Is Australia producing the most profitable quality of wheat?

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GrainGrowers

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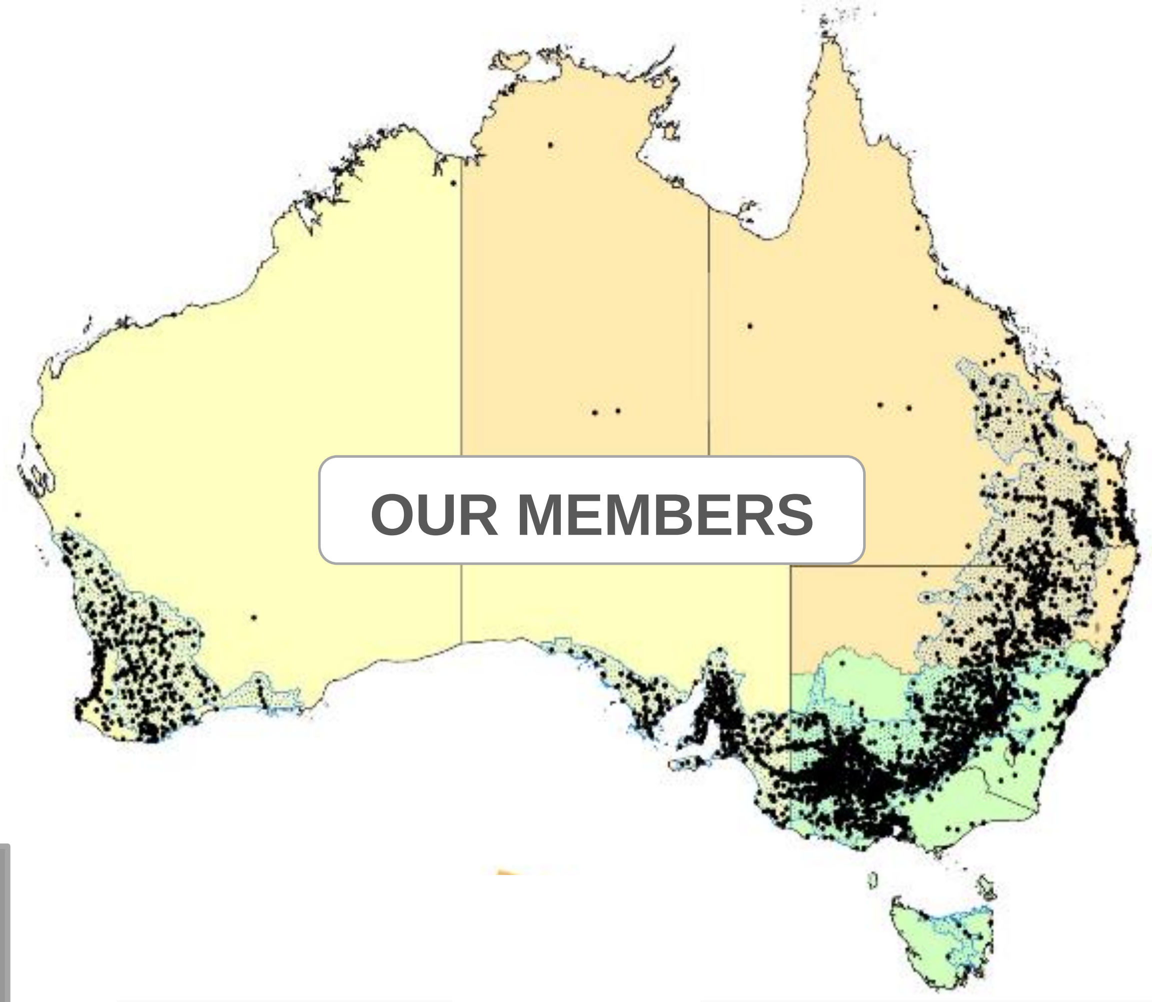
Contents

About GrainGrowers

- Est 1958. 17,000 members
- Independent member-based grain farmer representative organization
- Committed to:
  - ➢ Driving positive policy outcomes via research and development
  - ➢ Building industry capacity
  - ➢ Grower engagement

Our goal is a more efficient, sustainable and profitable grain production sector that benefits all Australian grain farmers and the wider grains industry.



Why wheat quality?

- Wheat is Australia's largest commercial crop and a mainstay of the Australian agriculture sector.
- Australia's reputation as a producer of high-quality wheat underpins market demand.
- There are varied reports about the performance of Australian wheat quality over the past decade.
- But what is quality? And how is it valued? And how does it impact the profitability of Australian farmers?

$$$

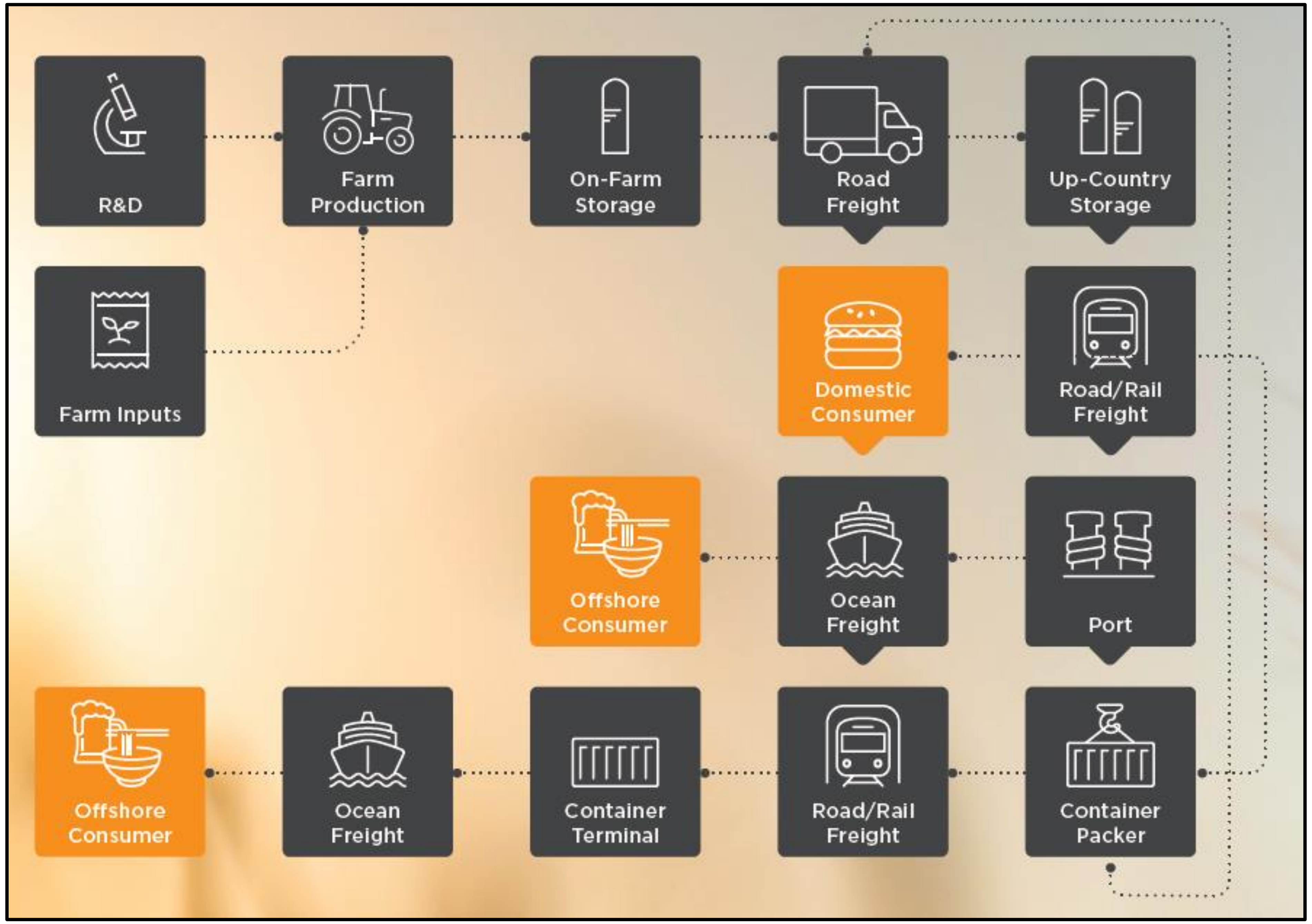
So what did we do?

- Commissioned research to determine:

  a. whether Australia is producing the most profitable quality of wheat

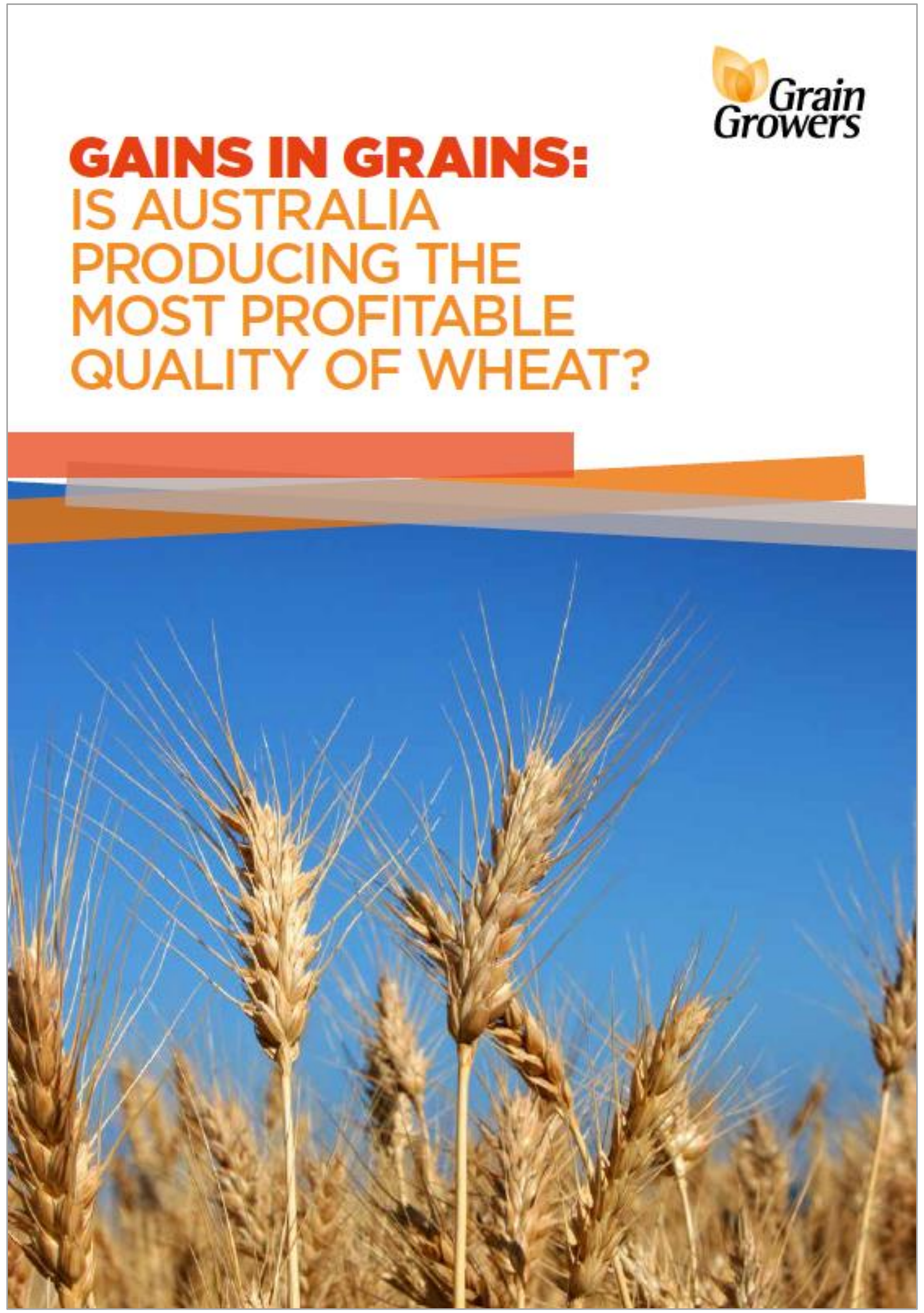
  b. how industry structures and systems deliver against this outcome.

- Collated data and perspectives from across the value chain



Report released Dec 2019

- Overview of the Australian and global wheat industry
- Review Australia's system of managing and delivering wheat quality
- Observations of Australian wheat quality over time
- Link quality and profitability
- **Recommendations for industry**



Key Findings

Much has changed in the industry since 2008.

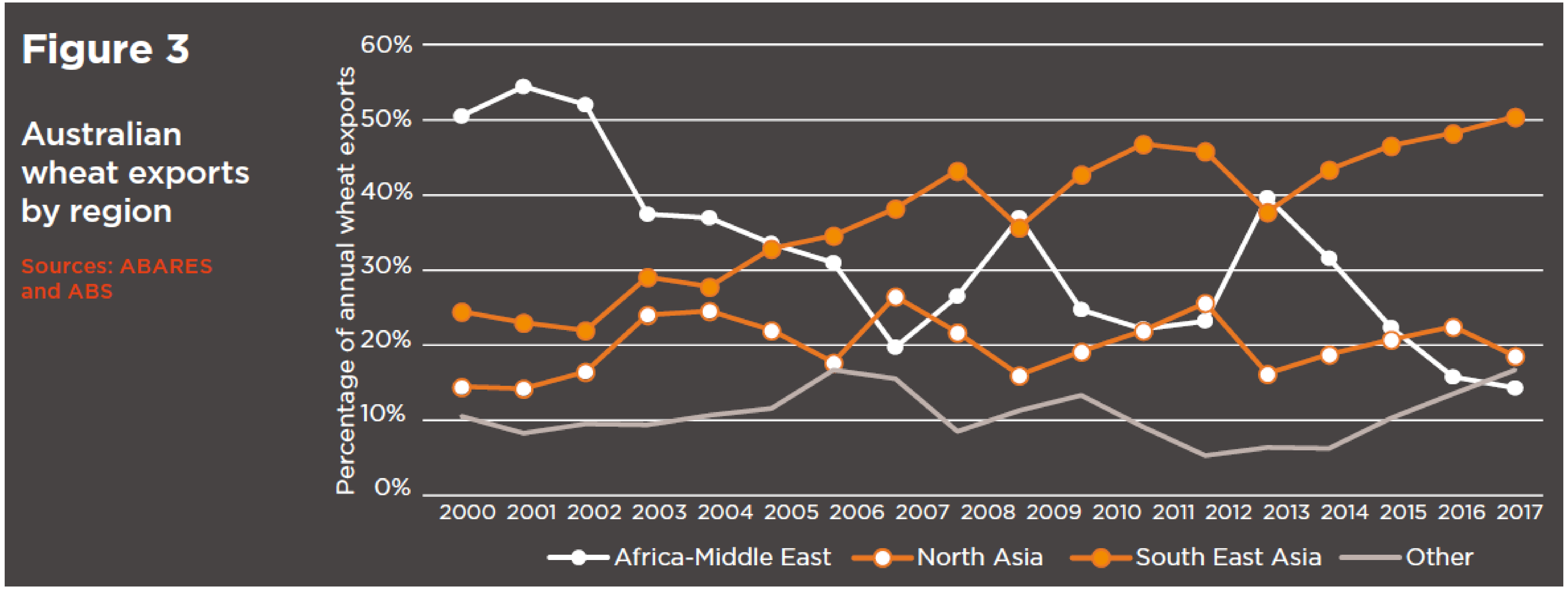
- Deregulation of the bulk wheat export industry (2008)
- A proliferation of companies trading and exporting Australian wheat
- A shift in Australian wheat exports from the Middle East and North Africa to Asia
- An increase in modes of export options including bulk, mobile loaders and containers
- A trend toward multi-origin procurement among overseas buyers (and more blending)
- Improvements in milling and baking technologies and techniques
- A rise in volume and improved quality of wheat produced and exported by low-cost competitors
- The growth in the domestic milling and stockfeed industry demand for grain
- An increase in on-farm storage

Quality is only one part of the profit equation

- For farmers and the supply chain to maximise profitability, it is imperative to produce and deliver the most profitable quality of wheat
- Supply chain participants value quality attributes differently
- The highest “quality” wheat does not mean the highest profitability
- Farmer profitability is influenced by many factors; Yield (or volume) being the most significant driver of profitability

Definitions of quality are not universal

- Different participants throughout the supply chain value quality attributes differently
- Different end users (e.g. noodles vs. bread vs cakes vs stockfeed vs biofuels)
- Different stages of the supply chain (e.g. farmer vs bulk handler vs trader vs end user)



Many players involved in quality management

Australia's system for managing and delivering wheat quality is regarded as having served the industry relatively well, however improvements can be made.

Figure 12

Grain industry continuous feedback loop

Adapted from: GRDC, GroundCover, Issue 130

Australian wheat quality meets many uses

Australian wheat quality is generally well placed to meet the demands of a wide range of domestic and export customers.

Grades (GTA)	Classes (WQA)							
	APH	AH	APW	APWN	ASW	ANW	ADR	ASFT
APH1/2	✓							
AH1/2	✓	✓						
AUH2	✓	✓						
APW1/2	✓	✓	✓					
APWN		✓	✓	✓				
ASW1	✓	✓	✓	✓	✓			
AGP1	✓	✓	✓	✓	✓			
ANW1/2						✓		
AUN1						✓		
DR1/2/3							✓	
SFT1/2								✓
FED1	✓	✓	✓	✓	✓	✓	✓	✓

Australian quality has changed: Protein…

Protein is falling:

Figure 15

Estimated protein level of APW2 in Western Australia

Sources: AGIC Asia and CBH Group

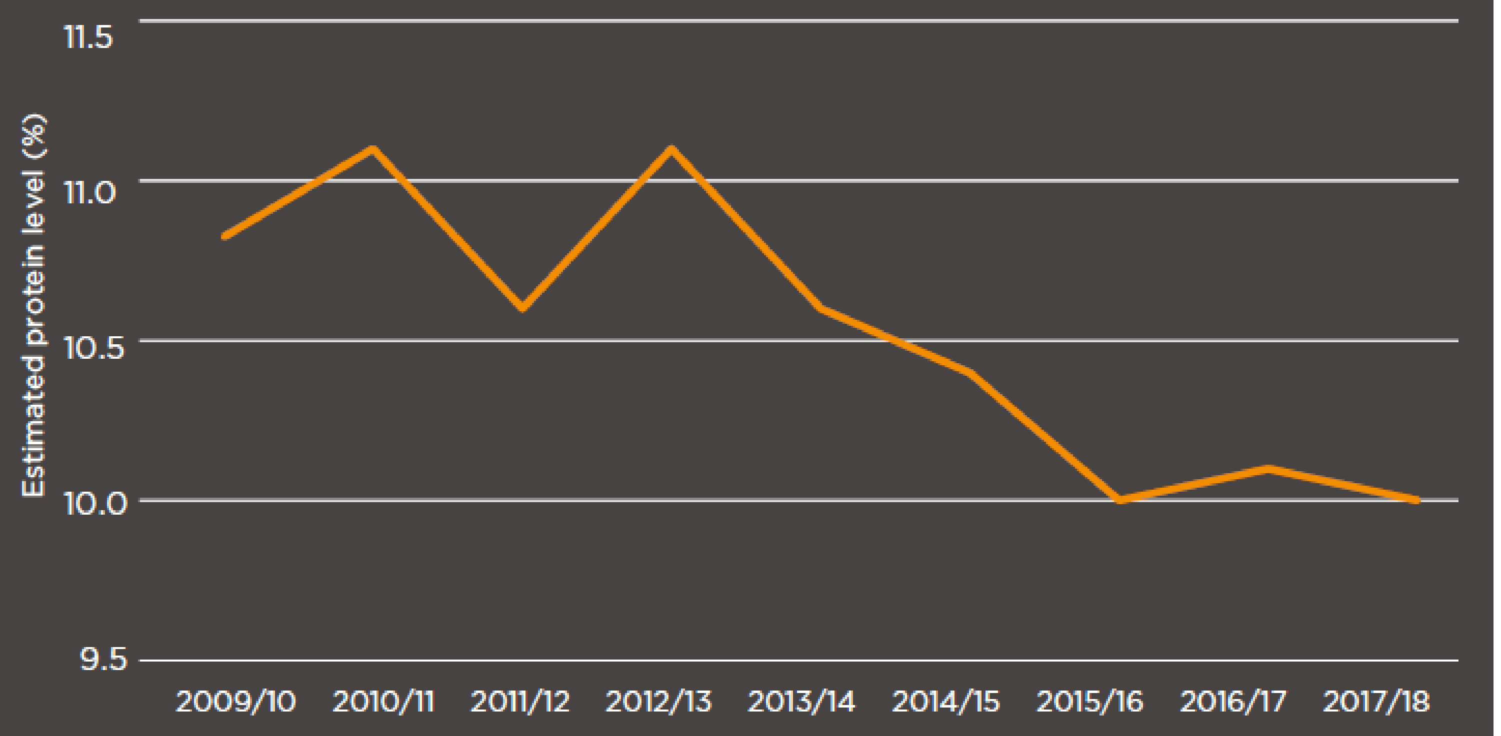
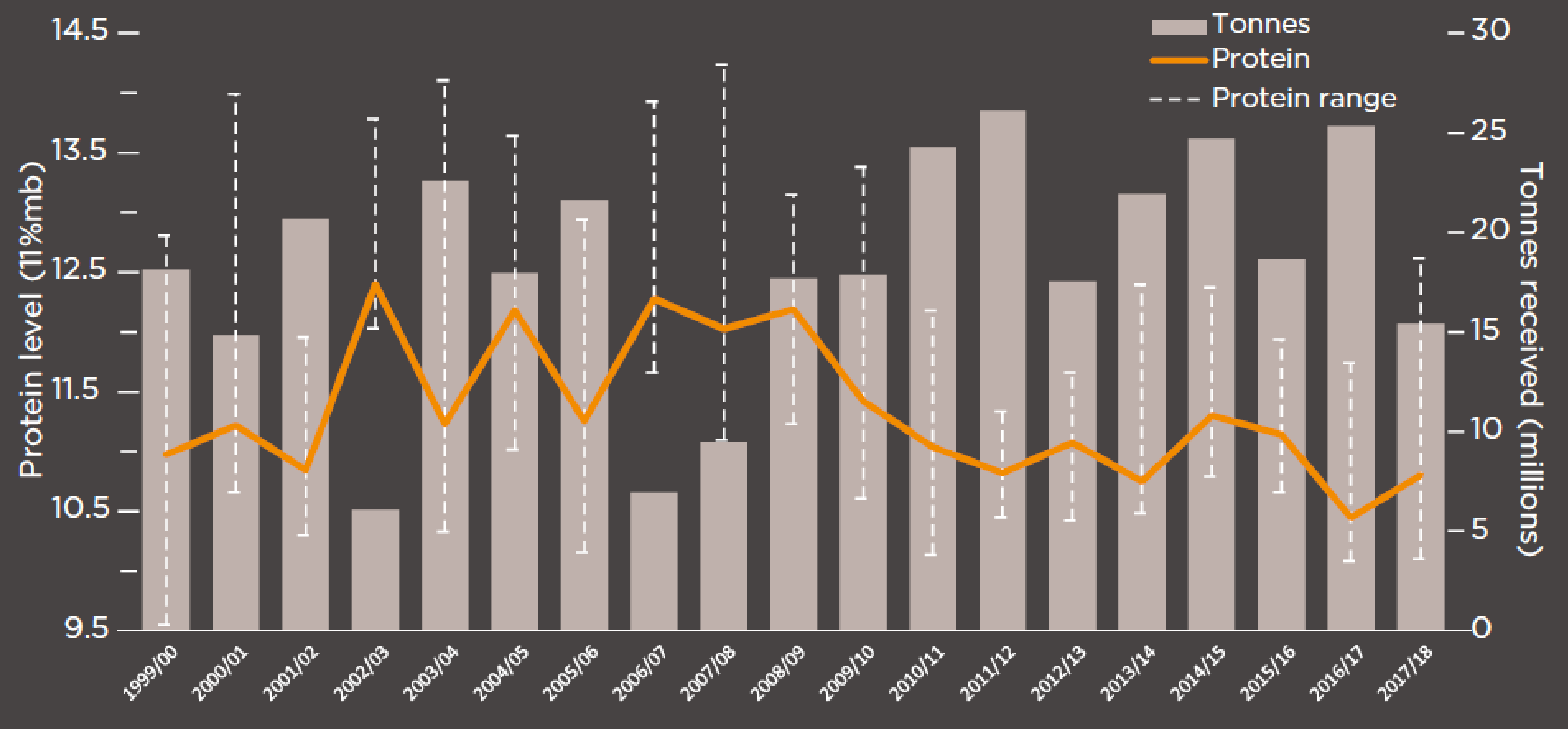


Figure 19

Australian wheat protein and production over time

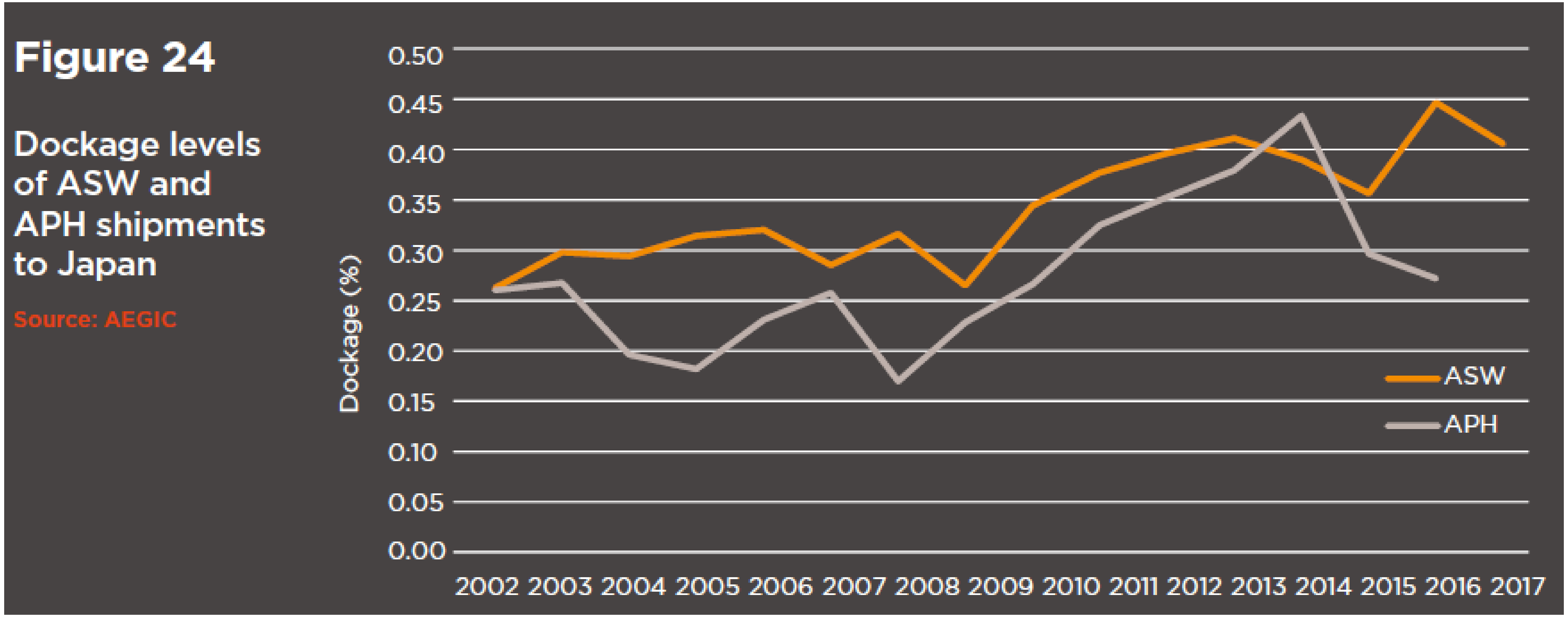
Protein is national weighted average. Range equates to the highest and lowest state protein levels for that harvest.

Sources: CBH Group, Emerald Grain, GrainCorp Ltd, GrainFlow and Viterra.



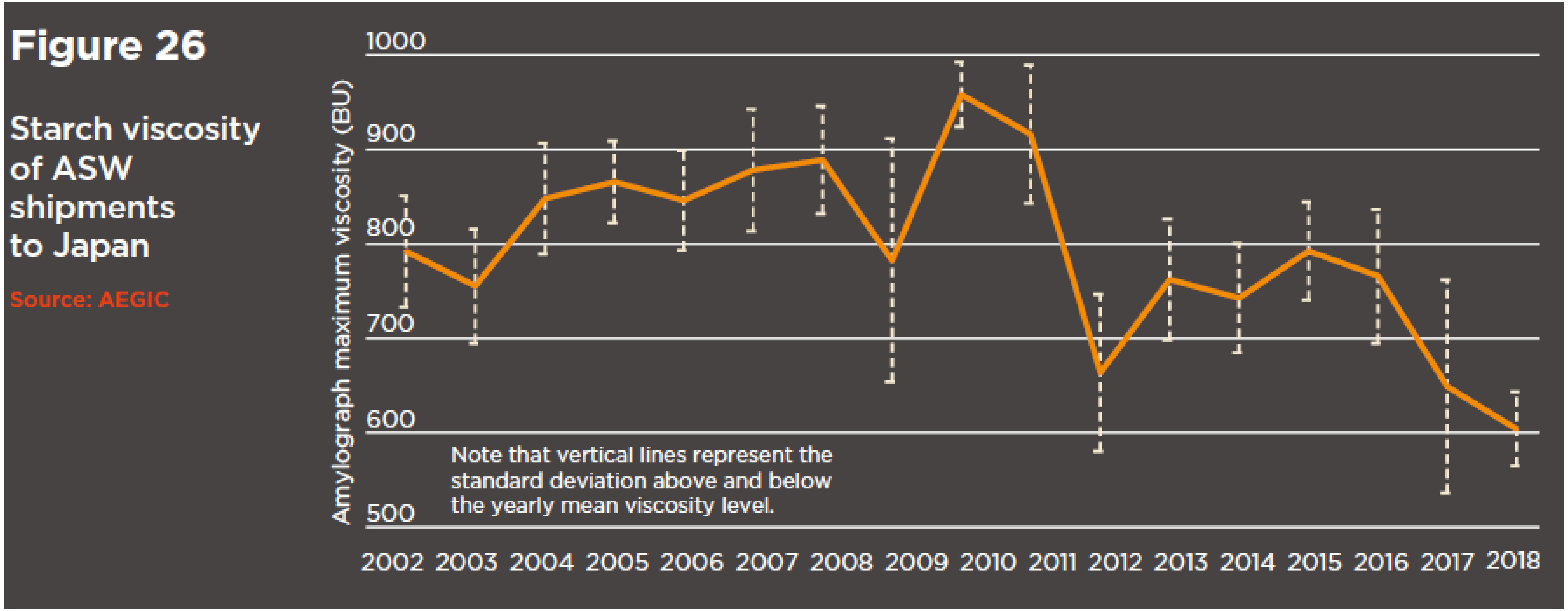
Cleanliness

not as clean…



Starch

..and starch quality has fallen.



But does quality matter?

Figure 27

Most important common attributes when selecting wheat for either bread or noodles

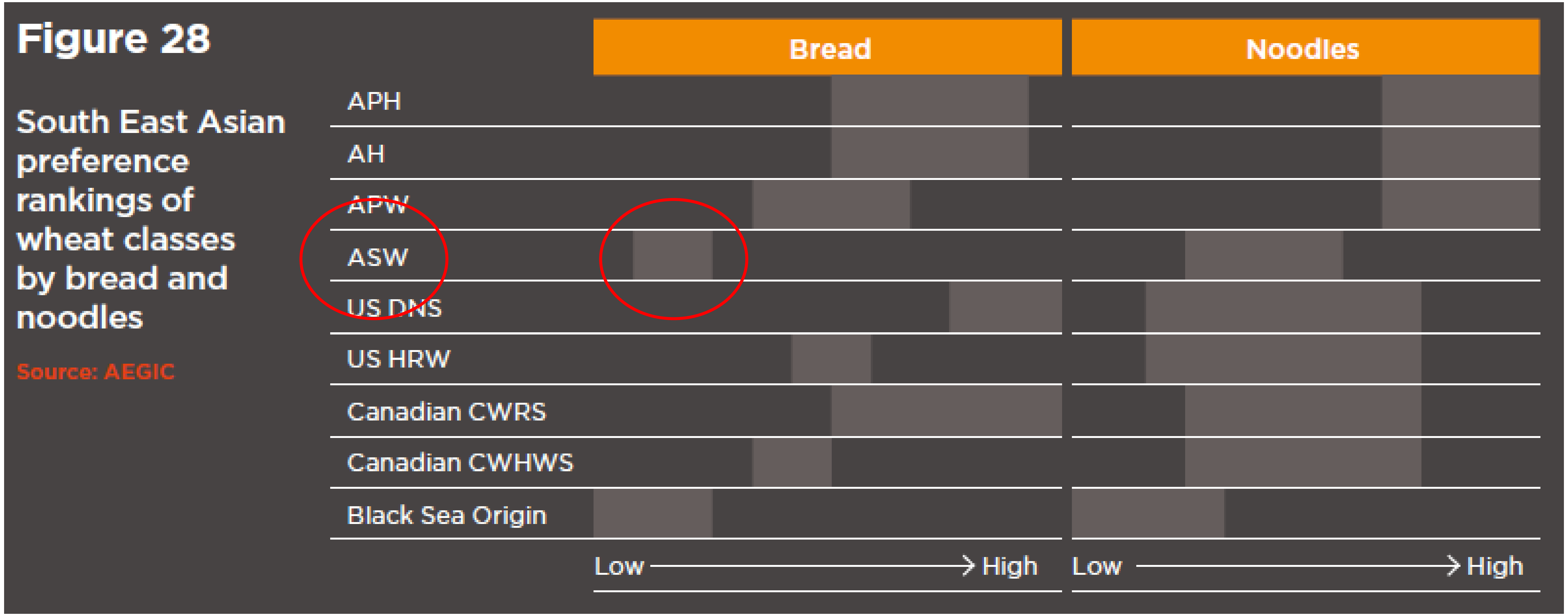
Source: AEGIC

Product type	Purchasing Managers Preferences	Technical Manager's Preferences
Bread	1. Price	1. Water absorption of flour
	2. Protein content of wheat	2. Protein content of wheat
	3. Wet gluten content	3. Dough strength (Rmax)
	4. Dough strength (Rmax)	4. Wet gluten content
	5. Milling yield	5. Milling yield
Noodles	1. Price	1. Noodle texture – elasticity
	2. Protein content of wheat	2. Noodle texture – firmness
	3. Noodle texture – firmness	3. Protein content of wheat
	4. Noodle texture – elasticity	4. Noodle colour brightness (L*)
	5. Wet gluten content	5. Wet gluten content

Buyers look at price, millers look at quality

But does quality matter?

Australian wheat is still sought after



But does quality matter?

Growers only see small rewards for quality

	AH1 vs APW	AH2 vs APW	APW	ASW vs APW	Feed vs APW
Kwinana	$17	$10	$276	-$8	-$66
Geelong	$26	$10	$265	-$11	-$39
Port Kembla	$24	$11	$269	-$11	-$40
Average	$22	$10	$270	-$10	-$48

Average grade spread to APW
(2009/10 to 2015/16)

Despite lower quality, only $8 discount for ASW in WA.

But no WA feed industry means big discount to feed.

But does quality matter?

Figure 32

Yield variation vs APW needed to maintain equivalent gross revenue

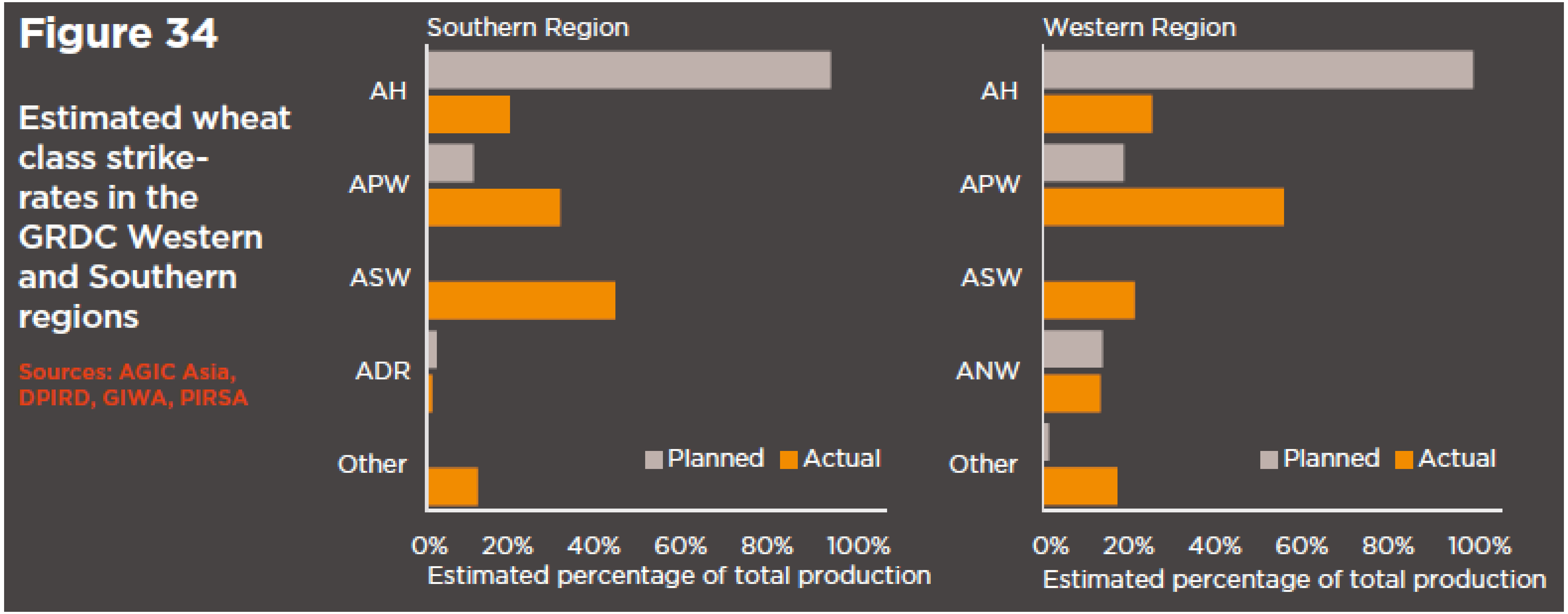
Source: GrainGrowers

Location	AH1	AH2	APW	ASW	Feed
Kwinana	-5.8%	-3.5%	-	3.0%	31.4%
Geelong	-8.9%	-3.6%	-	4.3%	17.3%
Port Kembla	-8.2%	-3.9%	-	4.3%	17.5%
Average	-7.5%	-3.6%	-	3.8%	21.6%

In WA, ASW will be more profitable than APW as long as it yields 3% more…

And lower protein typically equals higher yields.

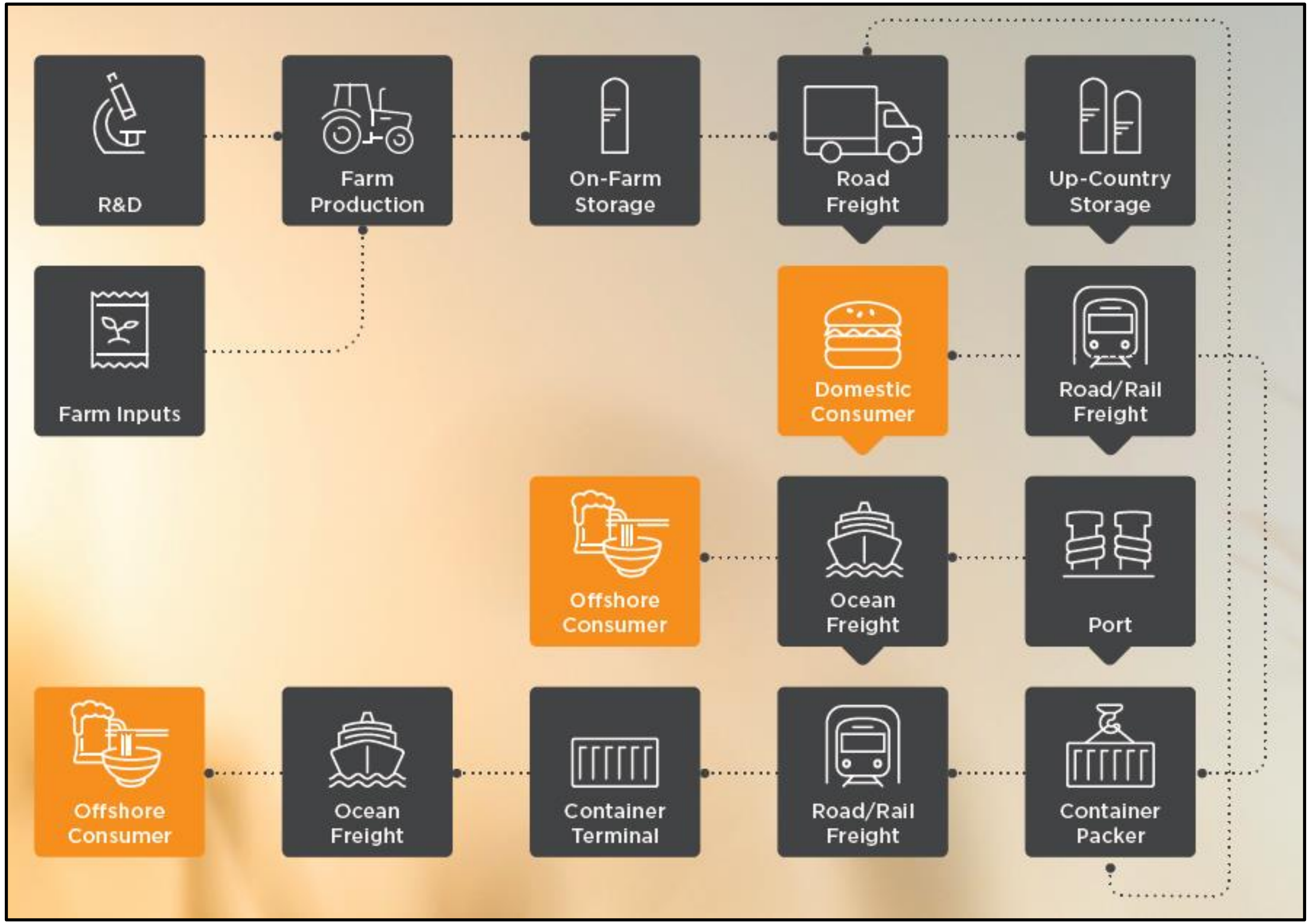
What we plant is not what we harvest



- 90% of WA plantings are AH varieties but only 20% are harvested/delivered as AH.
- Potential big impact on profitability.

Operational efficiency impacts optimal quality

- Trade off between niche / high value markets and operational efficiency.
- Will the expected increase in price more than offset the decline in supply chain efficiency?



Seven Recommendations

Recommendations

1. Review mechanism's for long-term decision making and crop shaping.
2. Ensure all domestic end-users have appropriate mechanisms to capture EPRs and consider broader improvements of efficacy of the EPR system.
3. Improve reporting of a variety's "strike-rate" to growers.
4. Review the classification system and classes to determine future readiness.
5. Consider introducing new tests and measurements for grain cleanliness.
6. Review the interaction between protein payment scales and blending.
7. Streamline the coordination and delivery of promotion of Australian wheat.

Acknowledgments

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- Emerald Grain
- Glencore Agriculture
- Global Grain Pty Ltd
- GrainCorp
- GrainFlow
- Grains Industry Market Access Forum Grains
- Research and Development Corporation
- Grain Trade Australia
- Grand Ridge Organics & Integra Flowers
- Intergrain
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- MarketAg
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THANK YOU

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