DURUM

SECTION 10

GRAIN MARKETING

OVERVIEW | SELLING PRINCIPLES | MANAGING YOUR PRICE (HOW TO SELL) | ENSURING ACCESS TO MARKETS | EXECUTING TONNES INTO CASH | MARKET DYNAMICS AND EXECUTION | EXECUTING TONNES INTO CASH FOR WESTERN DURUM WHEAT
Grain Marketing

Information and tables for this chapter were produced and supplied by Profarmer Australia

10.1 Overview

The final step in generating farm income is converting tonnes of grain produced into dollars at the farm gate. This chapter provides best-in-class marketing guidelines for managing price variability to protect income and cash-flow. It outlines the decisions to be made, the drivers behind the decisions and the guiding principles for each decision point, as illustrated in Figure 1.

Figure 1: Grain Selling – best practice in conversion of tonnes to dollars.

As shown in Figure 2, Port Adelaide durum wheat values have varied by $100 to $310 per tonne during the past seven years (representing a variability of 35-80 percent). For a property producing 500 tonnes of durum wheat, this means a $50,000-$155,000 difference in income (depending on timing of sales).
10.2 Selling Principles

The aim of a selling program is to achieve a profitable average price (the target price) across the entire business. This requires managing several unknowns to establish the target price and then working toward achieving that target price.

Unknowns include the amount of grain available to sell (production variability), the final cost of that production and the future prices that may result. Australian farm gate prices are subject to volatility caused by a range of global factors that are beyond the grower’s control and difficult to predict.

The skills growers have developed to manage production unknowns can be used to manage pricing unknowns. This guide will help growers manage and overcome price uncertainty.

10.2.1 Be prepared

Being prepared and having a selling plan is essential for managing uncertainty. The steps involved are forming a selling strategy and a plan for effective execution of sales.

A selling strategy consists of when and how to sell.

When to sell

This requires an understanding of the farm’s internal business factors including:

» Production risk
» A target price based on cost of production and a desired profit margin
» Business cash flow requirements.

How to sell

This is more dependent on external market factors including:

» Time of year (determines the pricing method)
» Market access (determines where to sell)
» Relative value (determines what to sell).

The key selling principles when considering sales during the growing season and production cycle of the crop are outlined in Figure 3.
Figure 3: Grower commodity selling principles timeline.

10.2.2 Establish a business risk profile – when to sell

Establishing a business risk profile allows the development of target price ranges for each commodity and provides confidence to sell when the opportunity arises. Typical business circumstances and how to quantify those risks during the production cycle are described in Figure 4.

Figure 4: Typical farm business circumstances and risk.

A grower’s decision making process for determining when to sell grain will be typically dependent on:

» Does production risk allow sales?
» What portion of production risk allows sales?
» Is the price profitable?
» Are business cash requirements being met?
10.2.3 Production risk profile of the farm

Production risk is the level of certainty around producing a crop and is influenced by location (including climate and soil type), crop type, crop management and time of year.

The general principle is you can’t sell what you don’t have and it is important to not increase business risk by over-committing production.

Establish a production risk profile, such as that outlined in Figure 5, by:

» Collating historical average yields for each crop type
» Collating a below average and above average historical yield range
» Assessing the likelihood of achieving the average based on recent seasonal conditions and seasonal outlooks
» Revising production outlooks as the season progresses.

Figure 5: Typical production risk profile of a farm operation.

As shown in Figure 5, the quantity of crop grown is a large unknown early in the year. However, it is not a complete unknown. You can’t sell what you don’t have, but it is important to compare historical yields to get a true indication of production risk. This risk reduces as the season progresses and yield becomes more certain. Businesses will face varying production risk levels at any given point in time with consideration to factors including rainfall, yield potential soil type and commodity prices.

10.2.4 Farm costs in their entirety, variable and fixed costs (establishing a target price)

A profitable commodity target price is the cost of production per tonne plus a desired profit margin. It is essential to know the cost of production per tonne for the farm business.

The principle is don’t lock in a loss. If a grower is committing production ahead of harvest, ensure the price is profitable.

Steps to calculate an estimated profitable price based on total cost of production and a range of yield scenarios is outlined in Figure 6 and more information is provided in the Grains Research and Development Corporation (GRDC) ‘Farming the Business’ manual. This resource also provides a cost of production template and tips about grain selling versus grain marketing. It is available at this link http://www.grdc.com.au/FarmingTheBusiness
Figure 6: Calculating the cost of production.

**Estimated Cost of Production - Wheat**

<table>
<thead>
<tr>
<th>Cost Category</th>
<th>Cost ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planting Area</td>
<td>1,200</td>
</tr>
<tr>
<td>Estimated Yield</td>
<td>2.05</td>
</tr>
<tr>
<td>Estimated Production</td>
<td>3,420</td>
</tr>
<tr>
<td>Fixed Costs</td>
<td></td>
</tr>
<tr>
<td>Insurance and General Expenses</td>
<td>90,000</td>
</tr>
<tr>
<td>Finance</td>
<td>90,000</td>
</tr>
<tr>
<td>Depreciation / Capital Replacement</td>
<td>50,000</td>
</tr>
<tr>
<td>Drawings</td>
<td>50,000</td>
</tr>
<tr>
<td>Other</td>
<td>50,000</td>
</tr>
<tr>
<td>Variable costs</td>
<td></td>
</tr>
<tr>
<td>Seed and sowing</td>
<td>48,000</td>
</tr>
<tr>
<td>Fertiliser and application</td>
<td>136,000</td>
</tr>
<tr>
<td>Herbicide and application</td>
<td>36,000</td>
</tr>
<tr>
<td>Insect / fungicide and application</td>
<td>36,000</td>
</tr>
<tr>
<td>Harvest costs</td>
<td>40,000</td>
</tr>
<tr>
<td>Crop insurance</td>
<td>10,000</td>
</tr>
<tr>
<td>Total Fixed and Variable costs</td>
<td>734,000</td>
</tr>
<tr>
<td>Per Tonne Equivalent (Total costs + Estimated Production)</td>
<td>792,000</td>
</tr>
</tbody>
</table>

**Fig 6:** Calculating the cost of production.

**Step 1:** Add together the fixed and variable costs to obtain the total costs per tonne.

**Step 2:** Add the fixed costs to the tonnage produced to determine fixed costs.

**Step 3:** Add the total variable costs to the total fixed costs to obtain the total cost per tonne.

**Step 4:** Add the per tonne cost to the cash received to determine the cash received per tonne.

**Step 5:** Add the cash received per tonne to the total fixed costs to obtain the total cost per tonne.

**Step 6:** Add the total cost per tonne to the total fixed costs to obtain the total cost per tonne.

10.2.5 Income requirements

Understanding farm business cash-flow requirements and peak cash debt enables grain sales to be timed so cash is available when required. This prevents having to sell grain below the target price to satisfy a need for cash.

The principle is don’t be a forced seller. Be ahead of cash requirements to avoid selling in unfavourable markets.

A typical cash-flow to grow a crop is illustrated in Figure 7. Costs are incurred up-front and during the growing season, with peak working capital debt incurred at or before harvest. This will vary depending on circumstance and enterprise mix.

**Figure 7:** Typical farm operating cash balance.
The operating cash flow of a typical farm that assumes a heavy reliance on cash sales at harvest, versus a farm business that spreads sales out throughout the year is also illustrated in Figure 7.

When there is heavy reliance on harvest sales, costs are incurred during the season to grow the crop. This results in peak operating debt levels at or near harvest. This means at harvest there is often a cash injection required for the business. An effective marketing plan will ensure a grower is not a forced seller to generate cash flow.

By spreading sales throughout the year, a grower may not be as reliant on executing sales at harvest time in order to generate required cash flow for the business. This provides a greater ability to capture pricing opportunities – in contrast to executing sales to fulfil cash requirements.

The ‘when to sell’ steps outlined above result in an estimated production tonnage and the risk associated with that tonnage, a target price range for each commodity and the time of year when cash is most needed.

10.3 Managing your price (how to sell)

The first part of the selling strategy answers the question of when to sell and establishes comfort around selling a portion of the harvest. The second part of the strategy addresses how to sell.

10.3.1 Methods of price management

Pricing products provide varying levels of price risk coverage and these are outlined below.

**Fixed price strategies**
- Fixed price strategies provide the most price certainty
- Examples include cash, futures and bank swaps.

**Floor price strategies**
- Floor price products limit price downside but provide exposure to future price upside
- Examples include options on futures and floor price pool products.

**Floating price strategies**
- Floating price strategies are subject to both price upside and downside
- Examples include some pool products and doing nothing.

A summary of where different methods of price management are suited for the majority of farm businesses is shown in Figure 8.
As illustrated in Figure 8, different price strategies are more applicable through varying periods of the growing season. If selling in the forward market, growers are selling something not yet grown and the inherent production risk of the business increases. This means growers should achieve price certainty if committing tonnage ahead of harvest. Fixed or floor price products and strategies are favourable. Comparatively, a floating price strategy can be effective in the harvest and post-harvest period.

The principle is if there is increasing production risk, take price risk off the table. When committing unknown production, price certainty should be achieved to avoid increasing overall business risk.

It is advised to separate the pricing decision from the delivery decision. Most commodities can be sold at any time with delivery timeframes negotiable. This means price management is not determined by delivery.

### 10.3.2 Fixed price

A fixed price is achieved through cash sales and/or selling a futures position (swaps). It provides some certainty around expected revenue from a sale, as the price is largely known. The exception is when there is a floating component in the price. For example, a multi-grade cash contract with floating spreads, or a floating basis component on futures positions. As shown in Figure 9, a fixed price product locks in price and provides certainty over what revenue will be generated regardless of future price movement.
10.3.3 Floor price

Floor price strategies can be achieved by using ‘options’ on a relevant futures exchange (if one exists), or through a managed sales program product by a third party (such as a pool with a defined floor price strategy). This pricing method protects against potential future downside, while capturing any upside. The disadvantage is that the price ‘insurance’ has a cost that adds to the farm businesses cost of production. As shown in Figure 10, a floor price strategy insures against potential future downside in price while allowing price grains in the event of future price rallies.

Figure 10: Floor price strategy.

10.3.4 Floating price

Many of the pools or managed sales programs are a floating price, where the net price received will move both up and down with the future movement in price. Floating price products provide the least price certainty and are best suited for use at or after harvest rather than pre harvest. As shown in Figure 11, a floating price will move to some extend with future price movements.

It should be noted fixed price strategies include physical cash sales or futures products and provide the most price certainty but production risk must be considered. Floor price strategies include options or floor price pools. They provide a minimum price with upside potential and rely less on production certainty but cost more. Floating price strategies provide minimal price certainty and are best used after harvest.
10.4 Ensuring access to markets

When the selling strategy of when and how to sell is sorted, planning moves to storage and delivery of commodities to ensure timely access to markets and execution of sales. At some point, growers need to deliver the commodity to market. Planning where to store the commodity is important in ensuring access to the market that is likely to yield the highest return. Timing the decision about how to sell is shown in Figure 12 and will be dependent on:

- The time of year determines the pricing method
- Market access determines where to sell
- Relative value determines what to sell.

10.4.1 Storage and Logistics

Return on investment (ROI) from grain handling and storage expenses is optimised when storage is considered in light of market access to maximise returns, as well as harvest logistics. Storage alternatives include variations around the bulk handling system, private off-farm storage and on-farm storage. Delivery and quality management are key considerations in deciding where to store your commodity.
The principle is harvest is the first priority. Getting the crop in the bin is the most critical aspect of business success during harvest. Selling should be planned to allow a focus on harvest.

Bulk export commodities that require significant quality management are best suited to the bulk handling system. Commodities destined for the domestic end-user markets, such as feedlots, processors or container packers, may be more suited to on-farm or private storage to increase delivery flexibility.

Storing commodities on-farm requires prudent quality management to ensure delivery at agreed specifications and can expose the business to high risk if this aspect is not well planned. Penalties for out-of-specification grain on arrival at a buyer’s weighbridge can be expensive. The buyer has no obligation to accept delivery of an out-of-specification load. This means the grower may have to incur the cost of taking the load elsewhere and potentially finding a new buyer. There is potential for a distressed sale which can be costly.

On-farm storage also requires prudent delivery management to ensure commodities are received by the buyer on time with appropriate weighbridge and sampling tickets.

The principle is storage is all about market access and storage decisions depend on quality management and expected markets. Decision-making about on-farm storage is outlined in Figure 13 and more information about options and economics is available at the Grains Research and Development Corporation’s (GRDC) Stored Grain information hub at this link: www.storedgrain.com.au

Figure 13: Grain storage decision making.

10.4.2 Cost of carrying grain

Storing grain to access sales opportunities post-harvest invokes a cost to carry grain. Price targets for carried grain need to account for the cost of carry. The principle is carrying grain is not free and the cost of carry needs to be accounted for if holding grain and selling it after harvest is part of the selling strategy.

If selling a cash contract with deferred delivery, a carry charge can be negotiated into the contract. As highlighted in Figure 14, optimising farm gate returns involves planning the appropriate storage strategy for each commodity to improve market access and cover carry costs in pricing decisions.
10.5 Executing tonnes into cash

This section provides guidelines for converting the selling and storage strategy into cash by effective execution of sales.

10.5.1 Set-up the tool box

Selling opportunities can be captured when they arise by assembling the necessary tools in advance. The toolbox includes:

Timely information

This is critical for awareness of selling opportunities and includes:

- Market information provided by independent parties
- Effective price discovery, including indicative bids, firm bids and trade prices
- Other market information pertinent to the particular commodity.

Professional services

Professional grain selling service offerings and cost structures vary considerably. An effective grain selling professional will put their clients’ best interest first by not having conflicts of interest and investing time in the relationship. Return on investment for the farm business through improved farm gate prices is obtained by accessing timely information, greater market knowledge and greater market access from the professional service.

Futures account and bank swap facility

These accounts provide access to global futures markets. Hedging futures markets is not for everyone, but strategies that use exchanges such as CBOT can add significant value.


**Figure 14:** Cash values versus cash adjusted for the cost of carry.
10.5.2 How to sell for cash
As with any market transaction, a cash grain transaction occurs when a bid by the buyer is matched by an offer from the seller. Cash contracts are made up of the following components with each component requiring a level of risk management:

**Price**
Future price is largely unpredictable, so devising a selling plan to put current prices into the context of the farm business is critical to manage price risk.

**Quantity and Quality**
When entering a cash contract, there is a commitment to deliver the nominated amount of grain at the quality specified. Production and quality risk must be managed.

**Delivery terms**
Timing of title transfer from the grower to the buyer is agreed at time of contracting. If this requires delivery direct to end-users, this relies on prudent execution management to ensure delivery within the contracted period.

**Payment terms**
In Australia, the traditional method of contracting requires the title of grain to be transferred ahead of payment. This means counter-party risk must be managed.

Typical cash contracting to GTA standards is shown in Figure 15.
Figure 15: Typical cash contracting as per Grain Trade Australia standards.

GTA Contract No.3

Grain Trade Australia is the industry body ensuring the efficient facilitation of commercial activities across the grain supply chain. This includes contract trade and dispute resolution rules. All wheat contracts in Australia should refer to GTA trade and dispute resolution rules.

Quantity (tonnage) and quality (bin grade) determine the actuals of your commitment. Production and execution risk must be managed.

Price is negotiable at time of contracting. Price basis or price point is important as it determines where in the supply chain the transaction will occur and so what costs will come out of the price before the growers net return.

Timing of delivery (title transfer) is agreed upon at time of contracting. Hence growers negotiate execution and storage risk they may have to manage.

Whilst the majority of transactions are on the premise that title of grain is transferred ahead of payment, this is negotiable. Managing counterparty risk is critical.
As outlined in Figure 16, the price point in a cash contract will depend on where the transfer of grain title will occur along the supply chain. It shows the terminology used to describe pricing points along the grain supply chain and the associated costs to come out of each price before growers receive their net farm gate return.

**Figure 16:** Costs and pricing points throughout the supply chain.
Cash sales typically occur through three methods:

**Negotiation via personal contact**

Traditionally, prices are posted as a public indicative bid. The bid is then accepted or negotiated by a grower with the merchant or via an intermediary. This method is the most common and available for all commodities.

**Accepting a public firm bid**

Cash prices in the form of public firm bids are posted during harvest and for warehoused grain by merchants on a site basis. Growers can sell their parcel of grain immediately by accepting the price on offer via an online facility and then transfer the grain online to the buyer. Availability depends on location and commodity.

**Placing a firm offer**

Growers can place a firm offer price on a parcel of grain by approaching buyers with a set tonnage and quality at a pre-determined price. The buyers do not have to accept the offer and may simply say no or disregard the offer.

There are increasingly more channels via which to place a firm offer.

One way this can be achieved anonymously is using the Clear Grain Exchange, which is an independent online exchange. If the firm offer and firm bid matches, the parcel transacts via a secure settlement facility where title of grain does not transfer from the grower until funds are received from the buyer. Availability depends on location and commodity.

Anonymous firm offers can also be placed to buyers by an intermediary acting on behalf of the grower. If the grain sells, the buyer and seller are disclosed to each counter-party.

Some bulk handler platforms are also providing facilities for sellers to place firm offers to the market. This includes GrainCorp through its CropConnect product.

A grower can also place a firm offer directly with an individual buyer.

**10.5.3 Counter-party risk**

Most sales involve transferring the title of grain prior to being paid. The risk of a counter-party defaulting when selling grain is very real and must be managed. Conducting business in a commercial and professional manner minimises this risk. The principle is seller beware. There is not much point selling for an extra $5/t if you don’t get paid. Counter-party risk management includes:

- Dealing only with known and trusted counter-parties
- Conducting a credit check (banks will do this) before dealing with a buyer they are unsure of
- Only selling a small amount of grain to unknown counter-parties
- Considering credit insurance, or a letter of credit, from the buyer
- Never delivering a second load of grain if payment has not been received for the first.

It is important to not part with a title of grain before payment, or to request a cash deposit of part of the value ahead of delivery. Payment terms are negotiable at time of contracting. Alternatively, the Clear Grain Exchange provides secure settlement through which the grower maintains title of grain until payment is received by the buyer, and then title and payment is settled simultaneously.

Above all, act commercially to ensure the time invested in a selling strategy is not wasted by poor counter-party risk management. Achieving $5/t more and not getting paid is a disastrous outcome.
10.5.4 Relative values

Grain sales revenue is optimised when selling decisions are made in the context of the whole farming business. The aim is to sell each commodity when it is priced well and hold commodities that are not well priced at any given time. That is, give preference to the commodities with the highest relative value. This achieves price protection for overall farm business revenue and enables more flexibility to a grower’s selling program while achieving the business goals of reducing overall risk. The principle is sell valued commodities – not undervalued commodities. If one commodity is priced strongly relative to another, focus sales there. Don’t sell the cheaper commodity for a discount.

10.5.5 Contract allocation

Contract allocation means choosing which contracts to allocate grain against at delivery time. Different contracts will have different characteristics (price, premiums-discounts, oil bonuses etc.) and optimising your allocation reflects immediately on your bottom-line.

Consideration needs to be made based on the quality or grades you have available to deliver, the contracts you already have in place and how revenues will be calculated on each contract. Key considerations include whether the contract calculates revenues based on a sliding scale, or on pre-determined quality ‘buckets’. Whenever you have more grain to allocate than pre-committed to contracts, it is important to consider the premiums and discounts available in the current cash market as part of your contract allocation decision.

The principle is don’t leave money on the table. Contract allocation decisions don’t take long and can be worth thousands of dollars to your bottom line.

10.5.6 Read market signals

The appetite of buyers to buy a particular commodity will differ over time, depending on market circumstances. Ideally growers should aim to sell their commodity when buyer appetite is strong and stand aside from the market when buyers are not that interested in buying the commodity.

The principle is sell when there is buyer appetite. When buyers are chasing grain, growers have more market power to demand a price when selling.

Buyer appetite can be monitored by:

**The number of buyers at or near the best bid in a public bid line-up**

If there are many buyers, it could indicate buyer appetite is strong. However, if there is one buyer offering prices $5/t above the next best bid, it may mean cash prices are susceptible to falling $5/t if that buyer satisfies its buying appetite.

**Monitoring actual trades against public indicative bids**

When trades are occurring above indicative public bids, this might indicate strong appetite from merchants and the ability for growers to offer their grain at price premiums to public bids.

**Sales execution**

The selling strategy is converted to maximum business revenue by:

- Ensuring timely access to information, advice and trading facilities
- Using different cash market mechanisms when appropriate
- Minimising counter-party risk by effective due diligence
- Understanding relative value and selling commodities when they are priced well
- Thoughtful contract allocation
- Reading market signals to extract value from the market or prevent selling at a discount.
10.6 Market dynamics and execution

10.6.1 Price determinants for western durum wheat

The durum wheat market in WA is in its infancy, with crops being produced on a very small scale. However, if durum wheat production were to be successful, it has the potential to be an important niche crop in WA production systems. It would provide growers with access to a market that has historically been supplied in Australia by product from South Australia and New South Wales.

Durum is a specialty wheat used primarily for the production of pasta products. Due to its specialised use, demand for durum tends to be inelastic and finite. This means there is a relatively fixed requirement for durum year-on-year and there are few substitutes.

Durum wheat values are influenced by the price of bread wheats, such as APW1, but these two wheat types ultimately have different markets. This means, at times, the price relativities between the two can separate reflecting differences in the supply and demand dynamics of each market.

For example, during the 2014-15 season, untimely rains saw European Union durum wheat production fall to historically low levels and its import requirement rose to its highest level in five years. This coincided with weather-damaged crops in Canada and the United States of America and a smaller crop in Australia. This meant the production of durum wheat globally was not adequate to cover demand and resulted in a $200/t or more premium for durum wheat in Australia compared to APW1 varieties. This was despite ample supply of Australian bread wheats. Figure 17 highlights the fluctuating value of durum wheat out of Port Adelaide.

Figure 17: Port Adelaide Durum Values ($/t).

The major production nations of durum wheat are Canada, the European Union (predominantly France and Italy), North Africa and Australia. Major consumers are the European Union and North Africa. Australian production is split between South Australia at 40-50 percent and northern NSW and southern Queensland making up the remaining 50-60 percent of the crop. In a typical year, Australia exports 60-70 percent of its durum wheat production, with a small number of local food manufacturers consuming the remaining 30-40 percent.
Australian export destinations for durum wheat are shown in Figure 18.

**Figure 18: Export destinations for Australian Durum.**

In years when global durum wheat supply exceeds the finite demand, Australian durum wheat values tend to be weak relative to bread wheat varieties. In this scenario, Australian durum is discounted to compete for a smaller amount of international trade activity, as well as competing for alternate homes in the domestic market (such as stock feed markets). Alternatively, when global durum wheat supply fails to meet demand, durum wheat can trade at strong premiums to bread wheat as the market competes to secure its demand requirements from a smaller global crop. This means a major determinant of Australian durum wheat values is the price at which international trade is transacting. This is influenced by:

- Global supply versus demand
- Quality of the global crop
- Timing of the Australian export program

### 10.6.2 Ensuring market access for western durum wheat

Due to the inelastic nature of durum wheat demand, consumers and exporters traditionally focus accumulation programs on the period immediately leading up to, during and after harvest when supply is the most certain. Hence, appetite for durum tends to be strongest from October to January each marketing year.

While Australia-wide, more than 95 percent of durum wheat exports are executed through bulk export vessels – rather than container exports – the small nature of the crop in WA means that any exports that occur tend to take place in containers. This means private commercial storages or on-farm storage facilities can provide efficiencies to market.

Being a specialty crop, there are fewer buyers of durum wheat than other grades of wheat. This means liquidity risk is a particularly important consideration for durum wheat growers. Liquidity risk is the risk that buyers reach their accumulation requirements and step out of the market. The price may fall sharply as a result, or buyer appetite could dry up altogether.

For growers in WA considering planting a durum wheat crop for the first time, it is prudent to research potential buyers prior to sowing the crop. Initiating conversations with buyers prior to planting a crop will provide insights into production and storage requirements, as well as potential homes for your crop once it has been produced.

---

With the majority of WA container packing facilities located in or around Perth, WA growers seeking to market durum wheat should consider their access to these facilities as part of their overall marketing plan.

The 10-year average monthly export pace for Australian durum wheat is outlined in Figure 19.

**Figure 19:** *The 10 year average monthly export pace for Australian Durum.*

Source: Australian Crop Forecasters

Australian durum wheat exports are typically strongest between January and May in each marketing year, as exporters look to move the crop shortly after the Australian harvest but ahead of the harvest of the northern hemisphere crops. The supply chain flow is outlined in Figure 20 and it is advised that storage decisions be determined by assessing market access.

**Figure 20:** *Australian durum wheat supply chain flow.*

---

10.7 Executing tonnes into cash for western durum wheat

Pricing in the durum wheat market is not always transparent. Few buyers and a number of transactions taking place outside the public indicative bid can make it difficult to gauge fair market value.

Price discovery for durum wheat in WA can be difficult given the small size of the market, particularly relative to other grains produced. This means South Australian markets, which have much greater market depth, can be an important source of price discovery – especially for those growers seeking to understand export values. For growers in WA considering planting a durum wheat crop for the first time, the selling process will be best started prior to planting the crop. This can be achieved by researching potential buyers and developing relationships with these buyers prior to planting a crop. These relationships can provide important insights into production and storage requirements, as well as potential homes for the crop once it has been produced. The deciles for sales of durum wheat out of Port Adelaide are shown in Figure 21. These deciles provide an indication of price performance relative to historical values. Where a Decile 1 indicates values in the bottom 10 percent of historical observations, a Decile 9 would indicate the top 10 percent. This chart is based on price observations from August 2009 to 2016.

Figure 21: Port Adelaide durum wheat deciles.