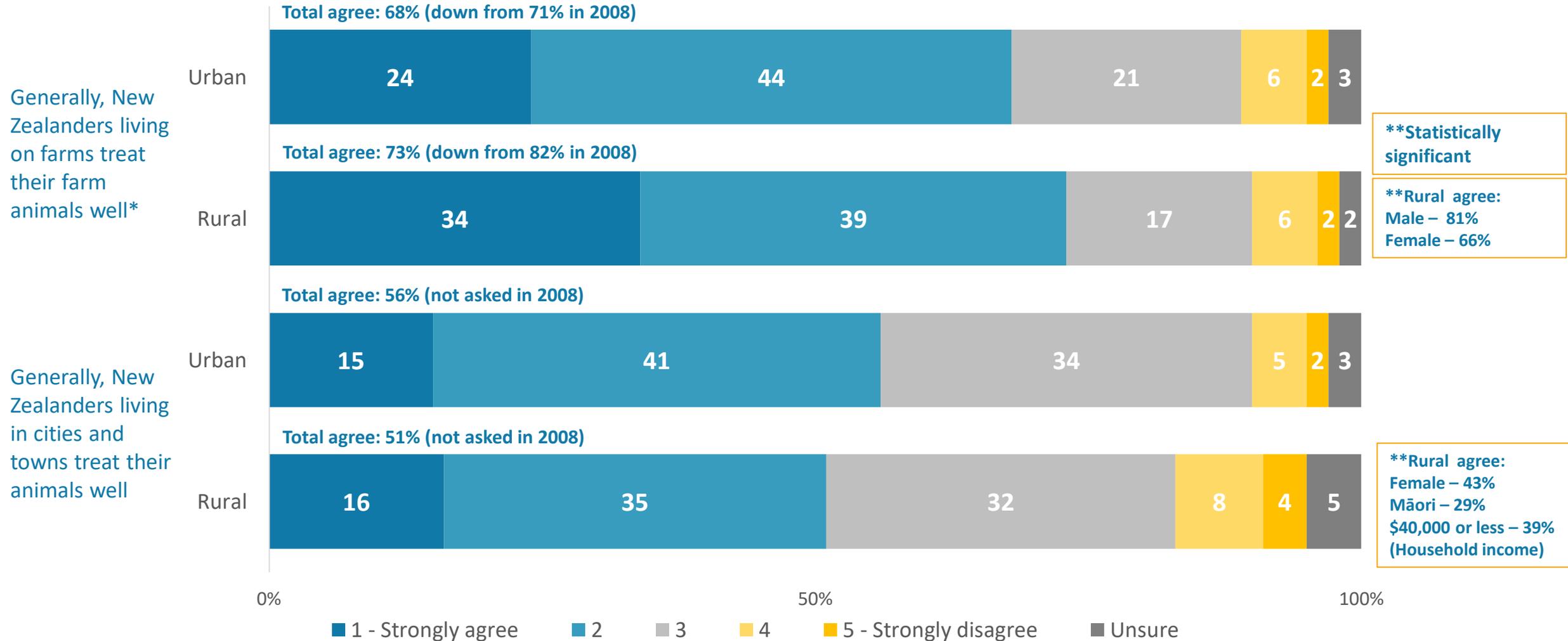
It is important that the welfare of farmed animals in New Zealand is protected



2017 base: Urban respondents (n=578) and rural respondents (n=667)

The majority of urban and rural respondents agreed farmers treat their animals well

How much do you agree or disagree with the following statements?



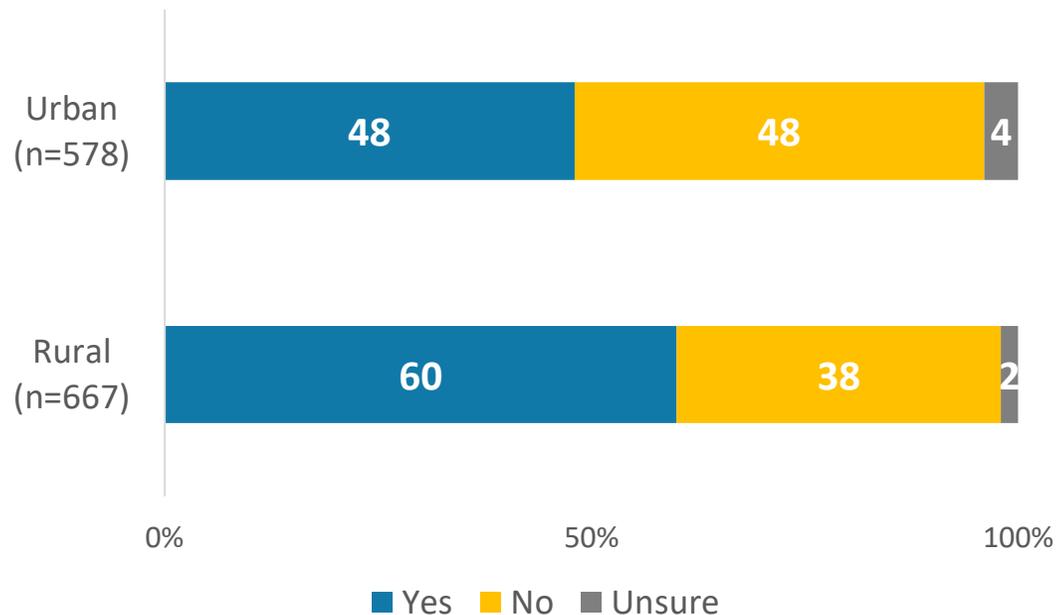
2017 base: Urban respondents (n=578) and rural respondents (n=667)
2008 base: Urban respondents (n=608) and rural respondents (n=635)

*2008 Statement read: 'Most farmers treat their animals well'

Rural respondents declared stronger awareness of the Animal Welfare Act and the Codes of Welfare as they relate to animals

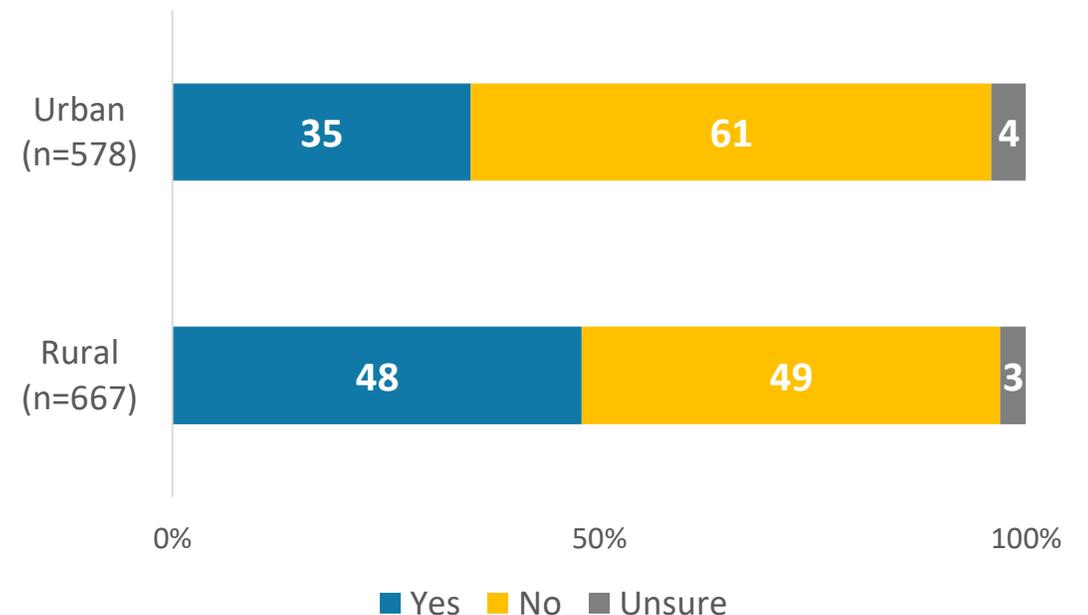
Have you read, seen or heard anything about each of the following?

The Animal Welfare Act (1999)



Statistically significant difference between urban and rural on the 'Yes' figure

The Codes of Welfare in relation to animals



Statistically significant difference between urban and rural on the 'Yes' figure

Void of objective animal welfare information is often filled by media reporting

- Most participants admitted they did not know what was happening on farms
- This void was mainly being filled by negative media stories
- While these stories were not necessarily viewed as representative they did cause some people to at least question their faith in farmers' animal welfare record

[Animal welfare issues?] There is the odd bad farmer but most are pretty good. (Auckland, low income, urban, male)

So I guess when I see those awful stories I kind of think and also hope that it is kind of more the exception and the minority of people who are treating animals really awfully. (Whangarei, rural, tertiary qualified/media consumer, female)

But that is the media, they love to highlight the negative, the rodeo; they don't highlight the dairy farmer who was up all night watching that cow because he knew it was going to calf. (Dunedin, general public, rural, female)

New Zealand generally considered to be a world leader in animal welfare

- There was a sense that New Zealand performed well on animal welfare and that we already have a range of guards in place to protect our animals

When you look at dairy farming compared to other countries our cows are eating grass and their cows aren't even on grass. (Auckland, tertiary qualified/media consumer, urban, male)

I think farmers treat their animals well because it is their income, their livelihood so they do. (Dunedin, general public, rural, female)

[Animal welfare?] I think that in comparison to the rest of the world we are top tier but I think in general the entire concept of farming farm animals is we keep them in paddocks and we take away the calves and the young sheep at a very young age. The entire concept is hard for us to say no everything is perfect and right. (Auckland, tertiary qualified/media consumer, urban, male)

- The media and literature scan suggested that New Zealand had a reputation as a world leader in animal welfare and it was clear that many participants in this study also held that view (media article; O'Callaghan, 2017)

Animal welfare – Generally thought to be under control

- The mistreatment of bobby calves was raised a few times, but this was generally thought to be under control

There are so many regulations out now around bobby calves and how inhumanely we have treated them. On my side of things we have been sending a lot more roofing material to make sure the bobby calves are sheltered well and there are ramps so they can walk on to the trucks so I think there has been a lot of focus on that already. (Whangarei, rural, tertiary qualified/media consumer, female)

I don't have an answer first hand because it has been years since I have been to a farm but it is in the media, again the bobby calf thing, chickens, I think we are relatively good. And I think we are improving. Chickens for example I think it is New World only sells free range chicken eggs. There are changes, people are demanding new things. (Auckland, low income, urban, female)

Some specific concerns about animal welfare

- When concerns did surface, these related to caged animals such as chickens
- Some concerns were linked to increased corporate farming and the perception that corporate farming structures would have a more negative impact on animal welfare
- There were also some concerns around the mistreatment of dogs, mainly in domestic situations

The corporate farmers that is where you would be more worried. We buy milk direct from the farmer as well so everything I see there is perfect. (Auckland, low income, urban, male)

And for domestic because we love animals here but at the same time SPCA are maxed out and there is still animal abuse especially in dogs and things like that going on. Again doing well, obviously there is a lot of room for improvement. (Auckland, tertiary qualified/media consumer, urban, male)

Like how they put the pigs in those horrible crates and they have said we will get rid of them by – and I thought my children won't even be alive by the time you do that. It was 2030 or something horrendous. (Christchurch, tertiary qualified/ media consumer, urban, female)

You can see the amount of abandoned animals and mainly dogs and that was a lot. Especially within the Whangarei district. And half the time the owners didn't give two shits. (Whangarei, urban, general public, male)

The main issue is the caged hens and that kind of stuff. (Auckland, tertiary qualified/ media consumer, urban, male)

8. Working in the Primary Sector (Skills)



Overview: Working in primary sector (skills)

- A majority of all respondents agreed that:
 - *'A wide range of skills are needed to work in the primary sector'*, (77% of rural and 76% urban respondents)
 - *'The primary industries involve cutting edge thinking and technologies'*, (67% of rural and 66% of urban respondents)
 - *'The industries in the primary sector offer good employment opportunities'*, (67% of rural 59% of urban respondents)
- Rural respondents (64%) were much more likely to recommend working in the primary sector compared to their urban counterparts (48%)
- Well less than half of both sub populations agreed that, *'Businesses in the primary sector are good employers'* (41% of rural respondents and 37% of urban respondents)
- A minority of respondents agreed that, *'A formal qualification is required to work in the primary sector'* (21% of rural and 20% of urban respondents)
- Small minorities (less than 10%) of respondents agreed with each of the following:
 - *'The primary sector is only for lower-skilled people'*
 - *'You have to come from a primary industries background to work in the primary sector'*

Overview: Working in primary sector (skills) – (cont.)

- In 2017, 20% of urban residents and workers indicated they would, *‘Seriously consider working in the primary industries in rural New Zealand’* – down from 24% in 2008*
 - Most of these (63%) indicated they would like to work in, *‘Horticulture’*, followed by, *‘Sheep and beef’* (36%) and then, *‘Dairy’* (30%)
- Wellington residents** were significantly more likely at 40% to indicate they would seriously consider working in the primary industries
- In 2017, 50% of rural residents who worked in urban settings indicated they would, *‘Seriously consider working in the primary industries in rural New Zealand’* up from 37% in 2008*
 - Most of these (52%) indicated they would like to work in, *‘Sheep and beef’* followed by, *‘Dairy’* (46%) then, *‘Aquaculture’* (23%), closely followed by, *‘Horticulture’* (22%)

*Note: the question in 2008 read, *‘How seriously would you consider working in rural New Zealand?’* – Therefore longitudinal data needs to be interpreted with care

**Note: this figure needs to be interpreted with care given it is based on a small sub-sample of n=50

Overview: Working in primary sector (skills) – (cont.)

Personal experience of working in the primary sector

- The percentage of respondents who were either currently or had previously worked in the pastoral farming industries has decreased since 2008
 - In 2017, 42% of rural and 14% of urban respondents said they were either currently or had previously worked in the sheep and beef industry. Also, 35% of rural and 14% of urban respondents said the same thing about the dairy industry
 - Both these results are lower than the 69% (rural) and 22% (urban) who said they had either currently or had previously been working in the farming* industry in 2008
- Slightly less respondents in 2017 also reported they were currently or had previously worked in, *'Horticulture'* and *'Forestry'* than recorded in 2008
 - In 2017, 31% of rural (down from 34% in 2008) and 14% of urban respondents (down from 18% in 2008) said they were currently or had previously worked in the, *'Horticulture'* industry
 - In 2017, 12% of rural (down from 19% in 2008) and 5% of urban respondents (down from 8% in 2008) said they were currently or had previously worked in the, *'Forestry'* industry

**Note: In 2008 the question was asked about 'farming' in general – this was split into two specific questions in 2017 that asked directly about 'sheep and beef' and also 'dairy' farming*

Overview: Working in primary sector (skills) – (cont.)

Having family or close friends working in the primary sector

- The percentage of respondents who said they either had family or close friends working in the pastoral farming industries has decreased since 2008
 - In 2017, 51% of rural and 29% of urban respondents said they had family or close friends who currently worked in the sheep and beef sector. Also, 47% of rural and 28% of urban respondents said the same thing about the dairy sector
 - Both these results are lower than the 75% (rural) and 40% (urban) who said they had family or close friends who currently worked in the farming* sector in 2008
- In 2017, 28% of rural (down from 33% in 2008) and 21% of urban respondents (unchanged from 2008) said they had close family or friends who currently worked in, *'Horticulture'*
- Also in 2017, 26% of rural (up from 23% in 2008) and 14% of urban respondents (unchanged from 2008) said they had close family or friends who currently worked in, *'Forestry'*

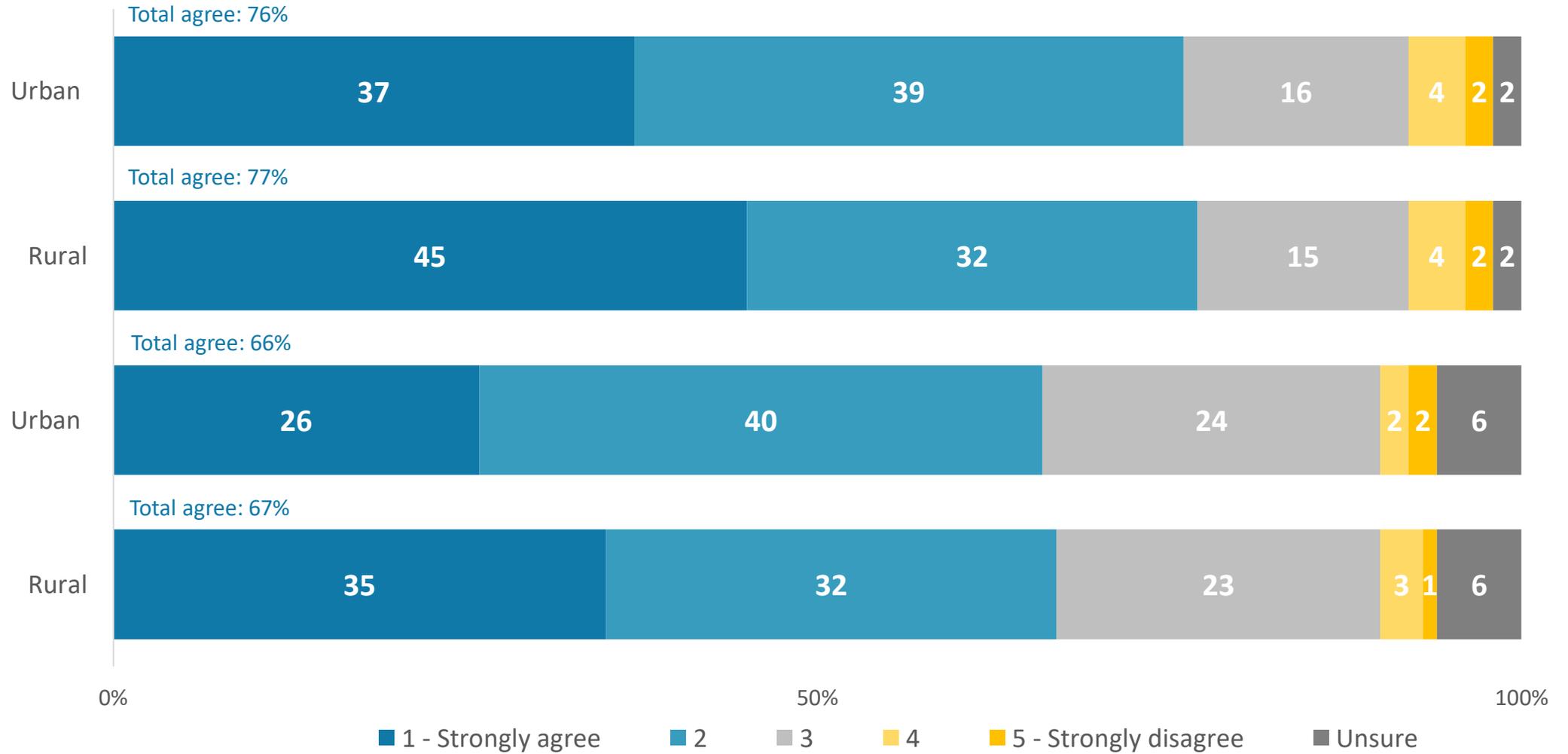
**Note: In 2008 the question was asked about 'farming' in general – this was split into two specific questions in 2017 that asked directly about 'sheep and beef' and also 'dairy' farming*

A majority of urban and rural respondents agreed that the primary sector required a wide range of skills and involved cutting edge technology

How much do you agree or disagree with the following statements?

A wide range of skills are needed to work in the primary sector

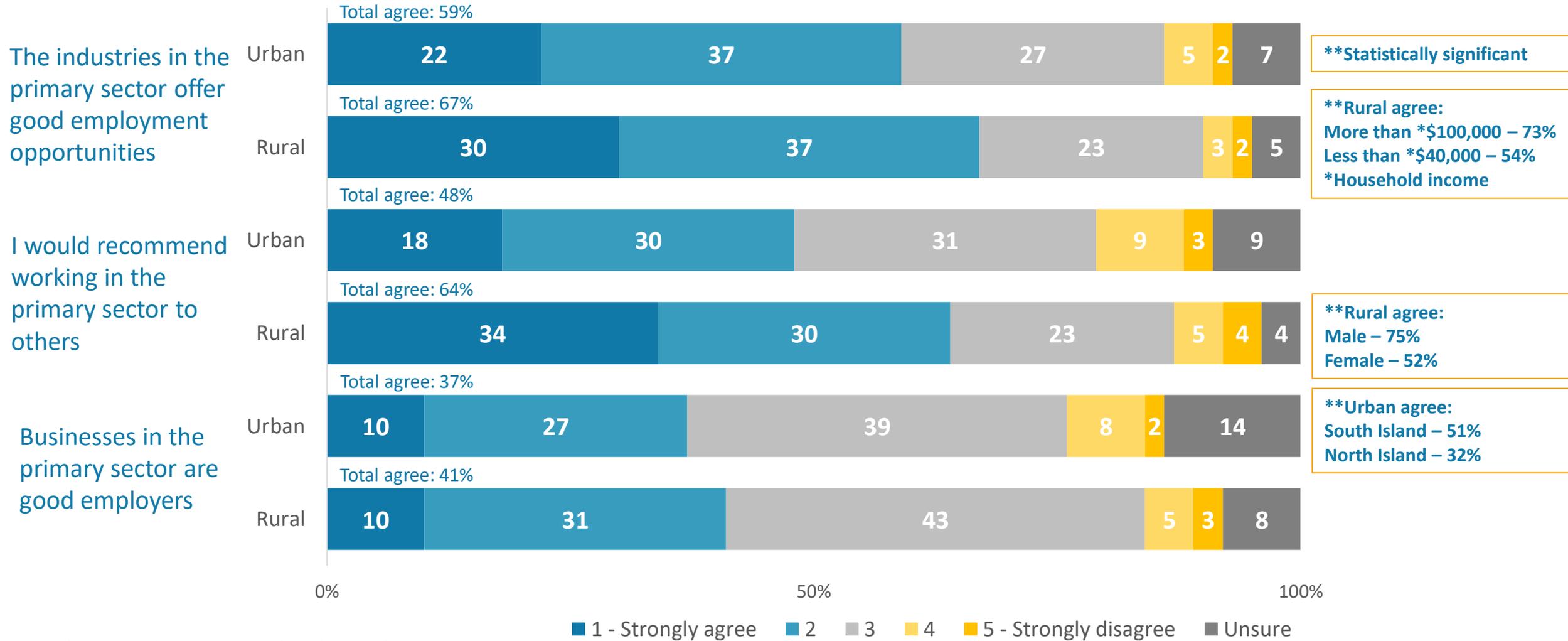
The primary industries involve cutting edge thinking and technologies



Base: Urban respondents (n=578) and rural respondents (n=667)

Urban and rural respondents agreed the primary sector offers good employment opportunities, but were less likely to agree they were good employers

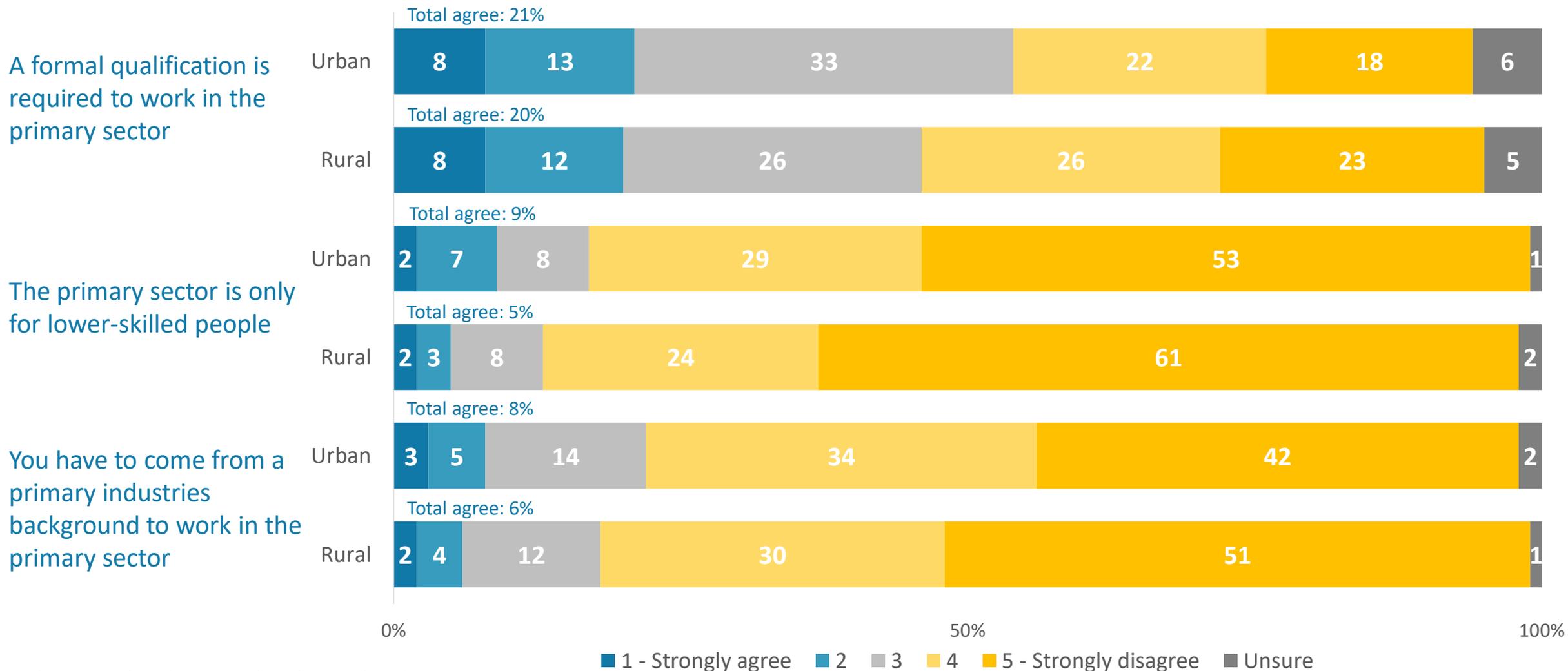
How much do you agree or disagree with the following statements?



Base: Urban respondents (n=578) and rural respondents (n=667)

A strong majority of urban and rural respondents disagreed that the primary sector is only for lower skilled people

How much do you agree or disagree with the following statements?



Base: Urban respondents (n=578) and rural respondents (n=667)

A minority of urban residents and workers would consider working in primary industries – Most interest was for working in horticulture

****Statistically significant**

****Total seriously:
Wellington residents – 40%**

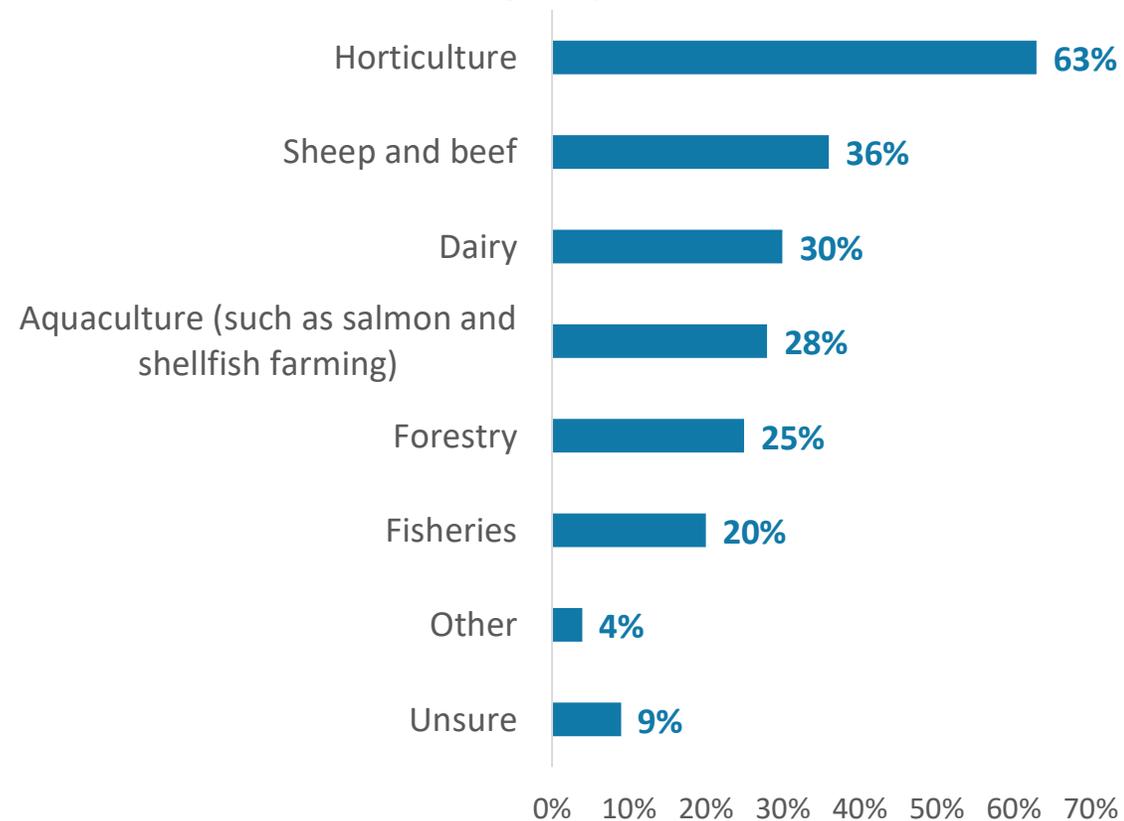
*How seriously would you consider working in the primary industries in rural New Zealand?**



Base: Respondents who live and work in an urban area

*2008 question read: 'How seriously would you consider working in rural New Zealand?'

Which, if any, of the following industries would you like to work in?

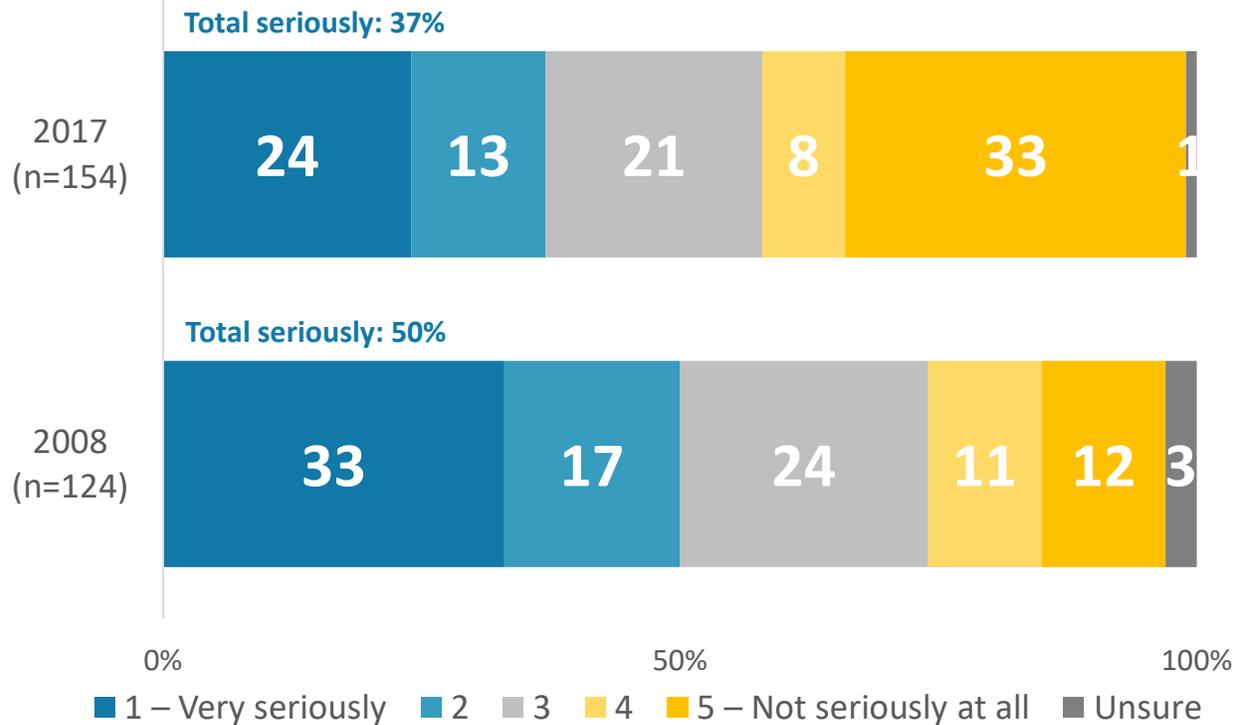


Base: Respondents who live and work in an urban area and would consider working in the primary industries in rural New Zealand. Small sample size (n=67)

Note: Multiple response question

A strong minority of rural residents who work in an urban area would consider working in the primary industries – Strongest interest for working in sheep and beef industry

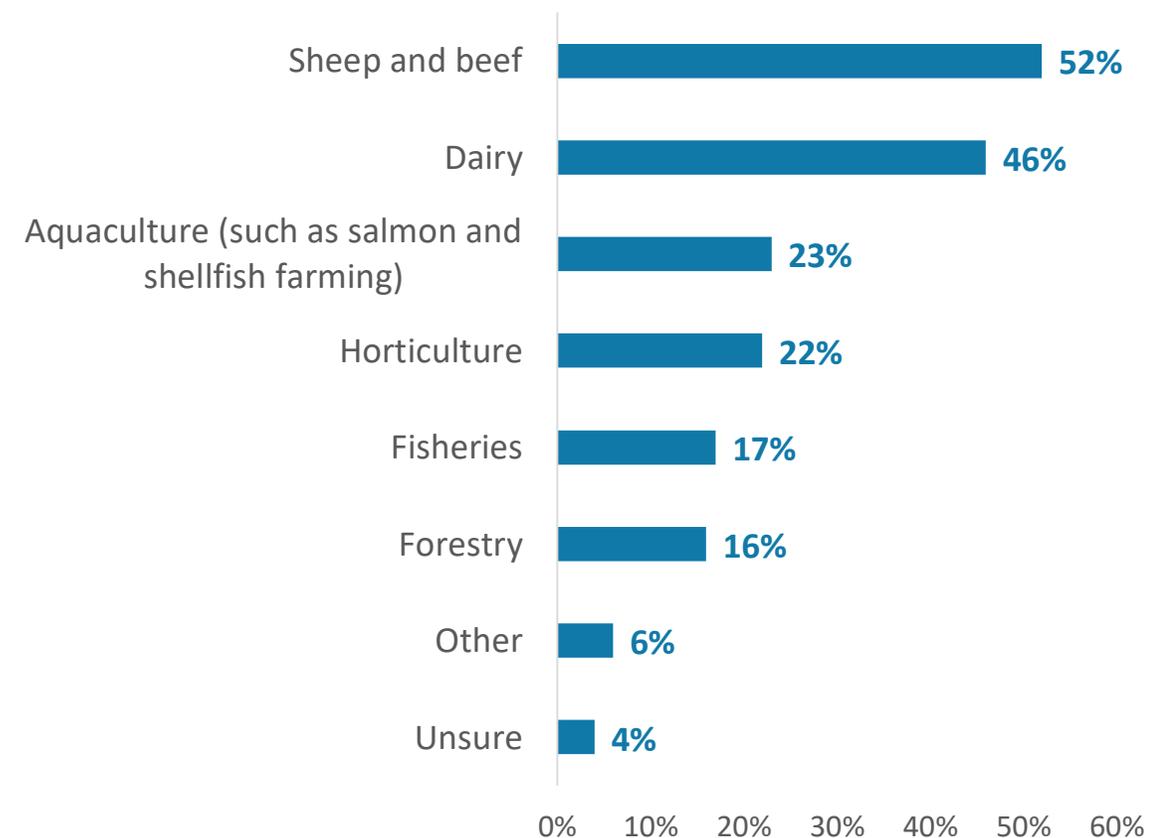
How seriously would you consider working in the primary industries in rural New Zealand?*



Base: Respondents who live in a rural area and work in an urban area

*2008 question read: 'How seriously would you consider working in rural New Zealand?'

Which, if any, of the following industries would you like to work in?

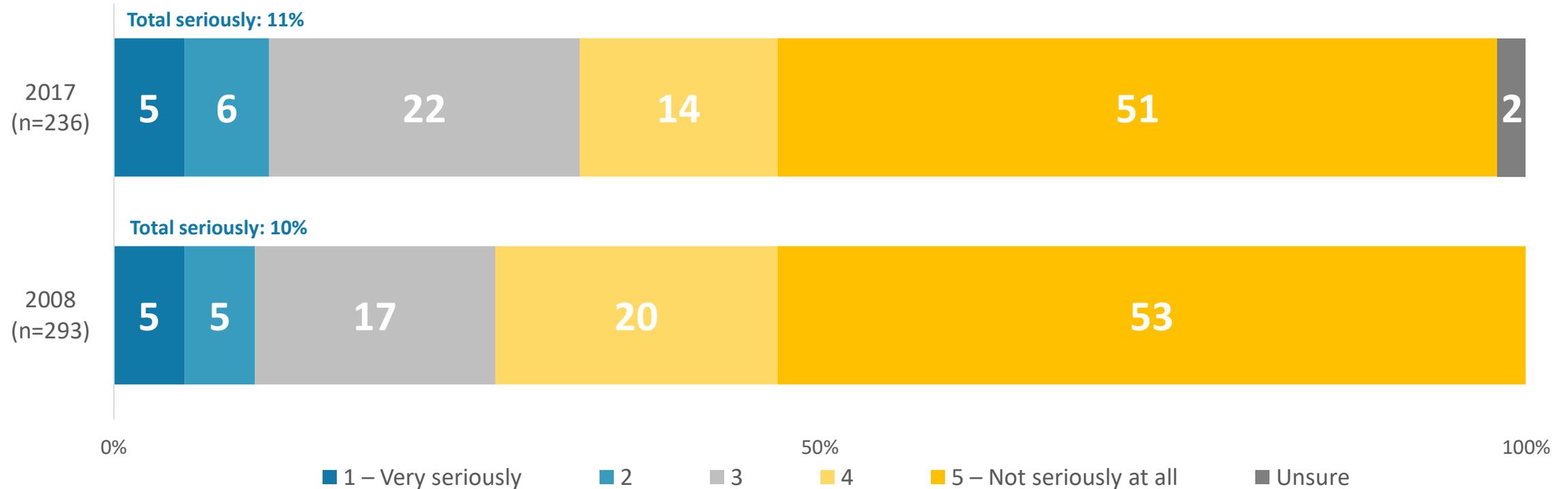


Base: Respondents who live in a rural area and work in an urban area and would consider working in the primary industries in rural New Zealand. Small sample size (n=58)

Note: Multiple response question

A small minority of rural residents and workers would consider working in primary industries in urban New Zealand

How seriously would you consider moving to work in the primary industries in urban New Zealand?*

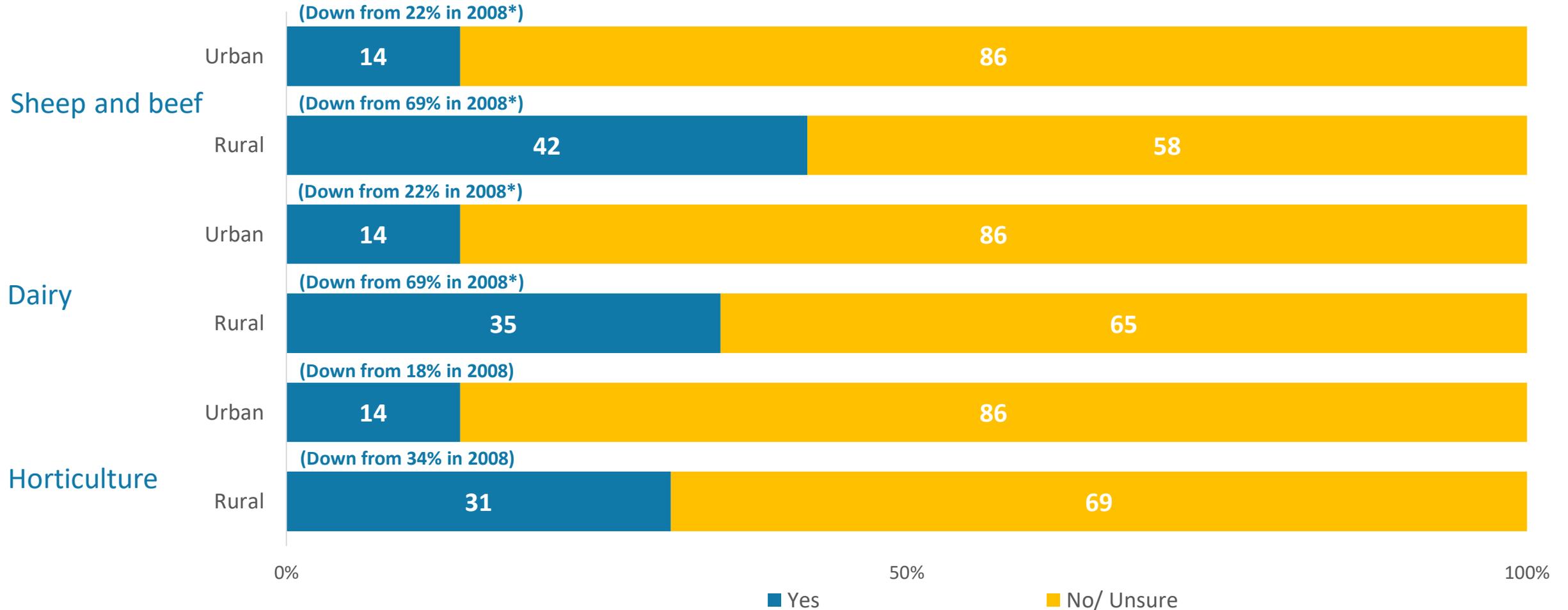


Base: Respondents who live and work in a rural area

*2008 question read: 'How seriously would you consider working in urban New Zealand?'

More rural respondents (than urban) declared they are or have worked in the following primary industries

Do you currently or have you ever worked in the following industries?

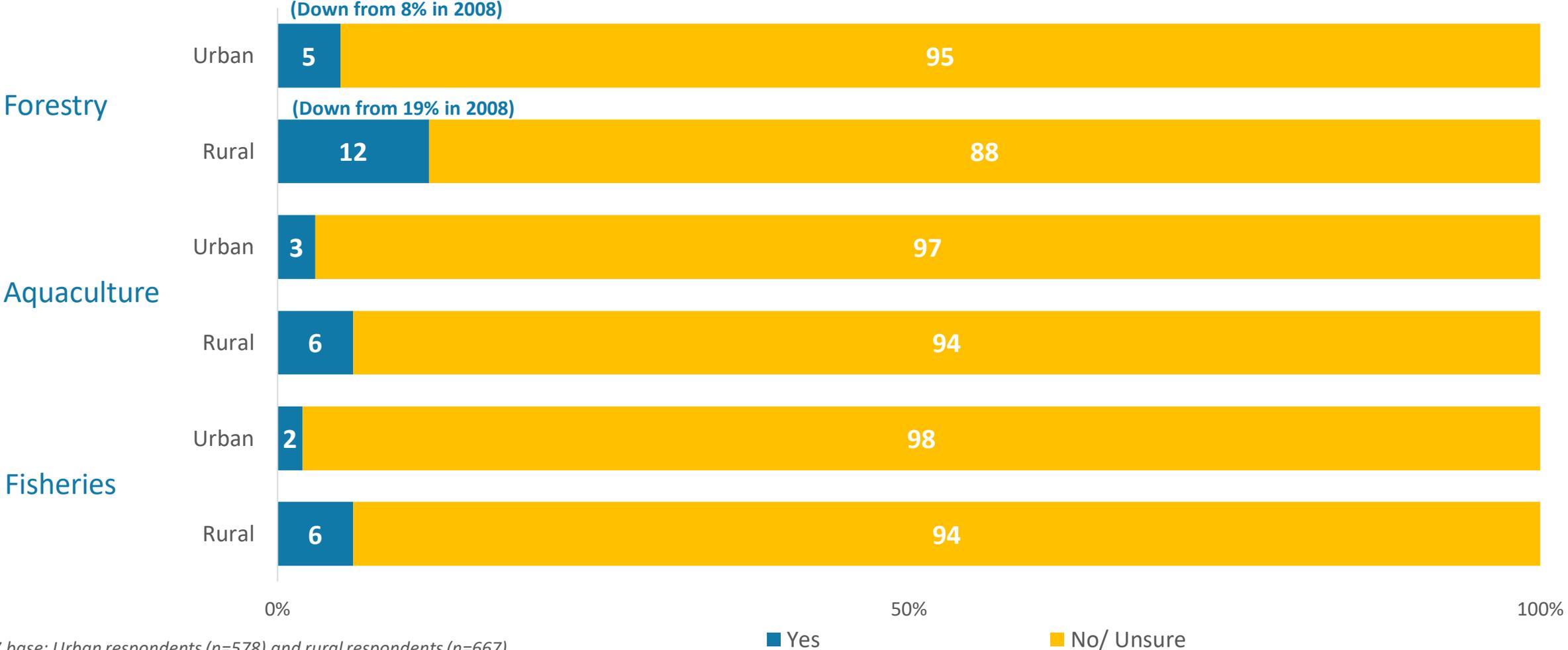


2017 base: Urban respondents (n=578) and rural respondents (n=667)
 2008 base: Urban respondents (n=608) and rural respondents (n=635)

**Note: In 2008 the question was asked about 'farming' in general – this was split into two specific questions in 2017 that asked directly about 'sheep and beef' and also 'dairy' farming*

Small minorities of urban and rural respondents declared they were or have worked in the following primary industries

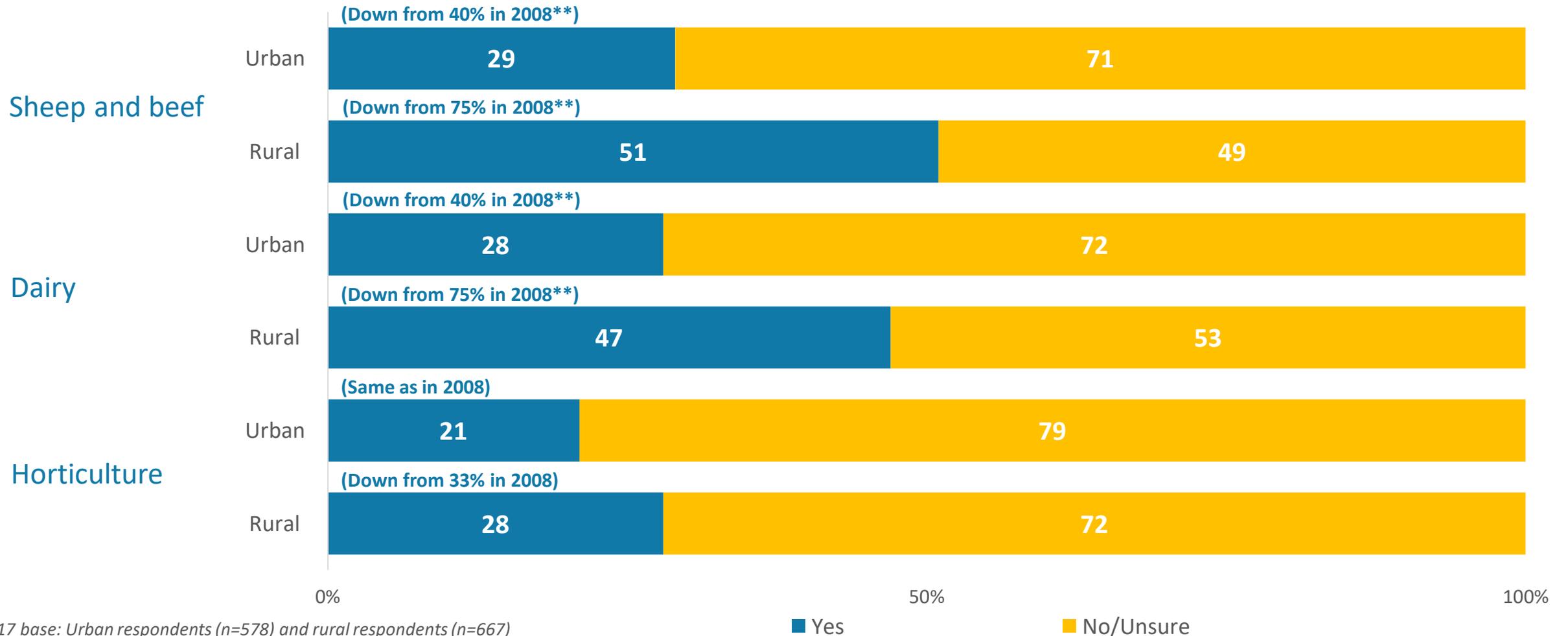
Do you currently or have you ever worked in the following industries?



2017 base: Urban respondents (n=578) and rural respondents (n=667)
 2008 base: Urban respondents (n=608) and rural respondents (n=635)

Around half of rural respondents declared having family or close friends who work or have worked in the pastoral industries

Do you have family or close friends that work in any of the following primary industries?*



2017 base: Urban respondents (n=578) and rural respondents (n=667)

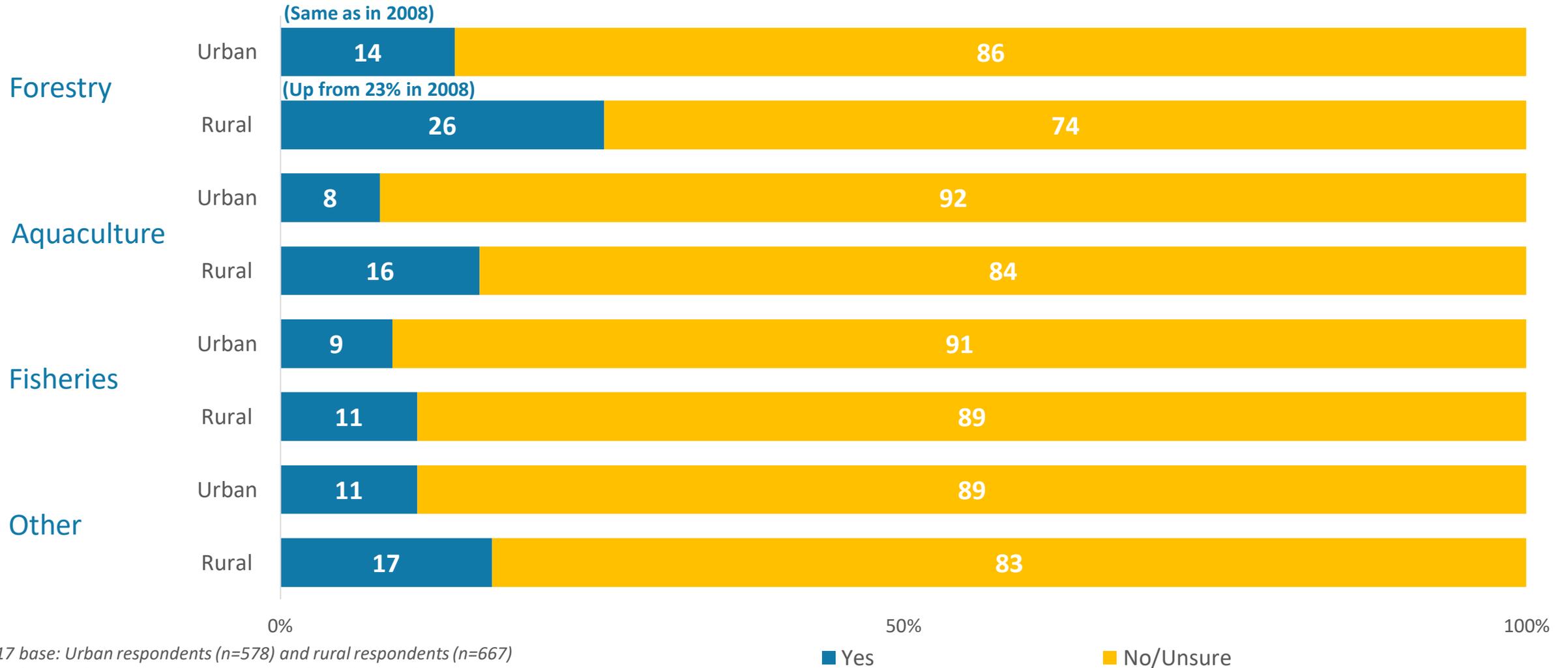
2008 base: Urban respondents (n=608) and rural respondents (n=635)

*2008 question read: 'Do you have family or close friends that work in the following industries?'

**Note: In 2008 the question was asked about 'farming' in general – this was split into two specific questions in 2017 that asked directly about 'sheep and beef' and also 'dairy' farming

Smaller percentages of urban and rural respondents declared having family or close friends that work in the following primary industries

*Do you have family or close friends that work in any of the following primary industries?**



2017 base: Urban respondents (n=578) and rural respondents (n=667)

2008 base: Urban respondents (n=608) and rural respondents (n=635)

*2008 question read: 'Do you have family or close friends that work in the following industries?'

9. Views of Urban and Rural New Zealand



Overview: Urban/rural divide

- The media and literature scan suggested there was a growing urban/rural divide and highlighted the higher percentage of New Zealanders (86%) that now live in urban locations (media articles; Edmeades, 2017; Hart, 2017). However, this is only 6% higher than was the case in the 1970s (webpage Statistics New Zealand 2017)
- The media and literature scan also suggested that there was an increasing polarisation of views between rural and urban New Zealanders and it was hard to find middle ground (media articles; Leggett, 2016; Mackay & Maharey, 2017)
- This research provides little evidence of any urban/rural divide in terms of differing views, and suggests if such a divide exists it may not be as great as generally perceived
 - As outlined earlier, very few significant differences in attitudes and views are apparent between urban and rural respondents across a range of survey questions
- The weight of opinion among urban respondents towards their rural counterparts remains more positive than negative. Urban respondents are still twice as likely to say their view of rural New Zealand over the last five years is more positive than negative
 - 26% of urban respondents say their view of rural New Zealand has become more positive over the last five years compared to 13% more negative – almost unchanged from the 2008 figures of 26% (more positive) and 9% (more negative)

Overview: Urban/rural divide (cont.)

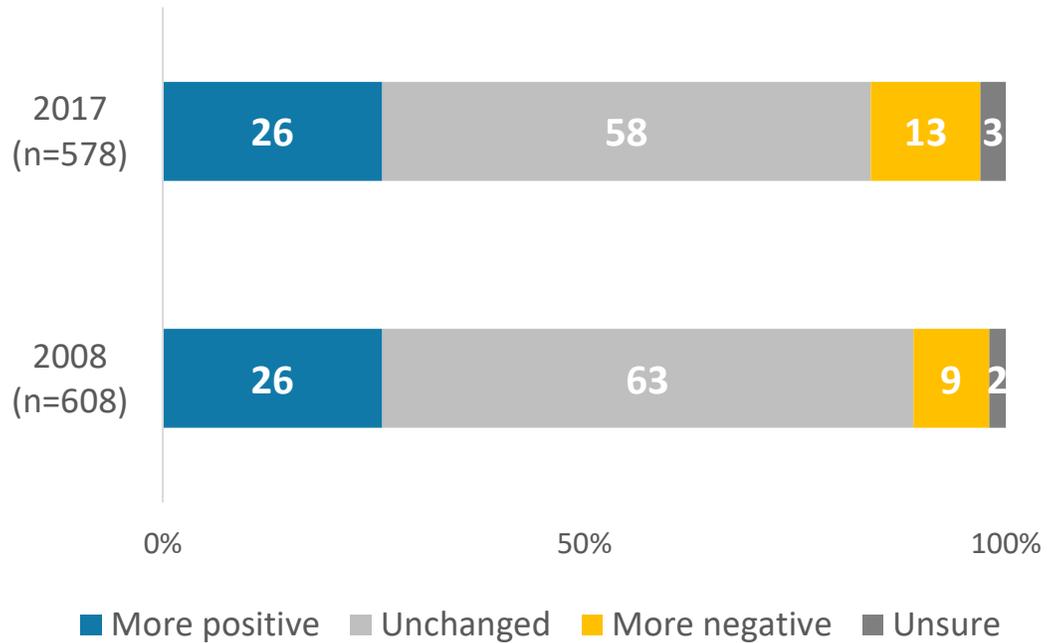
- The largest movement since 2008 is an increase* in the percentage of both urban and rural respondents who mentioned, 'Pollution caused by dairying' as a reason for a more negative view of rural New Zealand
- In 2017, urban respondents were significantly more agreeable to supporting their rural counterparts to have access to services:
 - A stronger majority of urban respondents (81% up from 74% in 2008), now agree that, *'Everyone in New Zealand should have reasonable access to services regardless of where they live and how much it costs to provide'*
 - A solid majority of urban respondents (63% up from 52% in 2008) now agree that, *'I don't mind paying a bit more for services if this means rural people can access them at a reasonable cost'*
- The majority of respondents are happy in their current location, although more urban respondents (26%) would consider moving to rural New Zealand, than rural respondents (9%) would consider moving to urban New Zealand, with little change in these percentages since 2008.

**Due to small sub-sample this figure needs to be interpreted with care, however its consistency with the qualitative research adds weight to the result*

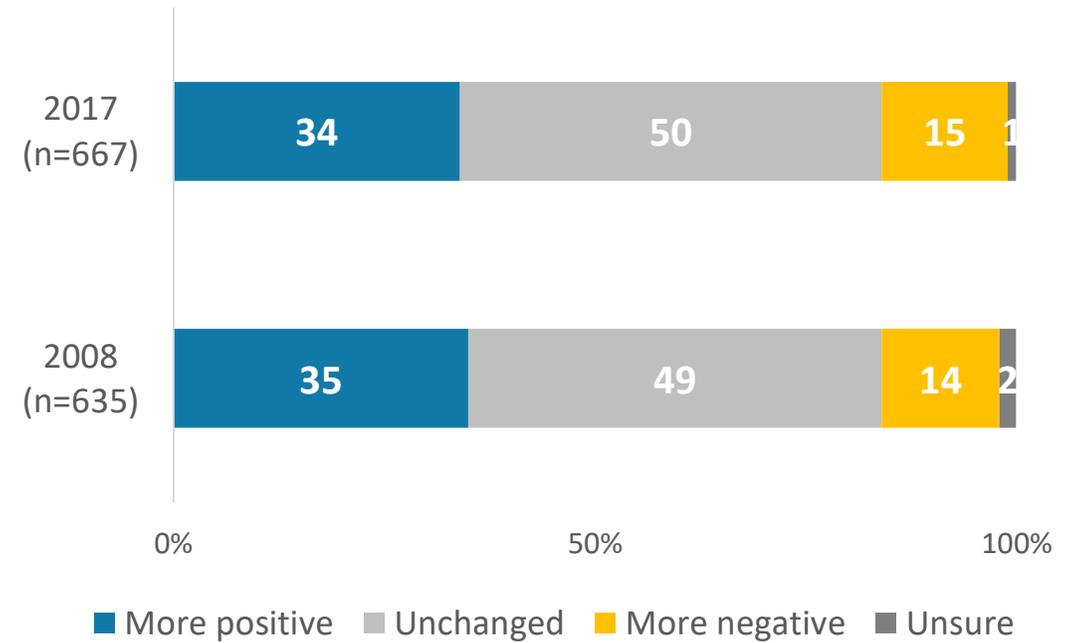
In 2017, both urban and rural respondents views of rural New Zealand remained similar to 2008

Has your view of rural New Zealand become more positive or more negative over the past five years or is it unchanged?

Urban



Rural



Urban and rural respondents declared ‘a better lifestyle’ was the strongest reason for a more positive view of rural New Zealand

Better lifestyle

2017 – Urban 36% and Rural 38%

2008 – Urban 27% and Rural 35%

- Better lifestyle/ less stress, simpler, more peaceful, freer
- Quieter, cleaner, close to nature, less traffic
- More to do than in the city

1

Cheaper housing

2017 – Urban 12% and Rural 7%

2008 – Urban 3% and Rural 3%

2

Farming attributes

2017 – Urban 11% and Rural 21%

2008 – Urban 17% and Rural 24%

- Farming more profitable now/ growth of dairy
- Farmers becoming less conservative, more progressive, more environmentally aware
- Farming important for New Zealand’s economy

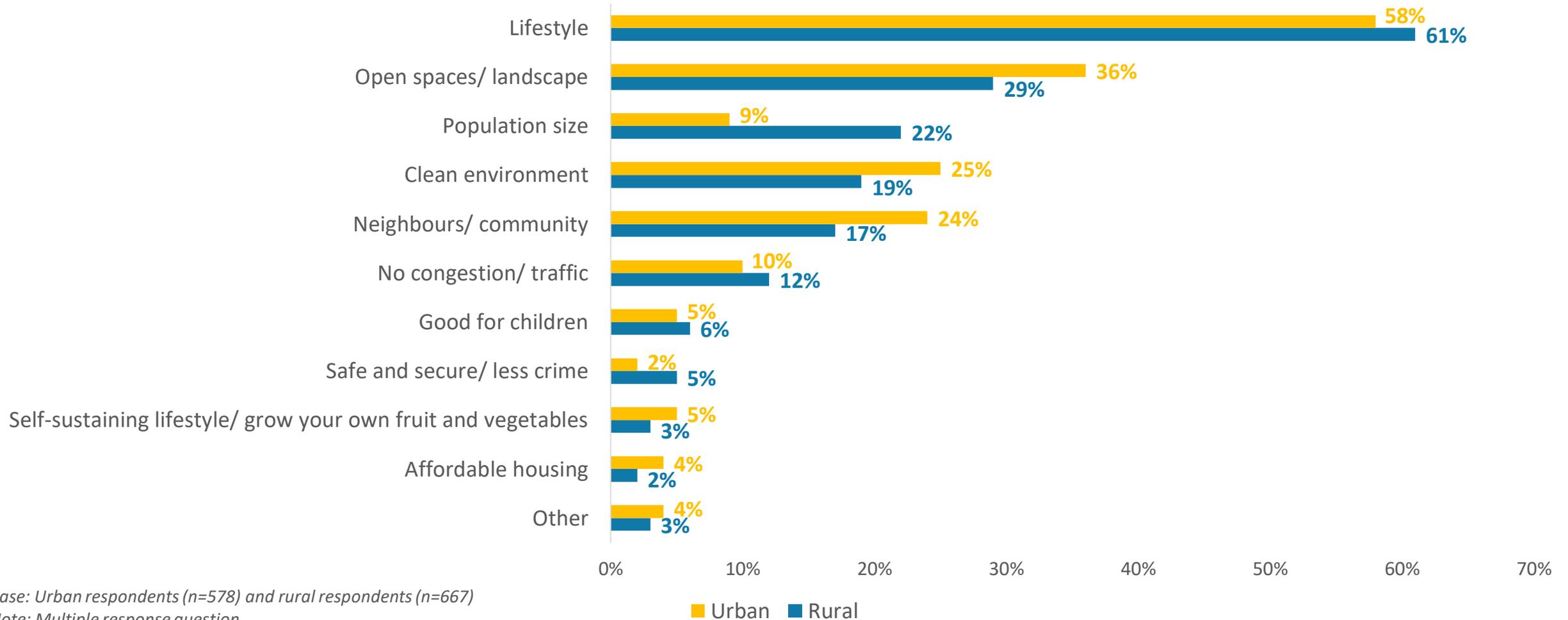
3

2017 base: Urban respondents (n=152) and rural respondents (n=228). 2008 base: Urban respondents (n=155) and rural respondents (n=224).

Note: Multiple response question

Urban and rural respondents declared 'lifestyle' was the main benefit of living in rural New Zealand

What do you think are the GOOD things about living in RURAL New Zealand?/ Even though you live in a URBAN area, what do you think are the GOOD things about living in RURAL New Zealand?



Base: Urban respondents (n=578) and rural respondents (n=667)

Note: Multiple response question

Urban and rural respondents declared farming (particularly pollution caused by dairying) as the main reason given for a negative view of rural New Zealand – a significant increase from 2008

Farming attributes*

2017 – Urban 84% and Rural 78%

2008 – Urban 42% and Rural 45%

- Pollution caused by dairying/ increased dairying (increased by 38% urban and 40% rural since 2008*)
- Farming becoming bigger/ more intensive/more profit driven (increased by 7% urban and 10% rural since 2008)

*Statistically significant difference from 2008 for both urban and rural respondents (note: multiple response question and very small sample sizes, interpret with care)

1

Rising cost of living

2017 – Urban 7% and Rural 4%

2008 – Urban 13% and Rural 23%

- Costs increasing/ rising petrol prices
- Cost of land increasing

2

Access to amenities and services

2017 – Urban 3% and Rural 7%

2008 – Urban 15% and Rural 10%

- Services/ schools closing/ reduced rural population
- Distance to services/ shops etc.
- Lack of elderly care

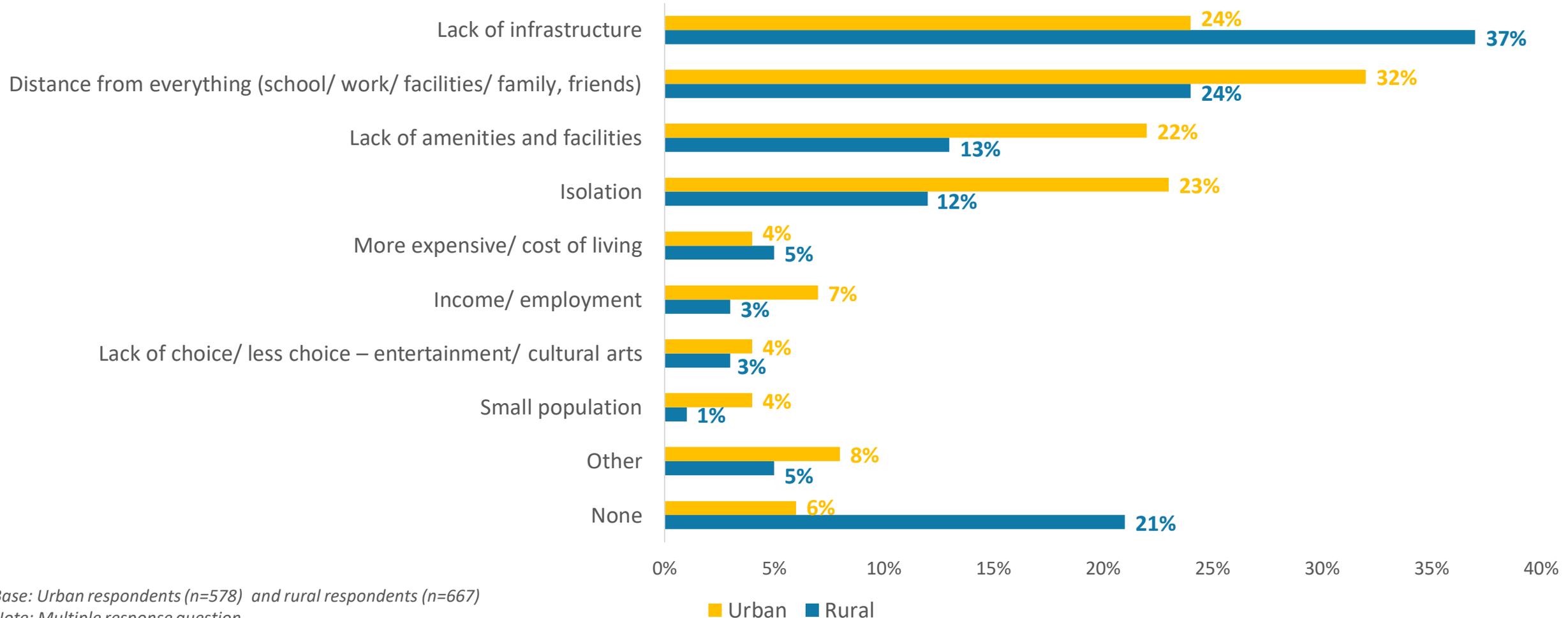
3

2017 base: Urban respondents (n=76) and rural respondents (n=100). 2008 base: Urban respondents (n=55) and rural respondents (n=91).

Note: Multiple response question

Urban and rural respondents declared 'lack of infrastructure' as the main bad thing about living in rural NZ

What do you think are the BAD things about living in RURAL New Zealand?/ Even though you live in a URBAN area, what do you think are the BAD things about living in RURAL New Zealand?

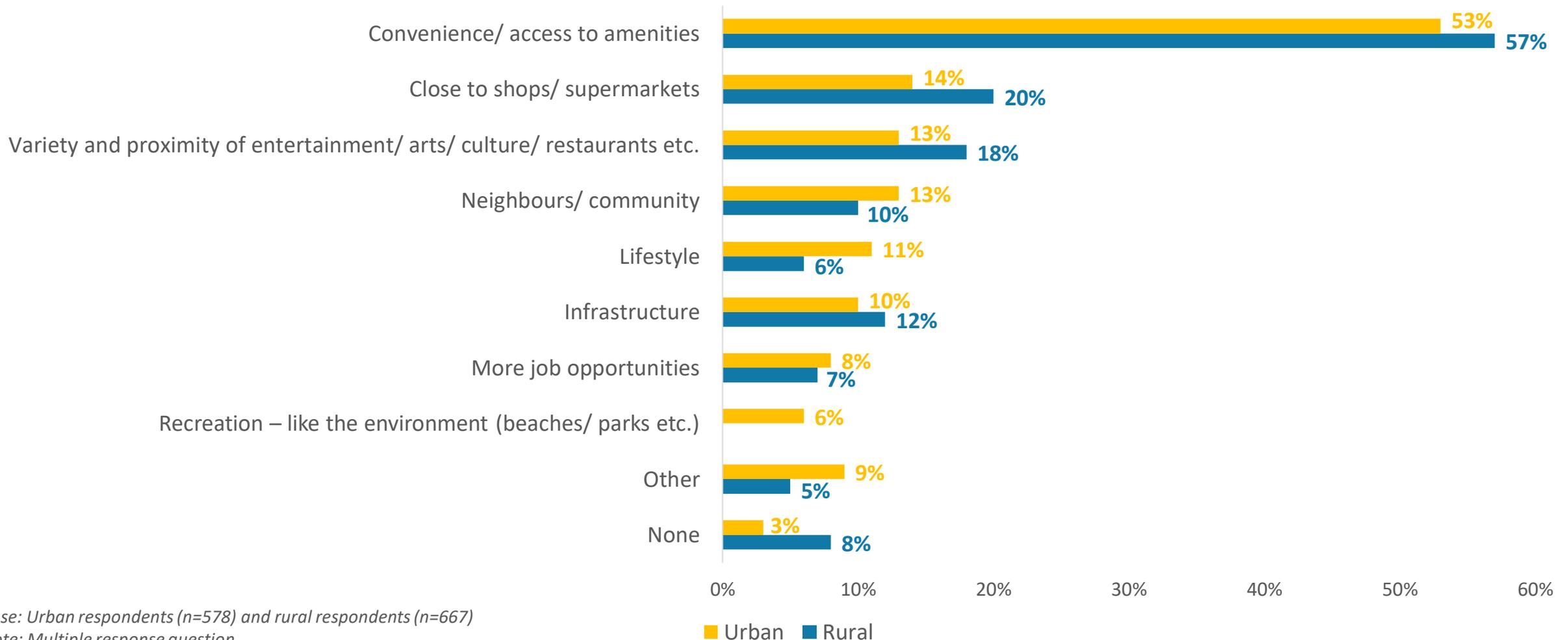


Base: Urban respondents (n=578) and rural respondents (n=667)

Note: Multiple response question

Urban and rural respondents declared the main good thing about living in urban New Zealand was convenience and access to amenities

What do you think are the GOOD things about living in URBAN New Zealand?/ Even though you live in a RURAL area, what do you think are the GOOD things about living in URBAN New Zealand?

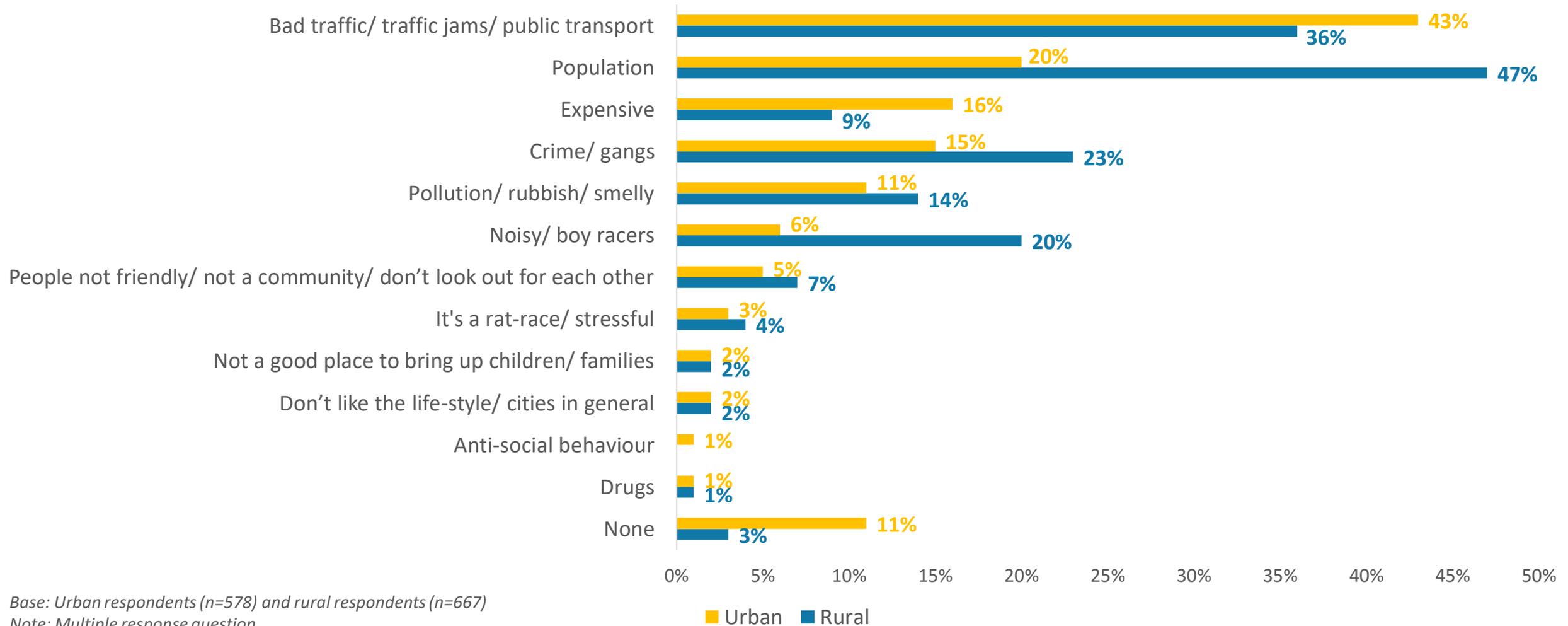


Base: Urban respondents (n=578) and rural respondents (n=667)

Note: Multiple response question

Urban and rural respondents declared the main bad thing about living in urban New Zealand was traffic and the population

What do you think are the BAD things about living in URBAN New Zealand?/ Even though you live in a RURAL area, what do you think are the BAD things about living in URBAN New Zealand?



Base: Urban respondents (n=578) and rural respondents (n=667)

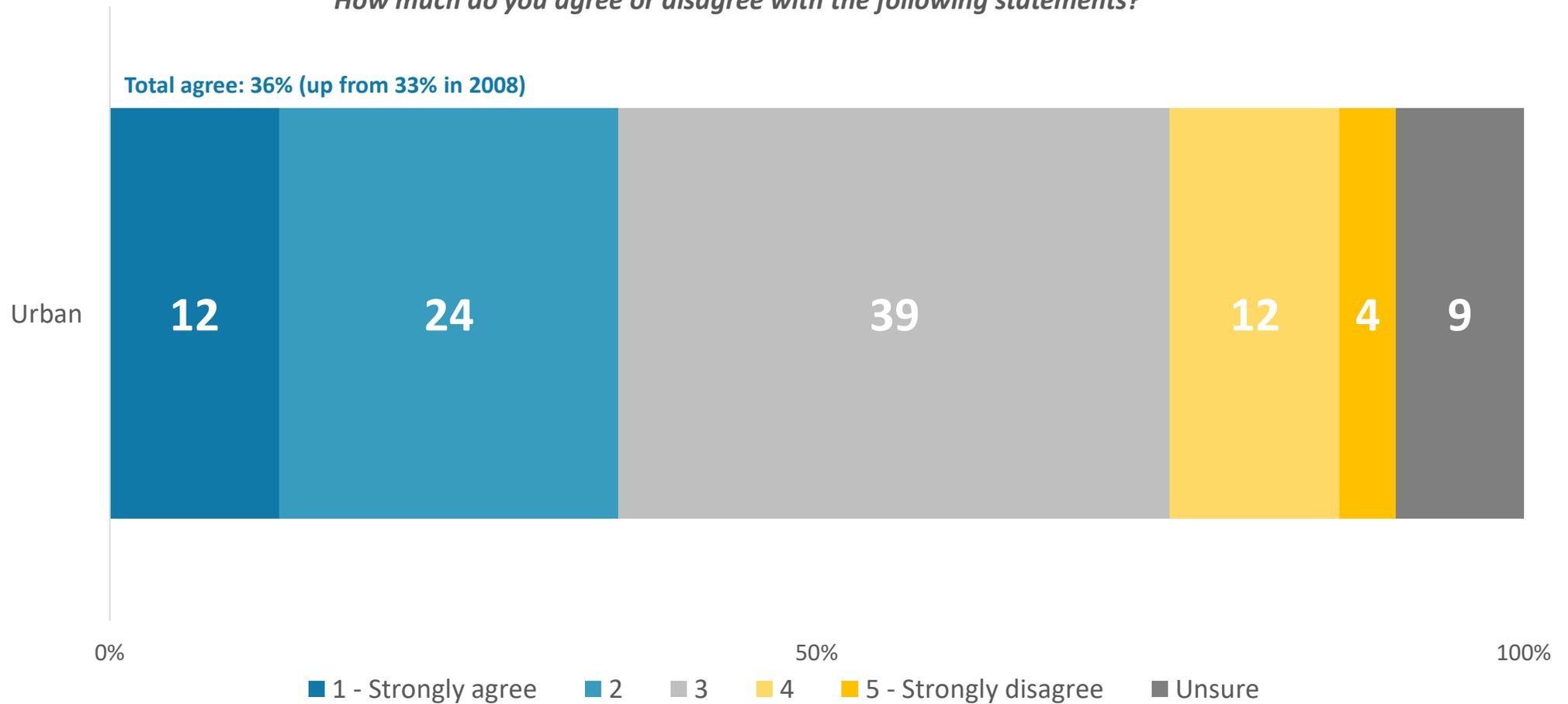
Note: Multiple response question

A third of urban respondents agreed rural New Zealanders understand the importance of urban New Zealand

How much do you agree or disagree with the following statements?

Total agree: 36% (up from 33% in 2008)

Rural New Zealanders understand the importance of urban New Zealand



2017 base: Urban respondents (n=578) and rural respondents (n=667)
 2008 base: Urban respondents (n=608) and rural respondents (n=635)

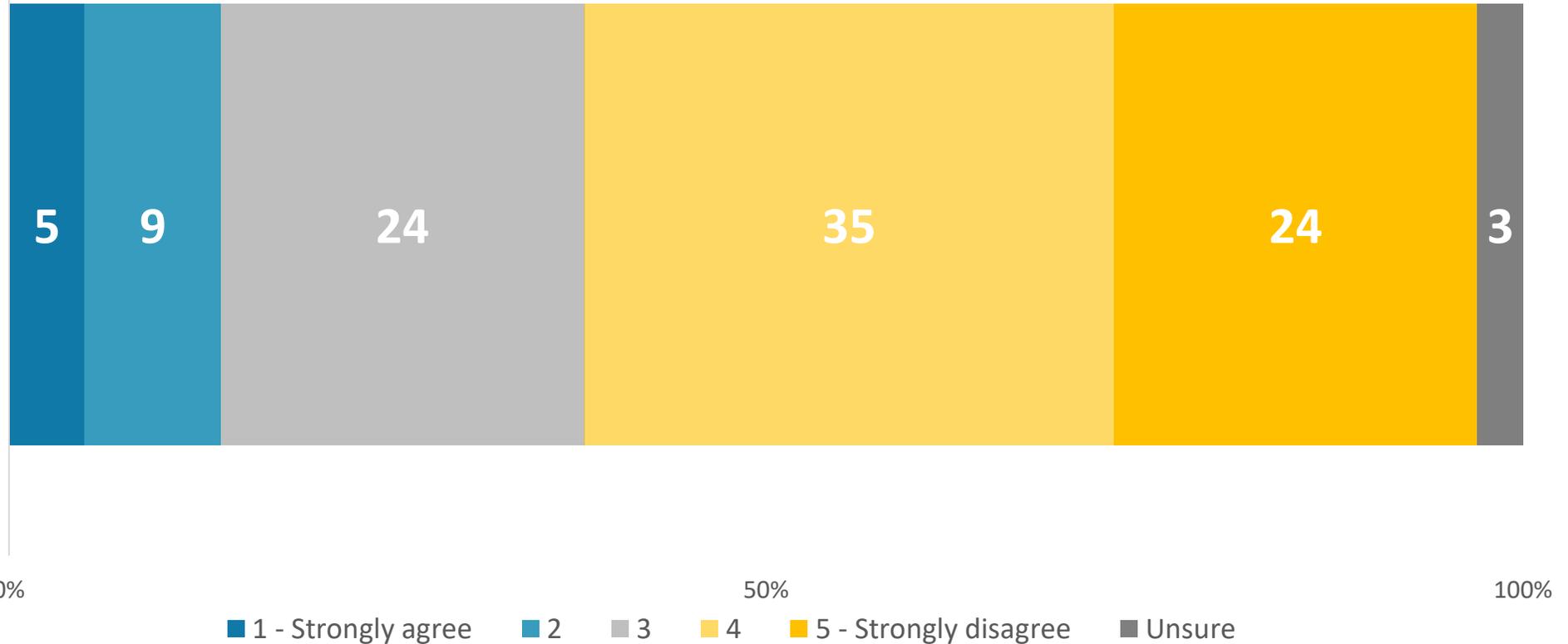
A minority of rural respondents agreed that urban New Zealanders understand the importance of rural New Zealand

How much do you agree or disagree with the following statements?

Total agree: 14% (up from 12% in 2008)

Urban New Zealanders understand the importance of rural New Zealand

Rural



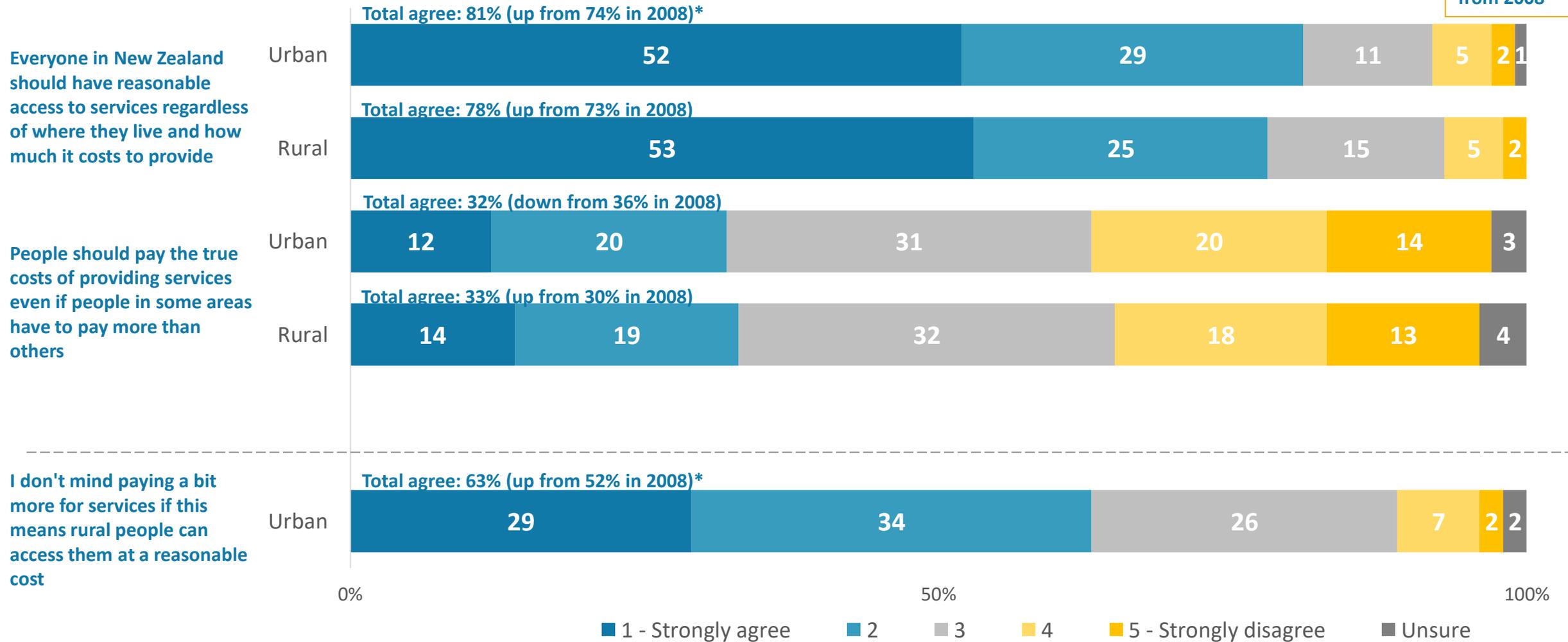
2017 base: Urban respondents (n=578) and rural respondents (n=667)

2008 base: Urban respondents (n=608) and rural respondents (n=635)

Strong agreement for ensuring rural residents have good access to services

*Statistically significant difference from 2008

How much do you agree or disagree with the following statements?

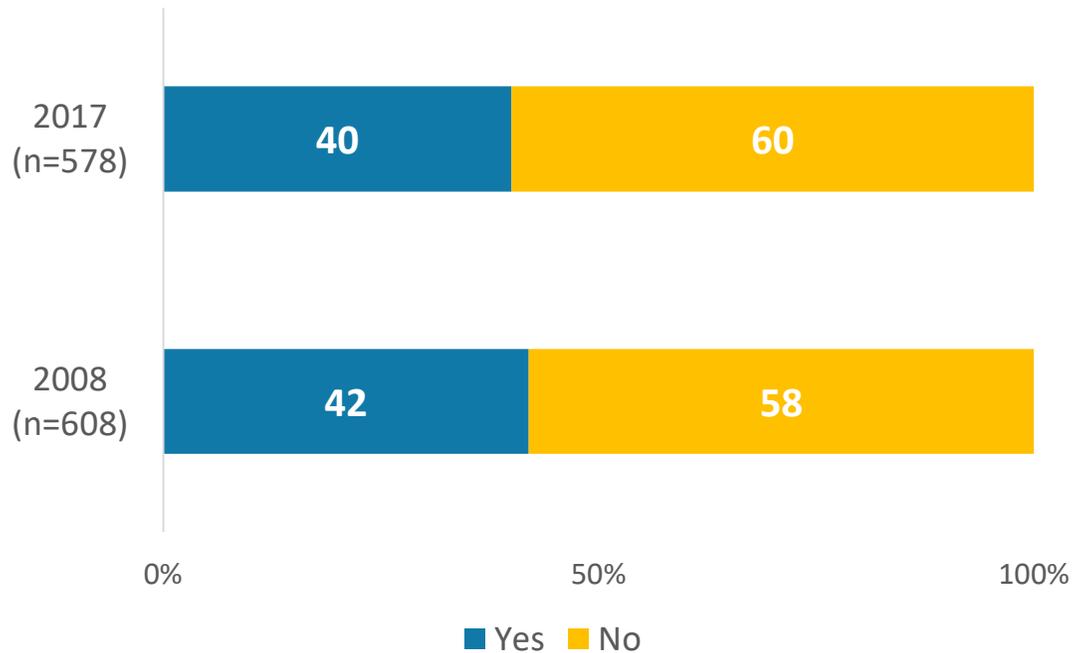


2017 base: Urban respondents (n=578) and rural respondents (n=667)
 2008 base: Urban respondents (n=608) and rural respondents (n=635)

In 2017, similar percentages of respondents declared visiting family or close friends in urban and rural areas as did in 2008

Urban

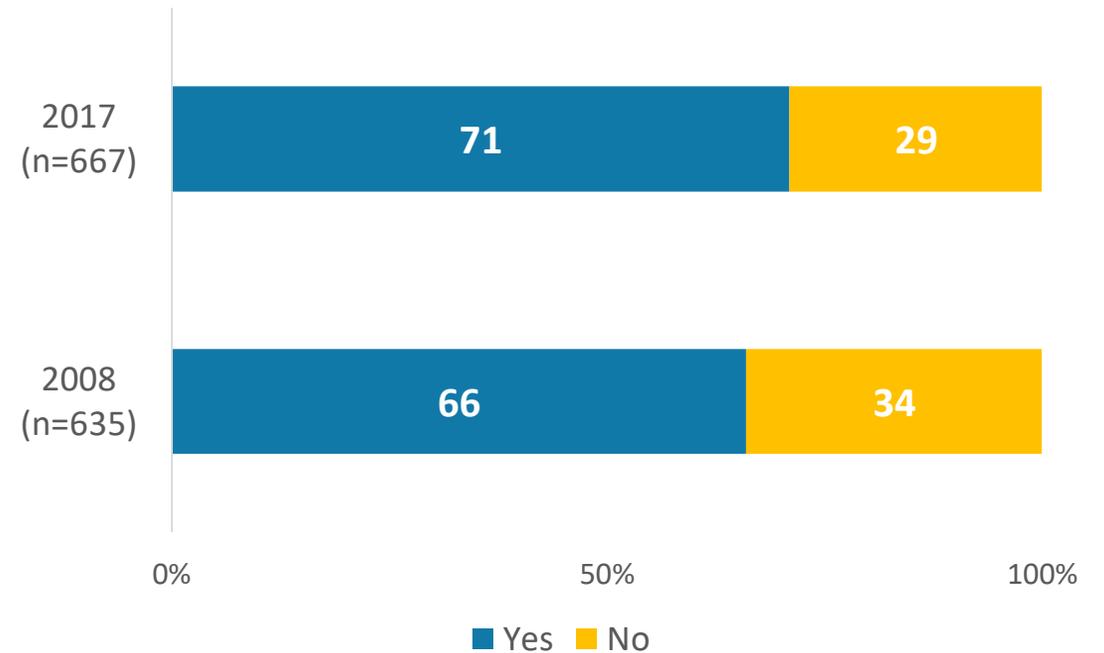
Do you often visit family or close friends that live in rural New Zealand?



Base: Respondents who live in an urban area

Rural

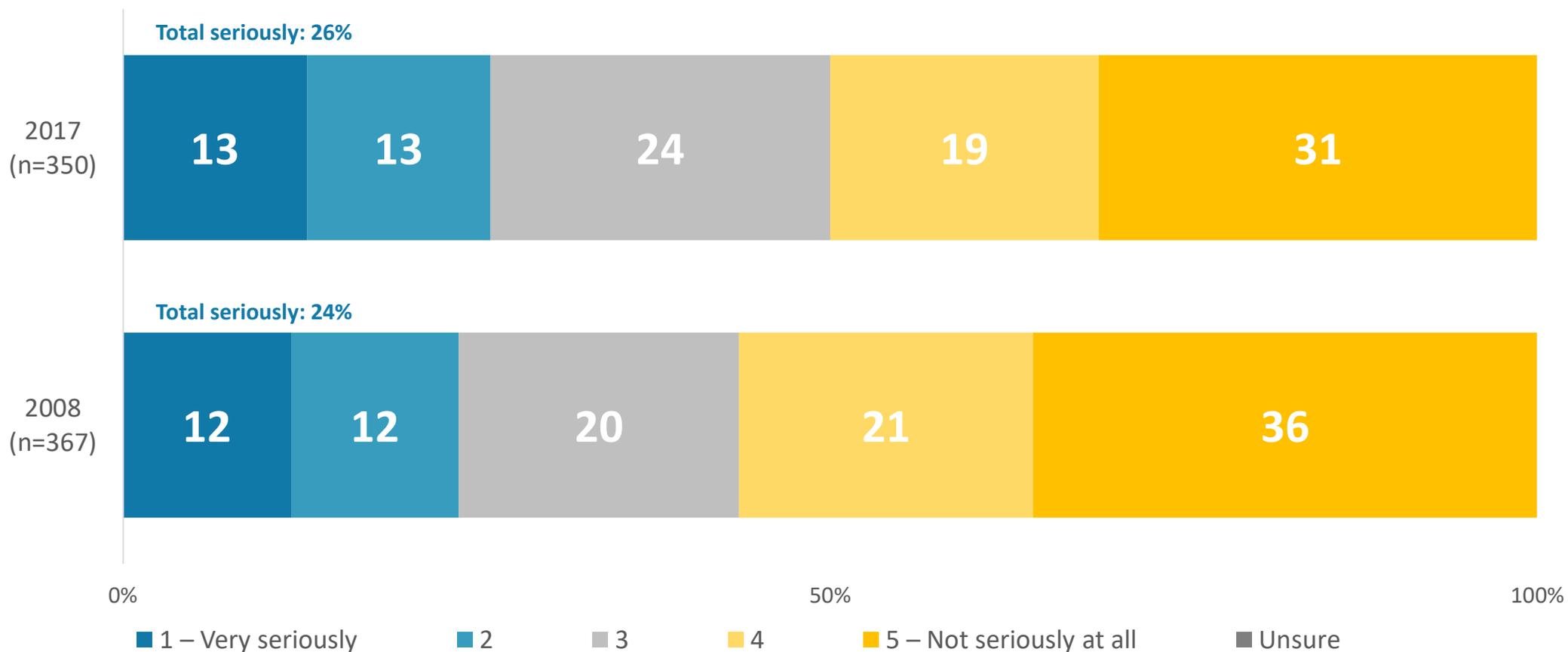
Do you often visit family or close friends that live in urban New Zealand?



Base: Respondents who live in a rural area

In 2017, a similar percentage of urban residents and workers declared they would seriously consider moving to rural New Zealand as reported in 2008

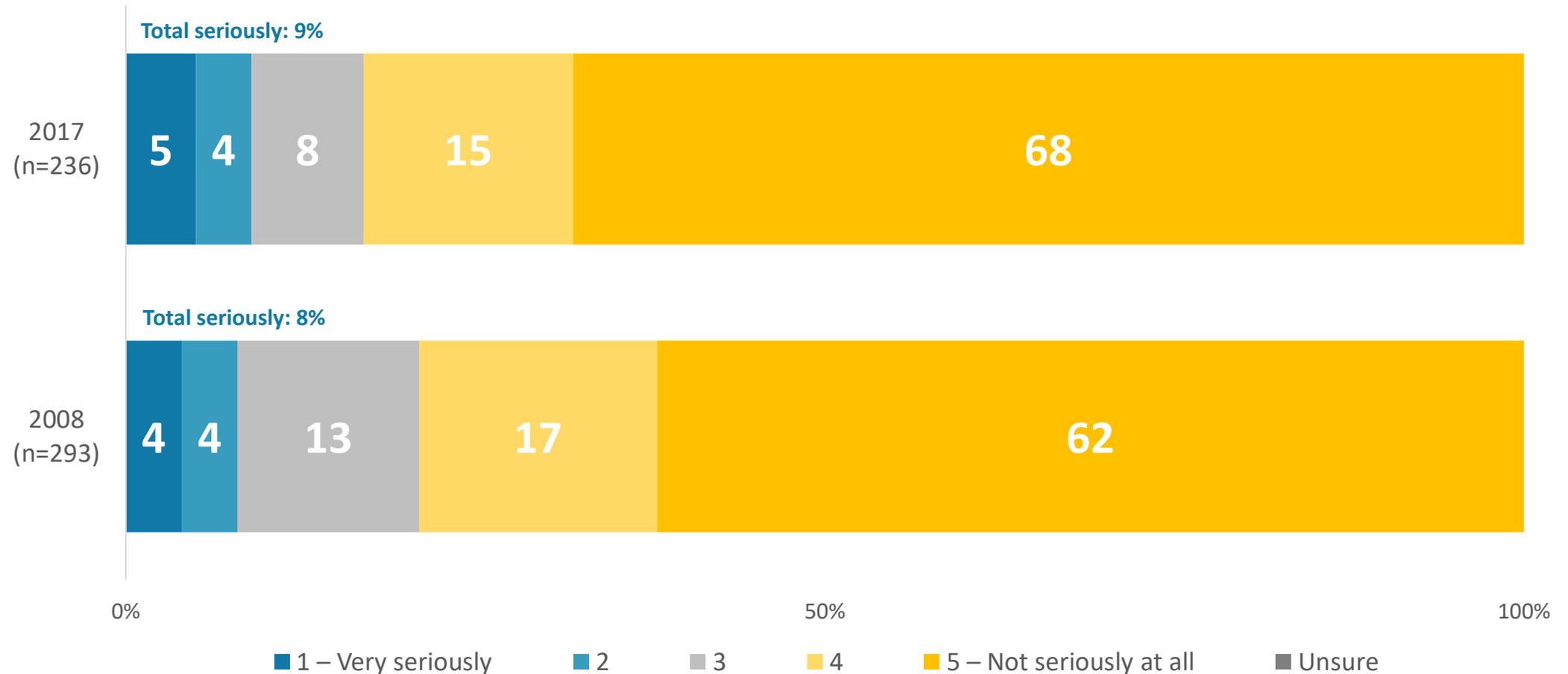
How seriously would you consider moving to live in rural New Zealand?



Base: Respondents who live and work in an urban area

In 2017, a similar percentage of rural residents and workers declared they would seriously consider moving to urban New Zealand as reported in 2008

How seriously would you consider moving to live in urban New Zealand?



Base: Respondents who live and work in a rural area

*2008 question read: 'How seriously would you consider working in urban New Zealand?'

10. Social License to Operate



Framing a response around social licence

- The concept of a social licence was new to most participants
- However, once explained many found it a useful way to frame conversations about how their country can work towards a sustainable primary sector

[Have any of you heard of a thing called social licence?] *It is where decision makers only get the approval of being able to make decisions by us giving them that authority. It is not like a drivers licence – well you can get your drivers licence taken off you – but it is something that you are supposed to keep getting approval for what we are doing to the world. (Auckland, tertiary qualified/media consumer, urban, female)*

[You query the corporate farmers' social licence?] *Yes because it really takes the Mickey out of it really. They are not really given a social licence, it is a bought one. (Dunedin, general public, urban, female)*

[Has anyone heard of the concept social licence to operate.] *When a community lets people do things that they shouldn't really be doing or is not really that good but you let them for certain reasons. (Whangarei, rural, tertiary qualified/media consumer, female)*

[Managing social licence?] *I think the government needs to be responsible for managing the environment because after all they are the people we vote in to manage New Zealand as a whole. (Christchurch, tertiary qualified/media consumer, urban, male)*

Social licence – Transparency

- Participants talked about the need for transparency and accurate information to underpin discussions and help set goals for New Zealand as a whole

Be transparent with what they are going to be doing. I think far too often, like the water, we hear about things like this well after the fact. We need to know how much water is being taken and how much we should be taking. (Christchurch, general public, rural, male)

The assumption is that it is being regulated, it is being monitored. If it is not then there is a lack of not just transparency but trust, not just between me and the farmer but between me and the government. (Christchurch, general public, urban, female)

We only know what they want us to know. We find out this has been going on or hasn't been. To have a proper social licence you need to be fully informed of the facts. We only know what they want us to know. (Auckland, general public, female)

Set some goals. Yes we all have ideas of what the perfect New Zealand would be like but how about somebody at the top sitting there and saying New Zealand is a business, we want to have certain outcomes from this business and that means we need to have water for the farmers but we also need to have clean rivers for the tourists and all of that other stuff. Maybe there needs to be set goals at the top level and the next group come in and say how are we going to achieve these goals of water and everything else. So how the country is going to look. (Christchurch, general public, rural, male)

Social licence – Transparency (cont.)

- There was acknowledgement that current discussions were influenced mainly by media reports that were mostly negative, meaning the full picture was not visible to many of the general public

I guess my question is how do we get that transparency. We have all mentioned we want more transparency but what does that look like. The media is usually a negative slant, look at the rivers, destroying the environment. So what is the flip side of that, how do we get that transparency out there more. (Christchurch, general public, rural, male)

And there is a problem with the influence of the media as well. The media will highlight anything that is wrong and suddenly the Green Party go to town on it. (Dunedin, general public, rural, male)

I feel like dairy is just the complete focus and it is in the media all the time so I do think dairy is appalling and how it has reached the waterways and the things it does to the land. But then all the other primary industries, the wineries, the sheep and cattle, the fisheries, they are doing great things for the country and I think those farmers are doing amazing sustainable things but you only see if you watch Country Calendar. (Christchurch, tertiary qualified/media consumer, urban, female)

Influencing social licence

- Some noted if a social licence to operate comes from society, who speaks on their behalf and has the power to influence the operators? This raised concerns about New Zealanders' ability to influence
- In New Zealand, the main avenue was thought to be via government. Some participants felt consumers held little power to influence producers – given their markets were mostly off-shore
- For the sector to retain their social licence, they needed to take into account the views of New Zealanders and the government was the main conduit to represent those views

Potentially, we are not the customer, so they are customer orientated and us as New Zealanders we don't pay their bills – so why think about our views?
(Whangarei, rural, tertiary qualified/media consumer, male)

It just depends on how big and how established they already are. If they are very big and very established we won't have much of a say. They have already got a lot of approval. (Dunedin, general public, urban, female)

- The media and literature scan suggested that understanding all the stakeholders and their different roles, views and visions within the community was crucial for building a basis for developing and maintaining a social license to operate (MPI information paper; Quigley & Barnes, 2014)

Social license through employment

- It is what the primary sector provides to the wider New Zealand community that helps to earn its social licence to operate
 - In New Zealand the primary sector is seen to be a significant supplier of employment to the New Zealand public and this is one of the main factors that enables it to maintain its social licence to operate

They are also offering a lot of work to the community itself. So they get their social licence on the basis of employment. (Dunedin, general public, urban, female)

By allowing farmers to operate and the fact that there are so many workers in the primary industry and the fact that there is such a large amount of land and a lot of resources that belong to the country that has been put into these industries to a certain degree we are shareholders just not in a business company sort of way. But we have an investment in what they are doing. If you have so many workers working in that industry they get paid and they go out and spend that money and the rest of us get money that way. (Whangarei, tertiary qualified/media consumer, rural, female)

Collaborate via education and support to build social license

- Participants generally felt it was best to positively collaborate with farmers by providing incentives, and education to help improve practices – with penalties only used as a last resort

They need to offer subsidies or something to help them. Because essentially it is going to affect people in the cities as well. (Christchurch, tertiary qualified/media consumer, urban, female)

[Is that the best way to maintain this social licence to operate?] Educate. Any farmer or land owner with any moral standing wouldn't deliberately go out and destroy the environment. Yes there are people who do it. I think education would be the best way for the lion share of it but you still need to have a big stick every now and then for the those that just won't learn. (Christchurch, general public, rural, male)

But you have to support the farmers too. You can't just say 25,000 dairy farms are going to shut down and those people are made redundant and have to find another life. (Christchurch, tertiary qualified/media consumer, urban, female)

Improved planning and monitoring

- Most calls for mitigating sector impacts were pragmatic. The dominant mood was to work with operators, rather than prosecute and penalise
- Participants wanted to see monitoring of impacts to help develop plans

I can't monitor your water supply and make sure you are not getting fertiliser where you shouldn't be so that is why you need the social licence for the government to continue to operate in the way that I would trust for them to monitor the farms. (Christchurch, general public, urban, female)

Yes but obviously within any community you are going to say hey here are the flaws but overall you are doing well but if we could work on these flaws that would be great. (Auckland, tertiary qualified/ media consumer, urban, male)

[To get your approval and acceptance?] Be more environmentally friendly and sustainable. Make an effort. I don't know who is responsible for coming up with it but there has to be a plan put in place going forward on how they are going to treat issues. So the effluent and land and all of that. (Christchurch, tertiary qualified/media consumer, urban, female)

And more checking of the waterways too because usually you don't find out they are polluted until they are way polluted. (Whangarei, urban, general public, female)

Solutions via wider involvement

- There was some recognition that the size of the task required widespread involvement and the responsibility should not fall just with primary producers
- There was some recognition that farmers were not the only ones to blame for environmental degradation
- It was suggested that government needed to lead the planning. However, producers and their representatives also needed to be involved in the process

I think for the environment it is such a massive task that you are going to take a loss personally while everyone else continues to profit by doing things that are unsustainable. So everyone needs to do the same thing, everyone needs to help with a problem like that, you can't just personally do it. (Christchurch, tertiary qualified/media consumer, urban, male)

They [Farming organisations] need to get their folks working proactively. If they don't do it themselves then we end up as a government doing it for them. (Christchurch, tertiary qualified/media consumer, urban, female)

[Responsible?] Everybody. The only way anything is going to change with this pollution problem is if every single person is informed and conscious of it all. [Not just primary producers?] No the farmers are still the people, they are all part of it and a big part of it too with the carbon footprint and that sort of jazz. But it is everybody's issue and everybody needs to contribute to it because we are all contributing to the pollution so we should all contribute to fix it. (Whangarei, urban, general public, male)

Improved platforms for engagement

- A few participants called for a platform that would allow affected parties to better engage in the issue of managing the primary sector

Probably need an easy way where members of the public can raise concerns through to them. An example of those cows that were wandering in that lake up in North Canterbury in the water when they shouldn't have been and those sorts of things. And they need to obviously follow up on things that are breaches of the guidelines or acceptable practice. (Christchurch, tertiary qualified/media consumer, urban, male)

I would like to see MPI people hired to oversee everybody and they are passionate people about farming. Why not pull in actual farmers to be part of that because they would have more of a focus and care about things. It is no point bringing in a young person who has no experience of farming to come in and make decisions when their mindset is I have to get my job done and have to meet the quota for the month of whatever they are ticking off. (Auckland, low income, urban, female)

Social licence to operate – Media and literature scan

- In the qualitative research, there was no questioning the amount of employment the primary sector provided to New Zealanders. However, many believed they did not have the access to affordable and quality food that they felt should be provided living in a country built on the production of food
- The direct positive benefits of the primary sector that earns its social license to operate is employment opportunities and the provision of quality and affordable food

We are not getting the fruits of all the New Zealand labour that is going in. We see the expensive prices even though we are the ones doing all the work. So if we saw more of the stuff going back into the community I think that would help everyone's view on it a little bit more. (Whangarei, urban, general public, male)

They have marked up the price so the people can't afford to buy that beef. So for a country that is exporting they don't care about the local people. So social licence means to me that you have to care for your own people not just thinking of making money for corporates. (Auckland, low income, urban, male)

- The media and literature scan suggested that for a successful social license to operate it needed to grow from a basis of 'do no harm' to a collaboration approach based on developing positive benefits for all (MPI information paper; Quigley & Barnes, 2014)

11. Conclusions



Conclusions

Views of the primary sector

- This study has shown that while New Zealanders' views of the primary sector as a whole have become less positive since 2008, they are still far more likely to hold a positive view of the various primary industries than a negative one
- Views of the horticulture industry were more positive than in 2008, the largest negative movements have come for pastoral farming, with positive views towards dairy farming decreasing the most
- However, New Zealanders' views of the dairy industry are still more likely to be positive than negative overall – (rural respondents; 50% positive and 21% negative, urban respondents; 47% positive and 25% negative)
- The media and literature scan suggested that farmers felt they were being singled out more for their negative impacts on the land and less for their stewardship (media article; Waterworth, 2017)
- However, this research suggests that farmers feelings of being 'singled out' are most likely being driven more by 'single issue' media reporting and less by a balanced representation of both the issues and overall public sentiment

Conclusions (cont.)

Main sector issues

- Water pollution and its use were perceived to be the main environmental issues for New Zealand generally and the primary sector specifically
- These issues were identified across both urban and rural respondents, and reiterated by the focus group participants
- The intensification and expansion of dairying, the corporatisation of primary production (mainly dairy) are key areas of concerns
- There is also anxiety that New Zealand's water is being increasingly used to deliver profits for private enterprise and less for New Zealanders as a whole to enjoy
- Sir Peter Gluckman, Chief Science Advisor, advised in his 2017 report that recent intensification in dairying was one of the main drivers of change in water quality (research report; Gluckman, 2017). This was clearly how participants in this research were viewing this change

Conclusions (cont.)

Biosecurity

- This research showed strong public engagement in the issue of biosecurity*
- New Zealanders' engagement in biosecurity is most strongly reflected by the high levels of responsibility they felt all sectors of society, including individuals, have for helping to protect their country from the entry or spread of pests and diseases
- This research suggests there is potential to build on New Zealanders' engagement in biosecurity, expand their focus to include more domestic pest and disease management, and to help MPI further meet its objectives
- The media and literature scan suggested that New Zealanders believe prevention is best and that most are willing to participate in passive surveillance, albeit with direction (research report; Yockney & Field, 2016). The respondents and participants in this research supported this stance with strong support for stopping entry at the border and calling for more general public and school-based biosecurity education

**Note: the research was conducted while a number of high profile incursions were in the media this level of engagement should be interpreted with care*

Conclusions (cont.)

Climate change

- Climate change is now perceived to be slightly less of an issue to New Zealanders than it was in 2008. This may be because other issues, such as water pollution, are of more concern.
- A strong majority agreed responding to climate change is the responsibility of all New Zealanders and an even smaller minority than in 2008 (statistically significant) now believe natural weather cycles are mostly to blame

Animal welfare

- New Zealanders were generally not concerned about animal welfare breaches but the vast majority thought the welfare of animals was important
- Ratings of how well farmers looked after their animals have decreased slightly since 2008. Where concerns were raised, they tended to focus on caged farming and the increase of corporate farming
- Concerns in urban areas tended to focus around the mistreatment of dogs
- The media and literature scan suggested that New Zealand had a reputation as a world leader in animal welfare (media article; O'Callaghan, 2017). This research also found that while New Zealanders were aware of media highlighting animal welfare issues among farmers, they considered New Zealand to be a world leader in the area of animal welfare

Conclusions (cont.)

Working in the primary sector (skills)

- The primary sector was viewed by respondents as requiring people with a variety of skills and was made up of industries that involve ‘cutting edge thinking and technologies’.
- Formal qualifications were seen as a requirement for working in the primary sector by 20% of urban and 21% of rural respondents
- One in five (20%) of respondents who live and work in an urban area would seriously consider working in a primary industry, whereas 50% of rural residents working in urban settings would consider working in a primary industry
- In keeping with this, urban respondents were less likely than rural respondents to indicate that they would recommend working in the primary sector to someone else
- There was some evidence that both urban and rural respondents consider there are good opportunities in the primary sector, however employer practice may need improvement
- The percentage of both urban and rural respondents who either currently or had previously worked in the primary sector has decreased since 2008

Conclusions (cont.)

Views of urban and rural New Zealand

- The media and literature scan suggested a growing urban/rural divide and polarisation of views as a result of more New Zealanders now living in urban locations and less connections between urban and rural New Zealanders (media article; Edmeades, 2017; Hart, 2017; MacKay, Rookes & Uden, 2017; MacKay & Maharey, 2017).
- This research challenges some of the findings suggested in the media and literature scan, and suggests if such a divide exists it may not be as great as generally perceived, and this perception may be being fuelled by an equating of the negative impact of farming (specifically dairy) with a negative attitude to 'rural'
- The urban and rural respondents in this research showed no significant differences in their attitudes and views across the majority of focus areas

Social license to operate

- The discussions with participants in this research suggests there is potential to frame positive discussions about how New Zealand manages the primary sector around a 'social licence to operate' (SLO)
- It is important to note that not many of the participants initially understood what a 'SLO' meant however, once it was explained to them many started to positively engage in discussions

Final message



I think my overall attitude is that I really like our primary industries but I really want them to do better. I don't want them to disappear I just want them to be nicer.
(Whangarei, rural, tertiary qualified/media consumer, female)

12. Methodology



Methodology – Media and literature scan

- The primary objective of the media and literature scan was to gain an overview of current issues related to perceptions of the primary sector and the urban/rural divide in New Zealand
- Media articles were the main sources of information used and the media article date parameters were from 1 July 2015 to 1 July 2017
- An electronic search was conducted using the Google search engine to identify media articles and other report types related to the urban/rural divide
- A variety of key search terms were employed to ensure a high level of scanning. These included:
 - Urban rural divide New Zealand, aquaculture, forestry, horticulture, farming, animal welfare New Zealand, biosecurity New Zealand, myrtle rust New Zealand, social licence New Zealand, etc. However the search was not limited to these terms
- Four reports and graphs relating to one of the reports were provided by MPI and these were:
 - Insentia Insights. (2017). *Careers and capabilities in the Primary Industries. Media insights report 1 January 2014 - 31 December 2016*. Commissioned by the Ministry for Primary Industries
 - Quigley, R. & Baines, J. (2014). *How to improve your social licence to operate. A New Zealand industry perspective*. MPI Information Paper No: 2014/5. Prepared for the Aquaculture Unit, Ministry for Primary Industries
 - Robertson, A. & Comfort, V, (2014) *Public perceptions of New Zealand's aquaculture industry*, Colmar Brunton
 - Yockney, C., Field, J. (2016). *MPI: Biosecurity draft qualitative report*, Colmar Brunton
- A total of 46 media articles and other types of reports were considered and 37 of these were selected for inclusion in this media and literature scan
 - Criteria: article date within parameters, topics discussed in the previous report (2008), MPI references, relevance of the article to the urban/rural divide, and report type
- References are provided at the end of this report

Methodology – Qualitative

- The qualitative stage consisted of the following nine focus groups:

Location	Group descriptor	Urban or Rural	Household income
Whangarei	Tertiary qualified/ media consumers*	Rural	-
Whangarei	General public	Urban	-
Auckland	tertiary qualified/ media consumers	Urban	-
Auckland	General public	Urban	-
Auckland	General public	Urban	Low income (less than \$75,000 Household)
Christchurch	tertiary qualified/ media consumers	Urban	-
Christchurch	General public	Rural	-
Dunedin	General public	Urban	-
Dunedin	General public	Rural	-

*Tertiary qualified/ media consumers are : tertiary qualified, regularly follow the news and are interested in issues and current events

Methodology – Qualitative

- The nine focus groups were made up of the following demographics:
 - Gender – 35 (female) and 32 (male)
 - Ethnicity – 17 (Māori) and 50 (non-Māori)
 - Age – 26 (aged between 18-29 years), 28 (30-49 years), 18 (50-69 years) and two (aged 70 years or more). Age was not noted for five of the participants
- Focus groups consist of around eight participants and they were run as a semi-structured discussion
 - Topics and questions were floated by the facilitator and participants discussed and expressed their views
 - Over a period of 1.5 to 2 hours participants were invited to ask questions of each other and disagree and agree. The facilitator kept them on topic and introduced new topics as the discussion progressed
- Focus groups are designed to:
 - Detect the full range of views on a topic
 - Understand some of the complexities that surround these views
 - Gauge the intensity of views, and
 - Understand the language that people use to describe their point of view
- The focus groups were conducted between 26 June and 7 July 2017

Methodology – Quantitative

Sample and Fieldwork

- The quantitative component of this report is based on a CATI telephone survey with a total sample of n=1,245 New Zealanders, 18 years of age and over. This total sample consisted of a n=750 nationally representative sample plus an additional booster sample of n=495 rural respondents
- To match the methodology of the 2008 survey, respondents defined themselves as either living in an urban or rural area
- Fieldwork was conducted from 16th to 29th June at UMR Research's national interview facility in Auckland
- For analysis and reporting purposes we report on two populations of interest a rural sample of n=667 and a urban sample of n=578
- The sample size is large enough to allow for robust analyses of the data
- Analysis of differences within each sub-sample (urban versus rural) were conducted on demographics and significance was tested at the 5% level ($p < 0.05$)

Weighting

- The survey data was rim weighted by age, sex and household size. Rim weighting is designed to weight characteristics simultaneously. The rim weighting process attains all the desired proportions while distorting each variable as little as possible

Booster sample

- Of the 750 New Zealanders surveyed, 172 resided in rural areas. A further sample of 495 rural respondents were surveyed, providing a total of 667 rural respondents
- Detailed tables of the sample design are provided in the supplementary report which contains the full list of data tables

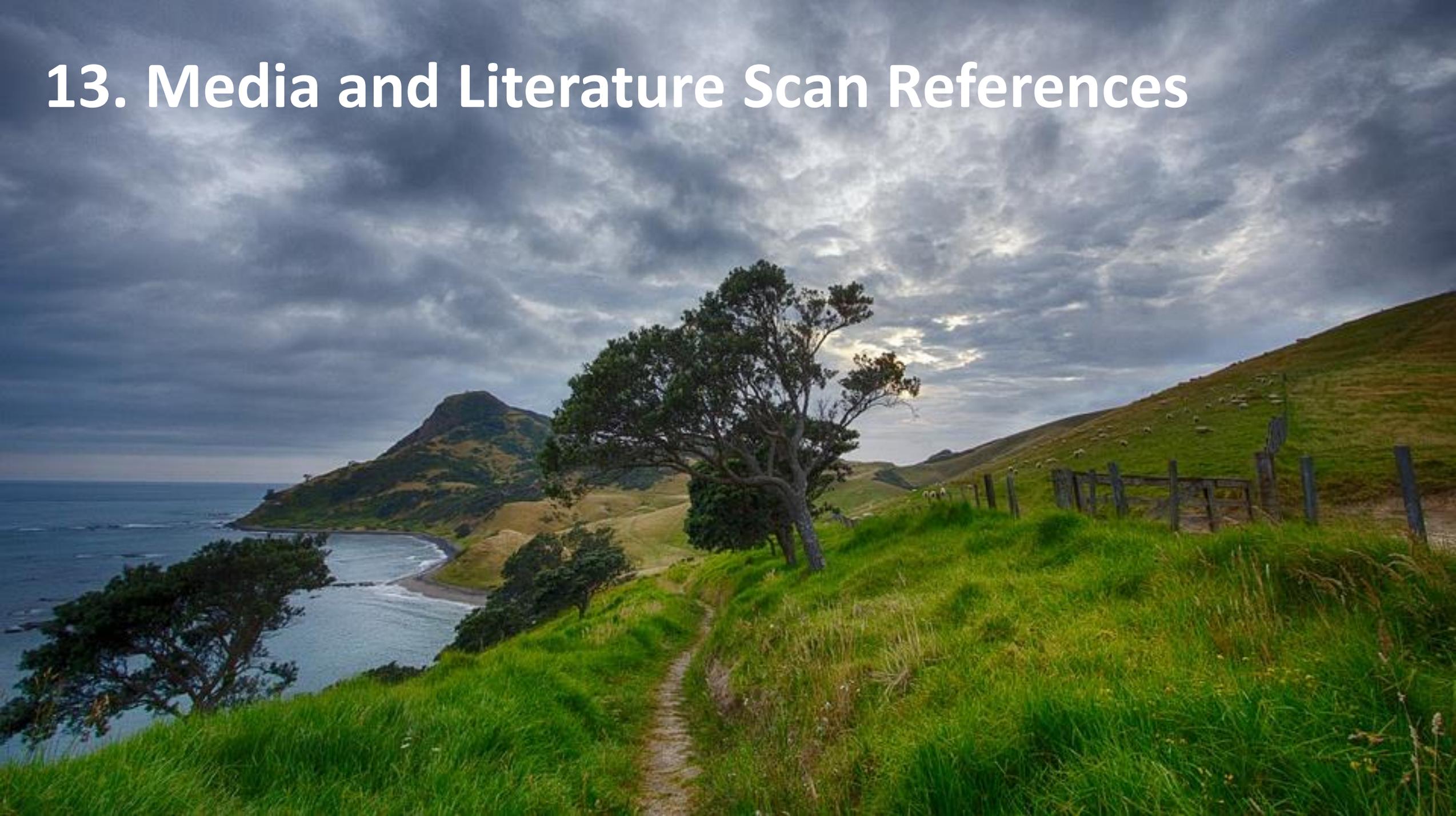
Margin of error

- The margin of error for a 50% figure at the '95% confidence level' for the sample of 750 is plus or minus 3.6%
- The margin of error for a 50% figure at the '95% confidence level' for the sub-sample of 578 urban respondents is plus or minus 4.1%
- The margin of error for a 50% figure at the '95% confidence level' for the sub-sample of 667 total rural respondents is plus or minus 3.8%

Segmentation

- A segmentation analysis was conducted in the 2008 study. However the primary attitudinal question used in 2008 were removed from the 2017 survey to make way for additional and more topical questions
- We went through the process of conducting a segmentation analysis but with a lack of common variables from 2008 it was impossible to produce a robust segmentation analysis. Therefore in discussion with MPI we decided it was better to exclude a segmentation analysis from the 2017 study

13. Media and Literature Scan References



References

Articles referenced are relevant to this report. The full media and literature scan contains further references

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