SOUTHERN
JUNE 2018

GRDC GROWNOTES™

GRDC
GRAINS RESEARCH & DEVELOPMENT CORPORATION

LUPIN

SECTION 13

GRAIN MARKETING

OVERVIEW | SELLING PRINCIPLES | ENSURING ACCESS TO MARKETS | EXECUTING TONNES INTO CASH | MARKET DYNAMICS AND EXECUTION

MORE INFORMATION

Pulse Australia 'Pulses – Understanding Global Markets': http://www.pulseaus.com.au/growing-pulses/publications/marketing-pulses#world-pulse-production-calendar

Pulse Australia 'Pulse Traders': http://www.pulseaus.com.au/marketing/pulse-traders

Australian Export Grains Innovation Centre 'Australian Grain Note – Pulses': http://www.pulseaus.com.au/storage/app/media/using_pulses/AGN_Pulse-Note-LR.pdf

Grain Marketing

This chapter was produced and supplied by Profarmer Australia.

13.1 Overview

The final step in generating farm income is converting the tonnes of grain produced to dollars at the farm gate. This section provides best-in-class marketing guidelines for managing price variability to protect income and cash-flow.

As shown in Figure 1, Port Lincoln Lupin values have varied from $70 to $210 per tonne during the past seven years. This is a variability of 30 to 90 percent. For a property producing 200 t of lupins, this means an income difference of $14,000 to $42,000, depending on timing of sales.

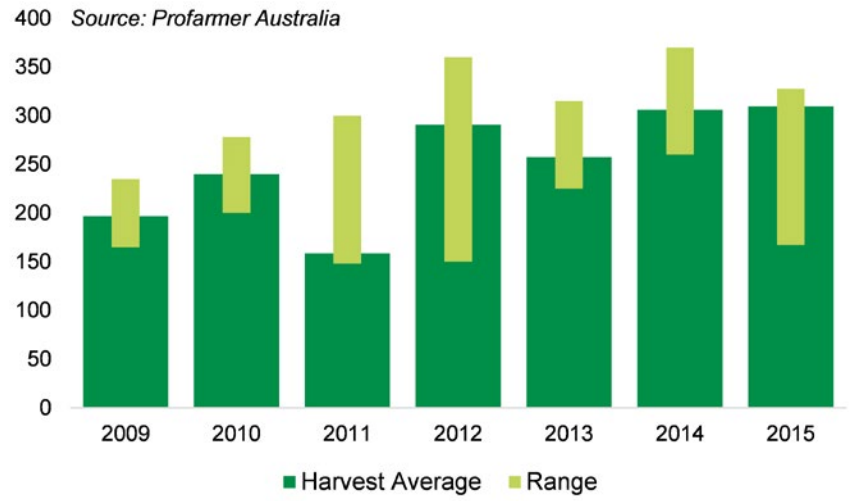

Figure 1: *Intra-season lupin value variations (in dollars per tonne) at Port Lincoln.*

13.2 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.

Unknown factors 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 grower 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.

FEEDBACK

13.2.1 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.

Key selling principles when considering sales during the growing season and production cycle of a crop are outlined in Figure 2.

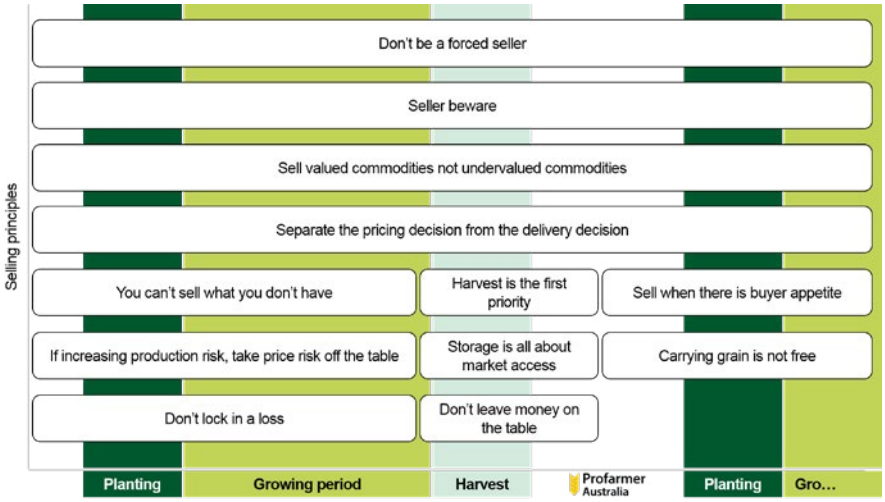

Figure 2: *Grower commodity selling principles timeline.*

13.2.2 Establish a business risk profile – when to sell

Establishing your 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 3.

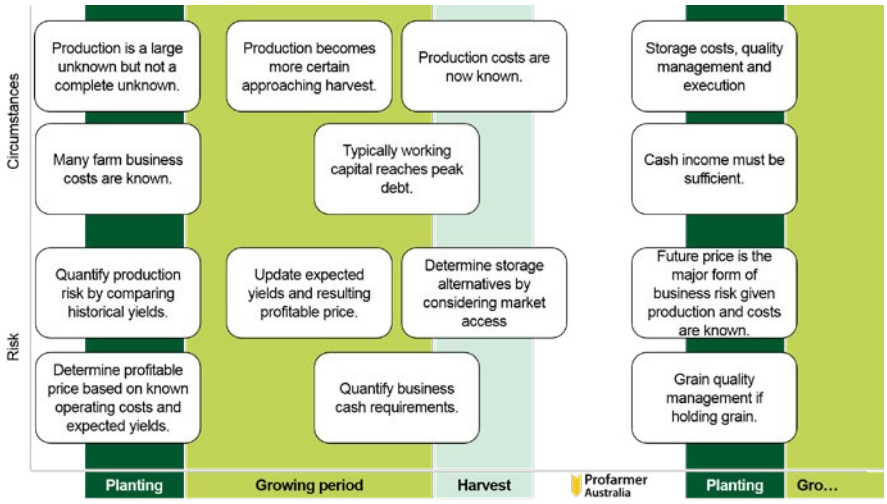

Figure 3: *Typical farm business circumstances and risk.*

The decision-making process for when a grower will sell their grain is dependent on:

- Does production risk allow sales?
- What portion of production?
- Is the price profitable?
- Are business cash requirements being met?

13.2.3 Production risk profile of the farm

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

The principle is you can't sell what you don't have. Don't increase business risk by over committing production.

Establish a production risk profile by:

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

The quantity of crop grown is a large unknown early in the year, but 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 level at any given point in time with consideration to rainfall, yield potential, soil type, commodity etc.

The typical production risk profile of a farm is illustrated in Figure 4.

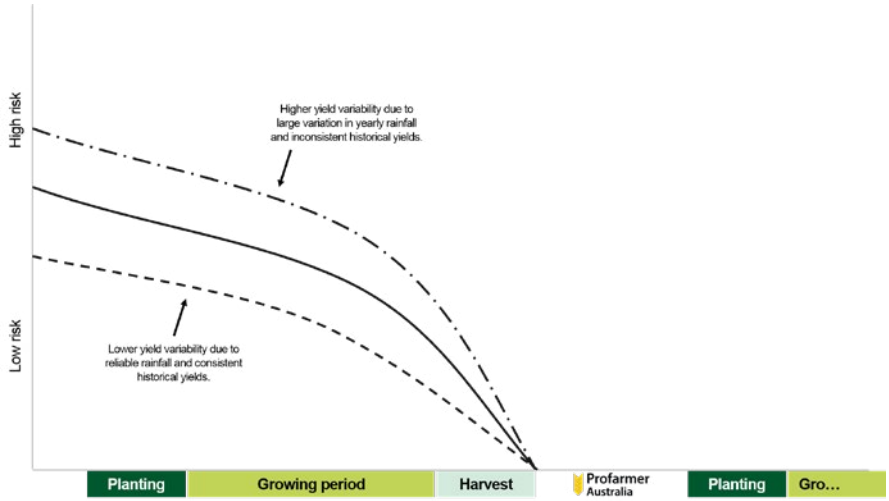

Figure 4: *Typical production risk profile of a farm operation.*

13.2.4 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 you are 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 provided in the Grains Research and Development Corporation 'Farming the Business' manual. It also provides a cost of production template and tips on grain selling versus grain marketing and can be found at this link http://www.grdc.com.au/FarmingTheBusiness

13.2.5 Income requirements

Understanding farm business cash-flow requirements and peak cash debt enables grain sales to be timed so that 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 5. Costs are incurred upfront and during the growing season with peak working capital debt incurred at or before harvest. This will vary depending on circumstance and enterprise mix.

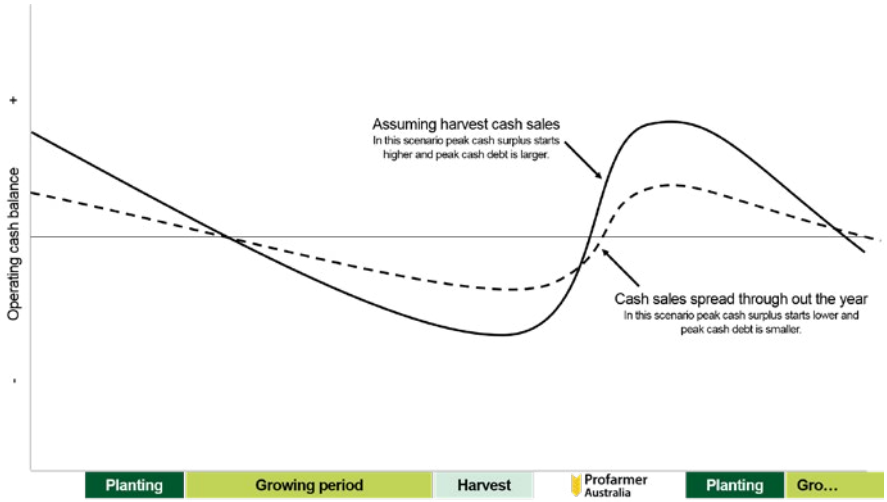

Figure 5: *Typical farm operating cash balance.*

The operating cash flow of a typical farm that is assuming a heavy reliance on cash sales at harvest versus a farm business which spreads sales out throughout the year is also clearly shown in Figure 5.

When harvest sales are more heavily relied on, costs are incurred during the season to grow the crop. This results in peak operating debt levels at or near harvest. 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' in order to generate cash flow.

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

13.3 Ensuring access to markets

Once 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 will 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.

When a grower has made the decision to sell, the question becomes how they achieve this. The decision about storage and when to sell is outlined in Figure 6 and can depend on:

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

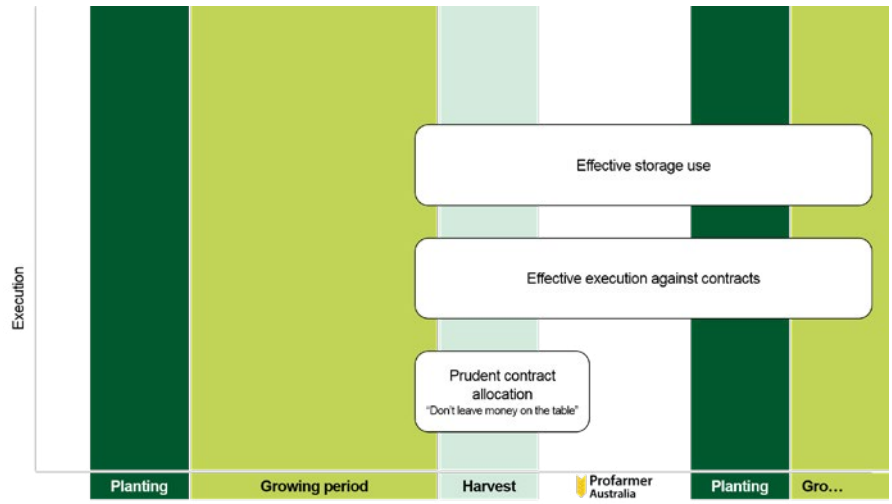

Figure 6: *Effective storage decisions.*

13.3.1 Storage and logistics

Return on investment 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 grain 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 most critical to business success during harvest and selling should be planned to allow focus on harvest.

Bulk export commodities requiring significant quality management are best suited to the bulk grain handling system. Commodities destined for the domestic end-user market (such as feed lot, processor or container packer), 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.Storage decisions depend on quality management and expected markets, as shown in Figure 7.

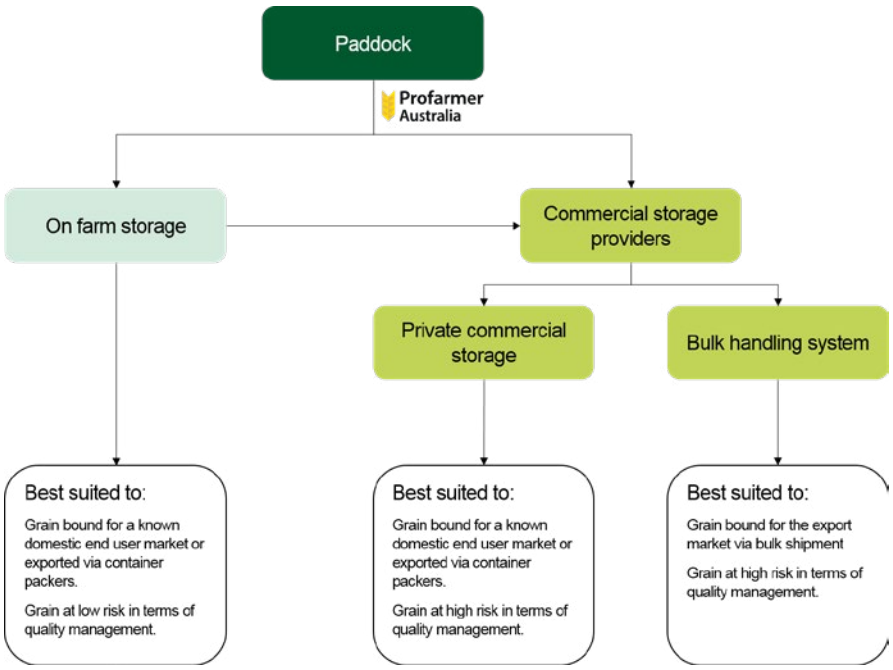

Figure 7: *Grain storage decision making.*

FEEDBACK

MORE INFORMATION

GRDC 'Stored Grain':
http://storedgrain.com.au/

13.3.2 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.

Carry costs consist of:

- Monthly storage fees charged by a commercial provider
- Capital cost allocation where on-farm storage is used
- Interest associated with having wealth tied up in grain, rather than cash or against debt.

The price of carried grain needs to be higher than what was offered at harvest. The cost of carry applies to storing grain on-farm, as there is a cost of capital invested in the farm storage plus the interest component

The principle is carrying grain is not free. The cost of carrying grain needs to be accounted for if holding grain and selling it after harvest is part of the selling strategy.

Optimising farm gate returns involves planning the appropriate storage strategy for each commodity to improve market access and covering carry costs in pricing decisions, as highlighted in Figure 8.

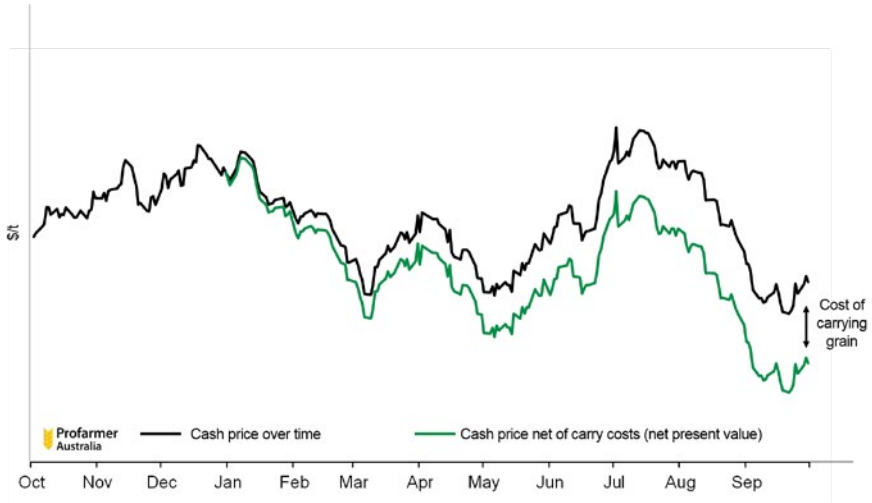

Figure 8: *Cash values vs cash adjusted for the cost of carry.*

FEEDBACK

MORE INFORMATION

Grain Trade Australia 'A Guide to Taking out Grain Contracts': http://www.australiangrainexport.com.au/docs/Grain%20Contracts%20Guide.pdf

Grain Trade Australia 'Grain Trade Rules, Contracts and Vendor Declarations': http://www.graintrade.org.au/contracts

Grain Trade Australia 'Trading Standards': http://www.graintrade.org.au/commodity_standards

Profarmer 'Australian Grain Prices, Analysis and Selling Tactics': http://www.profarmergrain.com.au

GrainCorp 'Grain Transact Resource Centre': http://www.graintransact.com.au

Australian GrainFlow Network: http://www.grainflow.com.au

Emerald Grain: http://emeraldgrain.com/grower-logins/

Clear Grain Exchange: https://www.cleargrain.com.au/get-started

Daily Grain: https://www.dailygrain.com.au/

13.4 Executing tonnes into cash

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

13.4.1 Set up the tool box

Selling opportunities can be captured when they arise by assembling the necessary tools in advance. The tool box 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

Grain selling professional 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.

This link http://www.graintrade.org.au/membership contains current financial members of Grain Trade Australia (GTA), including buyers, independent information providers, brokers, agents and banks providing over-the-counter grain derivative products (swaps).

13.4.2 How to sell for cash

Like 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 hence 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 delivery of the nominated amount of grain at the quality specified. Hence 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 it relies on prudent execution management to ensure delivery within the contracted period.

Payment terms

In Australia, the traditional method of contracting requires 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 9

FEEDBACK

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.

GTA Contract No.3

CONTRACT CONFIRMATION

GTA Trade Rules and Dispute Resolution Rules apply to this contract

GRAIN TRADE AUSTRALIA

This Contract is confirmation between:

BUYER
Contract No:
Name:
Company:
Address:

Buyer ABN:
NGR No:

SELLER
Contract No:
Name:
Company:
Address:

Seller ABN:
NGR No:

The Buyer and Seller agree to transact this Contract subject to the following Terms and Conditions:

Commodity:
Grade:
Quantity:
Packaging:
Price:
Price Basis:

GTA Commodity Reference:
Inspection: (Origin – Destination)
Tolerance: (Refer over)
Weights: (Origin – Destination)
Excl/Inc/Free GST

Delivery/Shipment Period: (Delivered, Shipped, Free In Store, Free On Board, Ex-Farm, etc.)
Delivery Point and Conveyance: (Road, Rail, Delivered Container Terminal, Freight, Rated Basing Point, Loading Weight requirements if applicable)

Payment Terms: The buyer agrees to pay the seller within _____. In the absence of a declaration, payment will be 30 days end of week of delivery.

Levies and Statutory Charges: Any industry, statutory or government levies which are not included in the price shall be deducted as required by law.

Disclosures: Is any of the crop referred to in this contract subject to a mortgage, Encumbrance or lien and/or Plant Breeders Rights and/or EPR liabilities and/or registered or unregistered Security Interest? ○NO ○YES (Please ☐ appropriate box) If "yes" please provide details:

Other Special Terms and Conditions:

All Contract Terms and Conditions as set out above and on the reverse of this page form part of this Contract. Terms and Conditions written on the face of this Contract Confirmation shall overrule all printed Terms and Conditions on the reverse with which they conflict to the extent of the inconsistency. This Contract comprises the entire agreement between Buyer and Seller with respect to the subject matter of this Contract.

Recipient Created Tax Invoice (RCTI).
To assist with the processing of the Goods and Services Tax compliance, the buyer may prepare, for the seller, a Recipient Created Tax Invoice (RCTI). If the seller requires this service they are required to sign this authorisation.

☐ Please issue a RCTI (Please ☐)

Incorporation of GTA Trade & Dispute Resolution Rules:
This contract expressly incorporates the GTA Trade Rules in force at the time of this contract and Dispute Resolution Rules in force at the commencement of the arbitration, under which any dispute, controversy or claim arising out of, relating to or in connection with this contract, including any question regarding its existence, validity or termination, shall be resolved by arbitration.

Buyer's Name: (PRINT NAME)
Buyer's Signature:
Date:

Seller's Name: (PRINT NAME)
Seller's Signature:
Date:

This Contract has been executed and this form serves as confirmation and should be signed and a copy returned to the buyer/seller immediately. 2014 Edition

©GTA. For GTA member use only.

Figure 9: *Typical cash contracting as per Grain Trade Australia standards.*

FEEDBACK

The price point in a cash contract will depend on where the transfer of grain title will occur along the supply chain. The terminology used to describe pricing points along the grain supply chain is shown in Figure 10, along with the associated costs to come out of each price before growers receive their net farm gate return.

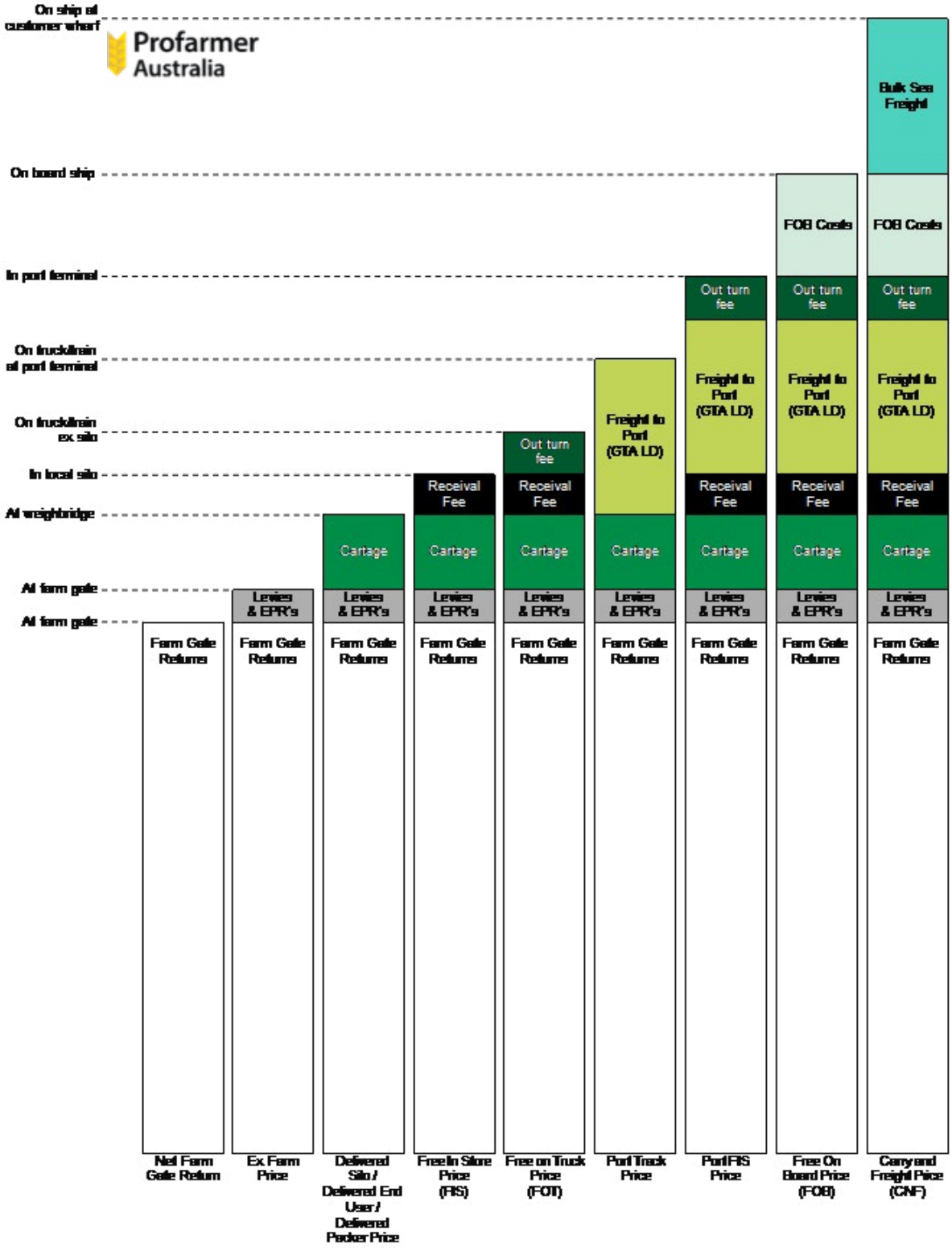

Figure 10: *Costs and pricing points through the supply chain.*

FEEDBACK

Cash sales generally 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. The availability of this 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. The availability of this 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, including GrainCorp through its CropConnect product. A grower can also place a firm offer directly with an individual buyer.

13.4.3 Counter-party risk

Most sales involve transferring 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 you are unsure of
- Only selling a small amount of grain to unknown counter-parties
- Considering credit insurance or letter of credit from the buyer
- Never delivering a second load of grain if payment has not been received for the first.

It is advised to not part with title of grain before payment, or 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. 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.

MORE INFORMATION

Grain Traders Australia 'Managing Counter-party Risk 14/7/2014': http://www.graintrade.org.au/sites/default/files/Grain%20Contracts%20-%20Counterparty%20Risk.pdf

Clear Grain Exchange 'Title Transfer Model': https://www.cleargrain.com.au/get-started

GrainGrowers 'Guide to Managing Contract Risk': www.graingrowers.com.au/policy/resources

Counter-party Risk: A Producer Perspective, Leo Delahunty http://www.graintrade.org.au/sites/default/files/GTA_Presentations/Counterparty%20risk%20-%20a%20producer's%20perspective%20-%20Leo%20Delahunty.pdf

FEEDBACK

13.4.4 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 to hold commodities that are not well-priced at any given time. That is, give preference to the commodities of 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.

13.4.5 Contract allocation

Contract allocation means choosing which contracts to allocate your grain against come delivery time. Different contracts will have different characteristics (such as price, premiums-discounts, oil bonuses etc.) and optimising the allocation reflects immediately on the business 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 there is more grain to allocate than pre-committed to contracts, don't forget to consider the premiums and discounts available in the current cash market as part of the 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.

13.4.6 Reading 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.

Appetite in pulse markets can be fickle, erratic and the buy-side can be illiquid. Monitoring market signals is critical to achieving the best possible returns.

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 $5/t above the next best bid, it may mean cash prices are susceptible to falling $5/t if that buyer satisfies their buying appetite. In pulse markets the spread between the highest and the second highest bidder can be more than $100/t at times.

Monitoring actual trades against public indicative bids is also important. When trades are occurring above indicative public bids, this may indicate strong appetite from merchants and the ability for growers to offer their grain at price premiums to public bids.

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 these are priced well
- Thoughtful contract allocation
- Reading market signals to extract value from the market or prevent selling at a discount.

FEEDBACK

13.5 Market dynamics and execution

13.5.1 Price determinants for southern lupin

Australia is a relatively small player in terms of world pulse production, producing 1.5-2.5 million tonnes (mt) of pulses in any given year versus global production of approximately 60 mt. Lupins make up only a small part of this global pulse complex, with estimates pointing to only marginally more than 1 mt being produced annually. Australia makes up a considerable proportion of global lupin production. Australian annual production has ranged from 550-650,000 t in recent seasons, accounting for 50-80 percent of global production and positioning it as the key global market participant.

There are two major types of lupins grown in Australia. The narrow leafed lupin (or Australian sweet lupin) is the predominant variety grown, with the bulk of production occurring in WA. Narrow leafed lupin varieties are predominately used for stockfeed and, with a relatively small domestic stockfeed market in WA, the majority of the State's production is exported. Comparatively, the albus lupin is primarily used for human consumption and production – although considerably smaller – is spread throughout New South Wales, Victoria, South Australia and WA. In the southern growing regions, lupins are spread across a wide area of both SA and VIC. Primarily it is the narrow leafed lupin that is produced, with 100-150,000 t produced across the two states each year. Albus lupins are grown in the southern region, but production is only an estimated 1000 to 3000 t each year.

The major export markets for lupins vary depending on variety. The export market for albus lupins is primarily Egypt, where these are used for human consumption in the snackfood industry. With the Egyptian import requirement estimated at just 50,000 t each year, a change in Australian production for this type can result in a notable under or over-supply. Comparatively, the major export markets for the narrow leafed lupin consist of South Korea, the European Union (EU) and Japan. These markets import an average 200-350,000 t of Australian lupins each year to be used as stockfeed. In the southern growing regions, the big majority of the narrow leafed lupin crop is consumed by the local domestic market as ruminant feed. Very little of the crop is bound for export.

With lupins predominately used for stockfeed, these are valued in relation to other competing protein commodities. Australia is typically the sole exporter of lupins into the global market. Rather than competing against other export origins, it competes against substitute protein products. The biggest competitor is the soybean complex. Lupins sold into export markets are typically valued at a price relative to that of soybean meal. Given this dynamic, Australian farm gate prices are heavily influenced by local production volatility and international trade values for substitute protein products such as soybean meal.

Some of the global influences on Australian lupin pricing are:

- The world price and availability of soybean meal (biggest influence on export values)
- Lupin production in origins outside of Australia.

While Australia is by far and away the biggest producer of lupins globally, if production increases in outside regions it can impact the import requirements for Australian produce in the coming season. This is particularly true in the EU, where increases in production can result in reduced appetite from neighbouring nations and key importers including Spain and the Netherlands. The global lupin production calendar is shown in Figure 11.

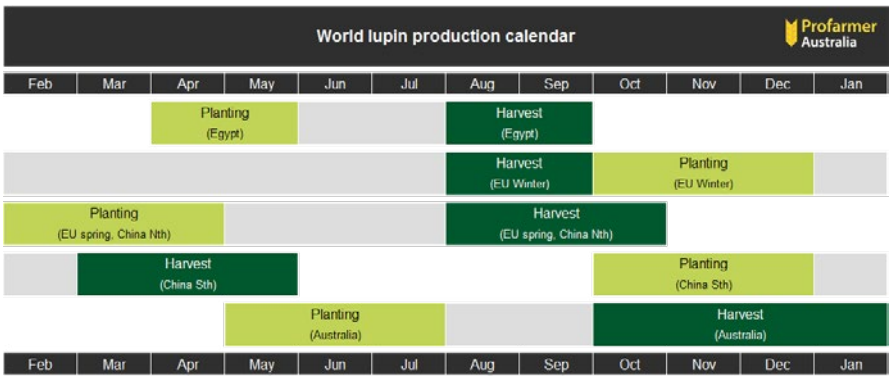

Figure 11: *Global lupin production calendar.*

Local influences on Australian lupin pricing include:

- Domestic production of each lupin variety
- Availability and quality of local protein feeds
- Seasonal conditions and the subsequent demand for feed grain
- Price of imported protein meals (such as soybean meal) and local protein meal prices (such as canola meal, soybean meal).

Appetite for feed grains, including protein feed, can vary greatly depending on seasonal conditions. Drought has led to sharp increases in appetite for narrow leafed lupin varieties as graziers and feedlotters are required to increase the volumes of feed they purchase.

Australian lupin exports are typically strongest shortly after our harvest as buyers seek to move crop to fulfil immediate appetite.

The five-year average monthly lupin export pace (in thousand tonnes) is illustrated in Figure 12.

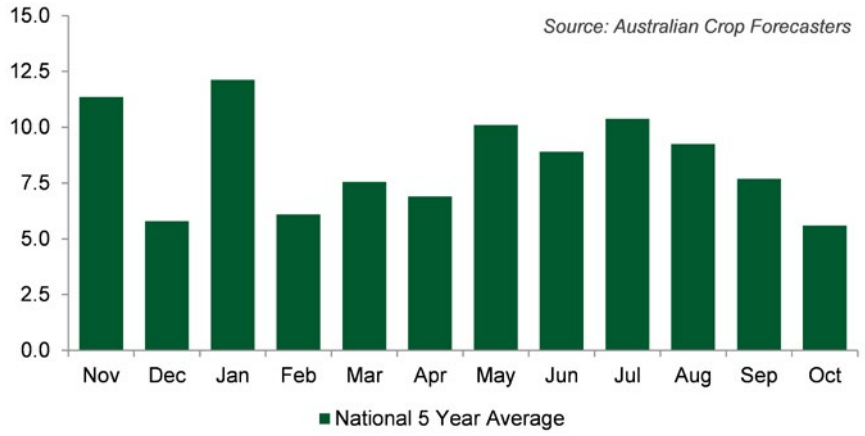

Figure 12: *Five-year average monthly lupin export pace ('000t) from Australian Crop Forecasters.*

13.5.2 Ensuring market access for southern lupin

The market for the southern lupin crop varies greatly depending on the variety grown and where it is produced. Narrow leafed lupins, which make up more than 90-95 percent of the lupin production of VIC and SA, are typically absorbed in the local domestic feed complex as stockfeed. On-farm storage allows more flexibility in accessing this market when it is most favourable to the grower and remains popular given the favourable way in which lupins store.

FEEDBACK

Once stored on-farm, lupins can be sold and delivered into private storage or directly to an end-user when it is most favourable. Private commercial storage may offer a viable alternative if on-farm storage is not available.

Albus lupins are ultimately bound for export for human consumption purposes. Egypt remains the main buyer. Production in VIC and SA is not big enough to warrant exporting in bulk vessels, which means the albus lupin market is executed through the container or 'delivered' market. To ensure access to this market, grain is required to be stored on-farm or delivered directly to the 'packer' at the time of harvest.

Albus lupins that do not make the required specifications for export are able to be sold into the domestic feed market, with the same market access principles applied for narrow leafed lupins to be followed. The Australian supply chain flow is shown in Figure 13.

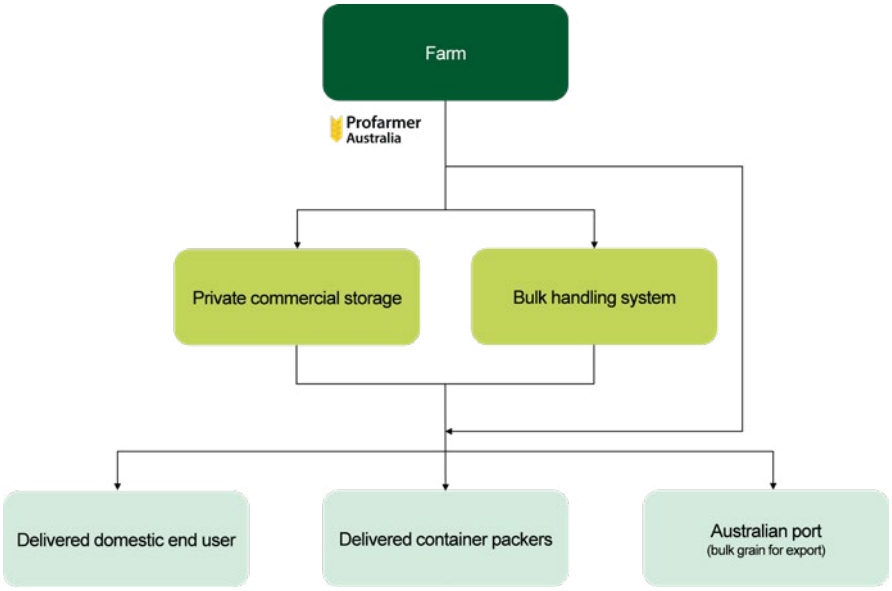

Figure 13: *Australian supply chain flow.*

Storage decisions should be determined by assessing market access. The majority of eastern and southern Australian lupins are either exported in containers, or consumed domestically. Private commercial storage and on-farm storage can both provide efficiencies to market.

Quarantine restrictions for importation of SA lupin into VIC and NSW were put in place in 1996 due to sporadic occurrence of anthracnose in broadacre lupin crops on the Eyre Peninsula (but this has not been sighted in recent years).

More information about VIC quarantine rules is available at: http://agriculture.vic.gov.au/agriculture/horticulture/moving-plants-and-plant-products/moving-plants-within-victoria/compliance-and-verification-agreements/lupin-anthracnose

Anthracnose was reported in NSW crops in 2016 and eradication zones have been set up. More information is available at: http://www.dpi.nsw.gov.au/biosecurity/plant/recent-pest-arrivals/lupin-anthracnose

FEEDBACK

13.5.3 Executing tonnes into cash for southern lupin

Given the volatile nature of lupin pricing, setting a target price using the principles outlined in this Chapter minimises the risk of taking a non-profitable price or holding out for an unrealistically high price that may not occur. Pricing deciles for lupins are provided as a guide and are illustrated in Figure 14.

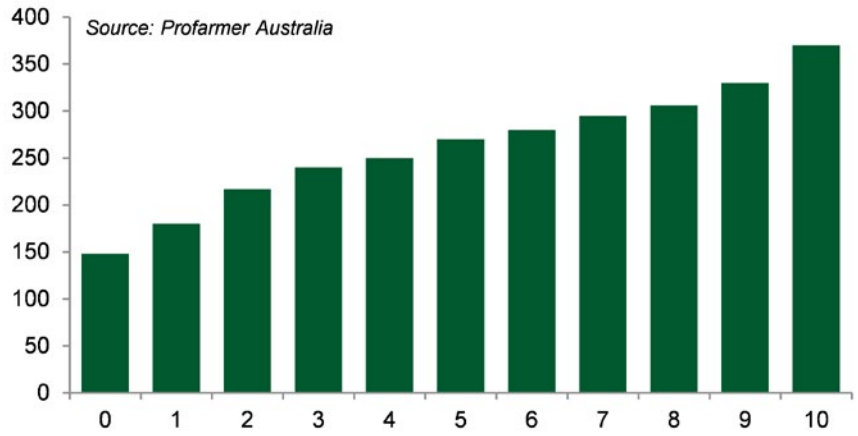

Figure 14: *Port Lincoln lupin deciles.*

Selling options for lupins include:

Store on farm then sell

This is the most common occurrence, particularly for narrow leafed lupins. Lupins are safe to store and require less maintenance than cereal grains. It does remain important to monitor quality, particularly for albus varieties, which will be required to meet export specification requirements. There must be consideration of the cost of storage in target pricing.

Cash sale at harvest

This is the least preferred option, as buyer demand does not always coincide with harvest. This is particularly true for albus variety lupins where there are limited buyers and an influx of grower selling can pressure values lower.

Warehouse then sell

This provides flexibility for sales if on-farm storage is not available. There should be consideration of warehousing costs in cost of production and target prices. The availability to warehouse lupins in the southern region is limited, with the major bulk grain handlers not providing this service due to the low volumes of production in the region. This may not be an option readily available to many growers in the southern region.

There are some forward price mechanisms available for lupins, including traditional fixed volume forward contracts and – less common – area contracts. Area based contracts tend to price at a discount to fixed volume contracts and this discount needs to be weighed-up against the level of production risk inherent in each contract.

As with all sales, counter-party risk and understanding contract of sale is essential. Counter-party risk considerations are especially important for pulse marketing, as there is often a higher risk of contract default in international pulse markets than for canola or cereals. This is due to the markets they are traded into and lack of appropriate price risk tools (such as futures). This can place extra risk on Australian based traders endeavouring to find homes for product. Lupin price history out of Port Lincoln is shown in Figure 15.

FEEDBACK

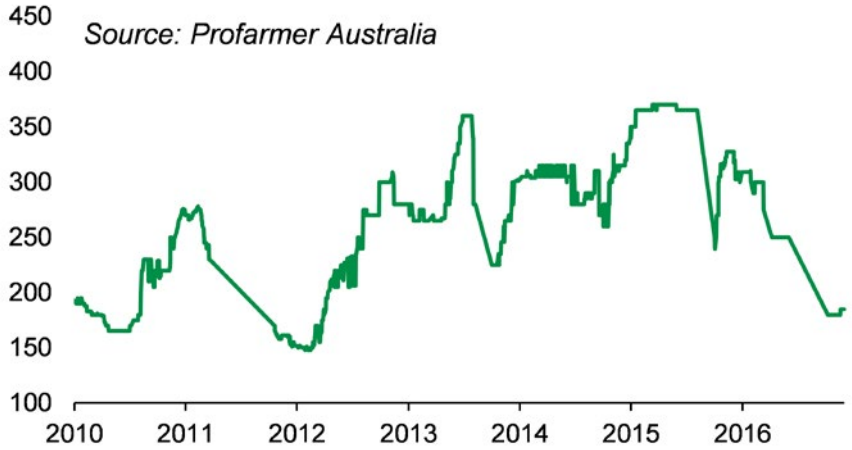

Figure 15: *Long term Port Lincoln Lupin price history.*