Gains in grains – is Australia producing the most profitable quality of wheat?

## Luke Mathews, Grain Growers Limited.

## Key words wheat quality, classification, standards, breeding, profitability

**Introduction**

In December 2019, GrainGrowers released the report **“Gains in grains – is Australia producing the most profitable quality of wheat?”** The report was delivered by independent agriculture consultancy firm groIQ (Dr Richard Williams) and assesses whether Australia is producing the most profitable wheat quality and how the nation’s industry structures and systems deliver against this desired outcome.

The research focused on understanding how wheat quality impacts grower profitability and assessed the performance of Australian wheat from the perspective of quality and price, taking into consideration changes over time including breeding investment, export market deregulation and international grain markets.

**Key messages**

* For Australian farmers and the national supply chain to maximise profitability it is imperative to produce and deliver the most profitable quality of wheat.
* Different participants throughout the supply chain value quality attributes differently. This means producing the highest “quality” wheat does not automatically mean growers or industry will maximise profitability.
* Profitability for wheat growers is influenced by many factors but yield (or volume) is deemed the most significant driver.
* Australian wheat quality is generally well placed to meet the demands of a wide range of domestic and export customers.
* Australia’s system for managing and delivering wheat quality through breeding, classification and grading are deemed to have served the industry relatively well, but improvements could be made.
* Australian wheat quality has changed over the past decade. Wheat protein levels (one of the most important quality parameters for end-use functionality) are trending lower. This appears largely driven by the trade-off between yield and protein and projections indicate that further increases in production are likely to be accompanied by lower grain protein levels into the future.
* For growers, striking the right balance between higher production (yield) and lower quality or price is important.
* It is imperative that the right price signals regarding quality are transferred from customer to grower to breeder.
* Opportunities exist to build on already effective industry structures to enhance management and deliver quality, via:
  + leveraging potential genetic gain delivered by breeders through flexibility changes to Australia’s wheat classes.
  + refined trading standards reflective of evolving global competitive landscape.
  + review of the impact of pricing structures and blending on protein.
  + ongoing refinement of industry collaboration to promote Australian wheat quality.

**Report recommendations**

*Review mechanisms for long-term decision making and crop shaping.*

Since deregulation, the Australian wheat industry has lost the explicit and centralised function of long-term decision making and crop shaping. In this context, crop shaping refers to forecasting long-term market requirements relating to quality and setting breeding objectives and quality management systems accordingly.

While the Australian industry has maintained mechanisms to manage inherent quality (i.e. classification of varieties into classes by Wheat Quality Australia - WQA) and seasonal quality (i.e. wheat grade trading standard set by Grain Trade Australia - GTA), there is a need for industry to consider a more explicit and coordinated industry decision-making and crop-shaping mechanism.

*Ensure all domestic end-users have appropriate mechanisms to capture EPRs and consider broader improvements to the efficacy of the EPR system.*

Australia’s end-point royalty (EPR) system has had a positive impact on wheat breeding since its introduction. However, it is suggested that the inability of some domestic feed grain consumers to capture EPRs efficiently could disincentivise breeding companies from investing in higher-yielding wheats suited to this end-use.

It is recommended that industry consider opportunities to improve EPR capture across all participants. It is also recommended that industry consider other opportunities to improve EPR compliance and eliminate misdeclaration.

*Improve reporting of a variety’s “strike-rate” to growers.*

While the WQA classification process establishes the class and maximum potential grade that a variety can achieve, the final grower return is based on the actual quality harvested and the allocated grade based on the GTA wheat standards. Given growers plant a variety based on expected yield and grade, it is important that growers have accurate information regarding a variety’s strike-rate. Therefore, it is recommended that industry review opportunities to improve strike-rate reporting to growers.

*Review the classification system and the classes to determine future readiness.*

To manage the trade-off that exists between yield and quality effectively, it is recommended that industry review Australia’s current wheat classes and their associated specifications for classification. The core objective of this review should be to determine the appropriate number and flexibility of class quality specifications to ensure that the quality profile meets market requirements and that opportunities for genetic gain in traits such as yield and disease resistance are maximised.

The future needs of both the export and domestic sectors requires consideration, with the latter currently having clear quality requirements that separate wheat being milled for food purposes from wheat as an ingredient for animal feed. Such a review should also consider (a) whether regional adaptation for certain quality profiles is more advantageous than the current national status of all Australian classes and (b) whether fewer classes and or grades might provide industry savings without sacrificing quality.

This recommendation can build on existing analysis already done by WQA and its industry partners.

*Consider introducing new tests and measurements for grain cleanliness.*

Screenings are a core quality test used to grade Australian wheat and are used partly to assess wheat cleanliness. However, some market feedback suggests the level of foreign material or unmillable material in Australian wheat could be increasing. Therefore, it is recommended that the Australian grain industry review its reliance on the traditional screening test and consider the introduction of other internationally recognised tests that better reflect future flour milling requirements for cleanliness.

*Review the interaction between protein payment scales and blending.*

It is recommended that the impact of blending on the protein levels of consignments be assessed and that industry consider whether incremental quality-payment structures such as those that exist for canola (rather than the current “cliff-face” arrangements) are a practical way to incentivise the pursuit and delivery of protein. Furthermore, to assist in the delivery of internationally competitive wheat (wheat with a minimum protein of 10-10.5%) it is recommended that industry consider the introduction of a minimum protein requirement for ASW.

*Streamline the promotion of Australian wheat.*

The promotional effort and technical market support of Australian wheat in export markets needs to be lifted. There is an opportunity for greater alignment and cooperation in the delivery of this support across all grains, not just wheat. A more coordinated promotional effort would also assist the marketers of Australian wheat to better communicate and capture the value proposition of Australian wheat linked to basic attributes such as cleanliness, low moisture and white seed coat colour.

Further detail regarding these recommendations can be found in the full report: <https://www.graingrowers.com.au/gains-in-grains-is-australia-producing-the-most-profitable-quality-of-wheat/>

## Acknowledgments

Dr Richard Williams, Managing Director groIQ

## Contact details

Luke Mathews  
Grain Growers Limited  
L19, 1 Market Street, Sydney, NSW 2000  
Ph: 02 9286 2000  
Email: [luke.mathews@graingrowers.com.au](mailto:luke.mathews@graingrowers.com.au)