Submission

The Australian Beef Language ‘White Paper’.

To:
Meat and Livestock Australia and Australian Meat Processor Corporation

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Agriculture in Western Australia

The Western Australian Farmers Federation Inc. (WAFarmers) is the State’s largest and most influential rural advocacy and service organisation. Founded in 1912, WAFarmers boasts a membership of over 4,200 farmers including grain growers, meat and wool producers, horticulturalists, dairy farmers, commercial egg producers and beekeepers. Collectively our members are major contributors to the $5.5 billion gross value of production that agriculture in its various forms contributes annually to Western Australia’s economy. Additionally, through differing forms of land tenure, our members own, control and capably manage many millions of hectares of the State’s land mass and as such are responsible for maintaining the productive capacity and environmental wellbeing of that land.

WAFarmers welcomes the opportunity to provide comments to the consultation on the Australian Beef Language Review.

Introduction

After considerable consultation across the industry, it was agreed that in principle the Beef Language has served the industry well for a considerable number of years. Having said this, we welcome the initiative to review the program given the developments that have occurred over the last twenty years in assessing carcase quality as well as improvements in breed development and genetics.

Clearly any modifications made to the current beef language would have to demonstrate a beneficial outcome for beef producers and their processor partners as well as our customers. The adoption of new objective descriptors could offer advantages on a number of levels. They could significantly reduce cost burdens associated with excessive bureaucracy, red tape and audits at processor level, which in turn should increase the monetary returns to producers. Secondly, increased accuracy of carcase characterises should improve product consistency across the board, provided this information is fed back to cattle feeders and breeders, and enhance the consumer demand for the product.

Establishing and evaluating accurate, reliable and objective techniques for measuring or predicting carcase and meat eating quality in beef cattle (and sheep) is key to the development of value-based marketing systems, genetic improvement programmes, and management systems to enhance product quality.

For example, in live animals, fat and muscle depths measured on the back by ultrasound scanning, or external dimensions measured by video image analysis (VIA), can be taken on-farm to predict important slaughter characteristics of beef and lamb. In live lambs, X-ray computed tomography (CT scanning) gives the most accurate predictions of carcase composition and also of intramuscular or marbling fat (a contributing factor to eating quality traits like juiciness and flavour), although no strong associations have been identified between in vivo CT measurements and other meat quality traits (e.g. tenderness, meat pH).
Product quality predictors that can be measured on the carcase include those estimated by VIA technology. This fast and non-invasive method provides accurate predictions of weights of trimmed primal cuts. CT scanning of beef joints allows fast and accurate assessment of beef carcase composition, without damaging or devaluing the carcase and is recommended for use as a ‘gold standard’ for prediction of leanness. Moreover, CT-measured muscle density is moderately correlated to intramuscular fat content and its fatty acid composition.

One of the most promising techniques for assessing meat quality is near infrared reflectance spectroscopy (NIR), which can predict fatty acid profiles, colour and sensory characteristics, such as texture, juiciness, flavour, and has the potential to be used on-line at the abattoir for fast and relatively inexpensive estimation of meat eating quality characteristics.

Integrating automated robotic sensors with VIA technologies to measure meat colour and carcase fat and other meat quality characteristics could potentially reduce the number of AUS-MEAT /MSA assessors employed to collect various carcase measurements in the plant.

The measurements noted above, also show genetic variation in different breeds and are thus of great interest for genetic improvement programmes, as well as for value-based marketing systems. The important factor here is the flow of information back to cattle feeders and breeders. A key issue for cattle producers and beef processors is the percentage of cattle that do not meet company specifications. This of course results in value penalties for cattle producers.

Comments to the Terms of Reference

WAFarmers would like to make the following suggestions for consideration by the review committee.

1. Carcase Aging

As noted in the Cattle Council of Australia (CCA) submission, some cattle producers currently receive penalties for descriptors like dentition. Research suggests eating quality variations can occur in a cut taken from young and/or older animal. This is suggesting tender cuts can be harvested from cattle of different ages. However, tenderness is one trait, flavour is another, has this been investigated?

If aging descriptors are removed in favour of quality based cut payments this could dramatically reduce the overall value of 0-2 tooth cattle in the domestic market. The majority of cattle slaughtered in WA are under 2 teeth. Basically, what will happen is that more cuts from older animals (cows) will enter the food chain as graded beef, potentially eroding the value of younger animals recognised for their high quality beef. A full cost risk analysis would have to be completed for the domestic market, before any changes to carcase aging was decided.

The view is that the use of dentition is a ‘red herring’; it is a chronological measurement which should be replaced by a physiological measurement. To accommodate this concept, MSA adopted ossification, but this descriptor is not widely accepted by some overseas customers. (Note: the use of HGPs increases ossification scores).
WA Farmers understands the scientific reasons and the possible benefits for some producers of removing dentition from the language. However, a number of factors must be considered before dentition is dropped from the language.

In general, the majority of cattle in Australia are sold on age and weight. Ossification can only be assessed after slaughter by approved and registered MSA graders. We must remember that some plants (abattoirs) are not MSA approved and would have to employ and pay additional costs to get MSA graders into their plants to collect ossification data. WA Farmers do not support adding cost to the beef supply chain.

Dentition can be assessed throughout the supply chain and is recognised globally as a measurement to verify the age of slaughter animals. Everyone can relate to dentition requirements. This is critically important if Australia wants to sell beef and beef products into export markets which have age restrictions on cattle because of diseases like BSE or as a reference point associated with beef quality.

For example, if we drop the use of dentition, then what age measurement could be used throughout the entire supply chain, live and dead, which is acceptable to the industry and our customers? Do we need an age descriptor within the language?

CCA correctly identifies the problems which exist between dentition and MSA graded carcases. If dentition is removed from the AUSMEAT language can meat businesses verify the age of animals for branded beef products as part of their specifications outside the language? For example, no animals born before a certain date can enter the food chain in Britain.

When MSA was introduced, the aim was to pay producers on the basis of the comprehensive data collected for each cut. Although this was a great concept, the majority producers said this was way too complicated and payments went back to simple definitions such as weight and age.

This is a complex discussion and WA Farmers suggest caution must be applied before a decision is made around the removal of dentition from the beef language.

WA Farmers recommends that a thorough investigation is needed around age verification options and the costs and benefits of these options to businesses before dentition is removed from the beef language.

2. New Innovations

Research to date using new objective technologies has given encouraging results on measuring traits like meat colour, fat content, objective yield assessments, ultimate pH, marbling and ossification with potential measurements for other meat attributes.

Their use would significantly improve and replace subjective assessments around descriptors like butt profiles and muscle shapes that result in producer penalties. Beef processing businesses will need assurances and evidence that these new technologies demonstrate consistent, meaningful and relevant results. If the proof of value is there, implementation of the new technologies will happen,
but it must be a commercial decision, it can’t be forced on the industry as a mandatory requirement. ‘Let commercial drivers bring home the right results’.

Through our consultation for this submission we noted a mixed response to the incorporation and use of these technologies by meat processing businesses particularly around the cost impost to businesses. Margins are extremely tight in the beef industry, so the benefits of these technologies would have to be demonstrated before uptake occurs.

A possible benefit of this new technology; is it gives cattle producers the opportunity to watch their animals being processed and graded ‘on-line’ i.e. real time observations through a computer. At present some producers have to wait 24 hours for their kill sheets to arrive. It is then difficult for producers to question or appeal grading outcomes and the resultant dispute doesn’t help producer processor relationships.

Immediate on-line access to grading points would be advantageous because not all cattle are meeting specifications and this is a cost burden for all concerned. On-line viewing of carcase grading could improve the percentage of cattle not meeting specifications by increasing producer knowledge base.

The standardised AUSMEAT HSC dressing (trim) specification is used consistently in Western Australia. However, changes could always be discussed to improve outcomes to vendors.

WAFarmers supports the CCA recommendation:

‘Cattle Council recommends that the beef language incorporates a meat colour assessment based on proven consumer demands’.

3. Streamlining the languages

Much discussion has occurred over the years on how the industry could capitalise on the investment made in the development of MSA. MSA is well recognised grading language in Australia and it has resulted in substantial benefits.

But, it is the AUSMEAT language, which is owned and managed by the industry, and is the globally accepted language and the language which has the stamp of approval from cattle (and sheep) producers in terms of fair payments and trading.

WAFarmers requests that an AUSMEAT representative must be included on the beef language review committee.

Can AUSMEAT and MSA merge?

This review provides an opportunity to explore the possibilities of merging the two languages to capitalise on the investments and opportunities.

The streamlining and amalgamation of the languages into one improved language could result in less confusion, less cost, less audits, less red tape and regulations and should in turn give an improved monetary return to producers.
Critical to this concept is the development of comprehensive marketing and communication plans to promote the improved beef language, globally.

4. Linking genetic variations

There have been significant developments with genomic predictions and markers for traits like meat yield that are of great benefit to beef producers. However, in our opinion it is not about how these predictions are incorporated into carcase based languages, it is about the feedback of carcase information to the producer to help in his/her decision making with the selection of animals to meet the target specification.

The adoption of new objective technologies in the abattoir could help producers assess the merit of selected genomic markers. There is a ‘real time’ need for this information to flow back to producers who are not getting objective carcase data on characteristics like meat yield.

5. Future Opportunities

WAFarmers supports the suggestions in the CCA submission on potential future changes, these being:

a. On-Farm Yield Calculations

The current system requires and allows a number of activities to occur post-farmgate which can impact on the eating quality and also the grading of a carcase. Activities that negatively affect the returns received by producers include trimming at assessment sites, damage caused by hide pullers and the application of hot water as an anti-microbial prior to carcasses entering spray chillers. Hide puller damage over a primal that has an area greater than 10cm x 10cm results in the carcase being ineligible for MSA. These activities are not within the producers control but they receive the financial penalty for the resulting downgraded quality of the product.

The existing system is difficult for producers to operate effectively within and future developments in technology offer the possibility of a more equitable system being established. Technological improvements offer the potential of greater transparency and accountability across the beef supply chain. Allowing all parties the ability to objectively assess the eating quality and yield of the animal pre-slaughter and determine the economic value.

The benefits that this type of technology would generate for producers are great. It would allow them to clearly identify when their cattle were ready to sell, the most profitable market for them to operate within and it would ensure that any actions that result in a downgrade to eating quality would not affect the price received. This type of technology would generate extensive benefits across the whole beef supply chain through sending clear market signals about the type of animals the market generates premiums from.

b. Transparent and Accountable Processing

Technological advancements create the possibility that the results for cattle assessments could be far more readily available to producers and this development could increase the transparency and accountability of the beef supply chain. As highlighted above, currently there are no effective
mechanisms available for producers tocontest their cattle grades. The time delay between the assessment, the meat being identifiable and producers’ receiving their grading prevents scores from being effectively contested.

Currently the only recourse available for an unfavourable grading is for a complaint to be lodged and an AUSMEAT member can be sent to assess the accuracy of the assessment. This is a flawed and ineffective process, for two reasons. Firstly the graders ability to make sound grading determinations under monitored conditions is not an accurate reflection of the assessment of the producers’ cattle. The auditing of the graders is a clear process and human nature ensures that people perform their duties to a stricter and higher standard when placed under examination conditions. Secondly, the AUSMEAT monitored assessments do not allow for a re-examination of the affected producers products and thus the producer must accept the economic shortfall without the confidence that the grading was correct.

An accountable and transparent objective grading system is a possibility in the future with the advancement of technology. The system would allow for producers to be updated in real time of their grading results and this quick data flow would enable unsatisfied producers to contest the grades. The contested measurements could then be re-examined in the presence of a third party and a true re-assessment could occur.

In the interim, until technology has improved to allow for such a system, there is need for greater transparency and accountability across the beef industry. Increasing the accountability and transparency of the beef supply chain is essential to ensuring that producers receive the correct market signals. The whole of the beef sector needs to examine methods to improve the transparency and accountability, to ensure that activities which detrimentally impact upon members are identified and effective corrective actions are taken.

Summary

There is generally widespread support for the Beef Language to remain as it is. Having said this, there is always scope for improvement. Technology is advancing rapidly and this progress offers highly desirable outcomes for the whole beef industry supply chain, especially with increasing the accountability and transparency throughout the industry.

WAFarmers looks forward to further consultation on the Beef Language White paper as it progresses through the consultative process.