Ministry for Primary Industries

Progress Report on the Primary Growth Partnership Passion2Profit Programme

Peter MacIntyre, Steve Murphy

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Wellington	Auckland	
Level 9, 1 Willeston St PO Box 587 Wellington 6140 Ph: +64 4 915 7590 Fax: +64 4 915 7596	Level 8, 203 Queen St PO Box 2475 Auckland 1140 Ph: +64 9 909 5810 Fax: +64 9 909 5828	
Sydney	Canberra	Melbourne
Level 14, 68 Pitt St Sydney NSW 2000 GPO Box 220 Sydney NSW 2001 Ph: +61 2 9234 0200 Fax: +61 2 9234 0201	Unit 3, 97 Northbourne Ave Turner ACT 2612 GPO Box 252 Canberra City ACT 2601 Ph: +61 2 6267 2700 Fax: +61 2 6267 2710	Level 8, 90 Collins Street Melbourne VIC 3000 GPO Box 3179 Melbourne VIC 3001 Ph: +61 3 9005 1454 Fax: +61 2 9234 0201

For information on this report please contact:

Peter MacIntyre
068742421
0212768819
pmacintyre@srgexpert.com



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Executive summary

The Passion2Profit (P2P) programme is a partnership between MPI and co-investors that make up 95 percent of the industry. The programme began in June 2015 and is budgeted to receive PGP funding from the Government of \$7.4m over its lifetime. Industry funding will slightly exceed this amount. The seven year programme has started into its third year.

The objective of this progress review is to provide the co-investors in the PGP with an independent assessment of how the programme is tracking towards its goals.

The original Business Plan estimated that the P2P PGP would increase venison export revenue by \$56 million per annum relative to 2014 levels by 2022. It was also predicted that industry EBIT would increase by \$34m per annum above business-as-usual levels and the NPV of the programme would be \$90 million over its 7 years. These estimates were dependent on, and driven off, all changes in deer numbers. Deer numbers continued to fall so it was necessary to reset these estimates in 2017. The P2P is currently targeting \$48 million per annum of incremental export revenues by 2022.

Our analysis of the P2P PGP's value drivers shows that most of the value was expected to come from increasing the volume of venison production. Prices were assumed to be static. The volume increase was to occur through a rise in hind herd numbers, an increase in average carcass weight, an increase in survival to slaughter and an increase the average loin size driven by P2P initiatives.

Analysis of the P2P PGP's strategy to reduce the proportion of production that was frozen, and switch 5 percent of this production to chilled, did not appear to be a significant value driver. This was because the increase in value from chilled exports was nearly offset by the decrease in frozen revenue. The difference being the price per kilo of chilled vs frozen exported venison.

In our view the value differential between chilled and frozen and the flow on effects of this to the P2P PGP and its priorities needs to be investigated further. Renewing the full EBIT and NPV assumptions to tease out some of the key assumptions about where the P2P PGP's value lies would also be helpful. These EBIT and NPV assumptions were done in 2014 but not in 2017.

While the direct returns of shifting production into chilled from frozen may not be great, the level of cooperation in the venison market achieved by the P2P PGP exceeds other sectors in the meat industry. The 'marketing premium venison' arm of the PGP has resulted in market development for Cervena in the Benelux in particular that would have been much more difficult, if not impossible, without the PGP. However, the tight supply of venison has made it most unlikely the PGP will achieve its ambitious 2022 market targets.

Uncertainty over the rewards for developing new markets and some patch protection could be reducing longer term opportunities to build the Cervena appellation. Renewed efforts may be needed to unblock these problem areas. It may be worthwhile to get co-investor CEOs involved and it may also be of value to have regular involvement by CEOs in the MWG, perhaps annually.



The market led production arm of the P2P PGP has made real progress in a number of areas. The Advance Parties initiative to drive practice change and technology adoption has been particularly successful. Moreover in the last year and a half the APs have been widening the spread of knowledge from their activities by involvement in the regional workshops designed to reach out to other deer farmers. The challenge is now to refresh them and keep them interesting so that they and their benefits endure. We see real potential for levering off the variety of interests in the APs by letting them shift their interests in directions that the AP members see as most useful for them. This may also be a mechanism for advancing important areas such as business planning, optimising mixed farming systems and advancing better environmental outcomes.

Initiatives which have tried to push out knowledge into the deer farming base from the centre have proven more challenging for the PGP. 'Information systems', which has tried to agree industry metrics and provide customised data to farmers, has struggled and so has promotion of use of genetic improvement. It may be possible to further these initiatives by using the APs to incubate and develop these initiatives.

Analysis suggests that genetics could fundamentally grow the deer sector's productivity and there has been encouraging recent research by AgResearch into venison heritability. We see value in devoting more resources to unlocking this potential. But it has proved difficult. It may be wise to initially investigate why there has been such a gulf between users and nonusers and why non-users claim to want to know more but when it's offered don't seem motivated to attend workshops. Genetics also seems a good candidate for a thorough review of how it is communicated and whether it is pitched at farmers in a way they can easily digest.

Access to experts or influential advisers, strategic feeding and initiatives aimed at improving animal health are important. Strategic feeding in particular has been a clear benefit to many AP members and will be driving material improvements in production as a direct result of this PGP. Because it drives production volume and quality it may merit greater funding than the 4 percent of the P2P 2017/18 budget that it has been allocated.

Improving access to experts, regional workshops and encouraging animal health planning are building momentum as they have all started in earnest only in the last 18 months. Their progress needs to be monitored and adjusted if they prove more difficult to roll out.

Overall, the governance and management of the P2P PGP are very capable and focused on results. The P2P has achieved its Output Logic Model short term outcomes for the period from the PGP's beginning in mid-2015 to 2018. These focused on identifying new markets and gaining insights into consumer demand as well as driving greater communication and collaborative learning and making it easier to access and take up new technology and processes.

We do not believe that the P2P can claim benefits or losses from all changes in deer numbers as was implicit in the 2014 Business Plan. But an estimate of incremental revenue from the P2P PGP derived from changed feeding and animal health practices amongst AP members only gives an amount of \$8.2 million. This is nearly double the P2P PGP's aggregate expenditure as at the end of 2017. This suggests that the P2P could well be paying back its cash costs already.



Progress Review of the Primary Growth Partnership Passion2Profit Programme

Introduction

1. The Passion2Profit programme is a partnership between MPI and organisations that make up 95 percent of the industry including Deer Industry New Zealand (DINZ), New Zealand Deer Farmers Association, Alliance Group, Duncan New Zealand Ltd, Firstlight Foods, Mountain River Venison and Silver Fern Farms. The programme began in June 2015 and is budgeted to receive PGP funding from the Government of \$7.4m over its lifetime. Industry funding will slightly exceed this amount over the same period. As at December 2017, almost \$2.2m of Crown funding had been paid out. The seven year programme has started into its third year.

The progress review

Objectives of the review

2. The objective of this progress review is to provide the co-investors in the Passion2Profit PGP programme with an independent assessment of how the programme is tracking towards its goals as set out in the original business plan (and subsequent annual plans).

Scope

- 3. The seven year programme is half way through of its third year. This review is to assist the programme partners to make informed decisions for the programme's remaining four years. It will include a review of progress made in each of the projects that make up the programme (marketing premium venison and market-led production) and will make recommendations as to their future direction and funding priorities. The progress review includes investigation of:
 - Progress to date in the P2P's projects;
 - Project resources including contractors, staff and research providers;
 - Adequacy of programme funding to achieve targets;
 - Management, governance and reporting systems;
 - Expert advisory panel reports, recommendations and resulting actions;
 - Programme Outcome Logic Model and evaluation framework;
 - Internal and external factors affecting the programme's progress; and
 - Any unintended consequences whether positive or negative.



4. It also makes recommendations about changes that could improve the likelihood of the programme achieving its objectives.

Out of scope

5. An independent evaluation of research quality, the financial management of the programme, which was audited in July 2017, and the rationale for PGP investment in the programme are out of scope. Deer industry business strategies and activities not directly related to the Passion2Profit programme are also out of scope.

Reviewers

- 6. The reviewers (Peter MacIntyre and Steve Murphy) appraised a wide range of information about the P2P PGP, including:
 - Passion2Profit Business Case (2014) and Annual Plan updates (2015/16, 2016/17, 2017/18).
 - Management, advisory and governance structure
 - The programme's outcome logic model, baseline data and evaluation indicators.
 - PGP Agreement and subsequent variations.
 - PSG meeting minutes.
 - Quarterly reports.
 - Names of expert advisory groups used by the programme.
 - Expert review reports.
 - CINTA Practice Change Survey (2013 and 2018).
 - Survey of Advance Parties (2016)
 - Access to Experts review (2016)
 - Chefs' Attitudes to Cervena feedback (2014 and 2015)
 - Non-seasonal market trials results (2016 and 2017)
 - Cervena appellation documents.
- 7. The reviewers also interviewed a range of participants in the programme including a member of the Independent Advisory Panel (IAP), members of the Programme Steering Group (PSG), P2P Advisory Group (AG) and Marketing Working Group (MWG). Some deer farmers and Advance Party facilitators were also interviewed.

Methodology

8. This review involved desk-based review of programme documentation, including the business plan and annual plan updates, the PGP agreement and variations, progress reporting and relevant research reports, technical reports and audit reports.



- 9. Key stakeholders were interviewed using a semi-structured approach. These interviews included the programme manager, DINZ personnel, relevant contractors and consultants, Programme Steering Group members, P2P Advisory Group members and P2P Marketing Working Group members, MPI staff and a member of the PGP Investment Advisory Panel (IAP). Some stakeholders were interviewed face-to-face while others stakeholders were interviewed by telephone. We also attended governance and advisory group meetings Programme Steering Group (PSG), P2P-Advisory Group (P2P-AG), Marketing Working Group (MWG) in February.
- 10. We coded the notes from the stakeholder interviews and used these with the evidence from the document review to frame our overall findings. We used this approach to develop conclusions against each of the review questions, and validate the findings. We will incorporate feedback from the MPI Investment Manager, the P2P Programme Manager, and the PSG, P2P-AG, MWG into the final report.

PGP programme objectives

Economic targets of the 2014 Business Plan

- 11. The original Business Plan estimated that the P2P PGP would increase venison export¹ revenue to NZ by \$56 million per annum relative to 2014 export revenues. This benefit was forecast to result from changes in deer industry performance relative to the state of the industry at that time. A counterfactual or 'do nothing' scenario for the end of the 7 year period of the programme was also forecast.
- 12. It was predicted that by 2022 industry EBIT would have increased by \$34m per annum above business-as-usual levels. The NPV of the programme (benefits less costs, where costs included the costs of the project and of changes in farm management) was predicted to be \$90 million over the 7 year life of the PGP.
- 13. These benefits derived from assumptions about the production increases that would result from the P2P's initiatives. The Business Plan assumed that it would drive a significant turnaround in the long run decline in deer numbers depicted in Figure 1. It assumed that it was going to reverse this pattern and achieve an increase in hind numbers of 10 percent or 50,000 by 2022. This key assumption and others are set out in the table from the 2014 Business Plan shown in Figure 2 below.
- 14. With the benefit of hindsight this herd growth assumption was optimistic. The PGP would have to have achieved near instant results, across a material number of farmers, to have turned the decline around. Instead what has occurred is that the decline has continued although between 2016 and 2017 numbers have corrected with total deer increasing by around 15,000 (stags up 22,565 while hinds continued to fall by 7,659 between those two years).

¹ Free on board (FOB)



15. It is possible that three years on the Programme may have contributed to taking the edge of the declining pattern. But it is much more likely that the 15,000 increase between 2016 and 2017 has resulted from the historically high market prices for both velvet, (driving stag numbers up in particular) but also for venison².



Figure 1 NZ Deer Population (June year end)

Source: Statistics NZ

² See <u>https://deernz.org/step-change-venison-prices#.Wtu5IS5ubcc</u> or Stats NZ Infoshare Harmonised Trade – Exports, Venison and Velvet exports \$kg



Inductor (/D)	Year 0	Year 7	Year 7	P2P Change vs Yr 0	
Industry KPI	rear u	With P2P	Do Nothing	absolute	%
Hind Herd numbers	500,000	550,000	450,000	50,000	10%
Survival to Sale	72%	76%	72%	0	6%
Animals for slaughter	343,750	403,000	309,000	59,250	17%
Average Carcass Weight (Kg)	57	60	57	3	5%
venison production (CWE)	19,473	24,600	17,613	5,127	26%
% sold Chilled	25%	30%	25%	0	20%
% sold Frozen	75%	70%	75%	0	-7%
Chilled exports (CWE)	4,932	7,487	4,403	2,555	52%
Frozen Exports (CWE)	14,541	17,113	13,210	2,572	18%
Average Chilled revenue/MT CWE	\$11,538	\$11,586	\$11,551	48	0.4%
Average Frozen revenue/MT CWE	\$9,967	\$9,987	\$9,978	19	0.2%
Chilled revenue	\$56,905,727	\$86,743,895	\$50,861,941	\$29,838,168	52%
Frozen revenue	\$144,934,974	\$170,899,491	\$131,806,886	\$25,964,517	18%
Total Revenue	\$201,840,701	\$257,643,386	\$182,668,826	\$55,802,685	28%

Figure 2 Business Plan Key Performance Indicators

Source: Business Plan 2014, pages 5 and 26³

Reset of Economic Targets in 2017

- 16. The initial projections of the potential economic benefits listed in Figure 2 were based on an estimate of what the hind herd number would be at the start of the programme in June 2015. The release of official statistics in 2017 for deer numbers as at June 2015 showed a decline in the hind herd, with it estimated at 430,500 compared to the figure of 500,000 used in the projections. This necessitated a reset of the assumptions used in the 2014 Business Plan projections. This took place in October 2017. We understand that the IAP was also very keen to see a clear statement of the incremental benefits of the programme.
- 17. The 2017 reset stated that the earlier forecasts were based on an expectation of a stable hind herd but a more protracted fall in numbers had occurred. The reset projections are shown in Figure 3 below. They did not include the full EBIT and NPV analysis done for the 2014 Business Plan.

³ This assumes an average NZD-Euro exchange rate of 58 Euro cents per dollar, which was lower than 2014 rates, but in-line with long-run averages. In 2018 the rate has averaged around 59 Euro cents. The business plan noted that assuming higher NZD exchange rates would reduce the revenue benefits. If the exchange rate were 63 Euro cents per dollar total revenue benefits would fall to \$38 million in year 7.



Industry KPI	Year 0	Actual Year 7		New Year 7		
industry RFI	Tear	2015/6	real /	Abs	Change	
Hind Herd numbers	500,000	430,500	550000	480,500	50,000	
Survival to Sale	72%	72%	76%	76%	4%	
Animals for slaughter	343,750	297,045	403,000	352,075	55,030	
Average Carcass Weight (Kg)	57	55.5	60	60	5	
venison production (CWE)	19,473	16,486	24,600	21,125	4,639	
% CWE destined Chilled	25%	25%	30%	30%	5%	
% CWE Destined Frozen	75%	75%	70%	70%	-5%	
Chilled exports (CWE)	4,932	4,121	7,487	6,337	2,216	
Frozen Exports (CWE)	14,541	12,364	17,113	14,787	2,423	
Ave Chilled revenue/mt CWE	\$11,538	\$12,083	\$11,586	\$ 12,131	\$ 48	
Ave Frozen Revenue/mt CWE	\$9,967	\$10,562	\$9,987	\$ 10,582	\$ 20	
Chilled revenue (CWE)	\$56,905,416	\$39,549,666	\$86,744,382	\$76,878,194	37,328,528	
Frozen revenue (CWE)	\$144,930,147	\$145,847,538	\$170,907,531	\$156,477,614	10,630,076	
Total FOB Revenue	\$201,835,563	\$185,397,204	\$257,651,913	\$233,355,808	47,958,604	

Figure 3 Reset Business Plan Value Drivers

Source: July to September 2017 Quarterly Report, Page 17

- 18. The key change in Figure 3 was a new hind herd count based on the June 2015 actual population of 430,500. This was lower than the counterfactual or 'do nothing' option in the original Business Plan (Figure 2) which was predicted to reach a low of 450,000 hinds and down by nearly 70,000 on the 2014 Business Plan starting population. Other material changes were a decrease in the starting value of the number of animals forecast to be slaughtered annually. The actual 2015/16 number was 297,045 down 46,705 from the original 2014 Business Plan estimate of 343,750. These changes flowed through into lower venison production (CWE) and lower chilled and frozen exports (CWE). However, these falls in volume were partially offset by a predicted increase in the 2022 forecast average carcass weight which rose from being 3kg heavier than in 2014 to being 5kg heavier.
- 19. Separating out the small contribution of the P2P PGP to herd numbers, animals slaughtered etc, from changes driven by market prices is a daunting challenge. It may have been more realistic to have targeted some small percentage of the changing deer herd as being driven by the Programme. In the situation of declining stock numbers this could have been expressed as a lesser decline than would have occurred if the Programme had not been put in place. This approach could then be validated against survey data collected as the PGP's initiatives were rolled out.
- 20. As the P2P's efforts become more embedded and start to change practices, there is likely to be some small positive effect on the volume of venison available for export. We examine what this effect might be, and what other benefits may actually have accrued from the P2P PGP, after our review of the Programme's milestones and the surveys of deer farmers in the section Possible economic benefits of P2P PGP to date.
- 21. At the time of the forecast reset it was noted that the volume of venison available for export on a carcass weight basis (CWE) did not convert directly into actual product weight exported in chilled form. This is because bones, fat and sinew are removed from nearly all venison cuts. A saleable meat yield of approximately 60 percent was therefore used. So in Figure 3 the 2,216 tonnes (CWE) is equivalent to 1,300 tonnes product weight exported without the bones, fat and sinew.



22. The net result of the reset presented in Figure 3 was that the expected incremental annual export revenues that the P2P programme was expected to deliver, fell from \$56 million to \$48 million. This would have also lowered the level of estimated EBIT and NPV but these were not reforecast at the time.

PGP's Value Drivers

- 23. We do not believe that the Programme can claim benefits from all changes in stock numbers. However, putting this to one side, we have attempted to break down the P2P PGP's value drivers to better understand where its value might come from.
- 24. We did this by taking the new 2022 target of \$48 million in annual incremental export revenues at face value and examining the effect of making a change to each value driver individually to observe its impact on achieving the \$48 million⁴. For example, we took the assumption of a 50,000 increase in stock numbers driven by the PGP from Figure 3 (11.6 percent increase on the 2015/16 actual herd numbers) and applied that to animals for slaughter to estimate its unique effect. We then did the same for increased survival to sale etc. In descending order of importance the key value drivers were:
 - A 34,500 or 11.6 percent <u>rise in hind herd numbers</u>. We estimated that this was responsible for approximately \$21 million per annum or 40 percent of the \$48 million per annum in increased revenue by 2022.
 - The <u>increase in average carcass weight</u> of 5kg from 55kg to 60kg (9 percent). We estimated that this explained around \$16 million per annum or 31 percent of the \$48 million per annum in increased revenue by 2022.
 - The <u>increase in survival to slaughter</u> by 4 absolute percentage points from 72 percent to 76 percent. We estimated that this accounted for around \$11 million per annum or 21 percent of the \$48 million per annum in increased revenue by 2022.
 - <u>Increasing the average loin size</u> of deer by 1 percent from 8.5 percent of carcass weight to 9.5 percent. The 2014 business plan estimated that this would yield \$3 million per annum or about 6 percent of the \$48 million per annum in increased revenue by 2022.
 - The <u>switch of the proportion of production that was frozen vs chilled</u> from 75 percent frozen and 25 percent chilled, to 70 percent frozen and 30 percent chilled only accounts for \$1.3 million per annum or around 2.4 percent of the \$48 million per annum in increased revenue. The main reason for this was that the increase in chilled revenue by \$10 million per annum was nearly offset by the decrease in frozen revenue by \$8.7 million per annum.

⁴ The reset of the annual incremental export revenue target did not include recalculation of EBIT or NPV. Note it was not possible to unpick cross effects between the P2P PGP's value drivers because the original modelling used macros which we did not have access to.



- Finally it was assumed that <u>prices</u> were static. The differences in prices between year 1 and year 7 were driven by improvements in carcass composition. This change in carcass composition, expressed as average chilled revenue/MT CWE and average frozen revenue/MT CWE, accounted for less than \$0.5 million per annum or less than 1 percent of the \$48 million per annum in increased revenue by 2022⁵.
- 25. The following pie chart breaks out the contribution of the main value drivers to achieving the increase in export revenues of \$48 million per annum by 2022⁶.



Figure 4 Value drivers of P2P Programme

Source: Business Plan 2014, pages 5 and 26

26. Figure 4 provides an interesting perspective on the P2P's objectives. Value drivers that increase the volume of product (herd numbers, survival and weight) are by far the most important followed by an improvement in quality (proportion of loin in the carcass). Based on the assumptions in both the reset and the Business Plan, the switch in the proportion of frozen vs chilled production is a minor contributor.

⁵ Chilled prices in 2014 were assumed to be \$12.08/kg and be \$12.13/kg in 2022 for chilled and for frozen the price was \$10.56/kg in 2014 and \$10.58/kg in 2022.

⁶ The business plan also assumed a range of other improvements that would contribute to the incremental revenue, EBIT and NPV including better feed efficiency, less peaky supply to processors, lower environmental footprint, less pressure to convert to farming activities with a greater environmental footprint and flow on benefits to the rural sector. These are summarised in Appendix 1.



Chilled Price Premium over Frozen

- 27. While the proportion of frozen vs chilled production only makes a small contribution to the value expected to be derived from the P2P PGP, it was believed to have had a wider strategic value as described in the 2014 Business Plan⁷. It stated that historically a lot of NZ venison was frozen and stored for many months before being traded as an undifferentiated commodity. NZ had therefore suffered from the risks inherent in the narrow market focus which had occurred because of European economic and currency weakness. It argued that this had dragged returns to most deer farmers below those of alternative land uses causing the national deer herd to fall from its peak of 1.7 million deer to near 1 million.
- 28. The 2014 Business Plan illustrated the temporal mismatch of supply and demand in Figure 5 below.



Figure 5 Supply and Demand Mismatch

Source: 2014 Business Plan, Page 7

- 29. The 2014 Business Plan also noted that the temporal mismatch of supply and demand destroyed a lot of value for the industry because product was frozen, traded, stored as a commodity when there are existing consumers who already valued it as a premium product and likely other consumers who would do likewise⁸. Therefore a key objective of the Marketing Premium Venison arm of the PGP was to "increase the amount of venison sold in chilled form, year round, at higher prices through collaborative branding and positioning of NZ venison in new markets or new market niches?".
- 30. Figure 5 shows about a \$1 per kg difference between the high point of the average 5 year AP stag schedule price and its low point a 14 percent differential. Similarly, the forecast prices underlying the reset Business Plan assumptions in Figure 3 show a chilled premium of about \$1.50/kg over frozen a 15 percent differential. This low differential results in increased chilled revenue being nearly offset by decreased

- ⁸ Ibid, Page 7
- ⁹ Ibid, Page 2.

⁷ 2014 Business Plan, Page 1.



frozen revenue. Based on this analysis, the focus on increasing chilled compared to frozen exports is not a particularly compelling value driver for the programme.

- 31. Moreover, it is not always costless to change the timing of production of chilled venison compared to frozen. Additional costs of production may occur if the chilled venison is produced earlier, outside the normal slaughter season, for example providing additional feed to reach target weights earlier in winter or holding finishing weaners later. The 2014 Business Plan stated that 'costs of the project and of changes in farm management' were taken into account in the original Business Plan estimates of net EBIT and NPV benefits¹⁰. However, given the small price margin of chilled over frozen product assumed in the 2014 Business Plan and the 2017 reset it would not take many costs or changes in those costs to negate the revenue benefit of this strategy.
- 32. However, Statistics NZ data on FOB export prices per kg suggest some margins exist at least at the average price of chilled vs frozen exports FOB by country. Figure 6 below illustrates the average percentage price premium of chilled over frozen venison \$FOB/kg for the top six venison markets by FOB value in 2016. None of the chilled to frozen price differentials is less than 34 percent.



Figure 6 Price Premium of Chilled over Frozen Venison

33. The Programme Manager has explained that average FOB per tonne values were problematic because they did not compare the price for like for like cuts. An example being that the majority of chilled venison going to the USA was middle cuts which had a higher value, while the majority of frozen venison was trim which had a

Source: Statistics NZ

¹⁰ Ibid, Page 16



lower value. The 2014 Business Plan financials and the 2017 reset took the value back to the carcass because only 25 percent of the carcass might be exported chilled during the 'chilled' season' and only 10 percent during the off season. This made the average carcass value difference small, even though the difference in the value of a chilled leg and a frozen leg could be much greater¹¹.

34. In our view the focus on chilled vs frozen compared to other value drivers, such as increasing volumes or survival rates, and the flow on effects of this to the P2P PGP and its priorities needs to be investigated further. The best way to do this might be to review the 2017 reset export revenue financials and rerun the EBIT and NPV assumptions¹², to tease out some of the key assumptions about where the P2P PGP's value lies.

Output logic model

35. The P2P PGP's output logic model (OLM) set out in summarised form the activities and outputs that the PGP would pursue. These are shown in Figure 7 below.

Figure 7 Outcome Logic Model Activities & Outputs



Source: P2P PGP

36. The OLM activities and outputs were expected to result in the following short term outcomes being achieved by 2018.

Figure 8 Outcome Logic Model : Short term outcomes



Source: P2P PGP

37. In the following sections 'Marketing premium venison' and 'Market led production' we examine the P2P PGP's activities and outputs and map out the specific objectives of its milestones and explore the progress made to date and whether the short term objectives shown above in Figure 8 have been met.

¹¹ Programme Manager's email of 23 April 2018.

¹² These were calculated in 2014 for the Business Plan but not in 2017 for the Business Plan reset.



Marketing premium venison

Sub-project 1 (formerly 1.1) : Confirm market requirements

- 38. This sub-project involved the co-investing marketing companies agreeing on a number of new markets where a differentiated venison brand could be sold, a new tested brand concept introduced and then confirmation of the markets' requirements. Research was also to be undertaken to confirm the most appropriate markets for the non-traditional positioning of venison, and quality criteria agreed in line with those markets' requirements.
- 39. The 2014 Business Plan targeted the development of 4 new, non-seasonal markets, with a target of circa 300 tonnes per new market by 2022¹³. Sub-project 1 was forecast to account for 11 percent of the PGP's budget for the year in the Annual Plan for 2017/18 (1 October to 30 September).
- 40. The Business Plan set out a number of milestones under this heading which were to be completed by December 2016¹⁴.

Milestone 1.1.1 : Confirm market entry strategies and market potential

41. Under this milestone the 2014 Business Plan explained that the marketing companies were to agree on the target markets and confirm that the potential exists to justify their development. The Marketing Working Group (MWG) was to be formed and appoint a person to do this work. The MWG was to agree criteria for assessing target markets for the introduction of a new and non-seasonal venison brand. The criteria were to include attitudes to exotic meat, market access, competition, retail prices for quality meat and the suitable paths to the consumer. Initial markets were thought to be niches within European countries that had high disposable income and an affinity with exotic meat along with channels that offered opportunities to expand non-seasonal sales. Marketing Working Group (MWG) was formed in March 2015.

Milestone 1.1.2 : Market research into consumer attitudes in new markets

42. The Business Plan stated that new markets were to be collaboratively identified. The opportunity to export to China, which was approved in 2014¹⁵, was to be explored. However, it was thought that the Chinese market would be challenging. Market research was to taste test with consumers, explore venison health attributes, what words are most appropriate and what channels existed. It was noted that venison was neither popular nor widely eaten in China. The MWG decided sufficient potential existed to introduce the product range to China in early 2015.

¹³ See page 20 of "6.9 Passion2Profit Quarterly Report Jul-Sept 2017.pdf" which is report of Meeting of the Passion2Profit Programme Steering Group, 24 October 2017

¹⁴ This assumed a start date of October 2014. See 2014 Business Plan page 56

¹⁵ Seven venison processing plants received approval to export to China in 2014. These covered the majority of NZ venison production.



Milestone 1.1.3 : Brand concept development for new markets

43. The co-investors were to use international brand development research agencies to develop a venison brand concept for the new market's segments by December 2015¹⁶.

Milestone 1.1.4 : Product development for new markets

44. Product development choices were to be tackled e.g. packaging, cut specification and product type. The option of developing new products was also considered by the MWG and decisions were to be made by July 2016. It would appear that this did not occur due to differences of opinion about the value of developing the market in China¹⁷.

Milestone 1.1.5 : Develop market pilot for new markets

45. All going well, the MWG was to agree a pilot market programme to test the appeal of the brand concept in the new market. This would involve a promotion campaign to support the sales of the new brand, and engagement of a locally based agency with appropriate skills, connections and knowledge. Selection of this local market partner(s) was identified as very important. The pilot's success would be assessed against sales volumes, prices achieved, customer feedback and certainty of returns etc. This milestone was to be completed by July 2016¹⁸.

Milestone 1.1.6 : Implement market pilot for new markets

46. The pilot was to be implemented between March and December 2016. The coinvestors would supply venison for the new market to the new brand's specifications. A targeted promotion programme was to be launched to support sales. It also involved finding a person to do trial marketing activities, scoping the potential of working with individual companies in the Chinese cuisine sector, and selected distributors to the western restaurant sector. This would involve menu development and testing with venison dishes and product development of any new venison cuts. At the end of the pilot it was expected that there would be a clear understanding of market channels in selected cities and the potential for venison in selected Chinese cuisine sectors.

Milestone 1.1.7 : Research consumer attitudes toward non-seasonal sales concept

47. The 2014 Business Plan explained that a number of markets could be attractive for developing growth of non-seasonal sales. It was planned that customer research would be conducted to approve the brand concept. A local representative would be

¹⁶ It is unclear from the four quarterly reports covering the period between March 2015 and March 2016 whether this was completed.

¹⁷ See quarterly reports from March 2015 to October 2016. The latter noted that this milestone had not yet commenced. The RAG Activity Tables in the earlier reports indicated that it was due to be completed by December 2015.

¹⁸ Consistent with milestone 1.1.4 it would appear that milestones 1.1.5 and 1.1.6 were not completed due to differences of opinion about the value of developing the market in China.



tasked with collecting research about potential volumes, prices etc from the value chain and from consumers.

Milestone 1.1.8 : Product development for non-seasonal sales

48. If milestone 1.1.7 succeeded then the MWG would agree to product specifications such as product range, packaging, cuts etc by March 2015.

Milestone 1.1.9 : Develop market pilot for non-seasonal sales

49. All going well a market pilot would be developed by a marketing partner. That partner would ideally be a food service distribution company that had the reach and breadth of customers to serve the majority of the restaurants/food outlets in the target segment of the selected market. The co-investors were to put in place a structured process to assess each market's merits and to agree on a trial market.

Milestone 1.1.10 : Trial market pilot for non-seasonal sales

- 50. With a trial marketing partner appointed a resource was to be engaged to implement the agreed trial marketing and promotion programme. The 2014 Business Plan intended that a resource be placed in a marketing partner. This person would promote the new brand concept to the targeted customers, and would be supported with the targeted brand promotion. The MWG would assess the success of this trial and make a call about continuing it by July 2015.
- 51. By the time of the 2016/17 Annual Plan a number of these milestones had been completed and those remaining were restructured as follows:
 - <u>1.1 Marketing Premium Venison Governance</u> which essentially covered the costs of the MWG.
 - <u>1.4 Marketing Premium Venison: New Markets Marketing Pilot (China)</u>. This activity was designed to help achieve collaborative sales of 500 tonnes of venison in the New Market's segments by year 7 (2022). This target was an increase on the 2014 Business Plan target of circa 300 tonnes per new market by 2022 in 4 new, non-seasonal markets.
 - <u>1.5 Marketing Premium Venison: Non-Seasonal Markets Confirm market</u> <u>requirements</u>. This milestone aimed to explore opportunities to increase sales of venison outside the main European game season in a market other than the Benelux. The purpose was to extract chilled price premiums and lower reliance on frozen sales.
 - <u>1.6 Marketing Premium Venison: Appellation Development.</u> The objective of this milestone was to mitigate the major costs in product differentiation and new market development. This was to be achieved by collaborating, as had happened in developing the Cervena appellation, which had allowed differentiation alongside marketers' own brands in the US, Australian and NZ markets. In 2016 the venison marketing companies had agreed an approach for the use of the Cervena appellation in the Benelux summer promotion. They also agreed to refine the appellation for use in collaborative markets, by confirming the best contemporary positioning and the rules of its use.



- 52. The 2016/17 Annual Plan reported that the P2P PGP had scoped 6 markets in 2015, one more than the plan to scope 5 new markets that year¹⁹. The OLM's short term outcome of 'New markets identified for New Zealand venison' was met in so far as the more markets than targeted were scoped. However, the plan for a pilot marketing programme under a common brand in China in year 2 (calendar 2016) did not take place²⁰. The reason for this was that consumer research highlighted reasons for reluctance to embrace venison among Chinese diners, so the MWG and PSG felt it would not succeed. The marketers and NZTE did however continue with market and product development work, along with Chinese based distribution partners, to continue to try to find suitable products and channels in China funded by DINZ and NZTE. So the 2014 Business Plan milestones 1.1.1 to 1.1.6 which had focused on China did not move to the market pilot phase. Project 2.3 b New Market Launch was therefore delayed with a consequent reduction in resources for this project.
- 53. New market research was to continue in 2016/17 into a second new market to allow marketing companies options for collaborative market development if opportunities in China did not progress further.
- 54. The 2017/18 Annual Plan defined the year's activities as follows:
 - <u>Project 1. Marketing Working Group.</u> Funding for this as in 2016/17.
 - <u>Project 1.2 New Market Research</u>, this was designed to allow individual companies to do some initial investigation of markets before all companies agreed to jointly supply venison. This only applied to initial feasibility studies of niche markets: as agreed by the MWG, if they promoted shared attributes of NZ venison and were open to all parties. The objective of this project was to explore two new niche market opportunities per annum.
 - <u>Project 1.4 Marketing Premium Venison: New Markets Marketing Pilot</u> (China), After initial research has highlighted reluctance among Chinese diners about venison; further investigation was undertaken. At the time of the 2017/18 Annual Plan the next step was to focus on creating demand for NZ venison in the western restaurant segment in Shanghai. It targeted a report to the PSG by June 2018 which would set out the opportunity for effective positioning messages for NZ venison in Shanghai for all the parties.
 - <u>Project 1.6 Marketing Premium Venison: Appellation Development.</u> As with the 2016/17 Annual Plan, this involved further unified development by the parties of the Cervena appellation for future cooperation new venison markets.
- 55. The January to March 2017 Quarterly Report described progress in Sub-project 1 as development of the framework to use Cervena[™] as a modern appellation that

¹⁹ P2P 2016/17 Annual Plan, Page 3

²⁰ Ibid, Page 5



augments individual company brands. However, it had not been possible to reach final agreement due to the differing needs of the individual businesses²¹.

- 56. The marketing companies were reviewing results of the China trial but it was reported that it seemed unlikely the MWG would agree on a collaborative marketing pilot there²² (This reference appears to have been out of date because the China trial was reported to have not taken place in the September 2016 2016/17 Annual Plan). The January to March 2017 Quarterly Report also mentioned that chef workshops had also been held in Shanghai in cooperation with NZTE along with preparation of training materials for using venison in Chinese cuisine.
- 57. The marketing companies also agreed to start New Market #2 research into two online US health food markets but consensus could not be reached on this approach therefore was not pursued further²³.
- 58. The April to June 2017 Quarterly Report only flagged a few changes compared to the earlier quarter. These were to note that the collaborative marketing pilot in China was on hold as the MWG did not agree on the continuation of market development activities. However, the group were interested in continuing market research into the long term opportunity there. Agreement on form and function of the Cervena appellation were also identified, and development of brand guidelines and instructions for use commenced.
- 59. By the July to September 2017 Quarterly report the Cervena Pure Freedom guidelines had been agreed and the new messaging and visual identity was to be scoped and developed. The research on the two on-line US health food markets highlighted the low cost of protein supplements, and the crowded nature of this market. However, it identified potential among protein deficient segments of the population.²⁴ In addition, the 2017 SFF trial to test Cervena through selected outlets in Germany was completed. At this time Alliance was planning to test the German market in 2018.
- 60. The co-investors' marketers had agreed on investigation into the US health food sector and also into the co-products market by the October to December 2017 Quarterly Report. In addition, research into the Chinese market continued with the MWG approving research to confirm a marketing message hierarchy for Chinese chefs working in western restaurants in Shanghai. There was, however, a delay in the design phase of the Cervena promotional material for 2018 with the due date shifting from January 2018 to April 2018.
- 61. The initial plans for 4 new markets each taking 300 tonnes of venison per annum by 2022 appears unlikely to be achieved at this time. Given the call not to proceed to a pilot in China, the 2016/17 Annual Plan target of collaborative sales of 500 tonnes of venison there by 2022 seems unlikely as well.

²¹ January to March 2017 Quarterly Report, Page 13.

²² Ibid, Page 14

²³ Ibid, Page 42/43

²⁴ July to September 2017 Quarterly Report, Page 40



62. Figure 9 shows the progress of the PGP's market development efforts measured in tonnes per market targeted vs actual tonnes sold. The actual tonnage sold has not met expectations in the 3 years where actual data is available. This has been explained as due to much stronger demand for New Zealand venison in traditional markets and lower supply due to reduced deer numbers. However, the marketing companies have developed opportunities in Benelux, and the single firm operating in German exceeded its target of 30 tonnes sold in 2017. Although there has been no pilot in China research continues there. In addition the five venison marketing companies have agreed to explore opportunities in the North American protein market.



Figure 9 P2P PGP Market Targets vs Actuals (Tonnes)

- 63. It seems very unlikely that in the current constrained supply situation that actual sales will increase 12 fold in the remaining 3 and a half years of the PGP to reach 1,200 tonnes (4 new markets each taking 300 tonnes of venison per annum). 97 tonnes of cooperative Cervena sales is just a starting point in the context of total provisional venison exports for the year ending September 2017 of 12,000 tonnes (The PGP's cooperative sales represent 0.75 percent of total exports).
- 64. We note that the October to December 2017 Quarterly Report outlined an achievement measure 1.2.2 in which the PSG were to receive two reports on niche markets with MWG recommendations for further action by September 2018. More investigation could throw up new opportunities. However, the current market is characterised by high demand and constrained supply for venison. It may therefore be wiser at this point to only proceed into new market development where there is clearly a very good likely return. However, the current state of the market is likely to change over time. If supply did increase over the next couple of years further expansion could be scoped but would have to be developed either privately by the

Source: P2P PGP



marketing companies or assisted by Government funds if a programme similar to the PGP replaced the existing PGP from 2022.

Sub-project 2 (formerly 1.2) : Joint marketing structure

- 65. In the 2014 Business Plan this Sub-project involved setting up a collaborative marketing and selling approach to run from July 2015 to December 2022. It was broken down into three milestones as set out below.
- 66. Sub-project 2 was forecast to account for 25 percent of the PGP's budget for the year in the Annual Plan for 2017/18. This is the single largest expenditure on any milestone.

Milestone 1.2.1 : Establish marketing structure governance

67. The 2014 Business Plan explained this milestone as relying on the private coinvestors agreeing on ownership, representation and disbursement of costs and benefits in a way that allowed efficient and effective management of the PGP. It was forecast to take between November 2014 and March 2019 to achieve this. Tax and competition advice was to be sought for NZ and any markets into which the product was to be sold. The terms of any use of collectively owned IP assets (such as Cervena imagery) were also to be agreed as well as the allocation of marketing effort.

Milestone 1.2.2 : Implement joint marketing structure

68. This milestone involved choosing marketing partner(s) to deliver marketing programme(s) for non-seasonal niches and new markets. Implementation was to include appointing a marketing resource and developing a promotional programme. It was envisaged that this would take place between December 2015 and June 2020. Once the first marketing programme was established in a non-seasonal market the plan was that it would be reviewed annually and if successful rolled out into subsequent market channels annually for the first three years of the programme. Each roll out would require research to confirm the emphasis of the new brand's values for each new market, and then a marketing programme to support its introduction. On-going marketing support would be required in each.

Milestone 1.2.3 : Agree selling and distribution agreement

- 69. How the venison was to be delivered was to be determined by market requirements and the structure agreed among the co-investing exporters by November 2015.
- 70. By the time of the 2016/17 Annual Plan these milestones had been completed or restructured into the following:
 - <u>2.3a Marketing Premium Venison: Non-Seasonal Promotion (Use Joint Marketing Structures)</u>. Under this milestone the venison marketing companies worked together to increase demand for NZ venison in the Benelux over the summer months. Only generic promotion of Cervena, rather than individual company brands, was reimbursable by the PGP. The aim at the time was to sell 120 tonnes of chilled venison as Cervena from January to August in the Benelux. Given the 2017 Benelux target of 90 tonnes shown in Figure 9, this target appears to have been subsequently revised downwards.



- <u>2.3b Marketing Premium Venison: New Markets Launch (Use Joint Marketing Structures)</u>. This milestone depended on progress with the Chinese marketing pilot milestone 1.1.4. If marketing companies had agreed on the feasibility of a joint marketing structure in China, this milestone would have set up a joint marketing structure to promote shared attributes of premium NZ venison there.
- 71. The progress reported for Sub-project 2 as set out in the January to March 2017 Quarterly Report was that there was an agreement by venison marketing companies to increase volume targets for the 2017 summer Cervena programme, the addition of a 4th NZ exporter to the Benelux programme in 2017 as well as the parties agreeing to introduce Cervena to Germany to boost the summer promotion. The companies were targeting a sales volume of circa 80 tonnes and positive market feedback on continuing to sell Cervena in the summer in the Benelux. Figure 9 would suggest that this target was revised up to 90 tonnes with 30 tonnes set for the Germany market.
- 72. The 2017/18 Annual Plan written in August 2017 defined the year's activities under Sub-project 2 as follows:
 - <u>Project 2.3 Marketing Premium Venison: Non-Seasonal Promotion (Use Joint Marketing Structures).</u> Under this activity the parties continued to work together to increase demand for NZ venison in the Benelux and Germany over the summer months with the aim of exporting 150 tonnes of Cervena chilled venison between January to August in the Benelux and Germany. This is materially lower than the target shown in Figure 9 of 230 tonnes (120 for Benelux, 80 Germany and 30 China). The trial of non-seasonal Cervena in the Benelux continued while a trial of it as a summer option in parts of the German food service market was to be expanded.
- 73. The following quarterly report for April to June 2017 noted that the collaborative marketing pilot in China was on hold under the milestone 'Establish Marketing Governance Structures' 2.1.1 b.
- 74. The July to September 2017 Quarterly Report explained that the third year of the Benelux trial had ended and 58 tonnes had been exported, which was short of the target of 80 tonnes (Figure 9 sets 90 tonnes). The short fall was put down to a combination of price resistance, constrained supply and less active promotion on the part of some distributors.
- 75. Planning activities for summer 2018 promotions into the Benelux and Germany were underway by the time of the October to December 2017 Quarterly Report. 2018 would be the 4th year of non-seasonal collaborative market development in the Benelux by the 4 trail participants and the second year in the German market by a single company with no second company joining that effort at that point in time. That report also noted that the original volume targets would be difficult to achieve given supply constraints.
- 76. The original Business Plan objectives of setting up a formal joint marketing structure and selling and distribution agreements was not able to be achieved. However, despite this, the less formal current arrangements have achieved a level of cooperation that the marketing companies all see as positive. The regular MWG



meetings have allowed the parties to air their opinions and, in the main, thrash out a common position built on the Cervena appellation. The commonly held view was that this level of cooperation would not have been possible without the P2P PGP. If, for example, the parties had tried to develop the Benelux market as sole traders would have been less successful.

- 77. It is understandable that limited supply and high demand have resulted in sales volumes for 2017 being 27 percent below expectations. The market has remained tight into 2018. Unless there is a radical change in market conditions it seems very unlikely that the markets in which the P2P parties are currently cooperating will achieve 300 tonnes per annum by 2022.
- 78. Figure 10 and Figure 11 show chilled and frozen average FOB prices per kg. These statistics unfortunately average away the detail of which cuts are going to which markets and at what price, for example the USA figures may be influenced by the mix of middles vs mince. However, they do suggest that the focus in the Netherlands and Belgium is sensible given the better FOB/kg returns available there. It might be of value to understand what is driving the Swiss market better as it accounted for 8 percent by FOB value of total NZ venison exports in 2017.



Figure 10 Chilled Average FOB Prices/Kg in main markets

Source: Stats NZ





Figure 11 Frozen Average FOB Prices/Kg in main markets

Source: Stats NZ,

79. In these circumstances ensuring that existing markets receive the quantities needed to ensure enough scale to continue to be visible in competitive European red meat markets may be more important than developing new market niches. This depends on the value of any prospective markets relative to existing markets. However, at this point it may be better to consolidate market expansion efforts and properly bed down the markets in which the P2P PGP is currently cooperating e.g. Benelux and Germany, before continuing in the drive to open more opportunities.

Sub-project 3 (formerly 1.3) : Develop processor-related and onfarm standards

- 80. At the time of the 2014 Business Plan the aim of this sub-project was to ensure that the new brand concept was consistently supported by product, processing and production standards that fulfilled customers' expectations. However, unnecessary and costly compliance requirements for farms or processing and marketing companies were also to be avoided.
- 81. It was expected that current Industry Agreed Standards for Processing would be merged with existing proprietary Farm Assurance programmes, and any gaps in these would be addressed and any unnecessary elements deleted. This sub-project was to be undertaken between October 2014 and March 2019.
- 82. Sub-project 3 was forecast to account for 3 percent of the PGP's budget for the year in the Annual Plan for 2017/18. The longer term objective set out in the 2014 Business Plan was to have market led standards complied with by 95 percent of farmers and 100 percent of processors by 2022.

Milestone 1.3.1 : Develop related product and on-farm standards

83. The purpose of this milestone was to agree product standards for venison that provide the market with certainty of production methods, quality and provenance in the period from the programme's inception to March 2019. This would underpin



the marketing and brand story for non-seasonal, premium and non-traditional markets.

- 84. At the time of the 2014 Business Plan the deer industry did not have a national quality assurance programme. The P2P programme was to achieve a single standard. These on farm standards would include environmental, welfare and management practices and the use of electronic identification to ensure traceability and age verification.
- 85. In 2014 the deer industry operated a single quality standard for venison slaughter and processing, which established rules for processing venison. New market requirements would be assessed and criteria for pH, tenderness and aging processes would be developed. Practical enforcement and administration were also to be agreed. DINZ was to administer the scheme.

Milestone 1.3.2 : Implement standards

- 86. Auditing of the standard was to be integrated into the existing company QA procedures, or introduced if companies did not already have them²⁵. It was envisaged that a publicity and awareness programme would be needed. It was also planned that a testing phase would be needed to ensure achievable standards and workable audit procedures, before full implementation. Each private co-investor was to decide how to incentivise compliance and a standards working group would review and modify the standards over time.
- 87. A single standard for deer farming the DeerQA On-Farm Industry Agreed Standards has been agreed by venison marketers and processors. Compliance with this standard is necessary for the supply of deer to the Cervena programme. DINZ has worked with the Red Meat Profit Partnership (RMPP) to align and include the deer farming standard with the RMPP New Zealand Farm Assurance Programme (NZFAP) ²⁶.
- 88. The RMPP NZFAP was launched on 1 October 2016. Venison marketing companies have agreed that, from 1 October 2016 Cervena venison must be sourced from farms that comply with the Deer Industry Standard for on-Farm Quality Assurance²⁷. This is being implemented over three years. The venison processing and marketing companies are responsible for on-farm audits of compliance with the standard.
- 89. As at August 2017 the marketing and processing companies were working with these standards as follows:
 - Silver Fern Farms, has implemented a single standard.
 - Alliance, enhancing its existing AGL programme

²⁵ It was thought that it may be necessary to use an independent third party audit system for added credibility.

²⁶ The RMPP NZFAP includes ten red meat industry partners and the Government working to increase profitability and productivity in the red meat sector via audit and certification of sheep, beef and deer farms.

²⁷ Cervena requirements do not specify which QA programme venison marketing companies must use, however, it must be equivalent to the Deer QA Standard.



- Mountain River Venison, tentative introduction from September 2017
- Duncan NZ, tentative introduction from September 2017
- Firstlight Foods, Using its own QA programme, agreed to transition to NZFAP.
- 90. To encourage uptake of the QA programme a Quality Assurance Deer Fact was sent also to all known deer farmers in August 2017, which was supported by a mail-out and print advertising.
- 91. The October to December 2017 Quarterly Report noted that all companies were implementing on-farm QA for venison production to the equivalent of the DeerQA on-farm standard and the roll out of audits across suppliers was underway. The future focus for this milestone was to be focused on improving farmer awareness and uptake and encouraging producers to use QA. Discussions on product raising standards are also on-going and to be reviewed by July 2018²⁸.
- 92. This milestone suffered delays early in the P2P PGP due to efforts to coordinate with the RMPP initiative. However, given its objective of reaching agreement on a benchmark standard, accepting the delay to widen the ambit of that agreement was a logical decision. The P2P's Producer Manager told us that farmers are welcoming the coordination on standards. The OLM does not have a short term outcome focused on this milestone. Given it is a key linkage between the market side of the P2P and the production side, it may be worth considering including some outcome in the OLM that targets take up of QA standards.
- 93. A report by the Programme Manager of July 2017 on 'Deer On-farm QA uptake' reported that 16 percent of deer farms were audited against a quality assurance standard and that covered 30 percent of farmed deer. The Detailed Status Update in the July to September 2017 Quarterly Report stated that the PGP was on track to meet its objective of having 20 percent of deer farmers compliant with the QA programme by end of year 1. However, it is unclear when that year was up. A excel file sourced from the Programme Manager titled 'P2P Measurements Data Summary' graphed a target of 70 percent QA farmer compliance by 2022. This is down from the 95 percent of farmers targeted in the 2014 Business Plan.
- 94. After a slow start this milestone appears to be gaining momentum. The venison processing and marketing companies ensuring that Cervena venison must be sourced from farms that comply with the Deer Industry Standard for on-Farm Quality Assurance will help drive compliance up from the current 16 percent achieved in July 2017. According to the Programme Manager's update on 'Deer On-farm QA uptake' in the July to September 2017 Quarterly Report, DINZ had requested a report from AsureQuality on numbers of farms with deer, and numbers of deer farms currently included in farm assurance programmes operated by the marketing companies who use AsureQuality as auditors. This will help to ensure that progress is monitored and, if compliance lags expectations, action can be taken to rectify that.

²⁸ See July to September 2017 Quarterly Report, Page 9.



Market led production

Sub-project 4 (formerly 2.1) : Overarching production initiatives

Milestone 4.1 (formerly 2.1.1) : Governance and management of project

- 95. The 2014 Business Plan described how the P2P programme had been driven by the P2P Advisory Group (P2P-AG). This group comprised experts in deer farming, farm management, animal health, information systems and the social science of practice change. The P2P-AG has linkages with universities, the Red Meat Profit Partnership, meat processing companies and the New Zealand Deer Farmers Association (NZDFA).
- 96. The PSG itself was formed from among co-investors and MPI and provides the overall governance for the P2P programme. Programme management required new roles to be created which were regarded as cash costs for the programme. These were covered by project 7 of the Annual Plan.
- 97. In the 2017/18 Annual Plan this milestone appears as 4.1 'Advisory Structure' and was budgeted to account for just 1 percent of the P2P's annual expenditure. This covered the P2P-Advisory Group. The Governance of the programme was covered by Project 7 of Schedule 5 of the PGP contract and subsequent Annual Plans.
- 98. The basic structure of the P2P PGP is shown in Figure 12 below. Interviewees were pleased with the overall governance and management of the P2P PGP (Milestone 2.1.1).



Figure 12 Governance Structure of P2P PGP

99. The PSG is ably led and regularly checks on progress in the PGP. It is responsible for the on-going governance of the project and is accountable for strategic decisions



regarding the high-level direction of the programme. The PSG is also responsible for the allocation of funding to specific tasks as set out under the contract, determining when milestones have been achieved and Go/Stop decisions. It provides reports to the Investment Advisory Panel (IAP) quarterly via the programme quarterly reports. The IAP advises MPI.

- 100. The P2P has an added committee, the P2P Advisory Group (P2P-AG), in its structure compared to many other PGP programmes. This is because the AG drove setting up P2P in the first place. Around \$30,000 per annum has been spent on its 4 meetings per year and other activities. This was expected to be a mere 1 percent of the programme's total costs in the 2017/18 Annual Plan²⁹. The P2P AG's role was described to us as more of a think tank without governance responsibilities. They are not trying to do the job of the PSG but rather focus on the overall direction of the P2P programme. However, the P2P-AG does also consider the details of implementation of the Market-led Production projects. The value of the AG has been tested with the Board and it has been asked to continue as it provides alternative views, some from outside the industry, and useful linkages to other relevant entities.
- 101. KPMG audited the P2P PGP and set out its findings in its report of 20 July 2017³⁰. Its report covered 1 April 2016 to 31 March 2017 and was designed to check on the robustness and effectiveness of the co-investors' PGP financial management systems. KPMG looked at budgeting, forecasting, and monitoring processes and systems and day-to-day financial management (payments, processing, allocating costs, etc.) as well as systems for developing claims to MPI and financial reporting to the PSG. It also sought to ensure that PGP co-investors had good records of the use of the funding and co-funding that supported their funding/co-funding claims.
- 102. Spending claimed by DINZ was found to be relevant to the P2P, with no instances found in sample testing of unrelated spending being included. KPMG found that DINZ's financial management system, administered by Beef and Lamb NZ, was robust and effective. KPMG also reported that the Programme Manager completed detailed reviews of all expenses and claims before payment approval and that all payments required two levels of approval from authorised personnel within Beef and Lamb NZ. However, control gaps were identified when data was extracted from the system for reporting and invoicing purposes.
- 103. DINZ welcomed KPMG's findings and stated that it would make some changes to ensure the programme's robust and effective financial management continued. At the time of the KPMG report, DINZ noted that changes had been made to address the three areas of improvement to accuracy of record keeping and the presentation of invoices identified by KPMG.
- 104. Overall, the governance and management of the P2P PGP are very capable and focused on results.

²⁹ 2017/18 Annual Plan, Page 8

³⁰ Passion2Profit, Ministry for Primary Industries, Primary Growth Partnership Audit, 20 July 2017



Milestone 4.3 (formerly 2.1.2) : Adoption and practice change research

- 105. In the 2017/18 Annual Plan this milestone appears as 4.3 'Practice Change Review'.It was budgeted to take around 3 percent of 2017/18 expenditure.
- 106. Adoption and practice change research also sits under Sub-Project 2.1 as milestone 2.1.2. Under this milestone the P2P-AG commissioned CINTA research in 2011 into practice change with the aim of identifying overlaps or gaps between what the P2P PGP was proposing to do and other areas of practice change. The plan was to repeat this survey of deer farmers' attitudes to change with more focus on use of information technology.
- 107. The P2P did this in late 2017 and the results are now available in the report CINTA Agri-research 2018 Deer Industry New Zealand of March 2018. DINZ requested that CINTA:
 - Measure any change in farmers' attitudes towards good farming technique and technology practice;
 - Evaluate the efficacy of the engagement tactics employed by the P2P programme; and
 - Investigate any ways of increasing engagement to increase efficacy of productivity improvement activities.
- 108. The P2P-AG is now considering the CINTA report with the aim of amending the P2P's approach to new practices in light of its findings as was the intention in the Business Plan. This review has also had access to this report and commented on it extensively though this report.
- 109. The October to December 2017 Quarterly Report noted that it was planned that by September 2018 the PSG would approve any identified practice change, which would be included in the 2018/19 Annual Plan, and implemented from October 2018 onwards.

Milestone 4.2 (formerly 2.1.3) : Access to experts

- 110. In the 2017/18 Annual Plan this milestone appeared as 4.2 'Influential Advisors' and was due to account for 3 percent of the P2P PGP's budget.
- 111. A key element of this milestone as set out in the 2014 Business Plan was to review relevant experts and sources of expertise as well as links to others relevant entities working on expert identification and accreditation. Gaps in expert advice were to be identified and addressed (e.g. specialised deer veterinarians were thought to be a gap). The Quarterly Report for April to June 2016 reported that the study assessing rural professionals had been completed and provided to P2P-AG April 2016. This was the AbacusBio Report which is summarised in Appendix 2.
- 112. The AbacusBio Report was qualitative and investigated what expertise deer farmers wanted, what they expected from various professionals, as well as what the various professional groups saw as their role. It also sought to identify their needs for professional development to be able to continue to add value to deer farming businesses. It reported a broad consensus that animal genetics, animal health and pasture/forage were areas in which deer farmers could gain the best "bang for buck"



to improve their businesses and where they could gain extra value from using a professional. AbacusBio's interviews also identified that deer farmers rated animal genetics as the topic area which needed the most attention both for skills improvement and in the very small pool of people with these skills.

- 113. The AbacusBio report found 7 common threads as follows. We have added the actions taken on these 7 AbacusBio themes in *italics* following each theme:
 - (1) The need for an annual one-day training course on the key success factors for deer breeding, finishing and velveting enterprises, including understanding market requirements and what needs to happen on farm to meet these.
 - This suggestion was enacted with 85 people attending the 2017 rural professional workshops. Those who attended these all indicated they felt more confident providing advice to their deer farming clients after they had attended the workshop. The P2P is looking to run these again in 2018.
 - (2) Event co-ordination and notifications a deer equivalent to the B+LNZ E-Diary as a notification service of upcoming events and links to deer information, plus co-ordination of events (such as one-day training scheduled along with Deer farmers' conference) to maximize networking opportunities.
 - This theme was actioned in a number of ways including via DINZ ENews a monthly newsletter to farmers and interested parties which includes a list of events, establishment of a Deer Industry NZ Facebook page with events included in it, Advance Party National Workshop held in conjunction with Deer Industry Conference in 2017 which was discontinued in 2018 and Cervetec (NZ Veterinary Association conference - deer branch) is to be held in conjunction with Deer Industry Conference in 2018.
 - (3) Contact page on DINZ website for professionals offering services to deer farmers to list their CV's and contact details. The suggestion was to require two farmer referees and one industry referee to gain a listing.
 - This idea was not enacted as it was not supported by P2P-AG who felt it was not appropriate for DINZ to endorse individuals.
 - (4) Web training and event recording. Create skills by building content via the DINZ website including recordings of conference and field day presentations and webinar versions of training courses.
 - This proposal was fulfilled with the DINZ Conference live streamed, and available online. Information videos were produced and posted to the DINZ website³¹ and links included in electronic and print communications. More work is to be done on information videos.
 - (5) Industry fast facts a deer version of DairyNZ's dairy facts and figures publication. There was a need for a "one version of the truth" publication of deer seasonal feed requirements including ME, protein, trace minerals, and covering the mix of age groups, breeds and sex.

³¹ See <u>https://deernz.org/deerhub/deer-information/reproduction/hinds/mating-management-hinds#.WsKSkohuaUk</u>



- This theme was enacted through the production of Deer Facts which was chosen as the P2P's 'one source of the truth'³².
- (6) Animal health high concern about the sustainability of drenches, lack of effective registered products and long withholding periods. Farmers realized co-funding would be necessary to research answers and that long term solutions would involve a mix of drugs, meeting nutritional needs more effectively through both advances in pasture/forage and use of supplements, and grazing management including of stock classes³³.
- While this was actioned it was not part of the P2P programme with DEEResearch initiating development of a new anthelmentic for deer.
- (7) Genetics refresher course Farmers and vets, stock agents, and consultants had highlighted a need for periodic refresher courses on genetics and the understanding of BV's, indexes and how to use these tools to best advantage.
- This was carried out with such a course offered in 2016 but it was discontinued due to poor attendance.³⁴
- 114. The 2017/18 Annual Plan argued that further industry capability was required in the deer industry because:
 - There were only around five specialist deer farming advisers. Therefore there needed to be a pipeline to bring good advisers through;
 - Skilled people were required to support the producer in the change process.
- 115. It noted that existing networks of rural professionals could be upskilled on deer farming topics to help deliver information. It added that the P2P PGP would promote opportunities in the deer industry to undergraduates to encourage future farm advisors to add deer knowledge to their skill mix.
- 116. The RAG table activity sections of the three quarterly reports covering the period January to September 2017 all described the same two achievement measures and activities in their respective quarters for this milestone as follows:
 - The 'PSG receives plan for the delivery of the Rural Professionals training programme'. This achievement measure was to be completed by February 2017. The activity in each of these quarters was presenting a plan for delivery to the PSG at February meeting.
 - The second achievement measure was 'PSG approves strategy to link to project 5.2 to ensure capability is developed by knowledge wholesaling and link into milestones 4.3, 6.1, 6.2, 6.3 ongoing over life of P2P by May 2016, ongoing review to December 2022.' The 'activity in the quarter' was 'Ongoing' and it was to be completed by June 2017.

³² An example is the Deer Feed tables produced in 2017 see <u>https://deernz.org/sites/dinz/files/DeerFeedingTables_V9.pdf</u>

³³ This was thought to potentially require a collaborative research project.

³⁴ Email from Innes Moffat of 3rd April 2018.


- 117. When these were added to the quarterly reports most of the 'complete by dates' had already happened.
- 118. The section 'Summary of progress during this quarter' in the July to September 2017 Quarterly Report was more descriptive stating that: over 60 people attended three workshops for rural professionals run in July and August [2017] and the 'Big Deer Tour 2017' took place in the last week of August [2017] and 5 students from Massey and Lincoln Universities and a marketing staff member from Silver Fern Farms took part. All participants and hosts commended the initiative. Likewise the same section in the April to June 2017 Quarterly Report gave useful details for example 36 rural professionals attended deer workshops held on June 15 and 16 at Fairlight Station, Garston, Southland and the 'Big Deer Tour 2017' programme held promotional events with farm management students at Massey and Lincoln Universities in May. 14 applications were received with 6 to be selected.
- 119. The October to December 2017 Quarterly Report probably written in January 2018 contained a variety of new achievement measures for this milestone including:
 - The PSG receives a review of 2017 Deer Industry Workshops for Rural Professionals to be completed by October 2017;
 - The PSG receives review of 2017 Big Deer Tour by October 2017; (Both of these bullets had likely been completed before the report was written?)
 - At least 60 rural professionals are more confident offering advice to farmers with deer through workshops by September 2018;
 - Identification of influential personnel in key supply companies which are to be provided with deer industry information also by September 2018;
 - An achievement measure of at least 3 farm management students enjoying an induction to the deer industry. However, 6 students are being planned for 2018 to be completed by September 2018.
- 120. The last four quarterly reports' 'Summary of progress during this quarter' sections indicate that useful activity is occurring which is likely to help meet the Annual Plan's aims of building from the five specialist deer farming advisers and training up more skilled people to support the producer in the change process. Other formats in the quarterly reports appear to be out of date and are less helpful.
- 121. In our view it may be worthwhile rationalising P2P's quarterly reporting. There appear to be 6 formats for reporting on progress in the P2P programme in most quarterly reports. These multiple formats appear to involve a fair amount of repetition of the same material in slightly different formats. Sometimes the summaries have useful detail while the detailed reporting such as the RAG Activity Tables appear to get out of date and opaque. It may be beneficial to find out which formats are valued by the PSG, AG, MWG and perhaps rationalise these to one summary which summarises and doesn't contain detailed descriptions and one detailed reporting format which does.
- 122. Overall this milestone appears to have made real progress over the last couple of years. The AbacusBio report has had its key themes largely implemented and the



first year's target has been exceeded. The July to September Quarterly Report's Detailed Status Update stated that the plan was to hold 3 workshops for up to 45 rural professionals before 30 September 2017³⁵. The excel file 'P2P Measurements Data Summary' noted a target for 2017 and all future years of 60 rural professionals trained. This was exceeded and 77 attending the training sessions. This milestone looks to be on track to swell the handful of specialist deer farming advisers identified in the 2017/18 Annual Plan.

Sub-project 5 (formerly 2.2) : Engagement for practice change

Milestone 5.1 (formerly 2.2.1) : Advance parties

- 123. In the 2017/18 Annual Plan APs were forecast to utilise 20 percent of the P2P PGP's budget. This represented the second largest expenditure on a single milestone.
- 124. According to the 2014 Business Plan there were only a few experimental APs in operation before the P2P PGP started. The OLM's short term outcomes targeted 8 experimental APs by the end of 2015 and 21 by 2022³⁶. There are now 26 APs with only 4 more needed by September 2018 to meet the programme's new target of 30 APs. This attests to the overall success of milestone 5.1. Part of that success has been the inclusive approach they have taken with a lot of emphasis on getting members comfortable with being involved. This means that APs require investment because it takes time, often at least a year, before members are comfortable with the AP format and the open and transparent way that APs operate.
- 125. In addition the August 2016 CINTA report titled "Advance Party Survey Results" indicated that the APs were not only more numerous than planned but also for the most part achieving a high level of practice change. This report showed that most AP members were motivated and interested in getting the most out of their farms. Moreover, AP members found advice from other AP farmers and vets most useful with a third of them judging these sources as highly useful³⁷. These sources were seen as the most accurate and reliable to help them optimise productivity and profitably. This may suggest that if AP numbers continue to grow, and if these attitudes endure, then AP's positive cycle of practice change will continue to spread out into the estimated base of around 1,500 deer farmers³⁸.
- 126. Nearly all those surveyed by CINTA had made 'smaller but important' and/or 'significant' changes to their farming in the last three years (98 percent)³⁹. The survey

³⁵ The July to September 2017 Quarterly Report, Page 42.

³⁶ See Passion2Profit Measures Table excel file

³⁷ CINTA Report "Advance Party Survey Results", August 2016, Slides 8 and 25

³⁸ CINTA AgriResearch, 2018 Deer Industry New Zealand Report # 1.1, March 2018, Page 5.

³⁹ Ibid, Slide 6. Note it appears that some farmers made both a 'smaller but important' change as well as a 'significant' change. This is because slide 37 shows 60 percent made the former and 56 percent the latter. This adds to 116 percent, so it would appear that 18 percent of those surveyed answered yes to both so that 98 percent of the 90 farmers surveyed had made one or more of the changes.



also queried AP members use of key practices including scanning pregnancies, weighing finishing deer, body condition scoring, comparing carcass weights with previous years, feed budgeting, recording deaths, stag selection using BVs and reviewing KPIs with a vet. Members who used these practices saw them as helping their deer farm's productivity and profitability⁴⁰.

- 127. The farming practices used by the greatest number of AP members were scanning pregnancies (86 percent) and weighing finishing deer (83 percent). The other farming practices were less popular than these. An annual production KPI review with the vet was used the least by farmers with only 35 percent seeing this as helpful. While the use of these practices by AP members is encouraging, the results also showed that 65 percent either were not undertaking annual production KPI reviews with vets, or were, but had doubts about their value. In addition, 48 percent had either not made a change to using genetics, had but thought it was not useful or saw no value in it⁴¹. Thirty six percent of AP members were not using BVs when selecting sire stags. Almost half of these while exploring using them, had doubts about their value⁴².
- 128. The survey results also showed that the length of time farmers had been involved in APs was important. Longer term members were more confident in changing their farming practices and introducing new technologies. For example in:
 - Pregnancy scanning
 - Weighing finishing deer
 - feed budgeting,
 - recording deaths,
 - using BVs
 - using body condition scoring,
 - new technology scales or EID readers
 - annual review of production with a vet,
 - animal health plans with help from a vet.
 - Increased production recording
 - Receiving annual production summaries from my deer processor.
- 129. When the attitudes of members who had been in an AP for a year or longer are compared to those who had been members for less than a year there was a markedly more positive attitude to using some of the farming practices/technology changes

⁴⁰ CINTA Report "Advance Party Survey Results", August 2016, Slides 14 and 15

⁴¹ Ibid, Slide 58

⁴² Ibid, Slide 15



listed above⁴³. Average belief that using these was helpful was between 20 to 35 percent higher for the group of longer term AP members than for the shorter term AP members⁴⁴. The same effect was also evident in attitudes to sources of information e.g. seeking production information from a vet and the perceived value of industry conferences⁴⁵.

- 130. This is positive as it suggests the growth of members will spark more practice change with time and provides an indication of the annual rate of that take up. It also serves to emphasise that time is needed for AP members to become comfortable about their involvement and the value of it. It is possible that as less open and motivated farmers join APs, the take up rates of these farming practices could wane a little⁴⁶. Another positive indicator is that 57 percent of AP members intend to growth their operations over the next 5 years.
- 131. The key factors for convincing these farmers to make changes were for 72 percent of those surveyed assurances of success of a new method/product and for 72 percent it was obtaining the correct advice or information. About half of farmers thought that confidence in knowing how to change and how to implement change was also important.
- 132. Of those surveyed about various practice changes between 36 to 60 percent had already implemented these before joining and AP⁴⁷. For example, before joining an AP 60 percent of AP members had introduced new technology/equipment and/or 52 percent had recorded their production. However, the practice changes implemented by AP members <u>after</u> joining in descending order of popularity were:
 - 55 percent found <u>improving the quality/quantity of the deer feed</u> very useful, quite useful or somewhat useful. (36 percent very useful, 12 percent quite useful and 7 percent somewhat useful). 36 percent were doing this before joining an AP).
 - 35 percent found undertaking <u>regular body conditioning</u> very useful, quite useful or somewhat useful. (12 percent very useful, 15 percent quite useful

⁴³ This only includes the 6 practices from 'feed budgeting' to 'annual review of production with a vet', for some reason the first two practices were not included in the 'less than one year' to 'one plus years' comparisons. The last 3 practices in this list were only included when the types of changes made were examined in Slide 57 and 58. Many practices appear to be inconsistently applied by CINTA and only some of the resulted reported on.

⁴⁴ See differential between AP members of less than a year vs longer term members' attitudes to the farming practices bulleted above when asked "I do perform this [farming practice] as this does contribute to my deer productivity or profitability", pages 14 to 19 of CINTA Report "Advance Party Survey Results", August 2016.

⁴⁵ CINTA Report "Advance Party Survey Results", August 2016, Slides 27 and 28

⁴⁶ CINTA Report "Advance Party Survey Results", August 2016, Slide 51 shows between 10 and 20 percent of AP members were sceptical of the influence of APs on their decisions. However this was also influenced by length of time in an AP. Members for a year or more had lower levels of scepticism, page 52 & 53.

⁴⁷ CINTA Report "Advance Party Survey Results", August 2016, Slides 56 and 58



and 8 percent - somewhat useful). 38 percent were doing this before joining an AP.

- 33 percent found increased <u>production recording</u> very useful, quite useful or somewhat useful. (18 percent very useful, 3 percent quite useful and 12 percent somewhat useful). 52 percent were doing this before joining an AP.
- 24 percent found carrying out <u>a proactive animal health</u> plan very useful, quite useful or somewhat useful. (11 percent very useful, 7 percent quite useful and 6 percent somewhat useful). 64 percent were doing this before joining an AP.
- 21 percent found introducing <u>new technology such as scales or EID readers</u> very useful, quite useful or somewhat useful. (10 percent - very useful, 9 percent - quite useful and 2 percent - somewhat useful). 60 percent were doing this before joining an AP.
- 133. Only 15 percent of AP members or less found 'receiving annual production summaries from their processor' very useful, quite useful or somewhat useful⁴⁸. However, 60 percent of AP members already received these prior to joining an AP. 'Changed genetics' was only found to be very useful, quite useful or somewhat useful by 11 percent of AP members with only 7 percent having found it very useful. 46 percent had not made this change or saw no value in making it. 40 percent were already using genetic tools before joining an AP.
- 134. The survey showed that South Island farmers were generally more open to change and adopting new practices and seeking information than North Island farmers. For example South Island farmers saw much more value in using a farm advisor than North Island farmers⁴⁹.
- 135. The 2014 Business Plan saw 'practice change' to a large extent determining whether the P2P PGP was successful or not. A number of factors suggest that three years into the P2P PGP the APs have been successful. These include:
 - The growth in APs beyond initial forecasts;
 - Their continued popularity; and
 - The 2016 CINTA report's many findings of real change by many AP members compared to their pre AP farming practices in important areas such as 'improving the quality/quantity of the deer feed', 'regular body conditioning' and 'production recording'.
- 136. Clearly the APs have encouraged material levels of take up of farming practice changes that will assist the P2P PGP to meet its goal of producing more and heavier deer, earlier and better.
- 137. A key question for the P2P PGP to tackle over its next 3 and a half years is how to keep the APs refreshed and interesting so that they and their benefits endure. It is

⁴⁸ Ibid, Slide 57

⁴⁹ Ibid, Slides 28 & 32



first important to recognise that there is a lot of variety of interests and focus in the existing 26 APs. We see real potential for levering off this variety and letting the AP's renew themselves from within by letting them shift their interests in directions that the AP members see as most useful for them. This is already happening to a degree. While avoiding being too prescriptive, the PGP could also foster AP's interests in ways that pick up and advance Programme objectives and have spill over benefits the other APs and the wider deer farming sector.

- 138. It may also be possible for the PGP to improve the results of some of its more 'centre to the farm' or more traditional extension oriented milestones. Some of these, such as genetics and information systems, particularly milestone 5.3.3. 'Business Management and decision support', have struggled to gain traction. But it may be possible to move them forward by carefully assisting AP groups who already have some interest in these areas, in their efforts to explore these practice changes/technologies.
- 139. We would expect that APs would to continue to advance the practice changes and use of technologies listed earlier in this section. In addition, some areas of possible focus have been raised with us in discussions with P2P participants and AP members and facilitators. These are:
 - Business planning;
 - Optimising mixed farming systems; and
 - Managing deer farming's environment effects.
- 140. Some APs already have a more competitive and economic performance based focus. These could be encouraged to explore their farm's performance in this way and build expertise in combining the use of different practice changes/technologies through annual business planning. These APs could then become the touch stones for other APs, or farmers outside the APs via regional workshops. Points in time when farmers really need solid business planning metrics and processes, for example, at farm succession or when farmers need to raise capital (debt or equity) could be targeted. This approach could also be kitted into the training of influential advisors in milestone 4.2. It could also be used as a way to progress milestone 5.3.3. This milestone's aim of 'all farmers being aware that good management relied on suitable information and having access to helpful guides to decision support tools' might be more effectively disseminated via business planning focused APs and their sponsorship of regional workshops, than from the centre. Equally APs with particularly competitive and financially focused approaches may represent an opportunity to further the aims of milestone 5.3.4 'Customised Data'. Such APs could have a direct interest in data such as individualised and comparative data on average slaughter date, average carcass weight or defect rate and be able to communicate its value within the AP system more effectively than attempting to do this from Wellington.
- 141. Based on CINTA's 2018 survey⁵⁰, around 80 percent of deer farmers farm on mixed farms. It is therefore not surprising that optimising the performance of deer in the

⁵⁰ CINTA AgriResearch, 2018 Deer Industry New Zealand Report # 1.1, March 2018, Page 5



context of a mixed farming system is an area of focus for some APs. A lot of good work has been done on this issue but these APs could be encouraged to pursue best performance of their farming systems. However, this may need to be assisted by the P2P PGP arranging its rules and relationships with other entities such as Beef and Lamb NZ or other PGPs so that any jurisdictional or boundary issues can be resolved. This may present challenges but if APs wish to understand farming systems well, and it is important to the AP members to progress in this direction, it may be necessary to cooperate in shared funding of joint efforts.

- 142. We understand that there are already a couple of APs with an interest in investigating the management of deer farming's environment effects in more detail. This issue has also been prioritised by the P2P PGP through milestone 6.4 'Other technology' such as environmental stewardship. We would expect that these groups would continue to be assisted and encouraged to build expertise in this area. Once they have built a solid body of knowledge they could become touch stone APs when other APs or deer farmers outside APs face new local body environmental rules. They could also be used as pathfinders in improving the environmental Code of Practice and the sector's environmental performance generally.
- 143. As discussed below under milestone 6.4, improving environmental performance could be challenging because the 2018 CINTA survey⁵¹ does not appear to show it being recognised as a problem area by many farmers. In this context, building the sector's environmental capabilities through the self-driven interest of APs who can spread what they have learned to other APs and the industry more widely is likely to be a much more effective approach than pressure from Wellington.

Milestone 5.2 (formerly 2.2.2) : Knowledge wholesaling (reaching non AP deer farmers)

- 144. The 2014 Business Plan explained that there were a variety of knowledge brokers such as veterinarians and agronomists, who could transfer new knowledge to clients. The P2P was to undertake a more systematic process of assisting information exchange from the research providers to farmers and knowledge brokers. It went on to state that influential individuals would be identified, or those with that potential, and learning would be shared through events such as annual gatherings to go over new research from universities, CRIs and private providers.
- 145. The amount budgeted for this milestone in the 2017/18 Annual Plan was \$107,000 or 4 percent of the P2P's expected spending in the year. The 2017/18 Annual Plan explained this milestone as aiming to engage deer farmers who were not in APs and share the benefit of community based learning⁵². It also noted that the AP project had not at that stage (August 2017) implemented extension of the learnings from APs to the local deer farming community. In light of this, DINZ recommended that APs worked with DFA branches to run open meetings with non-AP deer farmers. DINZ recommended using regional workshops.

⁵¹ Ibid, Page 29

⁵² 2017/18 Annual Plan, page 24.



- 146. The January to March 2017 Quarterly Report explained that after being trialled in 2016 6 APs worked with their local DFA Branch to conduct practical workshops for local deer farmers. The lessons' learnt in APs were taken and applied to individual farmers' issues. These 6 workshops covered: velveting, feeding hinds during lactation & chemical topping; environment and technology; growing weaners in autumn, irrigation and drones; fertility, fertiliser and how to get the best performance out of legumes in a dryland environment; and fencing, fawning and feed utilisation for better growth⁵³. 215 people attended these regional workshops and they were reported as well received⁵⁴.
- 147. The July to September 2017 Quarterly Report noted in its section on the budget and the Detailed Status Update that 20 workshops had been budgeted for between 1 October 2016 and 30 September 2017 but 15 completed⁵⁵. The 2017 Regional Workshop Overview reported that from October 2016 up until the 15th of November 2017 there had been 18 workshops held. The October to December 2017 Quarterly Report added two more regional workshops to the list (held after the 15th of November 2017). This means that since the inception of this milestone there have been 20 regional workshops.
- 148. The 2017 Regional Workshop Overview also commented on future strategy for the workshops stating that the plan was to target APs who had not held a regional workshop yet. Chairs and facilitators were to be contacted to begin a second round, and at the same time emphasise that small scale workshops were preferable to large field days. This report also noted that there had been some reluctance to engage or commit to workshops due to the harsh 2017 winter. As a consequence the target for 2017/18 had been reduced to 15 workshops.⁵⁶
- 149. The 2018 CINTA survey of deer farmers found that 18 percent, or around 106 of the people surveyed, kept their farming knowledge and skills up to date by attending regional workshops⁵⁷. The CINTA survey also inquired about farmers views of the usefulness or effectiveness of regional workshops for their deer farming operations. Only 21 percent, the equivalent of around 315 farmers of the 1,500 estimated deer farmers, thought that regional workshops were useful or effective. Around 60 percent did not think they were useful or effective or had not heard of them. However, given that these workshops have only been held for about a year when the survey was carried out, it is early days and it is likely to be too early to draw any conclusions about their value.
- 150. The regional workshops are a key plank in the P2P PGP's strategy to expand learning outside the APs to the wider base of deer farmers. The challenge is to find workshop formats and topics to pull in and persuade some of the 60 percent that their views in 2018 were too negative. The Regional Workshop Overview report suggested that there was scope to focus more on the AP group and member

⁵³ 2017 Regional Workshop Overview, Cenwynn Phillip, 15 November 2017, Page 1

⁵⁴ January to March 2017 Quarterly Report, Page 12

⁵⁵ July to September 2017 Quarterly Report, Page 13 and Page 42

⁵⁶ 2017 Regional Workshop Overview, Cenwynn Phillip, 15 November 2017, Page 2

⁵⁷ CINTA AgriResearch, 2018 Deer Industry New Zealand Report # 1.1, March 2018, Page 44



projects. It also noted that small workshops on the new velvet harvest standards were well attended and that a smaller workshop off farm proved to be a very effective way to encourage interaction between AP and non-AP members. It proposed encouraging these types of workshops.

- 151. The Regional Workshop Overview report emphasised that workshops should be farmer-centric and less focused on external guests and should avoid falling back on traditional field day approaches. It also noted a number of activities to support this including effective communications between all organising parties, a re-write of the regional workshop guide and description as well as inclusion of the topic of running workshops in AP facilitator training sessions.
- These strategies appear a sensible way to progress this milestone. We agree that 152. greater emphasis on the issues raised by AP member groups themselves may help to seed more attendance from those not in the APs compared to the more traditional approach of bringing in outsiders to provide formal presentations. However, perhaps more direct communications with the marketing co-investors in the P2P would be helpful (there appears to have only been one instance of this in the 14 regional workshops listed in the Regional Workshop Overview report, John Sadler at the Canterbury AP held on the 28th of November 2017). It may be that each of the marketing co-investing companies has a thorough programme of this sort of direct communication with farmers and do not see pursing these through the regional workshops as useful. Another point raised on this issue was that the marketing coinvestors wanted to avoid being seen to use these events for partisan purposes. However, if the P2P is to be market led then having more of this direct interaction could be useful. It may also be possible for the MWG to agree on a communications approach to the regional workshops that presents their combined efforts in the Benelux and Germany and wider market developments neutrally.
- 153. This milestone has met its original target for 2017 of 20 workshops. The plan for 2018 lists around 17 potential targets for workshops listed in the Regional Workshop Overview report and 5 were listed on the P2P website as at 16 April 2018 covering the period through to the end of June 2018⁵⁸. The approach of targeting a lower number of workshops may be beneficial as it should allow more organisation and effort to go into those that are held. The results of this approach could be monitored through feedback on the 15 targeted for the year.

Milestone 5.3 (formerly 2.2.3) : Information systems

- 154. Under the Information Systems milestone 2.2.3 of this sub-project, the 2014 Business Plan anticipated the development of benchmarking tools, individual reporting, a CRM database and a booklet on farm management tools. This was based on the view that farmers were interested in production data and that data would allow them to undertake farm analysis to improve their decision making.
- 155. This milestone had changed into two milestones by the time of the 2017/18 Annual Plan:

⁵⁸ See <u>https://ap.org.nz/regional-workshops</u> for most up to date data on upcoming regional workshops.



- Milestone 5.3.3 "Business Management and decision support" with the aim of all farmers being aware that good management relied on suitable information and having access to helpful guides to decision support tools. For the industry the aim was to have accepted performance indicators for productivity and profit established, circulated and accepted terminology for profit and productivity KPIs in use; and
- Milestone 5.3.4 "Customised Data" with the aim of motivating at least 200 farmers per annum to seek further information to improve their productivity.
- 156. The budget devoted to these milestones is not great, at less than 2 percent.
- 157. Referring to Milestone 5.3.4, the 2017/18 Annual Plan stated that P2P would utilise centrally-held databases to deliver individualised information for instance, how a particular farm performed relative to peers in average slaughter date or average carcass weight or defect rate. It continued that benchmarking against peer performance either regionally or nationally not only provided the basis for a conversation with farmers but potentially also provided a strong motivation for individuals to seek change to improve their relative performance.
- 158. It also mentioned that this service was aimed at plugging a gap in direct communications with farmers who were neither in the DFA, nor in APs, and ensured the key messages could be delivered to all known deer farmers⁵⁹.
- 159. Milestone 5.3.3 Business Management and decision support
- 160. The Programme Manager reported in November 2017 on progress to that date with these milestones⁶⁰. He commented that KPI spreadsheets allowing farmers to calculate and record their own performance were not being used by farmers and were therefore being reformatted for easier use.
- 161. The Programme Manager related that the booklet on farm management tools had been scaled back after a number of reviews and false starts. He also averred that it was realised that there were a large number services, databases and tools already available for farm management decision making. He reported that the project had therefore been pared back to produce calculators, tools and guides that answer farmers' questions such as on venison growth curves, the new hind mate calculator and feed cost comparer. These were available via a webpage that contained several of the on-line/offline calculators which could also be saved to a mobile device etc.
- 162. He noted that the data group created a set of production KPIs for good performance for venison, velvet, replacement hinds and reproduction with the help of AgResearch data. These were communicated to the APs, Regional Workshops, via the web (DINZ site), email and in print. While they were available, they were not being universally applied by deer farmers or their advisors.

⁵⁹ 2017/18 Annual Plan, Page 27

⁶⁰ 8. Decision Support Strategy, Innes Moffat, 14, November 2017



- 163. The Programme Manager also conveyed that DINZ had been providing deer industry tools and metrics to service providers for inclusion in their systems e.g. deer in the RMPP e-ASD and on their business planning website. While other commercial IT services have picked up deer, in their systems they haven't yet picked up DINZ's KPIs⁶¹.
- 164. Milestone 5.3.4 Market Led Production: Customised Data
- 165. The Programme Manager's report explained that DINZ had worked with the DeerPro deer slaughter database on an annual venison production summary from JML slaughter data for farmers. This was provided on request from farmers and was communicated via various media. Where farmers did not have this information it had been appreciated but where farmers did, such data wasn't as helpful. He also clarified that the original Business Plan project to provide a CRM database had not proceeded as there was no real need seen for it in light of other databases.
- 166. A review of the three quarterly reports for milestones 5.3.3 and 5.3.4 covering the period from January 2017 to September 2017 shows that the majority of initiatives under these milestone have consistently been significantly delayed or where they have been completed they have later been abandoned e.g. CRM. The project that hasn't been delayed is 5.3.4 which faces challenges in not replicating activities that could be argued to be the purview of the marketing companies.
- 167. The October to December 2017 Quarterly Report only lists two significantly delayed initiatives under milestone 5.3.3:
 - Business support plan presented to P2P-AG by March 2018; and
 - Deer information included in red meat sector monitoring systems with deer metrics included in RMPP business planning tools by September 2018.
- 168. For milestone 5.3.4 the achievement measure is delivery of 200 customised reports to deer farmers identifying production trends with suggestions for further action. Activity in the quarter had been to contract with Deerpro Ltd for delivery of reports on target by September 2018.
- 169. It would appear that efforts aimed at plugging the gap in direct communications with non-DFA, and non AP farmers has proven challenging. Some of those interviewed for this review commented that putting technology packages together and pushing them out to farmers doesn't seem to work.
- 170. The most problematic components of these milestones seem to be those aimed at providing a tool or database where other similar services already exist. In the remained years of the PGP care should be taken to avoid putting effort into initiatives such as these unless there is proven value in them which is confirmed by clear feedback from farmers. For instance if the KPI spreadsheets reformatted for ease of use do not achieve much interest, a holding pattern on making these tools available but with minimal cost might be best. It might also be advisable to provide

⁶¹ We understand from one interviewee that B+LNZ has recently included deer in its benchmarking tools It may not be surprising that it is difficult to get deer included as the incremental costs of doing so for some IT service providers may outweigh the benefits given there are few deer farmers compared to other farm types.



advice to marketing companies on presentation of slaughter data and encourage farmers to utilise this data rather than running the risk of replicating the efforts of the marketing companies. This would be apparent if significantly less than 200 farmers request this information from the P2P PGP. We have not seen a measure of these requests to be able to see how it is going to date.

- 171. The 2016 CINTA survey⁶², of AP members asked them how useful information sources were for them. Only 10 percent found DINZ staff and publications were highly useful. Around 38 percent gave this option 4 out of 7 or worse as a source of advice and information. This suggests that these sources were seen as of secondary value compared to other options for AP members such as "other members of the AP" or "vets for production information".
- 172. The survey of the wider deer farming base by CINTA in 2018 found only 29 percent believed that deer growth charts were useful or effective. 50 percent either hadn't heard of these or rated them as not useful or effective. However, like regional workshops, the growth charts have not been available for long. The P2P has investigated what the supporters found valuable about the charts and calculator as well as why the detractors didn't find them helpful in a qualitative survey carried out by AbacusBio. Based on this work it is seeking to hone them to suit farmer needs better⁶³. This work points to the popularity of the charts compared to the calculators and a desire to have regional detail and more information on feeding PKE, forages, grain and silage. However, their lack of perceived value does suggest that progressing these needs to be done cautiously. Continuing to target information to when there is likely to be interest is critical.
- 173. Another approach might be to put more resources into having all communications with farmers put through a QA process specifically designed to make them as easy to follow and understand as possible.
- 174. As discussed under milestone 5.1 'Advance parties' above, it may be worthwhile progressing KPIs through APs with a particular interest in them. These APs could help the P2P test the value deer farmers might see in a package of information, such as performance KPIs, that are available to assist farmers in developing good annual business plans or when required for raising bank or equity finance. These could seek to include other aspects such as animal health and environmental requirements to demonstrate a comprehensive approach to existing or potential financiers.

Milestone 5.4 (formerly 2.2.4) : Other practice change engagement strategies

- 175. In the 2014 Business Plan the P2P-AG was to review existing practice change by June 2017 and compare sector productivity KPIs with pre-P2P levels under this milestone. The PSG was to decide if new or more effective methods of practice change could be used.
- 176. The qualitative 2016 AbacusBio report found as one of its seven themes that a deer version of Dairy NZ's dairy facts and figures publication would be helpful because there was a need for a "one version of the truth of deer seasonal feed requirements

⁶² CINTA Report "Advance Party Survey Results, August 2016, page 25

⁶³ AbacusBio, Feeding Theme Group Qualitative Survey – April 2018.



including ME, protein, trace minerals, and covering the mix of age groups, breeds and sex." As mentioned in paragraph 113, the P2P Programme Manager confirmed that the AbacusBio recommendation based on this theme was accepted the P2P PGP and enacted by the production of the Deer Facts newsletter.

- 177. In the 2017/18 Annual Plan this milestone appears to have changed into Milestone 5.4 "Market Led Production: Deer Facts". This involved producing a paper based single source of deer farming guidance. 10 Fact sheets were to be produced over the course of the year and distributed to all known deer farmers and rural advisers. Topics were to be timed to coincide with key management decisions. The fact sheets were to provide one source of agreed knowledge for farmers, rural professionals, vets and farm advisors.
- 178. The 2017/18 Annual Plan noted that the production of each Deer Fact required a lot of time to make sure it reflected agreed positions. However, the Deer Facts newsletter was forecast to take up less than 2 percent of the P2P budget in 2017/18.
- 179. The January to March 2017 Quarterly Report described the release of 3 Deer Fact sheets on reproductive targets, environmental management, and biosecurity in the quarter. In the April to June 2017 Quarterly Report Deer Fact sheets on "working with the seasons to maximise deer profits" and "nutrient management on deer farms" were distributed. It also noted that 27 Deer Facts had been produced up to the end of that quarter.
- 180. The July to September 2017 Quarterly Report stated that the objective was to distribute 12 Deer Facts per annum. It reported that 2 issues covering on-farm QA, and successful pregnancy had been distributed in August 2017 and another covering feeding tables was about to be delivered. The final Quarterly Report available to us for October to December 2017 stated that the target for the year was to distribute 10 Deer Facts. Deer Facts on 'fodder crops for winter feed' and 'feeding tables' had been distributed in Q1. It also noted that 31 Deer Facts had now been produced and continued to be well received by farmers with deer and others with interests in the deer industry.
- 181. The 2018 CINTA survey found that 42 percent of deer farmers believed that the Deer Facts newsletter was useful or effective to their deer farming operation⁶⁴. This was materially higher than the number who considered APs to be useful (33 percent) or any of the other offerings. However, a quarter of farmers either thought the newsletter was not useful or effective or didn't know about it. Nearly a third of farmers were neutral about it.
- 182. The 2 percent of the P2P budget in 2017/18 dedicated to Deer Facts might just reflect production costs rather than also including an allocation of P2P personnel time. The excel spreadsheet 'P2P measurements data summary' indicates that 12 Deer Facts were produced in 2016 which met plan while in 2017 10 were produced which missed the plan slightly. Deer Facts was supported by the AbacusBio report⁶⁵ appears to be a popular and effective way of reaching the wider deer farming base

⁶⁴ CINTA AgriResearch, 2018 Deer Industry New Zealand Report # 1.1, March 2018, Page 51.

⁶⁵ AbacusBio Report, "Access to Experts Report" 31 March 2016, Bruce McCorkindale.



given the equivalent of around 630 farmers saw the newsletter as useful or effective. It may be worthwhile putting additional effort into ensuring Deer Facts are as easy for farmers to understand as possible rather than continuing to pursue 12 per annum, especially if it becomes more challenging to find new topics over time.

Sub-project 6 (formerly 2.3) : Technology packaging

Milestone 6.1 (formerly 2.3.1) : Genetics for market

- 183. In the 2014 Business Plan the P2P genetics programme was to focus on 'early kill' and 'terminal maternal' breeding values (BVs) as well as expanding deer progeny testing to assess the heritability and measurement of venison quality traits and carcass conformation for high-value cut yield. To achieve this, an industry-wide agreement of desirable traits and national data collection was to be agreed. A genetics reference group (GRG) was to be formed from processing companies, stud breeders and geneticists to agree which traits to pursue.
- 184. This milestone was expected to account for only 2 percent of the annual budget⁶⁶.
- 185. The Annual Plan for 2017/18 commented that BVs for some traits were often available but seldom used in stag purchasing decisions. It also stated that the GRG met quarterly to discuss and agree priority breeding traits and how to get consistent data collection from the deer studs involved in Deer Select. The annual plan argued that traits still needed refining, and the inclusion of maternal or early finishing traits would help some deer farmers. The GRG was to focus on "packaging farmer planning information into other means of information dissemination so the impact of genetics is clearly incorporated in deer industry management thinking."
- 186. The 2017/18 annual plan reasoned that superior BVs had the potential to rapidly improve the industry's productivity, as long as the feeding and health practices were applied to allow the genetic potential to be expressed. Carcass weights and carcass information were being rapidly improved by those using genetic improvement. It averred that this practice needed to be encouraged across commercial deer farmers with a venison focus, by producing guides to genetics planning and farm planning models to show the impact of genetic changes to farm income.
- 187. The July to September 2017 Quarterly Report and the two previous quarterly reports showed that the achievement measure of having new strategies in place to increase use of high merit sires by commercial producers by March 2016 had been shifted to March 2017. It also noted that work was underway by the GRG to have recommendations to the PSG on increased scope of recording market-led genetic traits ready by September 2017 (this is after the quarterly report was probably written).
- 188. The October to December 2017 Quarterly Report explained that a genetics 'hinds to terminal sire' mate allocation calculator was now live on the deer industry website with 87 unique viewers since 1 January 2018 and producer uptake communications

⁶⁶ 2017/18 Annual Report, Page 8.



for genetics was well underway. However, it also noted that the plan for the GRG to provide recommendations to the PSG on increased scope of recording market-led genetic traits which had been due in September 2017 was now being targeted for a year later i.e. by September 2018⁶⁷. The three earlier quarterly reports covering calendar 2017 had noted this project as on track. The October to December 2017 Quarterly Report noted it as "not yet commenced". This appears to be true but because it has been delayed for a year.

- 189. The Programme Manager has acknowledged that there have been delays with the genetics milestone. This has been due to other pressures taking priority.
- 190. The 2016 CINTA survey of AP members found that 64 percent did use estimated BVs when selecting sire stags because they thought it contributed to their deer productivity and profitability⁶⁸. In addition, 40 percent had changed their approach to genetics prior to joining and AP. However, of AP members who had made changes after joining an AP, only 11 percent had found changed genetics very, quite useful or somewhat useful⁶⁹. Helpfully, those who had been AP members for 1 to 2 years were significantly more likely to say they used estimated BVs as it contributed to deer productivity and profitability (76 percent) than those who had been members for less than a year (51 percent).
- 191. The 2018 CINTA Report identified some encouraging trends for all deer farmers. The proportion of deer breeders that were using breeding values for stag selection had increased significantly since 2011 from 36 percent to 49 percent in 2017⁷⁰. Deer velveters that had "a dedicated velvet antler breeding programme in place" had also increased significantly from 43 percent in 2011 to a level of 65 percent in 2017⁷¹.
- 192. Genetics appears to have been particularly difficult for the P2P PGP to progress. There seems to be a real dichotomy between users and non-users. At least amongst AP members there appears to have been solid use of the technology with two thirds selecting sire stags based on estimated BVs⁷². However, 48 percent of AP members had either not made a change to using genetics, had but thought it was not useful or saw no value in it⁷³.
- 193. The AbacusBio findings discussed in milestone 2.1.3 above appeared to have identified a knowledge gap that needs addressing in genetics. One of its themes was

⁶⁷ October to December 2017 Quarterly Report, Page 8

⁶⁸ CINTA Report "Advance Party Survey Results", August 2016, Slide 15.

⁶⁹ Ibid, Slide 58.

⁷⁰ CINTA AgriResearch, 2018 Deer Industry New Zealand Report # 1.1, March 2018, Page 10 note that there was a change in question asked between 2011 and 2017 from "Use breeding values for on-farm selection" to "Use breeding values for stag selection"

⁷¹ Ibid, Page 17.

⁷² CINTA Report "Advance Party Survey Results", August 2016, Slide 15

⁷³ Ibid, Slide 58



demand for periodic genetics refresher courses but when such a course was offered in 2016 it was poorly attended and as a result discontinued⁷⁴.

- 194. We have asked various interviewees about why the genetics milestone has struggled. Reasons suggested have included, the much better genetic productivity of BVs for velvet compared to venison making venison BVs seem comparatively poor value and strong opposition from some deer farmers to the LIC's deer improvement business before it was sold in July 2017.
- 195. Our analysis of the economics of this PGP shows that genetics could fundamentally grow the deer sector's productivity as it directly targets volume production as well as quality. LIC's deer improvement programme was credited with an average 15 kilograms liveweight gain per animal between 2004 and 2014, based on yearling weight⁷⁵. In addition, a recent AgResearch report⁷⁶ found that:
 - There were good heritability estimates to select for many venison production traits
 - The study's taste panel showed texture was moderately heritable and important to overall liking texture/tenderness being the key consumer trait
 - Ultrasonic eye-muscle area (EMA) on live animals was moderately heritable and it was favourably correlated with increased meat yield and quality
 - EMA also correlated with important carcass quality traits, tenderness, and texture; and
 - Higher boned-out meat-yield correlated with increased tenderness
- 196. In light of these findings it would seem worthwhile to perhaps devote more resources than 2 percent of the budget to unlocking this potential. It may be wise to initially investigate why there has been such a gulf between users and non-users and why non-users claim to want to know more but when it's offered don't seem motivated to attend workshops.
- 197. If this has not already been tried, it may be worthwhile seeing if there is an AP with a strong venison genetics interest, or seeking to form one, and progressing its investigation of the value of venison BVs. Afterwards its findings could be disseminated firstly amongst APs then more widely. Genetics also seems a good candidate for a thorough review of how it is communicated and whether it is pitched at farmers in a way they can easily digest.

Milestone 6.2 (formerly 2.3.2) : Strategic feeding

198. At the time of the 2014 Business Plan this milestone aimed to gather feeding and nutrition data, identify gaps and set best practice. Cost-benefit tools were to be

⁷⁴ See paragraph 113.

⁷⁵ <u>https://www.stuff.co.nz/business/farming/95134349/genetics-company-lic-sells-off-its-deer-improvement-business</u>

⁷⁶ 'Venison in the DPT', NZ Deer Industry Venison Marketing Managers – 8 Feb 2018, Jamie Ward, AgResearch, Slide 9.



developed so farmers could set targets and trigger points and take corrective action e.g. by supplementing feed or making animal health interventions, to recover growth rates from climate, or other challenges. A feeding working group was to oversee this and information was to be provided to farmers in a variety of ways. A feeding 'champion' was to provide key influencers with information on animal nutrition and feeding solutions including feed budgeting and animal nutrition calculators.

- 199. The 2017/18 Annual Plan sought to achieve the same goals as summarised in the paragraph above. However, in addition the Annual Plan listed three priorities for this milestone as:
 - Best practice for feeding and nutrition which involved gathering the best current information and providing it to farmers.
 - Guidance growth curves for young deer and management of breeding hinds;
 - Defining the current and potential growth targets and triggers.
- 200. Strategic feeding solutions accounted for 4 percent of the P2P 2017/18 budget.
- 201. The January to March 2017 Quarterly Report described this milestone's progress in the quarter as the distribution of a second venison growth wall planner with Deer Industry News in February 2017. It also stated that a web-based version of the venison growth curves had been commenced and that it would allow farmers to investigate the impact of changes on growth rates and economic returns. This was at the time in production (started in March 2017 and due in April 2017)⁷⁷. The Farm Systems Description Project was also noted as underway. Roll-out and delivery of feeding information was to be achieved by September 2016 but presumably this report was penned in April 2017.
- 202. The January to March 2017 Detailed Programme Status Update also stated progress had continued with the provision of other materials to assist farmers to take a more planned approach to feeding and growing deer. This included a forage planner farm systems approach.
- 203. However, by the time of the April to June 2017 Quarterly Report the 'P2P Programme in a page' described delivering strategic feeding tools by 30 September 2016 as at risk of delays. But the quarterly report was dated 2 August 2017?⁷⁸
- 204. Progress in the July to September 2017 Quarterly Report was summarised as being the commissioning of a forage calculator and a deer mating calculator and the testing of these during the quarter. The Deer Farming Systems description was also provided to industry groups for their appraisal.
- 205. Progress had also been made with the roll-out and delivery of feeding information by September 2016. It also reported that web-based growth calculators for venison and replacement animals had been delivered and that a forage planner was in development. The PSG was also to review the links with projects 6.1 and 6.3 by June

⁷⁷ January to March 2017 Quarterly Report, 15. Detailed Programme Status Update, Page 47 Page E50

⁷⁸ April to June 2017 Quarterly Report 12. For Information - Detailed P2P Project Status Report for Information, Page 33



2017 to ensure real solutions were being delivered for commercial farmers annually. However, this report was presumably written after September 2017.

- 206. The October to December 2017 Quarterly Report described progress in the quarter as the production of growth curves for replacement hinds which was distributed to all know deer farmers. It also explained that Deer Facts on 'Fodder crops for winter feed' and 'Feeding tables' had been distributed widely as well as a feed cost comparer calculator. It noted that a venison growth curve was to follow in September 2018. In addition it reported that the Farm Systems Description was currently being user tested and it was targeting acceptance by June 2018.
- 207. The 2016 CINTA survey of AP members found that 36 percent thought that since they jointed an AP the most useful change was the quality/quantity of the deer feed overall⁷⁹. This exceeded any other change made by AP members significantly⁸⁰. Changed deer feed quality and quantity was also the practice and technology change that improved most as AP members were involved for longer in their APs. Twenty five percent of AP members of less than a year found changes to feed quality/quantity very useful with a further 11 percent finding it quite useful (totalling 36 percent finding them either very or quite useful). But this rose significantly for AP members of over a year with 47 percent finding the changes to feed quality/quantity very useful with a further 14 percent finding it quite useful (totalling 61 percent. The rest had either made these changes before joining the AP and only 10 percent had not found them useful or have not yet changed.
- 208. Moving to the wider base of all deer farmers, the 2018 CINTA report showed that 65 percent of the surveyed farmers used a supplementary feeding regime pre-rut or pre-wean which represented a 10 percent increase on the 55 percent who practiced this in 2011. Given the CINTA survey results, some of this improvement is probably attributable to the P2P programme.
- 209. The same CINTA report also noted that the levels of monitoring of mature hind live weights by breeders, a measure of the success of feeding strategies, had fallen from 48 percent in 2011 to 39 percent in 2017⁸¹. When CINTA explored attitudes to monitoring mature hinds it found that just less than two-thirds of farmers (63 percent) visually assess their mature hinds, which was lower than the 68 percent who did so in 2011. Significantly more farmers were using mature hind monitoring as a benchmarking tool in 2017 at 8 percent than the 2 percent in 2011. The fall in monitoring of mature hind live weights is puzzling.
- 210. In the 2011 CINTA report more than half of the finishers had well-established innovative practices such as providing specialist feed to achieve desired growth rates (58 percent) and regularly monitor weaner growth rates (56 percent). Around two

⁷⁹ CINTA Report "Advance Party Survey Results", August 2016, Page 58.

⁸⁰ Ibid, Page 58

⁸¹ CINTA AgriResearch, 2018 Deer Industry New Zealand Report # 1.1, March 2018, Page 12



thirds of finishers re-grassing programmes (77 percent)⁸². However, few were thinking about using new practices.

- 211. Five years later the CINTA survey showed that 68 percent of finishers grew forage crops to meet seasonal feed requirements. Although it appears the wording of the question had changed, this appears to be a material improvement over 2011 that CINTA did not comment on specifically in its 2018 report⁸³. This is a 10 absolute percentage point increase, some of which is likely to derive from the P2P programme's efforts. The level of regular monitoring of weaner growth rates was the same as in 2011 at 55 percent. 83 percent of finishers re-grassed regularly in 2017 up 6 percent on 2011.
- 212. The 2018 CINTA report shows that the P2P programme has plenty of room to improve the take up of more formal feeding strategies. Just three percent of deer farmers said they used a full farm system for feed budgeting with around 10 percent using pasture metering for crop yields and 13 percent creating a written feed budget every year. Nearly half of farmers 46 percent said they did a visual assessment of feed covers, with 26 percent doing rough feed budgets in their heads, both more tradition approaches. Many farmers appear to carry this informal approach through to their assessments of their stock. The 2018 CINTA report also indicated that 86 percent of breeders assessed the condition of their hinds by eye only⁸⁴ while 59 percent undertook body condition scoring of hinds⁸⁵.
- 213. However, the value of more formal approaches to feed management and animal health and growth rates depends on the degree to which these provide more reliable estimates which would lead to higher production and earnings. The added value of more formal approaches may not be too material for some very experienced deer farmers. So it is possible that focusing the P2P's efforts more on younger less experienced farmers who could be more open to change could yield better results for the P2P and whatever programme might follow it. This is because improving feeding strategies and thereby increasing production using more formal approaches may be something that, in an important number of cases, will take a generation or more to achieve.
- 214. The high level of value of feeding strategies shown CINTA survey of APs may indicate that this is a really important topic of interest and discussion within APs. It is not clear to us if the P2P's information efforts listed in the quarterly reports are hitting the mark and providing useful material for the APs to use. The 2016 CINTA survey found that 38 percent of AP members didn't appear to see much value in DINZ staff and publications but 62 percent were. It may be worthwhile exploring the value AP members are getting from the tools and calculators provided under this milestone and confirming which are the most helpful.

⁸² Note these percentages include both those who have practiced this for a while as well as those who have recently begun to.

⁸³ See CINTA AgriResearch, 2018 Deer Industry New Zealand Report # 1.1, March 2018, Page 15

⁸⁴ Includes both those who are doing this as a well-established practice as well as those who have recently begun the practice.

⁸⁵ See CINTA AgriResearch, 2018 Deer Industry New Zealand Report # 1.1, March 2018, Page 10



- 215. There may also be value in taking the most advanced APs in this area of feeding strategies and focusing and testing the tools and calculators with them as a way of checking how easy they are to use and their wider value to the sector. As discussed earlier advances by these APs can be reflected back to other APs and through regional workshops to continue to drive this important milestone forwards.
- 216. In the section below titled Possible economic benefits of P2P PGP to date we estimate that this initiative on its own may have already covered the costs of the P2P PGP to date. Our analysis of the value drivers of this Programme also suggests that this is a very important milestone as it drives venison volumes. Given this, it may merit greater funding than the 4 percent of the P2P 2017/18 budget⁸⁶ it has been allocated.

Milestone 6.3 (formerly 2.3.3) : Improve animal health

- 217. The 2014 Business Plan's aims for animal health was to apply tailored animal health plans to improve product quality, maximise growth rates and minimise on-farm deaths. A deer health champion was to liaise with interested groups and advise on recommended animal health practice. The first priority was to ensure deer farmers were aware of productivity limiting deer diseases and health conditions. Their level of awareness was to be benchmarked by conducting market research. Key messages were to be agreed with NZVA, based on the survey's findings.
- 218. The deer health champion was to use experts and distribute information as part of a marketing campaign to educate farmers about the benefits of planned animal health. Progress was to be reviewed each year to assess uptake. The Business Plan also envisaged that a deer health group would convene to review the effect of marketing efforts after year 2 and the awareness survey was to be repeated to measure progress.
- 219. A second key aim was that to develop a process for the systematic adoption of planned animal health among deer farmers. Every deer farmer was to have an individually tailored, annually reviewed, formally constructed animal health plan based on a risk assessment process. The right tools and well trained vets would be needed to achieve this. Data from milestone 2.2.3 would inform producers of their relative productivity, and motivate them to seek assistance on animal health.
- 220. The Deer Branch of NZVA was to develop programmes to improve vets' delivery of animal health planning advice. There was also to be a system to ensure on-going professional development for vets. The Business Plan noted that vets would need to build skills in three key areas: deer disease and health conditions, benchmark data, KPIs and targets and facilitation.
- 221. The 2017/18 Annual Plan showed that this milestone was to account for 6 percent of the P2P budget that year.⁸⁷ It emphasised that disease and death through misadventure are a material cost to deer farmers and that the Deer Health Advisory Group (DHAG) strongly endorsed managing herd health status through the adoption of formal, individually tailored, annually reviewed, risk assessed animal health plans. It commented that traditional approaches to encouraging use of animal

⁸⁶ 2017/18 Annual Plan, Page 8

⁸⁷ 2017/18 Annual Plan, Page 8



health plans had not led to widespread uptake, with surveys of farmers reporting a lack of faith in the financial return of professionally supplied animal health plans.

- 222. The 2017/18 Annual Plan explained that a Deer Health Theme Group had calculated a 14 percent increase in profit from the achieving a healthy herd so the project aimed capture this profit via adoption and use of deer health plans. P2P set itself the target of getting 10 percent of deer farmers after 3 years to use proper animal health plans with that rising to 50 percent after 5 years. It also indicated a plan to measure of the number of farmers who were using the deer health review process by October 2018.
- 223. The January to March 2017 Quarterly Report stated that progress had been made in this milestone due to trials with vets and farmer clients confirming the effectiveness of the annual health review. It also noted that there was agreement to proceed with co-funding NZVA Vet training modules. It was planned that P2P-AG would receive a review of animal health planning in June 2017. The report also commented that the DHAG had agreed priorities for the Deer Health Project Manager and confirmed several projects to increase farmer awareness of key diseases and produce materials to assist with uptake of animal health planning.
- 224. The April to June 2017 Quarterly Report explained that the Deer Annual Health Review (DAHR) had been completed and presented to the AP Facilitators on 24th May 2017 and also presented at the Deer Industry Conference on 26th May of that year. The DAHR was developed over 18 months with significant consultation with a number of deer farmers and vets to develop a process that is fit for purpose and encourages best practice. The Quarterly Report continued that the workbook would be made available in electronic form initially. It also reported that a MOU with NZVA had been signed to produce vet training module based on P2P process. Finally, it stated that trials of the health review process had been well received by those farmers and veterinarians involved to date.
- 225. Progress reported in the July to September 2017 Quarterly Report included distribution of a 'Preventing Foetal Losses' Deer Facts and the continuing roll out of the DAHR with the workbook made available online. It also noted that activities to encourage adoption of health planning were underway.
- 226. The Detailed Status Report Update for this guarter explained that there was an objective to have 50 percent of deer farmers with an appropriate animal health plan by year 3 and to also have 80 percent of farmers have working knowledge of key production limiting deer diseases. It also reported that in 2016/17 the project aimed to produce and test the DAHR and the Project Manager had presented the DAHR at the DINZ conference. The Project Manager had been working with a small group of veterinarians and farmers to trial the document and process. The aim of this was to confirm the utility of the document and process, and refine it, inform production animal vets of its purpose, create a team of vets to propagate the use of the DAHR among their clients and peers and facilitate initial DAHRs to ensure satisfactory outcomes for farmers who would also be able to encourage wider adoption. Importantly the Detailed Status Report Update noted that 22 DAHRs had either been done or booked in prior to mid-September 2017.

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- 227. The October to December 2017 Quarterly Report described progress in the quarter as the continuing roll out of the DAHR with on-going discussions with key regional vets. It also reported that presentation of case studies of farmers using the DAHR had appeared in December 2017 Deer Industry News and was due to be completed by September 2018. In addition, work was underway to create a core group of influential deer vets to encourage use of DAHRs. A job description had been completed and 6 individuals targeted to be Vet champions by April 2018.
- 228. Judging by the quarterly reports and the September Detailed Status Update Report good progress is being made on this milestone. The target setting is however confusing. Two targets were apparent in the documentation. The 2017/18 Annual Plan targeted 10 percent of deer farmers to use proper animal health plans after 3 years and 50 percent after 5 years while the September Detailed Status Report Update targeted 50 percent of deer farmers with a proper animal health plan after 3 years and a seemingly new target of 80 percent of farmers have working knowledge of key production limiting deer diseases. A single agreed target is needed.
- 229. The 2016 CINTA survey of AP members revealed that nearly a 5th of AP members had adopted a proactive animal health plan with the help of a vet⁸⁸.
- 230. The 2018 CINTA report suggested that nearly half of deer farmers (47 percent) said they had a drench plan with just under a third of farmers (29 percent) consulting their vet for parasite management planning. Four percent responded that they had no parasite management plan with the same percentage never having heard of them. This same report also found that vets remained key influencers of change for 65 percent of farmers when they were making an on-farm policy change or adopting new technology. Other influencers of change were AP members at 44 percent, field days trial results with 44 percent, and neighbours/deer producers at 43 percent. All these were more than 20 percentage points lower. Moreover, the influence of vets had increased a little from 59 percent in 2011 to 65 percent in 2017.
- 231. The high level of influence of vets suggests that continuing to target improved training for vets and vet involvement in AP activities and regional workshops is likely to have more impact than other focuses for spending. The increase between 2011 and 2017 is encouraging and this important milestone needs to continue to be progressed. However, we note that currently, 3 years into the programme 22 out of an estimated 1,500 deer farmers or 1.5 percent had either been done or booked DAHRs prior to mid-September 2017. Discussions with one interviewee suggested that part of the problem of take up may be related to the complexity of what has been developed (DAHR). If it's take up stalls, or is a lot less than planned, it may be worthwhile trialling a simpler version perhaps drawn from plans that are currently used by AP members⁸⁹. The more complex plan would of course be available for those wanting to improve the health planning of their herds further. We recommend regularly reporting on consistent agreed metrics for this milestone.

⁸⁸ See CINTA AgriResearch, 2018 Deer Industry New Zealand Report # 1.1, March 2018, Page 57 (Includes those who thought the change was very useful and those that thought it was quite useful).

⁸⁹ We understand Paddy Boyd has an example of a simpler animal health plan.



Milestone 6.4 (formerly 2.3.4) : Other technology

- 232. In the 2014 Business Plan this milestone allowed the P2P to periodically review whether new technology packaging might be needed. It was expected that growing societal and consumer expectations for assurances of environmental stewardship and animal welfare could be a growing areas of interest that might need to be packaged up for farmers.
- 233. Environmental stewardship was planned to account for 3 percent of the P2P budget in the 2017/18 Annual Plan⁹⁰.
- 234. The 2017/18 Annual Plan explained that increasingly farmers were being required to mitigate the environmental impacts. It argued that water quality, land management, native biodiversity, agricultural emissions and other aspects of ecosystem services would require monitoring and management. It also suggested that market demands and product positioning added impetus and opportunities to improve production efficiency through appropriate nutrient budgeting and management, and improvements in land management. Furthermore it averred that this could have positive effects for stock health and welfare and time management.
- 235. The 2017/18 Annual Plan also described how the P2P programme would provide resources to encourage adoption of appropriate environmental management practices which would improve deer farming performance and offer a means of further differentiating New Zealand deer products in the international marketplace. It noted that the application of this good practice by farmers was patchy, but industry-wide there was more willingness to adopt and demonstrate good practice. So the 2017/18 Annual Plan set a goal of agreeing a Code of Practice (CoP) by 30 September 2017 and a means of verifying compliance with that Code by 30 September 2018. Finally it aimed to have 80 percent of farmers meet deer industry standards for environmental stewardship by 30 September 2020.
- 236. The January to March 2017 Quarterly Report discussed inclusion of 'Environmental Stewardship' in the P2P programme. It noted that it would involve creation of guide to operate within a code of compliance for environmental management, case studies of practical environmental management and guidance about industry needs on environmental compliance and management. This quarterly report also stated that the members of the Environmental Stewardship Advisory Group (ESAG) had now been agreed.
- 237. The April to June 2017 Quarterly Report stated that one of the two new APs that were established in the quarter had an environmental focus and that the ESAG met in June 2017 to develop the CoP for environmental good management. It also indicated that there was expected to be some slippage in the target date for completing the CoP as, at that point, it had been rescheduled to late October 2017 with DINZ Board sign off in November 2017.
- 238. The July to September Quarterly Report repeated the same targets as the previous quarterly report (note that all 3 quarterly reports from January to September 2017

⁹⁰ 2017/18 Annual Plan, Page 8



appeared to target June 2017 for an agreed CoP while the 2017/18 Annual Report had targeted September 2017 as discussed above).

- 239. The October to December 2017 Quarterly Report explained that further work to test the CoP had taken place and was set to be approved by the NZDFA Executive Committee and the DINZ Board in February 2018. However, the RAG Activity Table (2017-18 year) to December 2017 appears to show this timeline shifting to March 2018.
- 240. This quarterly report also discussed setting up a register of suitable environmental advisors who could provide advice to farmers on improving environmental management by May 2018. It also noted that the ESTG was to meet in February to develop case study material by March 2018⁹¹.
- 241. The 2018 CINTA report contained a section in which farmers were asked about the measures they took to monitor and manage the impact of deer farming on the environment⁹². Thirty six percent of farmers stated that they had fenced off waterways on their farms and 31 percent said that they kept an eye on risks but had no formal plan in place. Eleven percent did not believe their farm had an impact on the environment. Farmers with incomes less than \$200k per annum were significantly more likely to have planted trees but less likely to have done any environmental monitoring or managing compared to farmers with higher incomes. Only 6 percent had completed Level 1 LEPs.
- 242. We believe that encouraging APs with an environmental interest to explore how the sector could best respond to pressures to improve environmental outcomes is likely to yield better results than pressure to do this from the P2P PGP itself. The 2018 CINTA survey shows that there is likely to be a long way to go on this milestone before the majority of farmers see it as something they need to take action on.

Achievement of short term outcomes of Output Logic Model

243. The short term outcomes shown in Figure 8 that were to be achieved by 2018 were:

- New markets identified for New Zealand venison;
- Insights into what is demanded by consumers in existing and potential markets;
- Greater communication and collaborative learning across the industry; and
- Easier access and increased uptake of new technology and processes.
- 244. As discussed in paragraph 52 the P2P PGP scoped 6 markets in 2015, one more than the plan. So the first OLM short term outcome was met in so far as the more markets than targeted were scoped. However, it has only been possible to develop

⁹¹ These case studies were targeted for completion by September 2017 in the two quarterly reports covering January to June 2017.

⁹² CINTA AgriResearch, 2018 Deer Industry New Zealand Report # 1.1, March 2018, Page 29



the Benelux market and start on Germany with small quantities of actual exported venison. This market scoping work has also allowed many insights into what is demanded by consumers in existing and potential markets.

245. As discussed in detail under the heading of Market led production greater communication and collaborative learning has been achieved across the industry between mid-2015 when the P2P PGP began and this April 2018 mid-term review. New technology and processes have also been able to be accessed and meaningful levels of practice change are occurring particularly in the APs as discussed above.

Possible economic benefits of P2P PGP to date

- 246. We do not believe that the P2P can claim benefits or losses from all changes in deer numbers as was assumed in the 2014 Business Plan. But we do believe that it is possible to argue that the P2P PGP has already paid back its costs to date of \$4,821,646⁹³. We have done some simple calculations based on the following:
 - 55 percent of AP members surveyed in 2016 had changed their feeding practices as a result of becoming AP members;
 - There were approximately 177 AP members in 2016 and 260 in 2017.
 - The average herd size of finishing stags and hinds in 2017 was 767 (CINTA 2018, Page 6, Herd Size)
 - Deer farmed by AP members who have changed feeding practice could be estimated to be 74,667 in 2016 and 109,681 in 2017.
 - Deer for kill per annum of AP members with changed feeding practices could be assumed to be 51,521 in 2016 and 75,680 in 2017.
 - If it was assumed that 2.5 kgs had been added to these deer by the changed feeding practices then the extra kgs of these deer due to changed feeding practice would be 128,801 kgs in 2016 and 189,200 kgs in 2017. (2.5 kgs is half the additional kgs assumed in the 2014 Business Plan financials).
 - If the schedule is assumed to be \$10/kg then the value derived from these changed feeding practices in 2016 could be around \$1,288,014 and \$1,891,997 in 2017.
 - Adding an incremental \$10/kg for an FOB export price would increase earnings to the sector by \$1,288,014 in 2016 and \$1,891,997 in 2017.
 - Summed this provides incremental earnings from the P2P for farmers and processors of \$6,360,022 in 2016 and 2017.
- 247. The same sort of approach could be taken with animal survival rates driven by changed animal health practices.

⁹³ October to December 2017 Quarterly Report, Page 3



- The proportion of AP members who valued animal health plans as surveyed in 2016 was 24 percent;
- In 2016 and 2017 this represented 42 and 62 AP members.
- The average herd size of finishing stags and hinds in 2017 was 767 (CINTA 2018, Page 6, Herd Size)
- The total animals that these AP members farmed in 2016 and 2017 is estimated at 32,582 and 47,861.
- If it is assumed that 3 percent more animals survived as a result of the changed animal health practices then an extra 977 animals would have survived in 2016 and 1,436 in 2017. (This is half the improved survival rate assumed in the 2014 Business Plan financials).
- The number of animals available for slaughter may have been an extra 674 in 2016 and 991 in 2017.
- Based on an average carcass weight of 55.5kgs the additional kgs of these animals would have been 37,432 in 2016 and 54,985 in 2017.
- If the schedule is assumed to be \$10/kg then the value derived from these changed feeding practices in 2016 could be around \$374,320 in 2016 and \$549,849 in 2017.
- Adding an incremental \$10/kg for an FOB export price would increase earnings to the sector by around \$374,320 in 2016 and \$549,849 in 2017.
- This sums to incremental revenues from additional animal survival from AP members making practice changes to \$1,852,371.
- 248. This does not take account of incremental costs incurred by farmers or processors to produce the additional exports. However, it provides a total of \$8,212,392 in additional revenues resulting from only 2 practice changes made only by AP members.
- 249. We have not assumed a separate value for other practice changes made by AP members that they found either: very useful, quite useful or somewhat useful, after they joined the AP. These practice changes were:
 - 35 percent who undertook regular body conditioning;
 - 33 percent who used production recording;
 - 21 percent who found introducing new technology such as scales or EID readers
 - 11 percent who began use of genetic improvement.
- 250. These practice changes are assumed to support the 2.5 increased kgs of carcass weight and 3 percent additional survival calculated above.
- 251. These calculations could therefore be argued to be conservative. They also do not incorporate any changed practices resulting from the P2P PGP in the wider base of



deer farmers. However, this is likely to have happened given that 70 percent of all deer farmers said that their deer farming operation was more productive than it was five years ago in the CINTA survey of 2018.⁹⁴

252. This estimate of incremental revenue from the P2P PGP derived from changed feeding and animal health practices amongst AP members only. It is nearly double the P2P PGP aggregate expenditure up until the end of 2017. It suggests that the P2P could well be paying back its cash costs as at April 2018.

Additional Benefits

- 253. There might not be large amounts of value to be derived from the strategy of swapping production to chilled from frozen as envisaged in the 2014 Business Plan. However, the P2P PGP is providing a model of cooperation in market development that could have positive implications for the wider red meat sector and for NZ exports of primary products more generally. It provides a forum in which the benefits of cooperating in market development can be tested and to date it has built a position in at least one market which could endure and provide long term returns where without the PGP it may not have happened at all.
- 254. The philosophy behind the P2P's APs is another area of wider potential benefit. It's non-competitive but open and transparent approach seems to encourage farmers to become involved but overtime open up to learn and share more. It is not unique but use of this approach at the scale achieved in the P2P PGP is providing a useful model which could be of value to other areas of primary production. The spreading of the message into the wider deer farming base through the regional workshops is another test case which could also provide valuable insights.

Recommendations

Confirm market requirements

- 255. The 2014 Business Plan targeted the development of 4 new, non-seasonal markets, with a target of circa 300 tonnes per new market by 2022. This Sub-project was designed to cover the research, product development and pilot trials in these new markets. However, the current international venison market is characterised by high demand and constrained supply. It may therefore be wiser at this point to only proceed into new market development where there is clearly a very good likely return because of the lack of venison to build scale in any new markets. These volumes are likely to be needed to maintain and build scale in the markets developed to date.
- 256. No formal marketing agreements were achieved early in this Programme, instead the Marketing Working Group was formed and it allows for useful discussions of cooperative development of markets. Opportunities to build scale for Cervena in markets may be being missed due to continued uncertainty amongst the co-investors about how the benefits of market development might be earned by them. The

⁹⁴ CINTA AgriResearch, 2018 Deer Industry New Zealand Report # 1.1, March 2018, Page 7



MWG could seek to explore arrangements that reward the trail blazing firm(s) while providing for scale as the market grows and other co-investors enter. Further work on formalising arrangements under Project 1.2 New Market Research may provide the avenue to progress this. This could include reviewing precedents set by market research and development efforts to date or exploring venison supply arrangements between trail blazers and following firms. This may also provide a means for greater PGP resourcing of these early research and further market development initiatives where they are clearly intended to benefit all co-investors over time.

257. The level of cooperation achieved by the P2P PGP exceeds other sectors in the meat industry. That level of cooperation has driven value by organising the development of the Benelux in particular despite the tight supply environment. However, there has been some patch protection which could reduce longer term opportunities to build the Cervena appellation. Renewed efforts may be needed to unblock these problem areas. It may be worthwhile to get co-investor CEOs involved as circuit breakers where necessary to unblock any patch protection where the majority believe this is reducing long term market opportunities for Cervena.

Implement joint marketing structure

258. The Business Plan Milestone 1.2.2 - Implement Joint Marketing Structure anticipated that once the first marketing programme was established in a non-seasonal market it would be reviewed annually and if successful, rolled out into subsequent market channels annually for the first three years of the programme⁹⁵. Although the development of the Benelux summer season market has made steady progress and still enjoys the support of participating companies, the possibility of expanding this into subsequent market channels annually has proven difficult to achieve. A key problem has been a limited supply of venison compared to earlier plans. Given this it may be wise to focus P2P's resources on building scale in existing markets e.g. Benelux, rather than potentially spreading resources too thinly by attempting to expand to new market channels annually.

Develop processor-related and on-farm standards

- 259. After a slow start this milestone appears to be gaining momentum. The fact that venison processing and marketing companies must ensure that Cervena venison must be sourced from farms that comply with the Deer Industry Standard for on-Farm Quality Assurance will help drive compliance up from the current 16 percent achieved in July 2017. Monitoring by AsureQuality and other monitoring will track progress and, if compliance lags expectations, action can be taken to rectify that.
- 260. If the processing and marketing companies present a united approach to standards then greater compliance should be achieveable. If that doesn't happen then this is less likely and other actions such as standards regulation may be options to consider if the benefits outweigh the costs.

^{95 2014} Business Plan Page 54



Overarching production initiatives

- 261. The P2P PGP and its predecessor the P2P-AG have commissioned regular research into practice change in the venison sector. This was designed to identify overlaps or gaps with other areas of practice change as well as monitor progress. This is commendable as it has given the PGP a measure of visibility of how the PGP is progressing that is not always the case with such initiatives. We encourage this practice to continue and be repeated before the end of the programme.
- 262. The access to experts or influential advisors programme appears to have made real progress over the last couple of years. The AbacusBio report has had its key themes largely implemented and the first year's target for developing the deer skills of rural professionals has been exceeded with high workshop attendances. This initiative ties in well with the others, and has an evidence base to support it, as a lack of skills has been identified and the surveys have identified a real demand from farmers for good advice from rural professionals. We recommend continuing with this initiative.

Engagement for practice change

Advance Parties

- 263. The Advance Party initiative to drive practice change has been very successful. The number of APs has exceeded initial expectations and they are popular. Surveys suggest that they have sparked real change by many AP members compared to their pre AP farming practices in important areas such as 'improving the quality/quantity of the deer feed', 'regular body conditioning' and 'production recording'.
- 264. A key question now is how to keep the APs refreshed and interesting so that they and their benefits endure. We see real potential for levering off the variety of interests in the APs by letting them shift their interests in directions that the AP members see as most useful for them. The P2P PGP needs to avoid being too prescriptive, but also foster AP's interests in ways that pick up and advance the PGP's objectives and have spill over benefits the other APs and the wider deer farming sector.
- 265. Using this approach it may also be possible for the PGP to improve the results of some of its more 'centre to the farm' or more traditional extension oriented milestones such as genetics and information systems that have struggled to gain traction.
- 266. Discussions with P2P participants, AP members and facilitators have highlighted the potential to foster APs to take work on business planning, optimising mixed farming systems and managing deer farming's environment effects further.
- 267. Some APs already have a more competitive and economic performance based focus. These could build expertise in combining the use of different practice changes and technologies through annual business planning. These APs could then become the touch stones for other APs, or farmers outside the APs via regional workshops and be targeted at farmers when they really need solid business planning metrics and processes, for example, at farm succession or when farmers need to raise capital (debt or equity).



- 268. There appears to be a real desire on the part of some APs to pursue best performance of their mixed farming systems. This may need to be assisted by the P2P PGP arranging its rules and relationships with other entities such as Beef and Lamb NZ or other PGPs so that any jurisdictional or boundary issues can be resolved. This may present challenges but if APs wish to understand mixed farming systems well it may be necessary to cooperate in shared funding of joint efforts.
- 269. A couple of APs are investigating the management of deer farming's environment effects in more detail. This issue has also been prioritised by the P2P PGP through milestone 6.4 'Other technology' environmental stewardship. We would expect that these groups would continue to be assisted and encouraged to build expertise in this area and once they have a solid body of knowledge, they could become touch stone APs for deer farmers facing new local body environmental rules. They could also be used as pathfinders in improving the environmental Code of Practice and the sector's environmental performance generally.

Regional workshops

- 270. The regional workshops are a key plank in the P2P PGP's strategy to expand learning outside the APs to the wider base of deer farmers. The challenge is to find workshop formats and topics to pull in and persuade some of the 60 percent that have been found in surveys to have a negative or neutral view of them. We concur with the strategy of focusing more on smaller off farm formats and AP group and member projects. This may help to seed more attendance from those not in the APs compared to the more traditional approach of bringing in outsiders to provide formal presentations.
- 271. More direct communications with the marketing co-investors in the P2P could be helpful in our view as we only saw one case of co-investors attending workshops. If the P2P is to be market led then having more of this sort of interaction could be useful. Better understanding of in market activities appears to be of interest to many of those we interviewed. It may also be possible for the MWG to agree on a communications approach to the regional workshops that presents their combined efforts in the Benelux and Germany and wider market developments neutrally.
- 272. We also concur with the approach of targeting a lower number of workshops than in 2017. It may allow more organisation and effort to go into those that are held making them higher quality. It may also recognise that expansion for its own sake may give diminishing returns in trying to shift farmers who are happy with their status quo. The results of this approach could be monitored through feedback on the 15 targeted this year.

Information systems

- 273. These initiatives have struggled. In our view it may be worthwhile progressing KPIs through APs with a particular interest in them. These APs could help the P2P test the value deer farmers might see in a package of information, such as performance KPIs, that are available to assist farmers in developing good annual business plans or when required for raising bank or equity finance.
- 274. It may be worthwhile investigating in more detail exactly what the supporters found valuable about this initiatives tools as well as why the detractors don't use them and



try to hone them to suit farmer needs better. However, their lack of perceived value does suggest that progressing these needs to be done cautiously. Continuing to target information to when there is likely to be interest is critical.

275. Another approach might be to put more resources into having all communications with farmers put through a QA process specifically designed to make them as easy to follow and understand as possible.

Other practice change engagement strategies - Deer Facts.

276. Deer Facts was supported by the AbacusBio report and appears to be a popular and effective way of reaching the wider deer farming base. It may be worthwhile putting additional effort into ensuring Deer Facts are as easy for farmers to understand as possible rather than continuing to pursue 12 per annum, especially if it becomes more challenging to find new topics over time.

Genetics for market

- 277. Genetics has been much more challenging than initially expected. Studies have a sizeable group of farmers who are using genetic improvement, particularly velveters, but also a large group who are not. There appears to be real demand to address the knowledge gap but when a course was offered it was poorly attended and as a result discontinued.
- 278. Suggested reasons for the difficulties in moving genetics forward have included, the much better genetic productivity of BVs for velvet compared to venison, making venison BVs seem comparatively poor value and strong opposition from some deer farmers to the LIC's deer improvement business before it was sold in July 2017.
- 279. Analysis suggests that genetics could fundamentally grow the deer sector's productivity as it directly targets volume production as well as quality and there has been encouraging recent research by AgResearch into venison heritability.
- 280. We see value in devoting more resources to unlocking this potential. It may be wise to initially investigate why there has been such a gulf between users and non-users and why non-users claim to want to know more but when it's offered don't seem motivated to attend workshops.
- 281. In addition, if this has not already been tried, it may be worthwhile seeing if there is an AP with a strong venison genetics interest, or seeking to form one, and progressing its investigation of the value of venison BVs. Afterwards its findings could be disseminated firstly amongst APs then more widely.
- 282. Genetics also seems a good candidate for a thorough review of how it is communicated and whether it is pitched at farmers in a way they can easily digest.

Strategic feeding

283. The 2016 survey of APs indicated that this was a really important topic of interest and discussion within APs and the same survey found that it was the most useful change made by AP members since joining an AP. This is clearly an important milestone as it drives production volume and quality. Given this, it may merit



greater funding than the 4 percent of the P2P 2017/18 budget that it has been allocated.

- 284. We believe that it may be worthwhile exploring in more detail the value AP members and deer farmers generally are getting from the tools and calculators provided under this milestone and confirming which are the most helpful.
- 285. There may also be value in taking the most advanced APs in this area of feeding strategies and focusing and testing the tools and calculators with them, if they are open to that, as a way of checking how easy they are to use and their wider value to the sector.

Improve animal health

- 286. This is another important milestone as it could markedly improve survival rates and therefore increase production, lower waste and improve animal welfare.
- 287. The high level of influence of vets suggests that continuing to target improved training for vets and vet involvement in AP activities and regional workshops is likely to have more impact than other focuses for spending. However, more progress is needed as 22 out of an estimated 1,500 deer farmers or 1.5 percent had either been done or booked DAHRs prior to mid-September 2017. We recommend regular and consistent reporting on this metric and more resources if necessary to improve take up.

Other technology - environmental stewardship

- 288. The 2018 CINTA survey shows that there is likely to be a long way to go on this milestone before the majority of farmers see it as something they need to take action on. For this reason we see this as a milestone that needs to be progressed carefully to minimise the risk of farmers seeing the P2P PGP as not pursing their interests.
- 289. We believe that encouraging APs with an environmental interest to explore how the sector could best respond to pressures to improve environmental outcomes is likely to yield better results than pressure to do this from the P2P PGP itself.

Complete full financial analysis of 2017 export revenue benefits including EBIT and NPV

- 290. In our view the value differential between chilled and frozen and the flow on effects of this to the P2P PGP and its priorities needs to be investigated further. The best way to do this might be to review and rerun the 2017 reset export revenue financials and break down the export volumes in different ways to test the outcome on the programme's value drivers. Renewing the full EBIT and NPV assumptions, which were done in 2014 but not in 2017, to tease out some of the key assumptions about where the P2P PGP's value lies would also be helpful.
- 291. We suspect that this may raise questions about the financial gain possible from targeting non-game season chilled exports of 1,200 tonnes per annum. This is especially the case where supplying into this market period causes material additional on farm costs.



Rationalise reporting

- 292. We recommend rationalising the P2P's quarterly reporting. There seems to be 7 formats for reporting on progress in the P2P programme:
 - Summary of progress during this quarter (which is a summary)
 - Overview Table of the Quarter (which is a summary)
 - RAG Activity Table (which his detailed)
 - P2P Programme on a Page (which is a summary)
 - Occasional Detailed Status Updates (which is detailed)
 - Risk Register (which is detailed)
 - Programme on a Page
- 293. These multiple reporting formats appear to involve a fair amount of repetition of the same material in slightly different formats. Sometimes the summaries have useful detail while the detailed reporting such as the RAG Activity Tables appears to get out of date and opaque. It may be beneficial to find out which of these formats are valued by the PSG, AG, MWG and rationalise these to one summary which summarises and doesn't contain detailed descriptions and one detailed reporting format which does.



Appendix 1: Other P2P Benefits Set out in 2014 Business Plan

- 294. The P2P PGP was also aiming to reduce the total amount of feed needed over the life of an animal lowering the amount of feed per kg of venison produced by 8 percent which would result in a saving of around \$8 million per annum.
- 295. Venison processors were forecast to benefit from greater throughput, a less-peaky supply and an increased average size of carcasses, which would reduce per-kg processing costs. It was also thought that future demand would be more certain allowing greater ability to plan future investment.
- 296. The relative environmental impact of each Kg of venison would fall with the fall in pasture consumed per Kg of venison produced of about 6 percent. This would flow onto lower greenhouse gas emissions and nitrogen and phosphate fertiliser inputs by a similar amount.
- 297. The business plan explained that improved deer farming economics would change pressures to convert to dairy/dairy support. It noted that a hind normally excreted circa 8 litres of urine per day (at about 4 grams of nitrogen per litre) on a generally extensive farm whereas a lactating dairy cow excreted around 80 litres per day with a similar amount of nitrogen on a more intensive farm.
- 298. The business plan also argued that there would be indirect flow on benefits to rural communities and suppliers if the PGP succeeded.



Appendix 2: Advance Party survey results CINTA August 2016

- 299. All 177 Advance Party members on the DINA email database were invited to take part in a short online survey to measure the effectiveness of the Advance Party (AP) on deer farming practices. There were 90 completed surveys, a response rate of 51 percent through there were 5 \$50 petrol vouchers to be won and reminder emails sent to non-responders. Only about 24 of the deer farmers who responded were not focused in some way on velvet production.
- 300. Most AP members take calculated risks (86%) and like exchanging information with other AP members (80%). Those who have been an AP member for 1 to 2 years are significantly more likely than those who have been with an AP for less than a year to say they are more likely to try out new methods and products overall.
- 301. Most AP members perform many of the practices, such as pregnancy scanning (86%), weighing finishing deer (83%), and consider these to be contributors to their deer farm's productivity and profitability. However, 35 percent say that an annual production KPI review with the vet does not or would not contribute to productivity and profitably overall. Belief in the value of this was much higher for those in APs for over a year where it was 55 percent rather than 17 percent for those in APs for less than a year. Those that saw value in feed budgeting also increased a lot between these two groups of AP members (from 64 percent to 86 percent). 25 percent did not believe that recording deaths contributed to their productivity and profitably.
- 302. Most AP members (98%) had made important and/ or significant changes to their farming in the last three years primarily with the goal of increasing profitability (84%) and productivity (81%) and to get the most from their farm (72%).
- 303. Just over half of AP members (57%) are planning to expand the deer component of their farming operation in the next five years. This expansion is driven primarily by the profitability of working in the sector and increased land area availability. Barriers to expansion sit mainly with the farmers being happy with the balance in their current situation as well as a having no more land available for expansion.
- 304. Significantly more AP members said that assurance that a change would lift productivity or profitability and/or the ability to access the correct advice and information would make farming practice changes easier than any other support.
- 305. Being an AP member was believed by many to : have motivated them to change (73%) or seek more information (70%) or given them confidence to make changes made (70%). The majority had already made changes since being in an AP. AP members who had been members for 1 to 2 years were significantly more likely than members of less than a year to say that they would find change easier to change if they had the confidence, and information to make a change.
- 306. For many AP members, introduction of technology equipment (60%) and production recording (52%) was implemented prior to AP involvement. However, since their involvement with an AP changing the quality/quantity of the deer feed



(48%) was found to be very useful or quiet useful. However, only 10 out of 90 had found changed genetics helpful.

307. A third thought that farm advisers we not of much value (slide 25). 15 out of the 90 respondents didn't think vets were helpful for production information although this changed the longer farmers were AP members. North Island farmers seemed to be noticeably less positive about a number of factors compared to the South Islanders.



Appendix 3: AbacusBio Report 2016

"Access to Experts Report" 31 March 2016, Bruce McCorkindale

- 308. The purpose of the report was to investigate what expertise deer farmers want, what they expect from various professionals, as well as what the various professional groups see as their role and their needs for professional development to continue to be able to add value to deer farming businesses. It was a qualitative study with relatively small numbers of interviewees which limited any statistical analysis. The interviews were completed during February and March 2016.
- 309. There was a broad consensus that animal genetics, animal health and pasture/forage were areas in which deer farmers could gain the best "bang for buck" to improve their businesses and where they could gain extra value from using a professional.
- 310. Deer farmers rated animal genetics as the one topic area needing the most attention both for skills improvement and in the very small pool of people with these skills.
- 311. Seven common threads emerged from the interviews as follows:
 - The need for an annual one-day training course covering the key success factors for deer breeding, finishing and velveting enterprises, including understanding of market requirements and what needs to happen on farm to meet these.
 - Event co-ordination and notifications a deer equivalent to the B+LNZ E-Diary as a notification service of upcoming events and links to deer information, plus co-ordination of events (such as one-day training scheduled along with Deer farmers' conference) to maximize networking opportunities.
 - Contact page on DINZ website for professionals offering services to deer farmers to list their CV's and contact details. The suggestion was to require two farmer referees and one industry referee to gain a listing. Possibly requiring attendance at deer events to maintain a listing.
 - Web training and event recording. Create skills by building content via the DINZ website including recordings of conference and field day presentations and webinar versions of training courses.
 - Industry fast facts a deer version of DairyNZ's dairy facts and figures publication. There was a need for a "one version of the truth" publication of deer seasonal feed requirements including ME, protein, trace minerals, and covering the mix of age groups, breeds and sex.
 - Animal health high concern about the sustainability of drenches and also the current lack of effective registered products which leads to long withholding periods. Farmers realized co-funding would be necessary to research answers and that long term solutions would involve a combination of drugs, meeting nutritional needs more effectively through both pasture/forage improvement and use of supplements, and grazing management including integration of species potentially a highly collaborative research project.



- Genetics refresher course Farmers and professionals such as vets, stock agents, and consultants had highlighted a need for periodic refresher courses on genetics and the understanding of BV's, indexes and how to use these tools to best advantage.
- 312. There was a diversity of people, farms and climates that make up the deer industry which means that "local" needs need to be factored into much of the advice and benchmarking that was offered. Word of mouth referrals was the key method for farmers to find people with the skills they were looking for.
- 313. Experienced deer vets were an integral and trusted member of farm teams. The certification programmes for velvet, harvesting of velvet, TB testing and dealing with various animal health issues meant vets had typically been on farm more regularly than would be normally be the case for typical sheep and beef farms. Vets suggested that there were good existing training programmes for them e.g the Zoetis course and other short courses, and a NZVA certification programme for all animal classes was being developed. They also believed that young vets would benefit from attending the proposed "One-day course" to gain a better understanding of what should be driving their client's businesses. Other than this, vets businesses appeared to be doing a good job of keeping up their professional development and meeting client needs.
- 314. Farm consultants were "generalists" seeing the whole picture but not necessarily having a highly detailed knowledge of the components. While there were a small number of farm consultants who had built good technical knowledge and skills of deer, for most, deer comprised only a small part of their business. Their ability to look at the whole was, in their view, the key part of maximising the overall performance of farm businesses.
- 315. Agronomists highlighted the need for a "Fast Facts" publication of industry agreed deer parameters. They thought that in theory special plant breeding programmes for deer could be established but given the small size of the sector this could be commercially challenging. They had a general view that deer farmers did not make enough use of special purpose pastures/forages that matched the particular peculiarities of a deer system compared to S&B. A comment was that ryegrass was not necessarily the best species for most deer enterprises and that it might require quite a shift in mind-set and management towards options with a better match.
- 316. Nutrition businesses focus on feed sales was similar to that of agronomists. There were a smaller number of nutritionists who were unconnected to product sales and operated as independent consultants. Very few had completed additional deer focussed training such as completion of a Masters or PhD project.
- 317. Farm supplies/services e.g. field reps, bankers, stock agents had the most contact with farmers as part of their daily activities, and were the first point of contact for many farmer enquiries. They were probably one of the most active referral agents. These people strongly supported the DINZ contact page idea. Specialist deer stock agents had unique insights to deer farm businesses with many involved in the purchase and grading of velvet, the assessment of stock being sold and purchased, and the sourcing of genetics as well as offering practical advice on handling. While they were often aware of big differences in farmers' ability to grow animals and know



that much of this was due to feeding management, they were seldom involved in looking into the actual causes themselves.

- 318. Deer farmers highlighted that there were very few professionals around that had a really good understanding of deer specific factors. They had teams around them and identified knowledge gaps that needed research– particularly for parasite management and pastures. Farmers had some long standing relationships with stock agents and vets in particular, with a lot of knowledge gained from the earlier stages of commercial deer farming. They thought there were a few younger members of professions coming through who were being trained and mentored by experienced people.
- 319. Farmers used their networks of other farmers and trusted professionals to seek referrals for new goods, services and people. They might use a DINZ contact page as a starting point but still "run the name past" their close networks. Genetics was one area really highlighted as needing more independent advice and information. They were concerned that deer farming had a poor image from past experiences of deer farming on small blocks and small areas of farms where expectations of a good income were not met.
- 320. There was a discussion of two types of benchmarking. Numeric benchmarking which was a series of output numbers without any particular context (other than regional or broad farm class categories) and "contextual benchmarking", with a high degree of context e.g. well written articles, discussion group comparisons, discussions with neighbours and advisers who could provide examples with a lot of context. With the latter the farmer was able to look at the results and assess the relevance to their property and how an idea could be modified to fit their system. The APs were viewed as trying to bring both forms of benchmarking together.
- 321. Those surveyed were asked how important it was to put extra effort into each topic for their deer farming clients to make progress, and what value someone from their profession could add to that topic. This part of the survey was designed to identify the "best bang for buck" for additional investment of effort and/or finance.
- 322. Deer farmers rated animal genetics and animal health as priorities with forage and pasture very close behind. Supplementary feeding, environmental issues and others were rated as less important. They thought that professionals were very likely to add value on genetics and forage and pasture. Less so on animal health but that was partially because they perceived a need for further research to help solve the problems in this area such as the effectiveness of drenches.
- 323. Environmental management was one field where those surveyed expressed awareness but at this point there was generally believed to be little extra value in doing more or moving faster than farmers were currently doing. Several of the farmers mentioned they had had regional council representatives on their properties and were comfortable they were on top of things. However, they were also aware that this was an area that needed to be considered as part of all farm decision making.