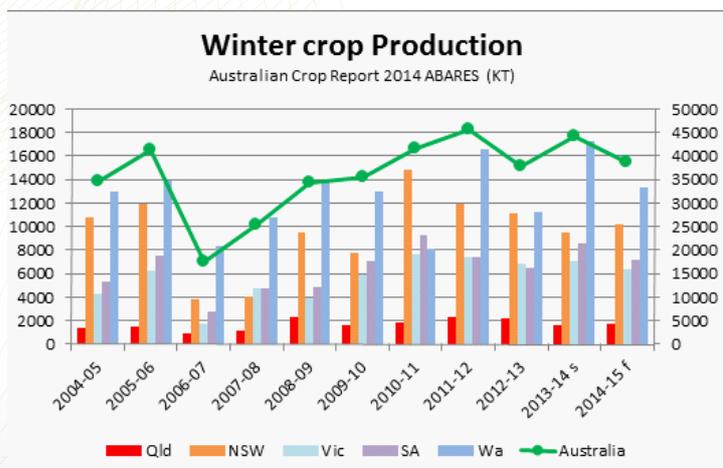


Challenges for Australia's bulk grain supply chains.

Grain production in Australia

From 2008-2009 to 2012-2013 the average annual winter crop production in Australia was 39 million tonnes. There is however significant variability in production with national figures varying from 34.4 to 45.7 million tonnes over the five years. In 2006-2007 low production in all states saw a national figure of only 17.6 million tonnes.

The two largest producing states are Western Australia and NSW. In the five years to 2012-2013 NSW produced an average of 11 million tonnes, which varied from a low of 7.7 million tonnes in 2009-2010 to a high of 14.7 million tonnes in 2010-2011. Approximately 10-11 million tonnes is consumed domestically, most of which occurs in the eastern states. The eastern state supply chains cater to both domestic and export customers; as a result there is significantly more competition on the eastern sea board.



Storage Capacity

The bulk handling storage capacity is approximately 55 million tonnes at 623 sites across Australia. Additionally an Australian Bureau of Statistics (ABS) farm survey showed that at June 2010 the on-farm grain storage capacity in Australia was over 14.3 million tonnes with 43% of that in NSW. This means Australia has the capacity to store almost two years' average grain production. As a result, grain storage fees are kept relatively low and are falling in real terms. Many sites have a throughput ratio of one or less.

Indications are that there is an increasing trend for on-farm storage. This is particularly prevalent in eastern Australia as producers look to sell direct to local buyers, and to maximise market opportunities.

Challenges associated with bulk grain handling in Australia

Grain production is extremely volatile, with yield variability across years and within regions. The coefficient of variation (a measure of the relative variation of distribution independent of the units of measurement) in Australia's export volumes is three times that of the US and Canada. As a result the Australian bulk handling industry must have the capacity to respond to the significant fluctuations in volumes. There needs to be contingencies to manage excess capacity following favourable seasons. In poorer seasons however there is under utilisation of this excess capacity. As a result the Australian grain industry supply chain is more costly than many others. Logistics planning is difficult on both a domestic and export basis.

Seasonal conditions also can affect the range and composition of grain quality, impacting on grain segregation costs. Production quality and volumes are not confidently known until harvest gets underway. Generally grain storage is segregated by grade, but when anticipated volumes by grade differ from expectations grain storage can become very inefficient, further added to supply chain costs.

Volatile production also poses problems for exporters who actively work towards locking-in freight and shipping requirements, at good prices prior to harvest. As a result, freight companies charge higher rates to accommodate the increased cost of excess capacity and short lead times.

Further detail is available in the Australian Export Grain Innovation Centre (AEGIC) report 'The cost of Australia's bulk grain export supply chains'. Future newsletter articles will look at rail freight in the northern Region.

References:

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