

Summary of Public Consultation on the Lamb Definition Review

Holmes Sacket Pty Ltd

February 2018

Executive summary

- A total of 509 complete surveys received and a total of 22 direct submissions were received.
- 83% of all respondents support for change in definition from public consultation.
- The major reasons cited for change were
 - No change in eating quality
 - A physical signal of impending change in animal classification between lamb and hogget
 - That New Zealand used this definition.
- The major reasons cited for not changing were
 - Not enough eating quality work has been done for sheep outside MSA pathways.
 - That it is not clear how the changed definition would be regulated and what it would cost.
 - That a precedent on this definition by New Zealand does not guarantee success in negotiating future market access
 - That there are already physical signals available to producers of impending change in animal classification between lamb and hogget.
- Considerations for Sheep Producers Australia
 - What the full definition should be, not just the part that refers to dentition.
 - What the flow on implications of the full definition would be for other definitions and regulation and whether there would be additional requirements to meet market expectations.
 - The importance of MSA pathways to minimize additive effects from increasing the risk of product failure.
 - Consideration of suitable compliance schemes that will meet market expectations need to be determined.
 - Whether the new definition would demand national harmonisation of compliance for all processors.
 - Whether the proposed definition provides a greater degree of confidence to enhance finishing and marketing decisions made by producers over

existing signals of an impending change in classification caused by the eruption of a tooth.

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Project background

- In April 2017 MLA, on behalf of Sheepmeat Council of Australia (now Sheep Producers Australia) agreed to undertake a review of the current definition of lamb with the intention to understand the impact of a change to the definition that would allow the eruption of either of the first two permanent incisors but neither incisor could be in wear. This change would bring that part of the definition that relates to dentition in line with the New Zealand definition.
- An interim report detailing the issues surrounding the proposed change in definition was published in September 2017 and subsequently circulated to industry for feedback as part of a public consultation process that asked either for an online survey to be filled out or for a detailed written submission to be submitted to Holmes Sackett Pty Ltd.
- This report aims to summarise the responses received in the public consultation process and make recommendations as to the areas that Sheep Producers Australia should consider in making its final determination as to whether the proposed change in definition should be adopted.

Final report objectives

- To provide an assessment of common themes raised through the public consultation process.
- based upon the available information and prior research conducted, identify whether cited concerns are substantiated.
- Indicate pertinent areas for consideration by SPA when determining a policy position.

Summary of Survey Responses

- The overwhelming survey response (83%) was in favour of the change.
- Because this survey was not a random sample of sheep producers, feedlot/finishers, processors, wholesale or retail businesses, and consumers it is not possible to know how representative these responses are of the whole industry.
- Within the sample the processing, wholesale, lamb finishing/feedlotting and merino based sectors of the industry are clearly in favour of the change.
- Only a few producers added comments as to why they agreed that the definition should be changed but those that did mostly cited their belief that;
 - There would be no change in eating quality
 - That it would help avoid the downgrading of product that they thought was comparable to the existing Australian definition of lamb.
 - That it would allow them to have a warning that the carcass grade was about to change.
 - That it would be consistent with the New Zealand definition.
- Although a majority of specialist prime lamb producers and retailers that responded to the survey favoured a change in definition, in comparison to other sectors of the industry, a larger proportion of these sectors expressed reservations to the proposed change.
- The reasons given for not changing the definition could be categorized into six key risks or reasons.
 - The most frequent reason given for not changing the definition was **regulatory risk**. Forty-eight percent of responses that were not in favour of the definition cited risks around how the new definition could be policed as the key reason. There is an overarching concern that allowing the presence of permanent incisors will create a much more difficult definition to enforce than a definition where permanent incisors are not allowed to be visible. It should be noted that the regulatory risk cited was nearly always a precursor to the expected deterioration in eating quality that might follow.

- The next most frequent reason for not changing the definition was **eating quality risks**. Nineteen percent of responses that were not in favour of the definition cited risks around how the new definition would impact eating quality as the key reason. These responses came from people that are not satisfied that the eating quality work is comprehensive enough to assure them that the 'lamb' brand would not be affected.
- Eight percent of responses that were not in favour of the definition cited risks around **market risks** as the key reason. A further 13% of responses that were not in favour of the definition cited **age** as the key reason. Both categories of reasons why not to change the brand were associating the 'lamb' definition with age not dentition. The former saw a risk in the message it would send to the market that Australia is extending the definition to allow 'older' sheep into the market and that would have negative impacts on market access and the brand. The latter group of responses considered age (i.e. less than 12 months) as the key component of the lamb definition and therefore ruled out the change because it was taking the industry further from the key component of the definition not closer.
- Eight percent of responses that were not in favour of the definition cited that it was **unnecessary**. These responses came from producers that considered a lamb could easily be taken to market within 12 months and therefore the onus should be on producers to get them to market under the current definition rather than change the definition to accommodate less productive production systems.
- Two percent of responses that were not in favour of the definition cited that there was a **price risk** to their business because of increased supply of 'lamb' when they are trying to sell their lambs.

Summary of written submissions

- Most of the written submissions were in favour of the change to the definition on the basis that
 1. It would encourage better quality in older lambs through more confidence in finishing because there would be a physical indicator of imminent change between lamb and hogget with the eruption of teeth.
 2. It would avoid unnecessary price penalties on lambs that cut their teeth between live assessment and slaughter.
 3. There is enough evidence to support no significant change in eating quality between the time immediately before an animal cuts its teeth and before any permanent incisor is in wear.
 4. New Zealand has access to all important markets with its existing definition and therefore there should be no issues with market access if Australia were to change to a definition that was the same as New Zealand's.
 5. Australia would no longer be at a competitive disadvantage in its supply of lamb because of differing definitions.
- The written submission that did not support a change in the definition of lamb maintained that
 1. New Zealand market access under its current definition was negotiated in the past in a unique negotiation environment and this does not guarantee Australia market access in future negotiations if it changes the definition. It may in fact remove a point of advantage in those negotiations.
 2. That the eating quality research is limited to MSA pathways and does not include a broader view on any eating quality deterioration between much younger lamb and older lamb under the current definition. It also does not recognize that not all lamb goes through an MSA pathways at present.
 3. That the ability and cost of regulation of a new definition which is perceived to be more subjective had not been documented for consideration.

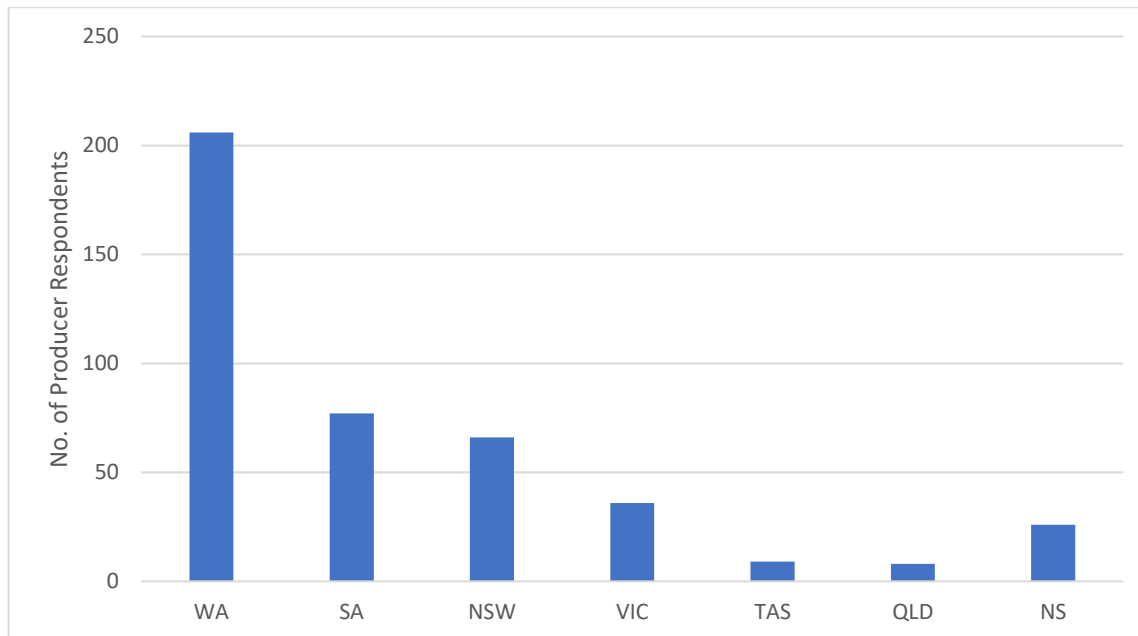
4. That the impacts of supply, demand and subsequent changes in price as well as the associated marginal costs of changing the definition have not been documented for consideration.
5. That there are physical indicators of the imminent eruption of permanent incisors and that therefore the actual eruption of an incisor is not required as a physical indicator of an impending change in the carcass grade of the animal.

Survey Responses

Producers

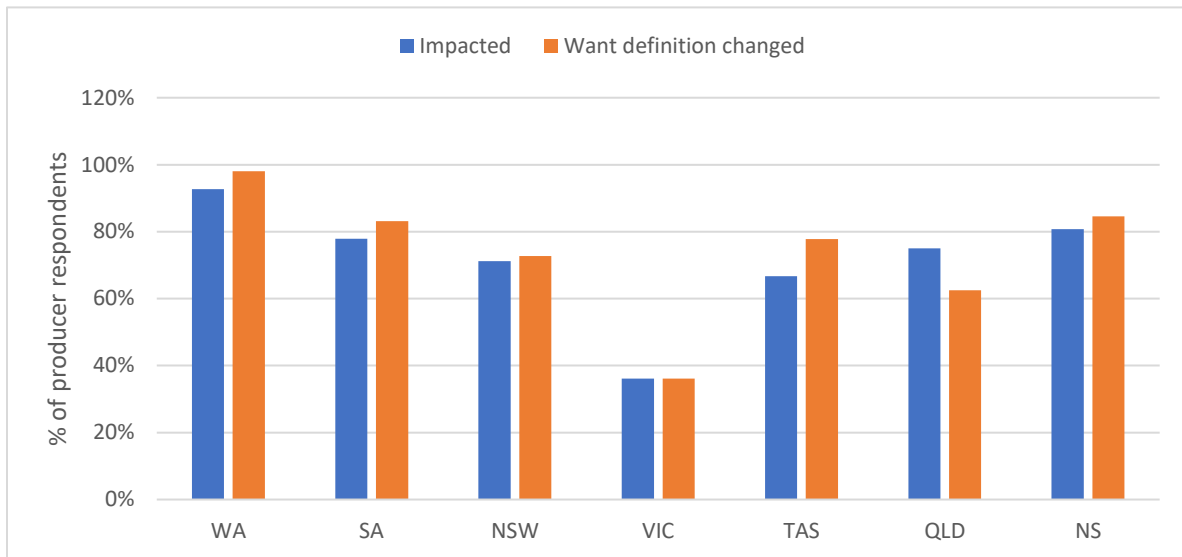
- A total of 509 complete responses were collated from sheep producers, feedlots/finishers, sheep consultants, agents, processors, wholesalers, retailers, and consumers. A survey response was not considered complete if it did not have names, contact details and which sector of the supply chain was being represented.
- 428 producers responded that had no other occupation listed (not agents, processors, or any other occupation).
- Of the producer responses, 69% said they were MSA registered and 68% said they wanted national regulation of the lamb meat brand.
- Of the producer respondent the clear majority came from Western Australia (206), followed by South Australia (77), New South Wales (66), Victoria (36), Tasmania (9), Queensland (8), with 26 not specifying which state they came from (NS) (Graph 1).
- 80% of all producer respondents said that their operations were impacted from lower prices due to the current lamb definition. 84% of all producers subsequently believed that the definition of lamb should be changed to allow eruption of incisors, but without either incisor being in wear.

Graph 1: The majority of producer survey responses came from Western Australia



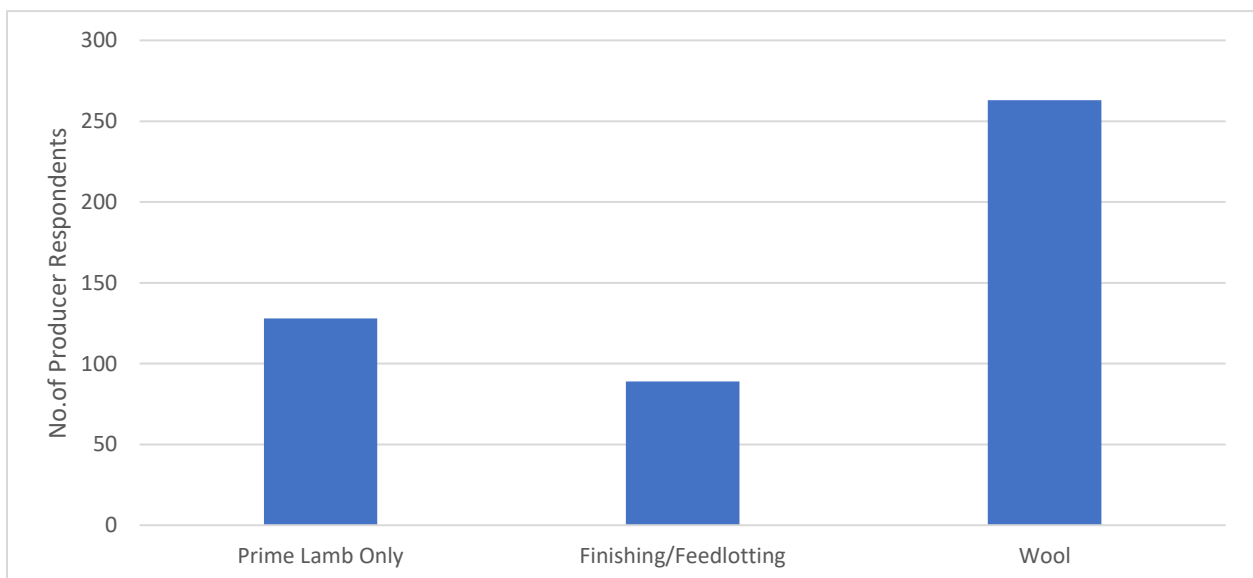
- By state the percentage of producers that responded that the current definition negatively impacted their business varied from a high of 93% in Western Australia to a low of 36% in Victoria. The percentage of producers that wanted the definition changed closely correlated to the percentage of producers that are currently negatively impacted by the change (Graph 2).
- Because the survey was not a random sample of producers it is not possible to know whether, or how far this sample is skewed towards producers that believe they are negatively impacted by the current definition and away from producers that are not.
- It is reasonable to assume that those negatively effected by the current definition are more motivated to have filled in the survey.
- The fact that Western Australian lamb production is more heavily dependent on merino-based genetics and grain finishing systems than the Victorian lamb production and therefore more producers from Western Australia are negatively impacted by the current definition may explain why more producers from Western Australia responded to the survey.

Graph 2: The majority of survey responses came from producers who are currently negatively impacted by the current Australian definition of lamb.



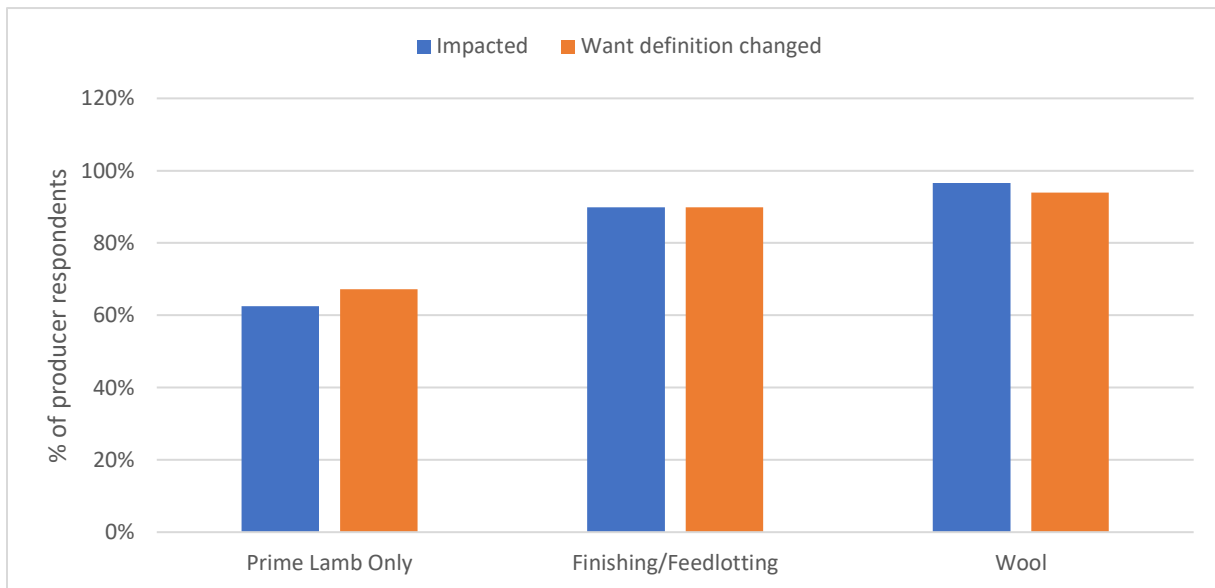
- By enterprise, the majority (263 respondents) of producers nominated wool production as part of their sheep enterprise. 128 respondents nominated that prime lamb was all that they did. 90 producer respondents said they carried out a lamb feedlotting or finishing enterprise.

Graph 3: Most producer respondents nominated wool production as part of their sheep enterprise.



- Of the producer respondents, the specialist prime lamb enterprise had the lowest percentage (63%) negatively impacted by the current definition and the lowest corresponding percentage (67%) that would like to see it changed to a definition incorporating two teeth not in wear. The feedlotting/finishing enterprise respondents had 90% impacted and wanting change, whilst of the respondents that had wool enterprises (presumably merino based), 97% indicated that were negatively impacted by the current definition and 94% of them would like to see it changed to incorporate the two teeth not in wear definition.
- Survey responses indicate that the push for change is greatest in the finishing/feedlotting sector and from merino-based systems than it is from the specialist prime lamb production systems (Graph 4) shows that across all production systems most producers wanted a change.

Graph 4: Across all production systems most producers who responded wanted a change.



- Of the specialist prime lamb producer respondents by state, Western Australia (92%) had the highest percentage that wanted the definition changed, South Australia (68%) the next highest, followed by New South Wales (60%), followed by Victoria and Tasmania combined which had the lowest (38%) (Graph 5).

Graph 5: Victoria and Tasmania were the only states where a minority of respondents were in favour of changing the definition of lamb.



Other supply chain participants

- A total of 43 respondents ticked that they were agents or worked in sale yards. Most of these respondents came from Western Australia (19) and New South Wales (18) (Graph 6).

Graph 6: Most of these respondents came from Western Australia (19) and New South Wales (18)

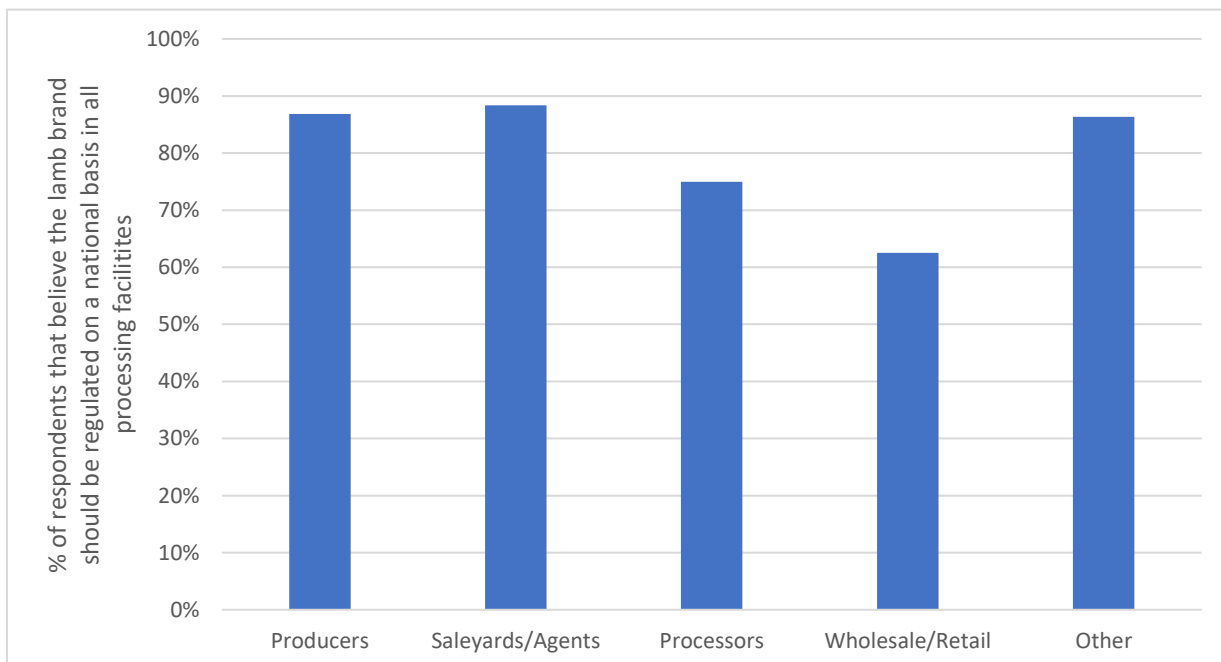


- Of the agent/saleyard respondents almost all were impacted negatively by the current definition, and most of all respondents from WA (95%), South Australia (100%), Queensland (100%) and NSW (67%) wanted it changed. Significantly less of the respondents from Victoria (33%) wanted the definition changed.
- Six farm consultants responded to the survey. Five of these were from Western Australia and all five were in favour of the change. One livestock consultant from South Australia responded and this consultant was not in favour of the change.
- Five researchers responded, with two of the five saying no to the change. Both gave reasons around the ability to regulate and fears of reduced overall product quality in the lamb category. The three in favour did not give reasons.
- Ten responses came from exporter, wholesale or retail businesses. Eight of the ten were in favour of the change, and notably these businesses were not dominated by Western Australia. Two were not in favour of the change, a major domestic retailer and a boutique business.
- Six responses came from people that stated they were representing AUS-MEAT accredited or State regulated processing establishments. All six were in favour of the change.

Response to national regulation

- Participants were told that approximately 15% of the national lamb slaughter is processed through non-AUS-MEAT Accredited Enterprises, and that these establishments are required to meet a range of different regulatory and compliance systems across state jurisdictions, that to varying degrees, underpin the practice of lamb branding.
- Participants were then asked to respond to the question whether they believed it is important for the lamb meat brand to be regulated on a national basis in all processing facilities.
- 86% of all respondent believed that there should be uniform national regulation of all processing facilities.
- The proportion of responses that responded yes was lower amongst processor responses and wholesale/retail responses, but the majority in those two categories were still in favour of national regulation of all processing facilities (Graph 7).

Graph 7: 86% of all respondent believed that there should be uniform national regulation of all processing facilities.



Written Submissions

- There were 17 written submissions in response to the consultation paper from private processing companies and cooperatives, producer advocacy bodies, state research and extension services unions, and regulatory bodies.
- Of these submissions, 12 were in favour of the change in definition and 5 were not in favour of the change in definition.
- A further five written submissions came in from individuals. Of these two were in favour of the change and 3 were not in favour of the change in the definition.

Written submissions in favour of the changed definition

- Of the written submissions that were in favour of the immediate change to the definition of lamb, the reasons given could be summarised into the following categories;
 1. **Avoiding discounts** on good quality product due to the inability to foresee the eruption of teeth under the current definition, thereby suffering unnecessary price discounts.
 2. **Increased supply of better quality older lambs** because producers, finishers, or feed lots are better able to take the risk on these lambs and finish them properly as the two teeth not in wear definition allows a clear signal with the eruption of teeth that they are about to change from lamb to hogget.
 3. **Price for lamb will increase** because the new definition, and the subsequent confidence producers would have to finish older lambs means the in Western Australia the abattoirs will be better able to compete for lamb against the live export trade that takes lighter animals offered because producers will not take the risk on finishing them.

Table 1: Details of written submissions supplied.

Organisations with written submissions to support the change in definition	Organisation Type	Position on Change
Australian Association of Stud Merino Breeders Limited	Producer representative body	Yes
AgForce Queensland Industrial Union of Employers	Union	Yes
Fletchers International Exports Pty Ltd	AUSMEAT Accredited Abattoir	Yes
Livestock South Australia	Producer representative body	Yes
Pastoralists and Graziers Association of Western Australia (Inc)	Producer representative body	Yes
Pastoralists Association of West Darling Inc.	Producer representative body	Yes
Sheep Alliance of Western Australia	Producer representative body	Yes
Southern Meats Pty Ltd	AUSMEAT Accredited Abattoir	Yes
Stud Merino Breeders Association of WA (Inc)	Producer representative body	Yes
Tasmanian Farmers and Graziers Association	Producer representative body	Yes
WAFarmers	Producer representative body	Yes
WAMMCO International	AUSMEAT Accredited Abattoir	Yes
Organisations with written submissions to support the existing definition	Organisation Type	Position on Change
AUS-MEAT Limited		No
Dorper Sheep Society of Australia Inc.	Producer representative body	No
NSW Department of Primary Industries	State government authority	No
NSW Farmers' Association	Producer representative body	No
Victorian Farmers Federation Livestock Group	Producer representative body	No

- The submissions in support of the changed definition variously supported
 1. That enough research had been done on eating quality to be confident that this change in definition would not impact eating quality of product sold as lamb under the new definition.
 2. That because the New Zealand definition of lamb included the ‘two teeth not in wear’ component, and that New Zealand was not excluded from any market that Australia had access to then there was no significant market risk from a change in the definition.
- Two organisations in favour of the change included caveats on their support. One was for some economic analysis to show how flock structure and lambing date changes by producers because of the change would increase profitability and the other was that support was conditional on more information as to how the change could be effectively regulated.
- It is not possible to effectively model how flock structures and lambing dates might change in response to the change in definition of lamb without having a definitive number of days that it takes from eruption of a tooth to it being in wear.
- The request for more information as to how the changed definition could be effectively regulated was also found in the comments in the survey responses. It seems logical that the industry would have thought through this issue and have a suitable solution before the definition were changed.

Written submission in favour of [retaining the current definition](#)

- Of the written submissions that were in favour of retaining the existing definition, the reasons given could be summarised into the following categories;
 1. **Regulatory risks** around the enforcement of the new definition. Issues cited here included the fact that ‘not in wear’ would be more subjective than ‘have erupted through the gum’ and this therefore either would

demand additional resources to enforce the more subjective definition or that there would be more risk of substitution.

2. **Market risks** associated with changing the definitions. The issues cited here were that it is not correct to **assume market access** under a changed definition. The point raised is that New Zealand may have gained that market access a considerable time before now with other conditions included in that negotiation that are unique to their circumstance. Holding onto previously negotiated market access is different to negotiating new access. One submission held the view that Australia's existing definition may well be a source of competitive advantage in market access negotiations in the future given the use of age in key export market lamb definitions (notably the UK and EU).
3. **Eating quality risks** associated with allowing older animals into the lamb category. Issues raised in the submissions in this category related to the limitations and limited amount of eating quality research that is being used to suggest there would not be any significant deterioration in eating quality. Key points raised were that the work published by Pethick (2008) and Weise et al (2005) was with lambs under a MSA approved pathway and that this work looked only at the eating quality difference between lambs about to cut their teeth and lambs where teeth had erupted but were not in wear. It did not look at the full continuum between lambs at weaning through to that point and answer the question of whether older lambs have lower eating quality. References were also made to a paper published by Hopkins et al (2007) that showed increases in topside toughness and the loins became darker in animals slaughtered at 14 and 22 months of age. This latter reference ignores the age difference between the old definition and new definition is likely to be less than 27 days. It does however confirm deterioration in eating quality with age. Submissions also pointed to the fact that ~15% of the national lamb kill is done in abattoirs that are not MSA accredited and that the MSA Annual Outcomes Report 2015-16 reported the proportion of sheep graded with

MSA through informal and trademarked pathways represented 23% of the national lamb slaughter. One submission also points out that as late as of 2017 a representative of the Retail Council confirmed that it had not altered its view that the definition should not be changed.

4. **Simple cost benefit analysis appearing to marginal** to justify the change considering risks to industry. This issue was raised considering not having quantified any impacts on price of increased supply of lamb under the new definition, no costing of the changes required to effectively regulate a new definition and the cost to industry of changing subsequent definitions (hogget, mutton, ram). It is also pointed out that market access may become conditional on other criteria under the changed definition and that these other conditions would need to be costed. For instance, the New Zealand quota to the European Union involves a NZ EU Quota Compliance Verification Standard with a subsequent Age Verification program that each processing plant must comply with.
5. **The change does not eliminate financial risk** associated with marketing older lambs. The issues cited on this topic is that the age at which a lamb's permanent incisors erupt (12 – 16 months) varies considerably more than the range in time taken from eruption to both teeth being in wear (27.4 days (Weise et al 2005)). Note that the time taken for both teeth in wear is thought to be longer than the time take to the first permanent tooth being in wear as both teeth don't erupt at the same time. In the responses to the survey one respondent pointed out that there are physical signs of impending permanent incisor eruption. A widening gap between the two front temporary lamb's teeth, those teeth being loose, inflamed and bleeding gums, and often a temporary tooth has fallen out entirely before a permanent incisor can be seen to have erupted through the gum. This raises the question as to whether a change in the definition is necessary in order aid producers to market livestock before they fall outside the current definition of lamb considering the current Australian definition being that the permanent incisor has

erupted through the gum. Because a large part of the argument for a change in the definition rests on the advantage it would give to producers finishing lambs on grain to have a signal that the animal is about to move from a lamb classification to a hogget classification, rather than the benefit of extending the age at which a lamb can still be called a lamb, it is logical that the industry should verify that there are no practical physical signals that a permanent incisor is about to erupt.

- A further, and important point raised in a submission that did not support the change, is that the consultation paper focused on only part of the New Zealand definition being 'two teeth not in wear' but did not reference that part of the New Zealand definition that refers to '<12 months of age'. The New Zealand definition is an either/or definition in that an animal is a lamb if it is under 12 months of age or so long as no permanent incisor is in wear. The point raised is that ultimately the industry needs to decide on the full definition to be used and then after that, the definitions of all other categories that may be affected by this change.

Substantiation of cited concerns

Of the concerns as to why a change in the definition should not be implemented the following one

- The concerns around eating quality were focused on there not being clarification on what eating quality differences may exist for lamb currently not slaughtered under an MSA pathway. If it is indeed a large proportion of the slaughter than it may be prudent to understand what impact a change in the definition might have on eating quality of sheep not under an MSA pathway. The outcome that is being sought is not whether an MSA pathway animal has better eating quality than a non MSA pathway animal at the same age, but rather whether a non MSA pathway animal that is close to teeth eruption but has not yet had a tooth erupt has significantly different eating quality to an animal on a non MSA pathway for which a permanent incisor has erupted but is not in wear. This has not been

researched. Other concerns around eating quality cited work that has shown decreasing tenderness with increasing age and were significant where the age difference was large. Whilst this is valid it misses the point that the suggested change in definition does not allow for substantially older animals to be classified as lamb and that under MSA pathways there is no significant difference in eating quality with such a small change in age. Where this argument might not hold up is if the change in definition were to substantially change production systems the producers employed so that there was more significantly older lamb being slaughtered and that these animals were not on average under better nutrition than the lambs that are slaughtered now before they are properly 'finished' in order to avoid the discount that comes from a reclassification of lamb to hogget.

- The concerns around regulation mostly centered on the fact that no information was forthcoming on how the changed definition could be effectively regulated, what would be required to effectively regulate a changed definition and whether that regulation would add costs and how much additional cost might be added to the supply chain. An example was given of the NZ EU Compliance Verification Standard that New Zealand operates under to access EU markets. As an example, the compliance verification standard has seasonal differences in the requirement for moulting animals pre-slaughter according to the risk of teeth eruption in New Zealand by season. The clear majority (86%) of respondents called for all processors to be under uniform national regulation. The AUS-MEAT submission correctly identified that to know how any change might be effectively regulated the entire 'new' definition (not just the dentition component) for lamb needs to be decided on and from that any other definitions that are affected need to be redefined and then a regulatory system needs to be designed that will give markets confidence in the definition. This is a body of work that is yet to be done, and without being done an estimate of any likely changes in the cost of regulation cannot be done.

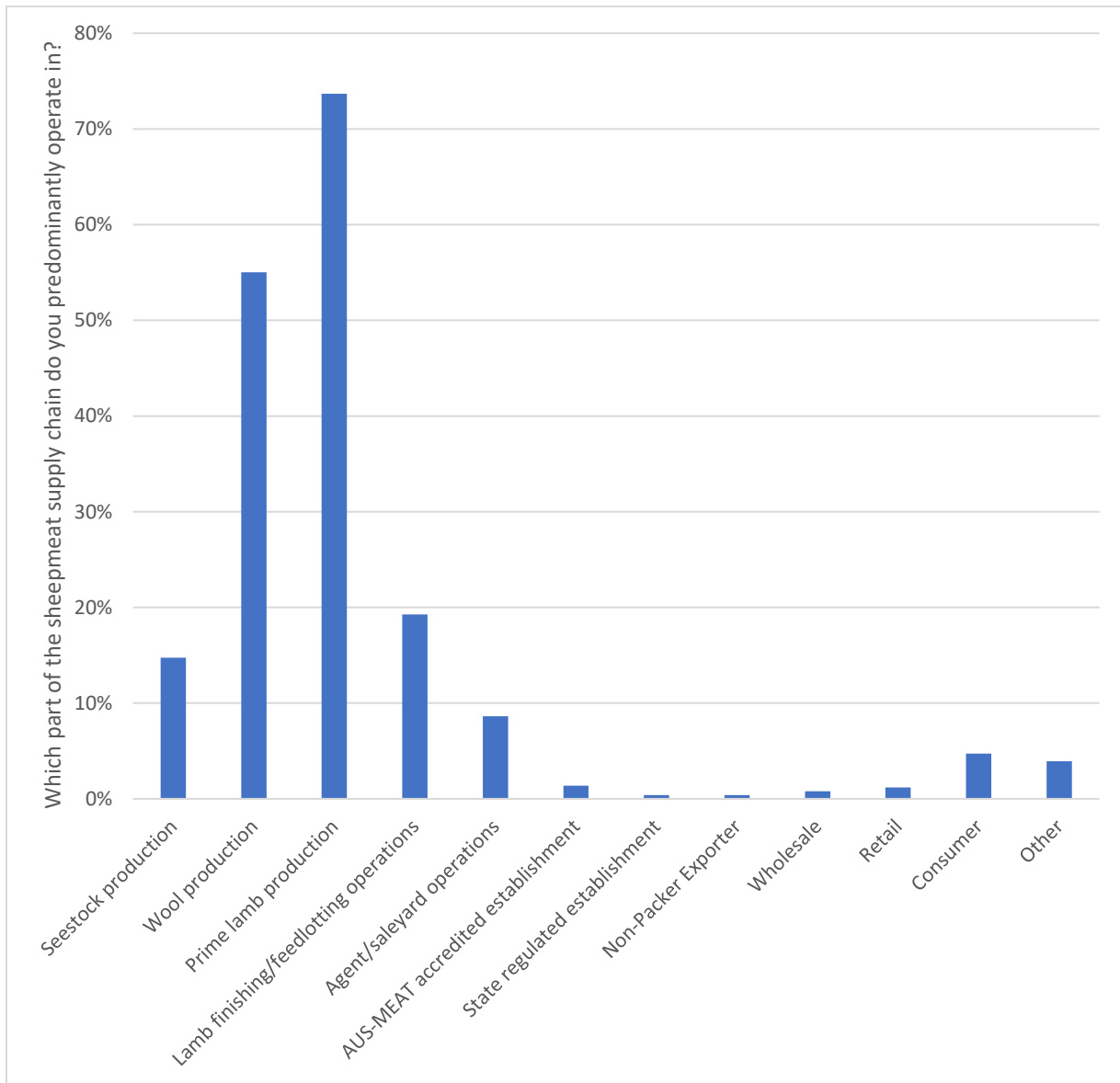
- A concern that had not previously been identified around market access raised in the public consultation identified that renegotiation of market access with a new definition that is harmonized with New Zealand is not a guarantee that it can be done when New Zealand market access might have been negotiated a substantial period beforehand. Feedback from MLA and AMIC export members in the initial consultation report identified that some market access risk would exist and that the highest risk was in a currently relatively small market being EU/UK access. Overall the precedence of using the proposed definition and the market access that New Zealand has, was considered to mean that the risks were minimal.
- A large part of the argument for a change in the definition is that it will allow producers more confidence to older finish lambs if they have a physical signal by which they can tell the animal is about to change classification. The average number of days 'eruption but not in wear' might allow as a signal for impending change in classification is not known but is assumed to be less than 27 which was the average number of days from eruption to both teeth in wear in one trial. In the public consultation process a respondent maintained that there are already physical signals of impending eruption of permanent incisor teeth, being widening of the gap between the two front milk teeth, inflamed and bleeding gums, loose teeth, and that these signals should be used by producers. No published work could be found to verify this or assess the practicality of incorporating into on-farm decision making. If it is true and practical, and there are in fact useable physical signals of imminent eruption of teeth than the change to the definition is purely an argument of extending the age at which an animal can be classified a lamb.

Pertinent areas for consideration by Sheep Producers Australia

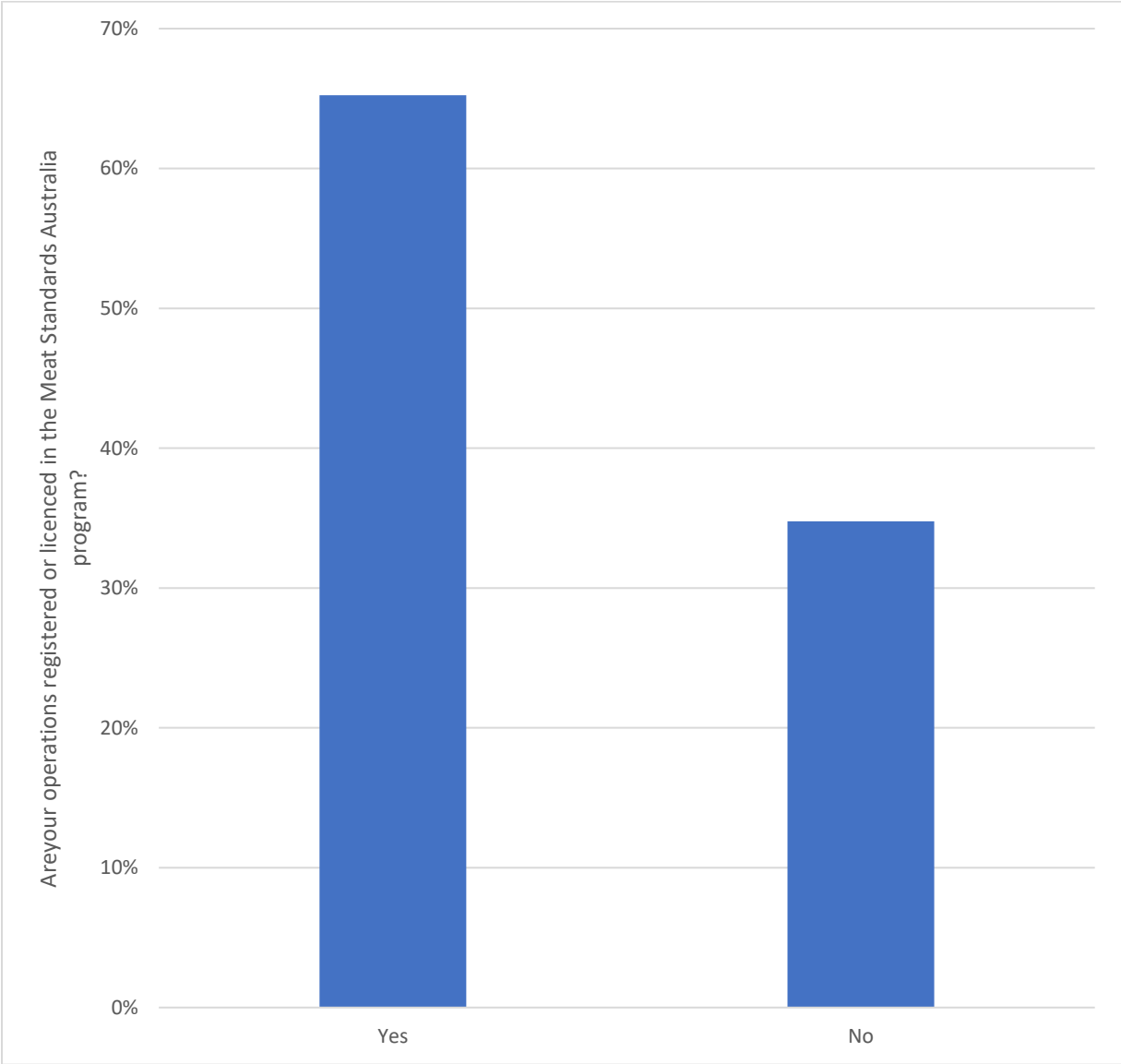
- The full definition needs to be determined (i.e. will it be an either/or decision as per the New Zealand definition).
- The impact the change in the full definition will have on regulation and changes to the cost of that regulation needs to be determined.
- The requirement of uniform national regulation needs to be considered.
- Consideration of suitable compliance schemes that will meet market expectations need to be determined.
- The importance of MSA compliant pathways in protecting eating quality needs to be determined.
- The likely impact on finishing and marketing decisions made by producers if the proposed definition does not allow increased confidence in finishing lambs over existing signals of an impending change in classification caused by the eruption of a tooth.

Appendix: Survey graphs

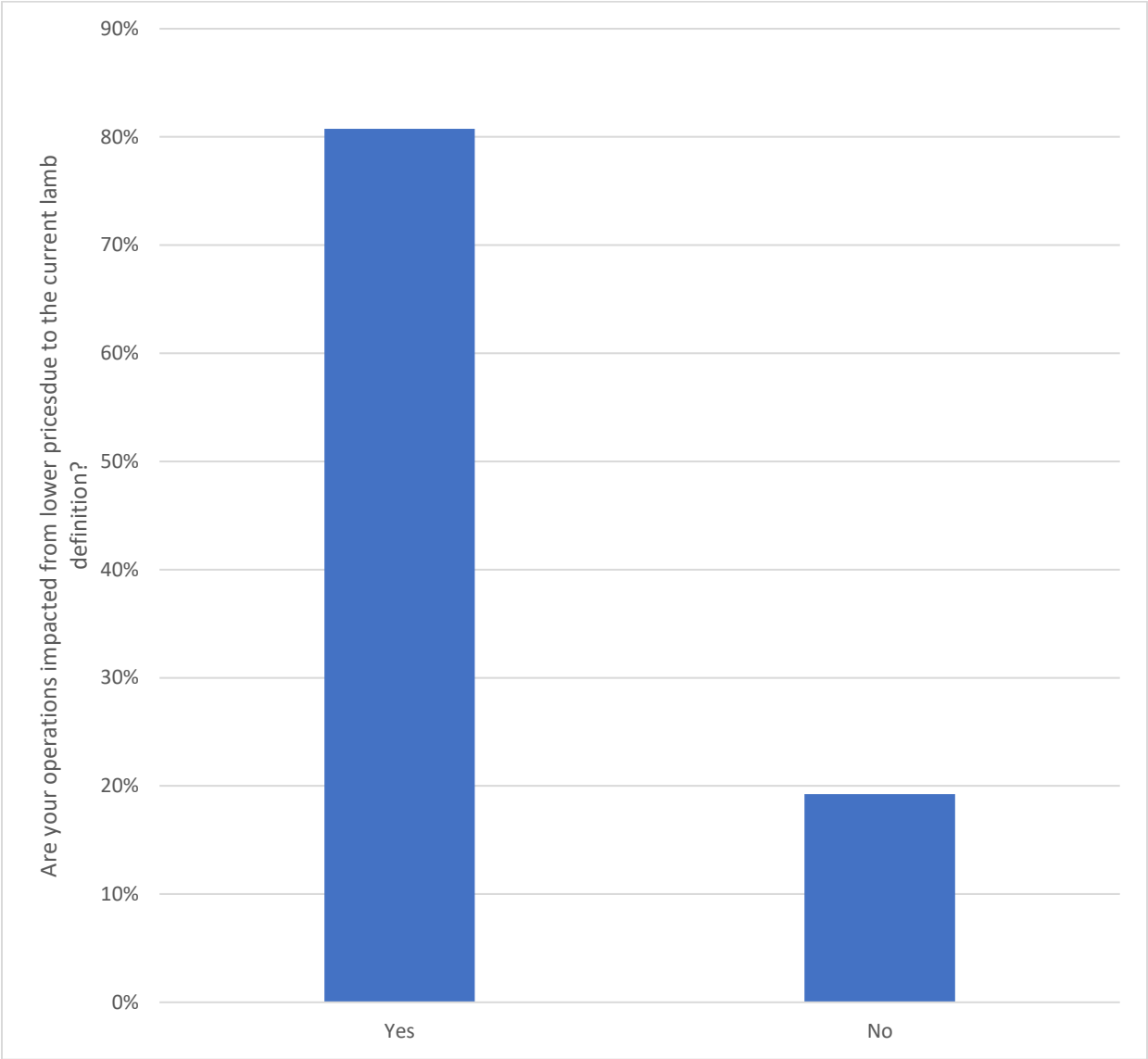
Q8 Which part of the sheepmeat supply chain do you predominantly operate in?



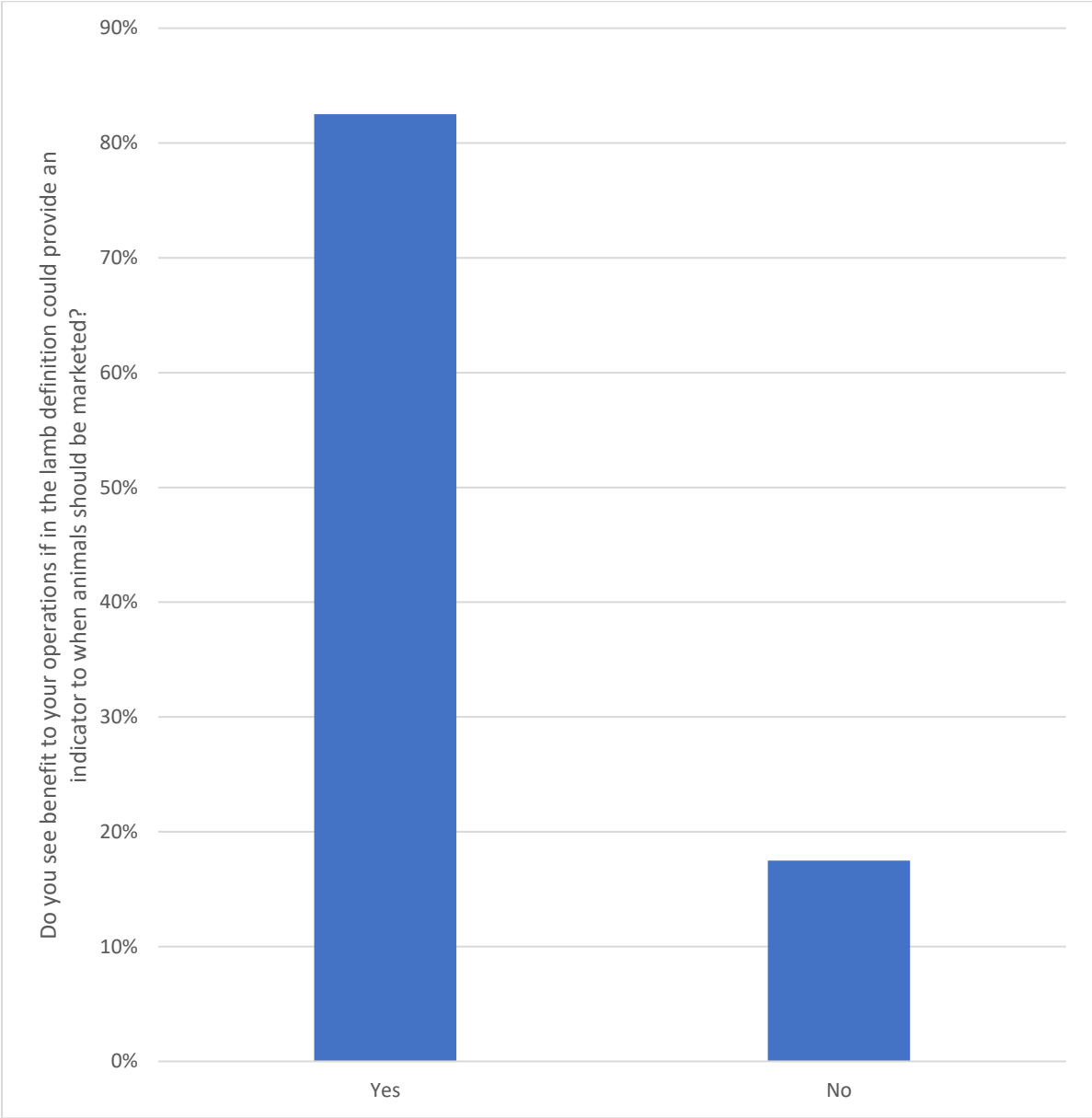
Q9 Are your operations registered or licenced in the Meat Standards Australia program?



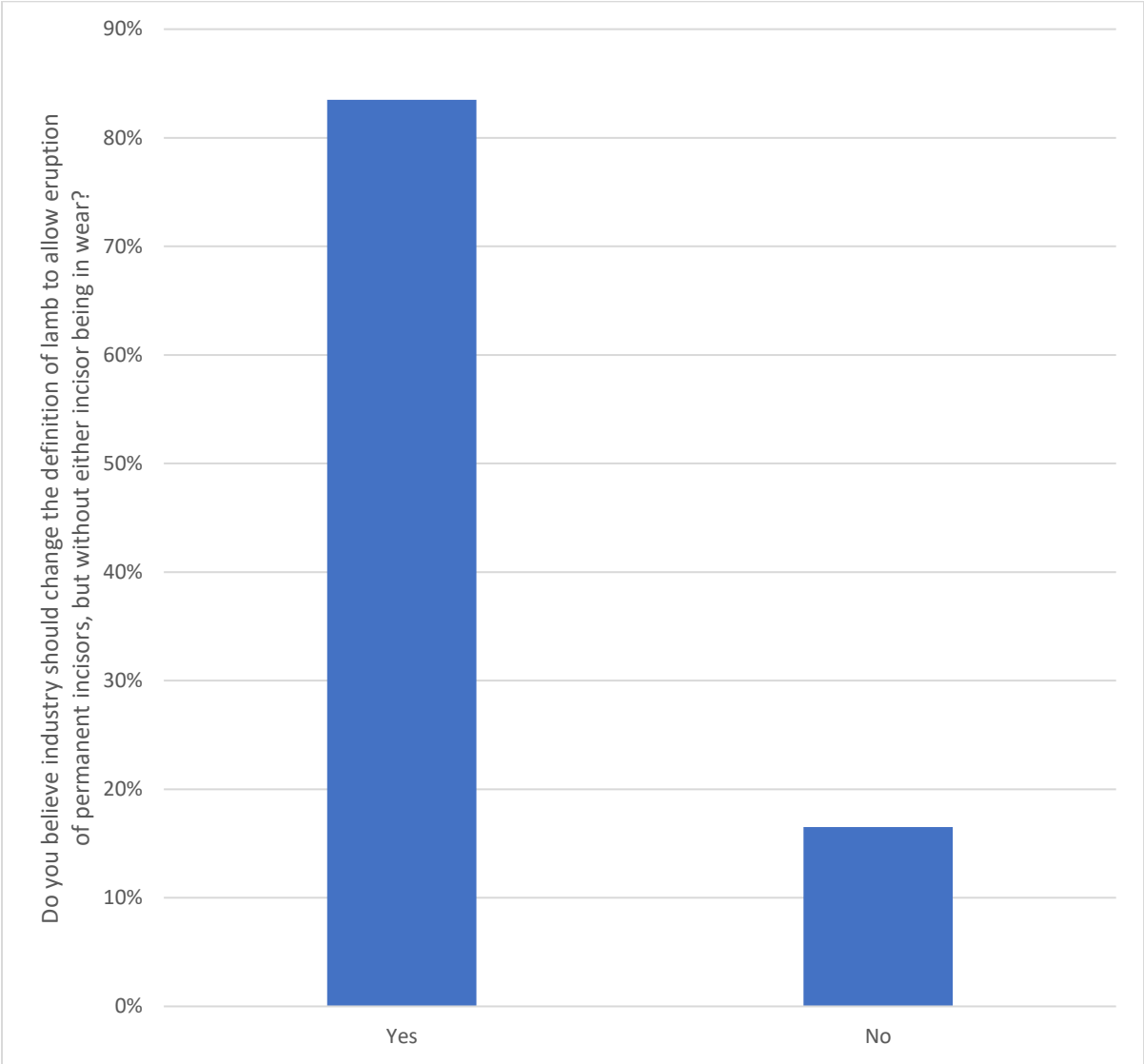
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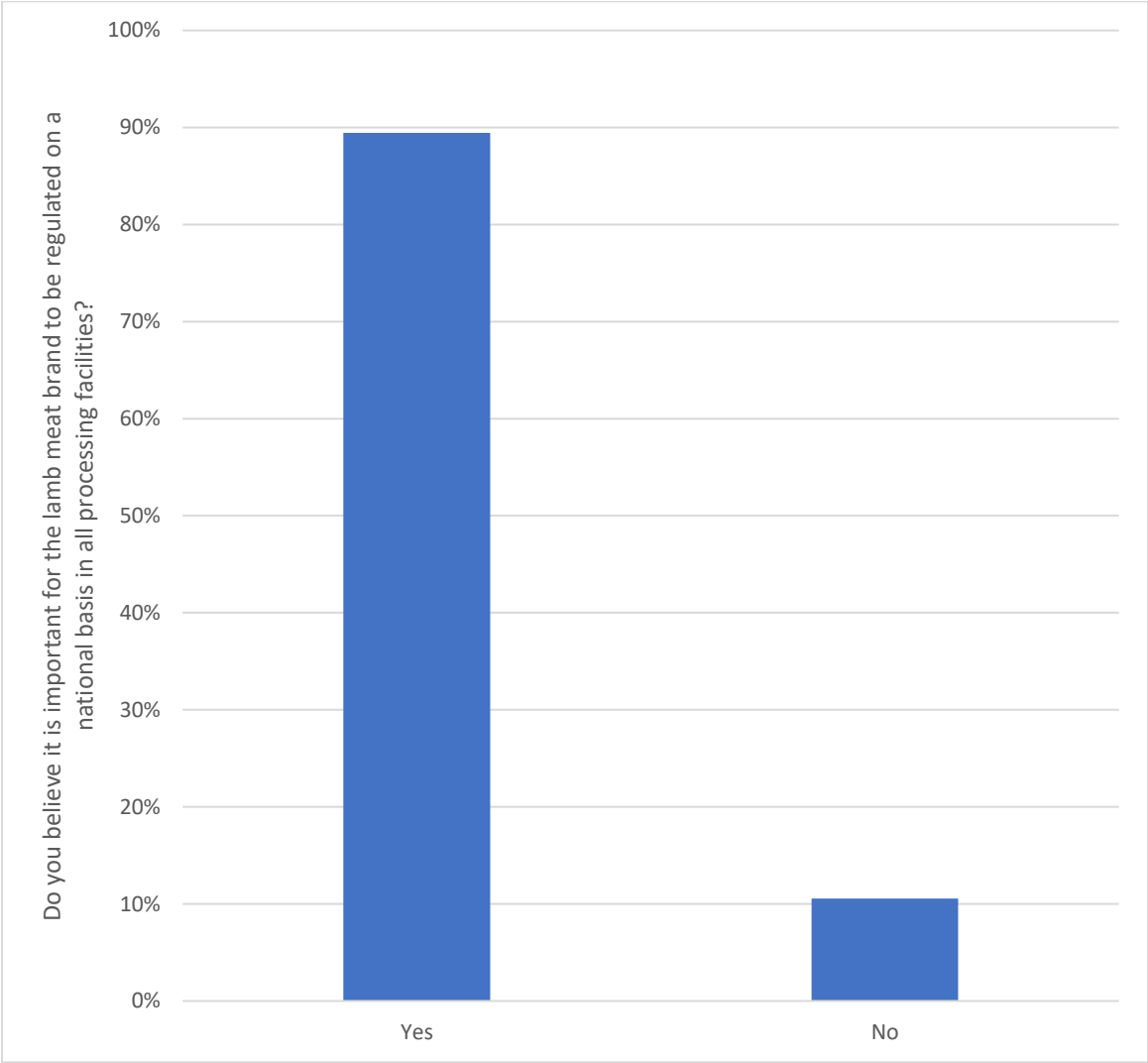
Q11 Do you see benefit to your operations if in the lamb definition could provide an indicator to when animals should be marketed?



Q12 Do you believe industry should change the definition of lamb to allow eruption of permanent incisors, but without either incisor being in wear?



Q13 Do you believe it is important for the lamb meat brand to be regulated on a national basis in all processing facilities?



Q14 Would you like to be kept updated on the development of this review and other sheepmeat industry information?

