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Introduction

Background

Our Land and Water (OLW) is the National Science Challenge established to invest in research and related activities to improve land use and freshwater management, and to support the vitality of te Taiao in Aotearoa. The OLW challenge goal of *Wai ora, Whenua ora, Tāngata ora* looks to a future in which all New Zealanders can be proud of the state of our land and water, while sharing in the economic, social and cultural values that te Taiao offers.

Research purpose

The purpose of this research and report is to collect Key Performance Indicators (KPIs) to measure the impact of the OLW programme on the Challenge goal of increasing farm participation in agribusiness, quality assurance, accreditation, and farm certification schemes. In particular, the study provided data regarding the on-farm use of environmental, social, cultural, and economic dimension metrics in such schemes. This report describes the results of the third survey is a series of three surveys. While the initial baseline survey focused on the calendar year 2020 and a follow-up survey focussed on the period of approximately July 2021 and July 2022, the current survey focuses on farmer participation in farm certification schemes during the 12 months prior to the distribution of the current survey (23/04/2024 – 31/05/2024). The OLW Challenge will use the data gathered in this research to report to the Ministry of Business, Innovation and Employment (MBIE) on its progress towards the goals specified above.

Methods

Sample

The survey target population was all land-based producers in New Zealand (e.g. agriculture, arable, horticulture, viticulture, etc). The sample was recruited predominantly through OLW contact email lists. Potential respondents were informed of the purpose of the survey and were required (in the first survey question) to give their informed consent for participation. They were also informed that participation was voluntary and that the privacy and confidentiality of their individual responses would be maintained, with only group data reported.

Survey instrument

The survey instrument was created using the Qualtrics™ platform to ascertain the relevant KPI measures for the OLW Challenge. The draft survey was based on the baseline and follow-up surveys (Farm Certification Scheme Baseline Survey 2020; Farm Certification Scheme Survey 2022) for consistency. All questions (except for informed consent) were voluntary - participants were able to choose not to answer any specific questions by skipping them or opt out of the survey at any point by leaving the browser. Most questions were closed-ended and suitable for statistical analysis. A few open-ended response questions were also included, and a minimum of relevant demographic information sought (i.e. farming sector, region, and age).

Respondents who had not participated in a scheme, or who were unsure if they had (second question in survey), skipped the questions regarding the schemes and went directly to the demographics page of the survey. The survey instrument was brief with a maximum of 20 questions (for those for whom the survey skip logic did not skip any questions) and on average took between 3-6 minutes to complete. The finalised study procedure and survey design was submitted to, and approved by, the Lincoln University Human Ethics Committee (HEC-2024-09).



Procedures

The survey went live on Wednesday 23rd April 2024 using the aforementioned collectors, and was held open for response for approximately five weeks, closing on 31st May 2024. There were further rounds of advertising via email contact (to those who had not responded to previous emails) during the third and fifth weeks in which the survey was open.

Analysis

Data analysis was conducted used survey data extracted from Qualtrics™ and exported to Microsoft Excel. As requested in the project brief, analysis was kept at a simple level with the main results being expressed as frequencies or averages. Open-ended questions were analysed by grouping similar statements or responses together and conducting counts of statements in each group using NVivo14 software.

Results

As this report is an analysis of Key Performance Indicators (KPIs) for OLW, to measure progress against the KPIs each survey question is specified and brief results from the baseline (2020), 2021-22 and current survey (2023-24) are presented. However, prior to the full results, a summary table of the main results is provided below (Table 1).

Table 1. Summarised results

		Resu	ılt	
Data collected	2020 Baseline	2021-22	2023-24 Current	% Change to Baseline
Percentage of respondents with farms participating in farm certification schemes	54.4%	61.5%	60.6%	6.6%
Percentage of farmers measuring wellbeing dimensions				
Economic dimension	13.3%	11.2%	7.1%	-6.2%
 Environmental dimension 	82.8%	81.7%	85.7%	2.9%
Social dimension	53.7%	53.4%	46.9%	-6.8%
 Cultural dimension 	27.5%	19.5%	20.3%	-7.2%
Average number of metrics per wellbeing dimension of respondents				
Economic dimension	2.2	2.3	3.2	+1
Environmental dimension	6+*	6+*	6-10/11+*	
Social dimension	~5*	~4*	~5.3	~+0.3
 Cultural dimension 	2.1	3.0	3.1	+1
Percent of respondent farms audited in prior 12 months	76.4%	90.7%	83.1%	+6.7%
Average number of times farms audited in prior 12 months	1.3	1.9	1.4	+0.1
Average level of satisfaction with main scheme	4.7**	4.6**	5.1**	+0.4**

^{*}Note: Due to the responses in the categories 6-10 and 11 or more indicators, it is not possible to exactly calculate an average for the count of environmental and social indicators.

The above results are presented in greater detail in the next section. The full results, as presented below, will aid the comparison of performance on the OLW KPIs over time against this baseline. Results from two qualitative questions, what farmers 1) liked, and 2) disliked about their farm certification schemes, are also reported below. Results and study limitations are briefly explicated in the Discussion section (Page 18).

Main survey questions

1. Do you give your consent to participate in this survey?

The first question of this survey asked participants to give their consent to participating in this survey. For the current survey, participants were screened if they did not consent to participating in the survey, leaving 142 consenting participants in total.

^{**}Scale: 1 = very dissatisfied, 4 = neutral, 7 = very satisfied.



2. During the past 12 months, did you participate in any farm certification scheme(s)?

For the current survey, of the 142 respondents who consented to participate, 61% (86) said they had participated in farm certification schemes during the previous 12 months, while 32% (46) said they had not done so, and 7% (10) indicated they were unsure (Table 2). There was a slight increase in the percentage of participants who stated that they participated in farm certification schemes between the two surveys (+7%).

Table 2. Number and percentage of farmers participating in farm certification schemes in past 12 months

	2020 Baseline		2021-22		2023-24	% Change	
	n	%	n	%	n	%	to Baseline
Yes	154	54%	152	62%	86	61%	7%
No	106	37%	85	34%	46	32%	-5%
Unsure	23	8%	10	4%	10	7%	-1%
TOTAL	283	_	247		142		

3. What is the name (or names) of any such farm certification scheme(s) that you participated in during the past 12 months? Please list schemes in order of importance to yourself - most important scheme first to the least important scheme last.

For the current survey, of the 86 respondents who participated in a farm certification scheme in the past 12 months, 85 named at least one farm certification scheme in which they participated. Thirty-seven of these respondents (44 per cent) also participated in a second scheme, while 15 of them (18 per cent) also participated in a third scheme. Between the baseline and current surveys there was an overall increase in the percentage of participants who stated that they participated in either 1, 2 or 3 farm certification schemes (Table 3).

Table 3. Number and percentage of farmers in a scheme who participated in 1, 2 or 3 certification scheme(s)

Number	2020 Baseline				2021-22			2023-24 Cur	% Change	
of schemes	n	% of % of Question Sample n % of Sample	n	% of Question	% of Sample	to Baseline				
1	127	100%	41.9%	142	100%	57.5%	85	100%	59.9%	+18%
2	64	50.4%	21.1%	66	46.5%	26.7%	37	43.5%	26.1%	+5%
3	30	23.6%	9.9%	31	21.8%	12.6%	15	17.6%	10.6%	+0.7%

In both surveys, respondents were requested to rank the farm certification schemes in which they participated in order of the schemes' importance to themselves. Table 4 overleaf shows the schemes that farmers participated in in the current survey and the number of respondents who rated different schemes at the first, second and third ranks. The two New Zealand Farm Assurance Programme (NZFAP and NZFAP+) schemes were the most frequently used, with both used by 23.4 and 8.8 per cent of respondents respectively. These two schemes were followed in frequency by GlobalGAP (5.1 per cent), Organic Farm NZ (5.1 per cent) and NZ Merino ZQRX (3.6 per cent).

Table 5. Farm certification scheme participation (Current Survey 2023-24)

Farm certification schemes	ranki ranking scheme		No. of respondents ranking scheme 3 rd most important	Total no. of respondents using scheme	Percent (%) of total responses	
NZFAP	23	6	3	32	23.4	
NZFAP+	9	2	1	12	8.8	
GlobalGAP	7	0	0	7	5.1	
Organic Farm NZ	7	0	0	7	5.1	
NZ Merino ZQRX	4	1	0	5	3.6	
Fonterra Co-Op Difference	4	0	0	4	2.9	
SWNZ	4	0	0	4	2.9	
Farm Environment Plan (FEP)	3	4	0	7	5.1	
Lead With Pride	3	0	0	3	2.2	
NZGAP	2	2	1	5	3.6	
NVSB	1	1	1	3	2.2	
NZ Merino ZQ	1	1	0	2	1.5	
Ecological Verification Outcome (EOV)	1	0	1	2	1.2	
AsureQuality	0	2	1	3	2.2	
Food Act	0	2	0	2	1.5	
Freshwater Farm Plans	0	2	0	2	1.5	
Otago Regional Council	0	0	2	2	1.5	
Total	69	23	10	102	74.5	

There were a further 26 unique responses for farm certification schemes each of which was only mentioned once in the current survey results. These included schemes such as: Alliance Group, Beef and Lamb, BioGro NZ, EU Organic, Fonterra Tiaki, Global Animal Partnership, Land to Market Verified, NZFAP+ Gold, NZ Merino ZQRWS, NZ Winegrowers Grafted Grapevine Standard, PGG Wrighton Wool Integrity, Pig Care, and SPCA, among others. There were also an additional 9 generic responses that could not be linked to a known scheme. In comparison with the baseline, the specific schemes used by participants changed between surveys (see Table 6). Specifically, there was a decrease observed for NZGAP participants (approximately -17 per cent), slight increases in the percentage of participants involved with organic schemes, and a slight increase in the percentage of participants involved with New Zealand Farm Assurance Programme (NZFAP) and farm environment plans (FEP).

Table 6. Farm certification scheme participation (Baseline 2020, 2021-22, and Current Survey 2023-24)

		aseline - esponses		1-22 – esponses	2023-24 Current – Total Responses		% Change to	
	n	%	n	%	n	%	Baseline	
NZFAP	43	21%	40	20%	32	23%	+2%	
GlobalGAP	N/A	N/A	N/A	N/A	7	5%	N/A	
Organic	7	3%	18	9%	7	5%	+2%	
Merino NZ	9	4%	10	5%	5	4%	No change	
Fonterra Co-Op Difference	13	6%	19	9%	4	3%	-3%	
Farm Environment Plans (FEP)	7	3%	9	4%	7	5%	+2%	
Lead With Pride	5	2%	3	1%	3	2%	No change	
NZGAP	43	21%	29	14%	5	4%	-17%	
Ecological Outcome Verification (EOV)	N/A	N/A	N/A	N/A	2	2%	N/A	
AsureQuality	3	1%	1	0%	3	2%	+1%	
Food Act	2	1%	0	0%	2	2%	+1%	
Councils	7	3%	2	1%	2	2%	-1%	
TOTAL RESPONSES	208		201		137			



4. During the past 12 months, how many times were you audited for compliance with the farm certification scheme(s) in which you participated?

For the current survey, of the 86 respondents who participated in a farm certification scheme, 76 gave interpretable responses to the question regarding the number of times their schemes were audited during the past 12 months. While approximately 18% of farmers (14) participating in farm certification schemes did not get audited during the past 12 months, the majority 61% (46) were audited once, followed by 16% (12) that were audited twice. Four farms (5%) were audited 3 or more times. The mean number of times respondents were audited in the past 12 months was 1.4 (standard deviation = 1.29, Min = 0, Max = 6). Compared against the baseline results, there was a slight increase in the percentage of farms audited once (4%) and farms audited twice (2%) but a slight decrease in the percentage of farms audited three times (-1%) (Table 7).

Table 7. Number of times and percentage of respondent farms audited in the past 12 months

Number	2020 Baseline		202:	2021-22		2023-24 Current		
of audits	n	%	n	%	n	%	to Baseline	
0	17	14%	13	9%	14	18%	4%	
1	74	59%	76	54%	46	61%	2%	
2	20	16%	31	22%	12	16%	0%	
3	8	6%	13	9%	4	5%	-1%	
4	3	2%	3	2%	14	18%	-2%	
5	2	2%	0	0%	0	0	-2%	
6 or more	1	1%	4	3%	0	0	-1%	
TOTAL	125		140		76			

5. Did the farm certification scheme(s) that you participated in during the past 12 months include financial indicators?

For the current survey, 84% of respondents claimed there were no financial indicators in the farm certification schemes in which they participated. A further 9% of respondents who participated in farm certification schemes were unsure if their schemes included financial indicators, while only 7% stated their schemes included financial indicators. Compared to the baseline, there was a slight decrease of 6% of participants indicating their schemes included financial indicators (Table 8).

Table 8. Number and percentage of farmers with and without financial indicators in their schemes

	2020 Baseline		2021-22		2023-24	% Change	
	n	%	n	%	n	%	to Baseline
Yes	17	13%	16	11%	6	7.1%	-5.9%
No	99	77%	112	78%	71	83.5%	6.5%
Unsure	12	9%	15	10%	8	9.4%	0.4%
TOTAL	128	100 %	143	100%	85	100%	

6. How many financial indicators were included in your farm certification scheme(s)?

For the current survey, of the 6 farmers with financial indicators in the farm certification scheme, 5 responded to the question regarding the number of financial indicators. The average number of financial indicators for these 5 farms = 3.2 with 40% having only 1 financial indicators. Compared to the baseline results there was a significant change in the numbers of financial indicators included in the farm certification scheme (Table 9).

Table 9. Number and percentage of farms with x number of financial indicators

Number of	2020 Baseline		202	2021-22		2023-24 Current		
indicators	n	%	n	%	n	%	to Baseline	
1	4	25%	4	27%	2	40%	15%	
2	7	44%	8	53%	0	0%	-44%	
3	4	25%	1	7%	0	0%	-25%	
4	0	0%	1	7%	2	40%	40%	
5	1	6%	0	0%	0	0%	-6%	
6-10	0	0%	0	0%	0	0%	0%	
11 or more	0	0%	1	7%	1	20%	0%	
TOTAL	16	100%	15	100%	5	100%		

7. Did the farm certification scheme(s) that you participated in during the past 12 months include environmental indicators?

For the current survey, 86% (72) of the 84 farmer respondents who participated in farm certification schemes claimed their schemes included environmental indicators. Just 10% (8) participated in schemes without environmental indicators and 5% (4) were unsure whether the scheme in which they participated included environmental indicators. Compared to the baseline, there was a decrease of 27% of participants indicating their schemes did not include environmental indicators (Table 10).

Table 10. Number and percentage of farmers with and without environmental indicators in their schemes

	2020 Baseline		2021-22		2023-24	% Change	
	n	%	n	%	n	%	to Baseline
Yes	106	83%	116	82%	72	86%	3%
No	16	13%	14	10%	8	10%	-27%
Unsure	6	5%	12	8%	4	5%	-4%
TOTAL	128		142		84		

8. How many environmental indicators were included in your farm certification scheme(s)?

For the current survey, of the 72 respondents with environmental indicators in their farm certification schemes, 68 responded to the question regarding the number of environmental indicators. More than a quarter of respondents (20) claimed to have 11+ environmental indicators in their certification schemes while another 29% claimed to have between 6-10 indicators. Thus, more than half of the respondents (40) who participated in farm certification schemes had 6 or more environmental indicators in their schemes. A slight increase in the percentage of environmental schemes with 2 and 3 indicators was observed between the baseline and current surveys. Slight decreases were observed for the percentage of environmental schemes with 4 and 5 indicators compared to the baseline (Table 11).

Table 11. Number and percentage of farms with x number of environmental indicators

Number of	2020 Baseline		202	2021-22		2023-24 Current		
indicators	n	%	n	%	n	%	to Baseline	
1	5	5%	3	3%	1	1.5%	-3.5%	
2	6	6%	13	14%	6	8.8%	2.8%	
3	13	14%	8	9%	11	16.2%	2.2%	
4	14	15%	9	10%	5	7.4%	-7.6%	
5	10	11%	11	12%	5	7.4%	-3.6%	
6-10	23	25%	24	26%	20	29.4%	4.4%	
11 or more	23	25%	25	27%	20	29.4%	4.4%	
TOTAL	94		93		68			

9. Did the farm certification scheme(s) that you participated in during the past 12 months include social indicators?

For the current survey, almost of half (38) of the farmers participating in farm certification schemes claimed that social indicators were included in their schemes. Approximately 27% (22) said there were no social indicators in their scheme while 26% (21) were unsure. Compared to the baseline, there was a slight decrease of 8% for the participants that said there were social indicators included in their schemes (Table 12).

Table 12. Number and percentage of farmers with and without social indicators in their schemes

	2020 Baseline		2021-22		2023-24	% Change	
	n	%	n	%	n	%	to Baseline
Yes	66	54%	70	53%	38	46.9%	-7.1%
No	39	32%	39	30%	22	27.2%	-4.8%
Unsure	18	15%	22	17%	21	25.9%	10.9%
TOTAL	123		131		81		

10. How many social indicators were included in your farm certification scheme(s)?

For the current survey, of the 38 respondents with social indicators in their scheme, 35 responded to the question regarding the number of social indicators included in their scheme. Approximately 37% (13) had 6 or more social indicators in their scheme while approximately 63% (22) had between 1 and 5 social indicators. Compared to the baseline, there was a slight increase of 5% in the percentage of schemes including 2 social indicators while the percentage of schemes including 3 social indicators slightly decreased (-9%). Very little change between the baseline and current surveys was observed for the other number of indicators included (Table 13).

Table 13. Number and percentage of farms with x number of social indicators

Number of		2020 Baseline		21-22	2023-24	% Change	
indicators	n	%	n	%	n	%	to Baseline
1	4	7%	5	8%	3	8.6%	2%
2	11	18%	17	27%	8	22.9%	5%
3	11	18%	8	13%	3	8.6%	-9%
4	7	12%	8	13%	4	11.4%	-1%
5	6	10%	7	11%	4	11.4%	1%
6-10	13	21%	11	17%	7	20.0%	-1%
11 or more	9	15%	7	11%	6	17.1%	2%
TOTAL	61		63		35		

11. Did the farm certification scheme(s) that you participated in during the past 12 months include cultural indicators?

For the current survey, approximately 20% (16) of respondents with farm certification schemes claimed to have cultural indicators in their schemes, while 52% (41) did not and a further 28% (22) were unsure. There was a small decrease of 8% in the inclusion of cultural indicators between the baseline and current surveys observed (Table 14).

Table 14. Number and percentage of farmers with and without cultural indicators in their schemes

	2020	Baseline	2021-22		2023-24	% Change		
	n	%	n	%	n	%	to Baseline	
Yes	33	28%	25	20%	16	20.3%	-7.7%	
No	65	54%	77	60%	41	51.9%	-2.1%	
Unsure	22	18%	26	20%	22	27.8%	9.8%	
TOTAL	120		128		79			

12. How many cultural indicators were included in your farm certification scheme(s)?

For the current survey, of the 16 respondents with cultural indicators in their schemes, 14 replied to the question regarding the number of cultural indicators. Half of these (7) claimed to have 2 cultural indicators in their scheme, while 14% (2) had only 1 and 4 cultural indicators, respectively. The average number of cultural indicators per farmer respondent was 3.1. Compared to the baseline, a large increase of 27% was observed in the percentage of schemes with 2 cultural indicators, while there was a large decrease of respondents with 1 cultural indicator included in their scheme (Table 15).

Table 15. Number and percentage of farms with x number of cultural indicators

Nulliber of		Baseline	2021-22		2023-24	% Change	
indicators	n	%	n	%	n	%	to Baseline
1	15	50%	6	25%	2	14.3%	-35.7%
2	7	23%	7	29%	7	50.0%	27.0%
3	4	13%	3	13%	1	7.1%	-5.9%
4	1	3%	3	13%	2	14.3%	11.3%
5	2	7%	0	0%	0	0.0%	-7.0%
6-10	1	3%	4	17%	2	14.3%	11.3%
11 or more	0	0%	1	4%	0	0.0%	0.0%
TOTAL	30		24		14		



13. What did you like about the farm certification scheme(s) that you participated in during the past 12 months?

For the current survey, 70 respondents replied to the question regarding what they **liked** about their farm certification scheme, contributing 95 responses (for this question, respondents were able to contribute more than one aspect). Of these, 83 (87.4%) responses mentioned aspects that they considered positive. These positive aspects fell under 10 broad categories, 8 of which were also observed in the 2020 Baseline and 2021-22 surveys. Table 16 below shows the broad categorisation of these aspects and the number of farmers liking each aspect. However, a further 12 (12.6%) respondents claimed that there was nothing they liked about their scheme, that it was a waste of time, and a financial and time burden that caused farmers to be stressed. There were also very few differences observed between the baseline and current surveys other than a general reduction in the percentage of participants who saw that quality assurance enabled premium market access, or that liked nothing about their scheme(s) (Table 16).

Table 16. Number of farmers who reported liking particular aspects of their farm certification scheme(s)

Posnoncos	2020 Baseline		2021-22		2023-24 Current		% Change
Responses	n	%	n	%	n	%	to Baseline
Quality assurance enabled premium market access (tells our story)	19	19%	17	14%	8	8%	-11%
Ease of use	15	15%	20	16%	16	17%	+2%
Increased farmer knowledge /improved farming practice	14	14%	17	14%	13	14%	no change
Broad scheme coverage of relevant farming areas	8	8%	3	2%	6	6%	-2%
Enabled price premium	8	8%	12	10%	7	7%	-1%
Talking to auditors helpful	4	4%	7	6%	7	7%	+3%
Brings regulation together and set quality standards	4	4%	6	5%	3	3%	-1%
Nothing, don't like it, waste of time, compliance cost	27	27%	19	15%	12	13%	-14%
Measuring progress and outcomes	N/A	N/A	10	8%	9	10%	N/A
Positive (general)	N/A	N/A	14	11%	14	15%	N/A
TOTAL	99		125		95		



14. What did you dislike about the farm certification scheme(s) that you participated in during the past 12 months?

For the current survey, 66 respondents replied to the question regarding what they **disliked** about their farm certification scheme, contributing 96 discernible responses (for this question, respondents were able to contribute more than one aspect). Of these, 91 (94.8%) responses mentioned aspects of the schemes that they considered negative. These negative aspects fell under 12 broad categories. Table 17 below shows the broad categorisation of these aspects and the number of farmers disliking each aspect. However, a further 5 (5%) respondents claimed that there was nothing they disliked about their schemes. As with the previous question, there was very little difference between the baseline and current surveys other than an increase in the proportion of respondents that thought of schemes as carrying compliance costs (7%), and a decrease in those that disliked nothing about their schemes (-7%) (Table 17).

Table 17. Number of farmers who reported disliking particular aspects of their farm certification scheme(s)

Parnancas	2020 Baseline		2021-22		2023-24 Current		% Change
Responses	n	%	n	%	n	%	to Baseline
Compliance costs - time, effort, money	19	19%	31	23%	25	26%	+7%
Replication/duplication of information requirements and data entry	18	18%	16	12%	14	15%	-3%
Tedious, useless or irrelevant questions	13	13%	18	13%	10	10%	-3%
Too much paperwork	8	8%	17	13%	8	8%	no change
No direct benefit for farmer	8	8%	14	10%	10	10%	+2%
Stressful and invasive	7	7%	6	4%	5	5%	-2%
Compliance with rules and regulation	5	5%	5	4%	7	7%	+2%
The lack of environmental and/or social considerations	4	4%	5	4%	4	4%	no change
Everything (about schemes disliked)	4	4%	0	0%	1	1%	-3%
Auditors and consultants	4	4%	10	7%	3	3%	-1%
Nothing (about schemes disliked)	12	12%	12	9%	5	5%	-7%
TOTAL	102		134		96		



15. Thinking of the main farm certification scheme in which you participated during the last 12 months, how satisfied/dissatisfied were you with it?

For the current survey, of the 86 respondents who participated in farm certification schemes during the previous 12 months, 42 replied to the question regarding their level of satisfaction with their main farm certification scheme. With a mean of 5.1 and a standard deviation of 1.5, farmers are, in general, neutral to moderately satisfied with their main farm certification scheme. Thirty-two respondents commented on why they felt satisfied or dissatisfied with their main farm certification scheme. Altogether these respondents made 17 positive comments, 3 negative comments, and 12 neutral or ambivalent comments. Thus, the quantity of positive, negative, and neutral comments, of the qualitative responses, reflects well the finding from the quantitative satisfaction level question. In general, the negative comments reflected similar sentiments to the aspects of schemes that were disliked, while positive comments reflect similar sentiments to what respondents liked about the schemes. Table 18 shows a comparison of farmers' level of satisfaction with their main scheme and the number and percentage of farmers rating at each level for both surveys, showing that there was a slight increase in satisfaction with the certification schemes (Table 18).

Table 18. Level of satisfaction with main farm certification scheme

	2020 Baseline		2021-22		2023-24	% Change	
	n	%	n	%	n	%	to Baseline
Very dissatisfied (1)	7	6%	5	4%	1	2.4%	-3.6%
(2)	4	4%	11	9%	1	2.4%	-1.6%
(3)	7	6%	8	7%	4	9.5%	3.5%
Neutral (4)	28	26%	30	25%	8	19.0%	-7.0%
(5)	26	24%	26	21%	9	21.4%	-2.6%
(6)	29	27%	27	22%	12	28.6%	1.6%
Very satisfied (7)	8	7%	14	12%	7	16.7%	9.7%
TOTAL	109		121		42		

16. Compared with 10 years ago, do you think that there is more or less farm certification across the industry?

In order to understand relative changes in the prevalence and quality of farm certification schemes, two new questions were included in the 2023-24 current survey – these are discussed below. Firstly, participants were asked to indicate if they thought that, compared with 10 years ago, there was more or less farm certification across the industry – results for this question are included in Table 19 below. More than two thirds of respondents (50) stated that they were much more schemes available than 10 years and another 30% (22) of the respondents claimed the number of schemes slightly increased. Only one respondent stated that there were much less schemes available than 10 years ago.

Table 19: Number of farm certification schemes available compared to 10 years ago.

	2023-24 Current				
	n	%			
Much less	1	1.4%			
Slightly less	0	0.0%			
No change	0	0.0%			
Slightly more	22	30.1%			
Much more	50	68.5%			
TOTAL	73				

17. Compared with 10 years ago, do you think that the quality of and value received from farm certification services is better or worse in general?

When asked about the quality and value received from farm certification services compared to 10 years ago (see Table 20 below), the majority of respondents (44 per cent) said that the quality and value slightly increased over the past 10 years with another 17 per cent stating that the quality and value is much better compared to 10 years ago. In contrast, 11 per cent of respondents found that quality and value of farm certification services is much worse than 10 years ago, with another 9 per cent of respondents stating that quality and value of services are slightly worse compared to the past. Another 20 per cent think that the quality and value of farm certification services is unchanged compared to 10 years ago.

Table 20: Quality and value received from farm certification services compared to 10 years ago

	2023-24 Current			
	n	%		
Much worse	7	10.6%		
Slightly worse	6	9.1%		
No change	13	19.7%		
Slightly better	29	43.9%		
Much better	11	16.7%		
TOTAL	66			



Demographics

18. Which best describes the nature of your business? (Tick all that apply)

A number of 163 responses were received for the business type question. Note that participants were able to select multiple answers for this question. Over more than two thirds (68) of responses indicated that most participants were sheep & beef farmers, followed by dairy (26), then horticulture (20) and other land-based businesses (17). The other land-based businesses included farm consultancy (3), dairy support (2), orchards (2) and farm forestry (2), among others. There was a significant decrease in the number of sheep & beef and dairy farmers from the baseline to the current survey, with a slight increase in the number of other land-based businesses and viticulture (Table 21).

Table 21. Nature of respondents' farming business: number

	2020 Baseline	2021-22	2023-24 Current	Change to Baseline
Agriculture – Dairy	58	44	26	-32
Agriculture – Sheep and Beef	115	93	68	-47
Agriculture – Other	16	15	15	-1
Viticulture	0	4	5	+5
Horticulture	48	63	20	-28
Arable	17	14	12	-5
Other land-based business	N/A	16	17	+17
TOTAL	254	233	163	

19. Which region in New Zealand is your farm business located?

Of the 142 total respondents, 130 gave their regional location. The regions of Canterbury (23%), Otago (14%) and Manawatu-Wanganui (10%) contributed the most respondents to the survey (Table 20). This changed slightly from the baseline survey, where most respondents were located in the Waikato (19%), followed by Canterbury (15%), then Otago (10%) (Table 22).

Table 22. Region of respondents' farm location

	2020 Baseline		202	1-22	2023-24	% Change to	
	n	%	n	%	n	%	Baseline
Auckland	10	5%	6	3%	5	4%	-1.2%
Bay of Plenty	16	7%	25	12%	5	4%	-3.2%
Canterbury	33	15%	29	14%	30	23%	8.1%
Gisborne	8	4%	2	1%	3	2%	-1.7%
Hawke's Bay	16	7%	12	6%	8	6%	-0.8%
Manawatu-Wanganui	14	6%	13	6%	13	10%	4.0%
Marlborough	1	0%	3	1%	4	3%	3.1%
Nelson	1	0%	2	1%	1	1%	0.8%
Northland	12	5%	15	7%	6	5%	-0.4%
Otago	23	10%	27	13%	18	14%	3.8%
Southland	12	5%	11	5%	6	5%	-0.4%
Taranaki	11	5%	5	2%	5	4%	-1.2%
Tasman	9	4%	5	2%	4	3%	-0.9%
Waikato	42	19%	32	15%	12	9%	-9.8%
Wellington	11	5%	20	9%	10	8%	2.7%
West Coast	1	0%	6	3%	0	0%	0.0%
TOTAL	220		213		130		

20. How old are you?

For the current survey, 121 of the 142 total respondents volunteered their age. These respondents' ages ranged between 23 and 88 years old with a mean of 57 years and a standard deviation of 12.9 years. Hence, this panel was a bit older compared to the panel from baseline survey with an average age of 52 years.

Discussion

This survey followed up a baseline survey to measure KPIs for the OLW Challenge – specifically, measuring participation in farm certification schemes. The data tables in the Results section provide a side-by-side comparison of the baseline (2020), 2021-22 and current survey (2023-24) results, thereby measuring progress from the baseline during the life of the programme.

There are numerous farm certification schemes available for farmers to participate in. For the current survey, 76 respondents participated in at least one farm certification scheme during the 12 months prior to their completion of this survey, with 15% participating in two, and 5% participating in at least three schemes. Farmers and growers continue to be involved with schemes that include financial, environmental, social and cultural indicators, with environmental indicators being the most common, and financial indicators being the least common in these schemes.

In comparing the current survey results with those of the baseline, there has been very little change between the baseline and current survey, with slight increases in farmer participation in and satisfaction with farm certification schemes over this period. There has also been little change in the number of schemes that include all four types of indicators (financial, environmental, social, and cultural), or the overall number of indicators of each type included in these schemes. When asked, farmers indicated that, compared with 10 years ago, there appear to be more certification schemes available, and the quality and value of these scheme has increased over time.

As seen with the baseline and previous survey, respondents both liked and disliked aspects of the farm certification schemes that they participated in. For the current survey, the three most liked aspects were 1) ease of use (16 observations, or 17 per cent); 2) increased farmer knowledge or improving farming practice (13 observations, or 14 per cent); and 3) the ability to measure process and outcomes (9 observations, or 10 per cent). As with the baseline survey, the three most disliked aspects of their schemes were 1) compliance costs – time, effort or money (25 observations, or 26 per cent); 2) the replication or duplication of information requirements and data entry (14 observations, or 15 per cent); and 3) tedious, useless or irrelevant questions (10 observations, or 10 per cent).

Study limitations

The current study, as with the baseline and 2021-22 studies, has some limitations that should be noted. Due to social science ethics procedures (voluntary participation), the survey cannot be considered random. Therefore, it is not possible to say how well the survey respondent data estimates the actual sample population data. To try to ameliorate for this data limitation, the current survey has used the same methodology and data collection techniques as the previous.

Another limitation is the relatively small sample size compared with previous years, as well as the sample size of the response to some questions. This was due to funnelling effects where a response could only be made to some questions if a particular response had been made to a previous question. Although some questions had low response rates for this reason, most respondents eligible to respond to a question did so.

A third limitation to the quality and accuracy of the data is that farmers were asked to estimate the number of indicators in the scheme in which they participated for each of the four wellbeing dimensions. These were subjective estimates and the accuracy of the number of indicators is unknown. It may be of value to examine the most common farm certification schemes and count the actual number of metrics included for each dimension. This information could provide a check on the accuracy of the survey data.



Appendix – Sampling and collector information

The following information was supplied by Annabel McAleer, senior communication advisor at Our Land and Water, for ensuring that the same methodology and procedures used for collecting data in the current survey may be repeated with fidelity in follow-up surveys.

Email 1

Subject:
☐ Calling all producers, farmers, growers! Please participate in a survey about farm certification schemes

Sent date: 24 April 2024 12:23 PM

Sent to 1858, to those in the OLW databased tagged Farm Advisor OR Catchment Group OR Farmer / Grower OR where audience category is 'unknown'

- Successful deliveries 1845
- Bounces 13
- Open rate 34.3%
- Unique opens 633
- Total opens 1284
- Click rate 5.9%
- Unique clicks 109
- Total clicks 143

Email 2

Subject:

Calling all producers, farmers, growers! Please participate in a survey about farm certification schemes

Sent date: 13 May 2024 10:08 AM

Sent to 1218 - those who didn't open email 1

- Successful deliveries 1215
- Bounces 3
- Open rate 14.3%
- Unique opens 174
- Total opens 399
- Click rate 3.8%
- Unique clicks 46
- Total clicks 57



Email 3

Subject:

☐ Calling all producers, farmers, growers! Please participate in a survey about farm certification schemes

Sent date: 28 May 2024 10:51 AM

Sent to 1042 – those who didn't open email 2

- Successful deliveries 1041
- Bounces 1
- Open rate 8.9%
- Unique opens 93
- Total opens 130
- Click rate 2.7%
- Unique clicks 28
- Total clicks 36