

## Farmer-to-farmer advice: What's the best way to sell raw wool in Australia?

**Elizabeth Jackson**<sup>1</sup>, **Mohammed Quaddus**<sup>1</sup>, **Nazrul Islam**<sup>2</sup>,  
**John Stanton**<sup>1,2</sup>

Email: [elizabeth.jackson@cbs.curtin.edu.au](mailto:elizabeth.jackson@cbs.curtin.edu.au), [mohammed.quaddus@gsb.curtin.edu.au](mailto:mohammed.quaddus@gsb.curtin.edu.au),  
[nislam@agric.wa.gov.au](mailto:nislam@agric.wa.gov.au), [jstanton@agric.wa.gov.au](mailto:jstanton@agric.wa.gov.au)

<sup>1</sup> Curtin University of Technology  
GPO Box U1987  
Perth WA 6845  
Ph: +61 8 9266 9266

<sup>2</sup> Department of Agriculture Western Australia  
3 Baron-Hay Court  
South Perth WA 6151  
Ph: +61 8 9368 3333

**Poster paper prepared for presentation at the International Association of  
Agricultural Economists Conference, Gold Coast, Australia,  
August 12-18, 2006**

*Copyright 2006 by Elizabeth Jackson, Mohammed Quaddus, Nazrul Islam and John Stanton. All rights reserved. Readers may make verbatim copies of this document for non-commercial purposes by any means, provided that this copyright notice appears on all such copies.*

## **Abstract**

Some 85% of all raw wool produced in Australia is sold on the open-cry auction system (Bolt 2004). Current debate among wool growers highlighted the need to explore other methods available and, of these, determine what are the most preferred. Four focus groups were conducted in regional Western Australia to ascertain primary producers' opinions on the options available for selling their raw wool. Focus group participants were given a series of scenarios to brainstorm, these focused on offering advice to a new neighbour who had never grown wool. Results of the research showed that auctioning wool via the services of a broker is by far the preferred selling method. Forward contracting and internet-based selling were options that were unfamiliar but worthy of trial while futures and options trading, value-added selling and selling direct to mills were the least favoured methods. Further to this it was found that producers are willing to try selling methods that shorten the wool supply chain and they also favour relationship-based systems.

***JEL classifications: Q10, Z13***

Keywords: wool commerce, auction, forward contract, focus groups, selling systems

## **Introduction**

An anomaly in the literature on Australian raw wool selling systems was identified with some 85% of raw wool sold on the open-cry auction system (Bolt, 2004), but other research suggested that the industry, and its primary producers, were not satisfied with this dominant method (Wool Industry Review Committee, 1993, Musser, Patrick and Eckman, 1996 and “Weakness in wool auction: Flugge”, 2004). A further anomaly was that auctioning wool had actually increased in popularity by 5% over the past fifteen years (Piggot 1990, Teasdale, 1991 and Bolt 2004).

Australia is by far the world's largest supplier of apparel wool (Lowe, 2005) and earned the nation \$2.34 billion worth of export income in the 2004/05 financial year (Wahlquist, 2005). However, declining wool prices since 1989 have seen woolgrowers' incomes suffer and specialist wool growers have experienced negative farm-business profits (Kingwell, Bathgate and O'Connell, 1999 and Shafron, Martin and Ashton, 2002). Kingwell, Bathgate and O'Connell (1999) give three reasons for this price decline: 1) the increased storage of wool either on-farm or in brokers' sheds, 2) the economic crisis experienced by so many Asian economies in the late 1990s and 3) the price-competitive nature of substitute products. With this knowledge it is expected that alternative selling systems would be embraced, rather than rejected as the literature has suggested.

This paper attempts to understand how the anomalies in the literature on attitudes towards the auction system came about and the levels of understanding current users of the wool commerce industry have of its operation. This is part of the exploratory stage of a larger project that will develop a model on the behavioural determinants of producers selling raw wool. The next sections of this paper present relevant background literature, research method and design, results and conclusions of this study.

## **Background Literature**

Research shows that Australian farmers are likely to experience greater fluctuations in commodity prices in the future (Kingwell, 2000) yet some 85% still sell their wool on the open-cry auction system (Bolt, 2004) with only 11% using the less risky forward market system (Coad, 2000) and the remaining 4% using alternative systems such as futures trading or direct selling to processors. It has been suggested that use of forward contract is one mechanism available to farmers minimise the risk associated with selling agricultural commodities (Barnard and Nix, 1979) and thus to stabilise income. This research seeks to document the advice farmers give to one another when discussing the sale of raw wool, with specific reference to the auction

system. Further to this, the knowledge gained from this study will be used to strengthen a behavioural model being developed to identify and quantitatively describe the factors affecting the adoption of forward contracts by Australian wool producers.

### ***Auction system***

The wool auction system has operated in Western Australia since December 1920 (“Flashback”, 2004) and is described on the Department of Agriculture Western Australia’s (DAWA) WoolDesk web site as follows: “Farm wool is mainly sold through open-cry auctions in Australia. These auctions are conducted by Australian Wool Exchange (AWEX) on behalf of the Australian wool producers, the wool brokers and the buyers.”

([http://www.agric.wa.gov.au/servlet/page?\\_pageid=213&\\_dad=portal30&\\_schema=PORTAL30](http://www.agric.wa.gov.au/servlet/page?_pageid=213&_dad=portal30&_schema=PORTAL30))

Despite its seemingly long life, the Wool Industry Review Committee (1993) found that 31% of Australian wool producers are dissatisfied with this system and claim it is “defective due to volatility, [exposed to] possible manipulation, [has] unpredictable time constraints and an unnecessary intermediary participation in the communication channel” (p. 75). How did this view come about?

The Reserve Price Scheme that existed in the Australian wool selling industry until July 1991 held an enormous regulatory power over sellers, those being farmers (Richardson 2001). Its main aim was “to provide greater stability to wool prices at maximum sustainable levels (Bardsley 1994, p. 1092). However, this supply-driven scheme subjected the industry to interventionist pricing mechanisms that failed to provide adequate price and market signals (Wool Industry Review Committee, 1993). There were numerous consequences of the Scheme’s removal, one of which was the realisation of how dependent the industry had become on the auction system of selling wool. Stemming from this came the understanding of how the industry had basically become structured around this somewhat inflexible system (Wool Industry Review Committee, 1993). The industry found itself comfortable, to the point of rigidity, with the

auction system and unwittingly discouraged less risky, alternative selling systems to farmers (Wool Industry Review Committee, 1993; Musser, Patrick & Eckman, 1996).

Some thirteen years after the Reserve Price Scheme's demise and despite efforts to introduce electronic and other selling alternatives to the industry (Bolt, 2004 and Liddle, 2004), about 85% of the Australian wool clip is still sold through open-cry auction (Bolt, 2004) with 15% being sold by alternative means. These alternatives are discussed later.

Interestingly, despite warnings of increasing commodity price fluctuations and encouragement for farmers to better manage their price risk (Barnard and Nix, 1979 and Kingwell, 2000), the past fifteen years has seen the total percentage of the Australian wool clip being sold at auction increase from 80% (Piggot, 1990 and Teasdale, 1991) to 85% (Bolt, 2004).

### ***Forward contracting***

The Wool Industry Review Committee (1993, p. 76) defined a forward contract as “A binding contract specifying the price (or price formula), quality and quantity of a product to be delivered at some specified date. The quantity may be expressed in units of output or as the production from a specified area. The contract usually specifies penalties to be exacted from each party for particular kinds of non-fulfilment.” What can be gleaned from this definition is that no matter how one looks at forward contracts, such a selling mechanism is characterised by a set price and set delivery date for a specified commodity.

The principal benefits of forward contracts to farmers discussed in the literature are based on the concepts of price risk management/uncertainty and income stabilisation (Barnard & Nix, 1979; Miller, 1986; Musser, Patrick & Eckman, 1996; Fraser, 1997; McLeay & Zwart, 1998; Coad, 2000; Kingwell, 2000; Champion & Fearne, 2001; Bolt, 2004; Brakenridge, 2004; Cuming, 2004, Liddle, 2004).

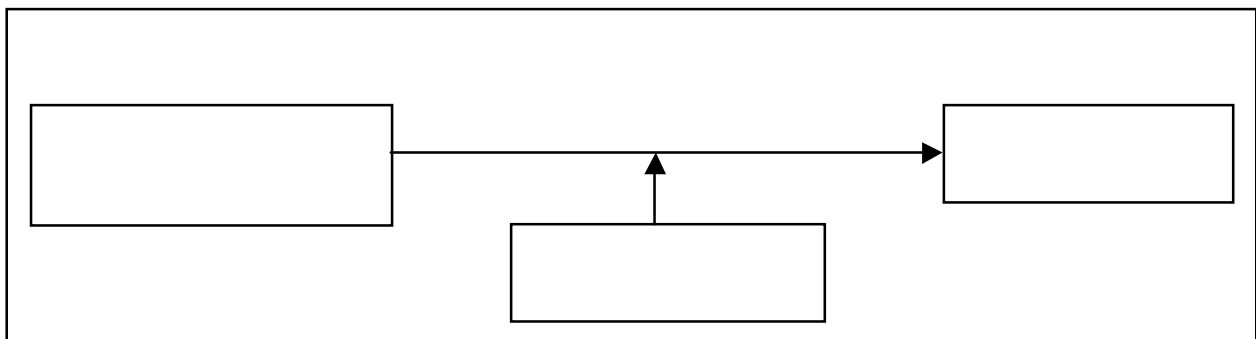
Many authors discuss the risk-averse nature of farmers (Bond & Wonder, 1980; Pluske & Fraser, 1995; Coad, 2000, Pannell, Malcolm & Kingwell, 2000) and comment on the benefit of forward contracts in terms of their stabilisation on income. Barnard and Nix (1979) give us a British agribusiness definition of forward contracts and aptly describe them as a tool of turning price uncertainty into price certainty.

### ***Other available selling systems***

Systems other than selling via auction or forward contract are utilised by 4% of Australian wool producers. Such systems include, but are not limited to retained ownership programs, sale by tender, offer boards, tops auction, laser matched interlots, merchants (such as Premier Wool Newcastle), electronic selling (including WoolTrade or e-wool) (<http://www.elders.com.au> and <http://www.landmark.com.au>) and Futures and Options contracts (<http://www.sfe.com.au>).

## **Research Method and Design**

The present study is the qualitative, exploratory phase of a larger, quantitative study. The research question related to this particular paper is: What advice do Australian producers have for each other on selling raw wool? The research model (Figure 1) shows our belief that the chosen method of selling raw wool is positively influenced by the perception of choices available. However this decision will be mediated by word-of-mouth advice external to the decision maker. The findings and discussions from this research are based on the preliminary data.



## ***Participants***

Selecting participants on the basis of convenience is often used for business research (Zikmund, 2003) and was used in this research to select locations and participants for the focus groups. Regionally-located DAWA officers provided lists of local farmers who would be potentially interested in attending. The principal selection criteria was that participants had to have experience in selling wool within Australia. Potential participants were contacted by telephone, fax and e-mail. Focus groups were conducted in areas of varying wool production in Western Australia ( at Northampton, Merredin, Kojonup and Esperance) with participant numbers ranging from two to eight people. Information was collected during the focus groups using Curtin University's Mobile Group Support System (MGSS) and AnyZing 5.0 software. Zing Technology allows focus group participants to electronically record their responses in anonymous "play spaces" that are projected onto a central video screen for further discussion (<http://www.anyzing.com/>). All participants contributed to these focus groups voluntarily.

## ***Data collection***

Focus groups are characterised as being unstructured and allow for spontaneous and free-flowing dialogue amongst the participants (Sekaran, 2003 and Zikmund, 2003). It is for these two reasons that only three, fictional, loosely structured scenarios were used as the primary vehicle to collect data. The principle use of these scenarios was to conduct a generalised, but not necessarily representative, situational analysis of the thoughts, feelings and opinions of Western Australian farmers so the behavioural model being developed based on the literature would have substance. Prior to conducting the focus groups, a preliminary session was run with four members of the research team and an external facilitator.

At the beginning of each focus group, the facilitator gave participants a demonstration of the MGSS technology and took them through an ice-breaker session to familiarise them with the MGSS key boards. Immediately following this, the scenarios commenced as follows:

*Introductory script: Bob Smith, formerly from the north-eastern Wheat-belt, has recently bought a property next door to you. While he has extensive farming experience, he has no idea about farming sheep so he asks for your advise.*

*Scenario 1: What advice would you give Bob with respect to selling his wool?*

*Scenario 2: What other ways are there to sell wool in Australia?*

*Gap script: Bob has been talking to a mate from over east who has told him that forward contracting is a good way to sell wool.*

*Scenario 3a: As far as you are concerned, what are the advantages for Bob?*

*Scenario 3b: As far as you are concerned, what are the disadvantages for Bob?*

*Scenario 3c: Given what you have heard so far, how would Bob know if he's better off?*

Upon the completion of each scenario, participants were asked to type their ideas into their anonymous "play space" and press F9 to record their input. Participants who did not feel confident in typing their thoughts were provided with assistance from the research team. This method proved to work efficiently except in cases where participants did not feel confident to ask for typing assistance. Probing of ideas was provided by all members of the research team.

Each focus group ran for about two and a half hours with participants being provided with a copy of the raw data collected in the form of a print-out from the MGSS.

## **Results**

Table 1 provides a summary of the participants' responses to the research questions regarding provision of advice to a new wool producers for selling raw wool. A table of categories is shown in Appendix 1.



Table1: Summary of responses on “What advice would you give Bob with respect to selling his wool?”

<b>Selling method</b>	<b>Principal response</b>
Broker	A commercial agent: either Elders or Landmark
Auction	“It’s a good place to start” “Is the dominant system”
Merchant	From a privately owned company eg Primaries, West Coast Wools
Futures	Too difficult
Co-operative selling	A group of producers marketing direct to processors
Forward contract	“Selling on farm” “Selling off the sheep’s back”
Internet trading	WoolTrade, e-wool or e-bay
Portfolio manager	Specifically related to Elders or Landmark
Value-added sales	Producers processing wool before selling

Finding a broker was the most common response from all focus group sessions when asked to provide selling advice to a new wool producer. It was said that a broker can provide a “whole farm package” service of managing all commercial aspects of the farm business, such as wool sales, fertiliser and chemical purchases, agronomic advice, livestock trading, land sales and providing general farm supplies. One of the main issues that was raised when discussing the use of a broker to sell wool was the importance of friendliness and trustworthiness in the relationship. These issues were pivotal in farmers’ thinking because they seemed to want to avoid more sophisticated systems like futures and options contracts. Another key issue was the simplicity of using a broker.

Associated with the issue of finding a broker was sending raw wool to auction. In most cases it was assumed that a broker will advise for wool to be auctioned however there was the comment made that brokers will provide the services of a “Portfolio Manager” who will often provide advice to sell wool by other means.

Participants said that the auction system is “a good place to start” when selling wool for the first time and that it “is the dominant system” for selling wool in Australia. They agreed that the auction price is the principal benchmark used for setting the reserve price when selling or negotiating. There was no mention of either the auction system or the use of a broker yielding the best return.

Merchants were described as specialised wool marketing organisations, such as Primaries or West Coast Wools, providing a slightly more specialised marketing service to their clients. While they do not offer a “whole farm package”, like the brokering agencies, they seem to be associated with a more intimate knowledge of the industry and an historical link with their clients.

Using futures and options to sell wool was mentioned during three out of the four focus groups however it was not recommended as user-friendly method. Only one participant from all the focus groups claimed to have used the system and also stated that he would not use it again. This system was described as “having to be studied”, “unfriendly”, complex and costly (in terms of advice required). It was said to be a waste of time because the wool reverts to auction once traded and the trade in Australia is too limited to make it viable.

Similar to the concept of trading by futures and options was the concept of selling raw wool direct to mills in a co-operative sense. The focus group participants from Esperance described this system in great detail while participants of other focus groups said that they had heard of this system in operation but had never heard of any associated success. The main objective of this system is to by-pass the auction system and brokering companies where farmers were unhappy with these dominant systems.

Another selling system that was discussed was that of forward contracts, sometimes called “selling on-farm” or “selling off the sheep’s back”. This practice was only raised during two of the four focus groups with many participants not having a full understanding of how this system operates. It was quite often confused with futures trading.

Upon prompting this issue, there was general agreement that the main advantages of forward contracts were in terms of price risk management and improved financial planning. However, it was the concept of “not locking in a good price” (compared to the auction price on the day of the contract’s closure) that was the key determinant for low use of this system. There was also the

fear of not being able fulfil the requirements of the contract in terms of quality or quantity. This issue was described as a more common problem with forward contracts for grain sales and was suggested to be an insignificant issue if the producer is adequately familiar with the farm's flock and historic wool quality data.

Similarly, selling raw wool on the internet or electronic selling, via systems such as WoolTrade and e-wool, was only mentioned during two of the four focus groups but prompting of this issue revealed it to be a very popular system described as convenient and simple. Upon discussion of this issue, the focus groups were actually used by participants as an education forum as many producers were not familiar with the system although were keen to try it upon advice from their peers.

Value-added sales were only discussed by one focus group. Prompting of this issue during other focus group discussions did not yield any information of relevance. Value-added sales, described as selling processed wool to international cloth-makers, was once again a strategy to exclude auction houses and brokering companies from the supply chain.

## **Discussion and Conclusions**

This paper opens the door onto wool producers' awareness and perceptions of the commercial environment in which they sell their wool. It presents the results of a qualitative field study that examined the views of Western Australian primary producers on selling raw wool. Four focus groups conducted in regional areas of Western Australia show that, when giving advice to peers on selling wool using the current systems, the use of a broker and the auction system are the dominant methods suggested by farmers. This finding is concurrent with the literature which suggests that about 85% of all Australian raw wool is sold at auction (Bolt, 2004). It also appears that comments made in regards to the auction system by the Wool Industry Review Committee (1993) and in "Weakness in wool auction: Flugge" (2004) in regards to discontent

with the auction system still hold true. When discussing alternative selling methods to auction, focus group participants were keen to learn about systems that by-pass the auction.

The suggestions to auction wool via the services of a broker were driven by the current dominance of the auction system, its ease of use and the friendliness associated with its operation. This system was not described as superior in terms of financial returns. Other selling systems that were discussed, but not recommended, were futures and options trading, co-operative selling and value added sales. Forward contracting of raw wool and selling it on the internet were practices that were unfamiliar to many focus group participants but were not discounted as methods for trial or future use.

This research is part of a larger project that examines the behavioural determinants of wool producers towards using forward contracts. Data from the present study will be used for the development of the project's quantitative stage. Areas for future research outside this project include the influence of relationship marketing strategies for service-oriented Australian agribusinesses, with particular reference to friendliness and trustworthiness, as well as defining the contributing factors in setting the reserve price for sale of raw wool by Australian producers.

## **Acknowledgements**

This research is part of the project "Behavioural Determinants of the Adoption of Forward Market by Australian Wool Producers", jointly supported by the Department of Agriculture Western Australia and the Australian Research Council. The views expressed in the paper are not necessarily the views of the supporting organisations. The authors would like to thank the farmers and industry stakeholder who participated and helped organise the focus group sessions. Support from Zohurul Hoque with the mobile technical equipments has been excellent. Thanks are also extended to Dr Margaret McCabe of Curtin University's Graduate School of Business for her helpful comments on the content of this paper.

## References

- Bardsley, P., 1994. 'The collapse of the Australian wool reserve price scheme', *The Economic Journal*, 104, 426, pp. 1087-1105.
- Barnard, C. S. & Nix, J. S., 1979. 'Uncertainty and farm organisation and planning', in *Farm Planning and Control*, 2nd edn, Cambridge University Press, pp. 382-411.
- Bond, G. & Wonder, B., 1981. 'Risk attitude amongst Australian farmers: a reply', *Australian Journal of Agricultural Economics*, 25, 1, pp. 77-82.
- Bolt, C., 2004. 'AWH to set up wool auctions', In *The Age*, Melbourne.
- Brakenridge, J., 2004. Contracts gain traction, The New Zealand Merino Company. Retrieved: October 13 2004, from <http://www.nzmerico.nz/news/merinonews.asp?id=230>.
- Champion, S. C. 2004. 'Customising to the needs of the customer - insights from the New Zealand Merino experience', in *Agribusiness Sheep Updates*, Perth, pp. 18-19.
- Champion, S.C. & Fearne, A.P., 2001. 'Alternative marketing systems for the apparel wool textile supply chain: Filling the communication vacuum', *International Food and Agribusiness Management Review*, 4, 3, pp. 237-256.
- Coad, A., 2000. *Hedging strategies for price risk management by wool producers in Western Australia*, PhD thesis, University of Western Australia.
- Cuming, M., 2004. 'Bank sees no future in futures', *The Land*, Agribusiness and General, 12 August. Retrieved: States that there's a lack of support for the forward market by growers.
- Elders, (n.d.). Retrieved: November 4, 2004, from [http://wool.elders.com.au/sell\\_alt.asp](http://wool.elders.com.au/sell_alt.asp).
- "Flashback", 2004. *Countryman*, June 17, pg. 53.

- Fraser, R., 1997. 'Seasonal variability, land values and willingness-to-pay for a forward wheat contract with protein premiums and discounts', *The Australian Journal of Agricultural and Resource Economics*, 41, 2, pp. 139-155.
- Kingwell, R., 2000. 'Price risk management for Australian broadacre farmers: some observations', *Australian Agribusiness Review*, 8, paper 2.
- Kingwell, R., Bathgate, A. & O'Connell, M., 1999. 'Wool in Western Australia - Research, development and extension', *Australian Agribusiness Review*, 7, 12.
- Landmark, (n.d.). Retrieved: November 4, 2004, from <http://www.landmark.com.au/>.
- Liddle, J., (ed) 2004. 'Is there a future for wool futures?' *Wool Record*, 163, 3720, p. 1.
- Lowe, S., 2005. 'The outlook for sheep products', in *Farm Budget Guide 2005*, Farm Weekly, Western Australia, pp. 96-102.
- McLeay, F. & Zwart, T., 1998. 'Factors affecting choice of cash sales versus forward marketing contracts', *Agribusiness*, 14, 4, pp. 299-309.
- Miller, S.E., 1986. 'Forward contracting versus hedging under price and yield uncertainty', *Southern Journal of Agricultural Economics*, 18, 2, pp. 139-146.
- Musser, W. N., Patrick, G. F. & Eckman, D. T., 1996. 'Risk and grain marketing behavior of large-scale farmers', *Review of Agricultural Economics*, 18, 1, pp. 65-77.
- Pannell, D.J., Malcolm, B. & Kingwell, R.S., 2000. 'Are we risking too much? Perspectives on risk in farm modelling', *Agricultural Economics*, 23, 1, pp. 69-78.
- Piggot, R., 1993. 'Agricultural marketing', in D. B. Williams, (ed.) *Agriculture in the Australian Economy*, Sydney University Press, Australia.
- Pluske, J. & Fraser, R., 1995. 'Can producers place valid and reliable valuations on wool price-risk information?' *Review of Marketing and Agricultural Economics*, 63, 2, pp. 284-291.

- Richardson, B., 2001. 'The politics and economics of marketing wool, 1950-2000', *Australian Journal of Agricultural and Resource Economics*, 45, 1, pp. 95-115.
- Sekaran, U., 2003. *Research Methods for Business: A skills building approach*, 4<sup>th</sup> edn. John Wiley & Sons, USA.
- Shafron, W., Martin, P. & Ashton, D., 2002. *Profile of Australian Wool Producers 1997-98 to 2001-02*, ABARE Research Report 02.7.
- Sydney Futures Exchange, (n.d.). 'Wool Futures & Options', Retrieved: November 4, 2004, from <http://www.sfe.com.au>.
- Teasdale, D., 1991. 'Wool preparation and processing', in D. J. Cottle, (ed.) *Australian Sheep and Wool Handbook*, Inkata Press, Melbourne.
- The Woolmark Company 2005. New Zealand Wool Exports (media release), Retrieved: 14 October 2005, from <http://www.wool.com.au/LivePage.aspxId=2239>, 21 August 2005.
- Wahlquist, A., 2005. 'Getting in for their chop as wool frays', In *The Australian*, p. 29.
- Weakness in wool auction: Flugge 2004. 'Weakness in wool auction: Flugge', In *Farm Weekly*, Perth, p. 44.
- WoolDesk, (n.d.). Retrieved: May 2, 2005, from [http://www.agric.wa.gov.au/servlet/page?\\_pageid=213&\\_dad=portal30&\\_schema=PORTAL30](http://www.agric.wa.gov.au/servlet/page?_pageid=213&_dad=portal30&_schema=PORTAL30)
- Wool Industry Review Committee, 1993. Wool - Structuring for global realities*, Commonwealth of Australia.
- Zing Technologies, (n.d.). Retrieved: October 27, 2005, from <http://www.anyzing.com/>
- Zikmund, W.G., 2003 *Business Research Methods*, 7<sup>th</sup> edn. Thomson South-Western, USA.

# Appendix 1

Table of response categories on selling raw wool in Australia: producers' responses at four focus groups.

Issues	Sub-issues	N	K	M	E	Frequency
<b>Methods of selling wool</b>						
Auction	Is the dominant system & a good place to start	✓	✓	✓		3
Electronic selling	WoolTrade, e-wool	✓				1
Hedge			✓	✓		2
Find buyers			✓			1
Find value of wool			✓			1
Wool quality & wool type			✓	✓	✓	3
Understand customer requirements			✓			1
Dollar movement/value			✓			1
Cost of production			✓		✓	2
Forward sell				✓	✓	2
On-farm diversity			✓		✓	2
Fair deal = costs + margin			✓			1
Find a broker	Such as Elders, Landmark	✓	✓	✓	✓	4
Find an agent/private buyer	Such as Primaries, West Coast Wools	✓		✓	✓	3
Appoint a portfolio manager	From Elders or Landmark			✓		1
Sell over extended period of time				✓	✓	2
Industry research					✓	1
AWTA testing				✓	✓	2
Set reserve price				✓		1
<b>Alternative methods of selling wool</b>						
Direct to mill		✓	✓		✓	3
Fibre Direct			✓			1
Futures		✓	✓	✓		3
Process & sell			✓			1

Key: N = Northampton  
 K = Kojonup  
 M = Merredin  
 E = Esperance