WOOL SELLING SYSTEMS REVIEW

GENERAL ISSUES:

1) The Need to Devise the Strategies Required to Overcome Inertia

Particularly since the 1972 publication of the final report of the Australian Wool Board's Objective Measurement Policy Committee Report titled "Objective Measurement of Wool in Australia" there have been significant opportunities available, and indeed significant innovations established, with clear potential to both improve efficiency within the supply chain, improve wool's competitiveness as a fibre and improve net returns to growers.

The fact that some 90% of our wool production continues to be traded through a traditional sequential open cry auction process despite its obvious shortcomings, and that it does so in an average lot size of five bales, indicates a serious and self evident level of market failure in terms of capitalising on available opportunities. It has not been a matter of lack of opportunity. It has been a failure to seize upon available opportunity.

There is no doubt that this review will identify numerous and significant opportunities to reduce costs and improve "competitive tension" in the wool trading arena, particularly where introduction of procedural reforms can be successfully synchronised. However, recent history reminds us that perhaps the greatest challenge of all lies in effectively familiarising the relevant parties with these 21st Century tricks of the trade. It may be somewhat akin to expecting an industry conditioned to transport based on bullock drays to convert to and invest in a railway system. Thus the success of this review will depend on devising effective strategies to achieve the adoption of necessary reforms.

2) The Importance Making Allowance for the Distribution of Growers, Brokers and Buyers as Well as for the Global Distribution of Processors and Consumers

Whilst it is self evident that the global customers for our wool have no alternative to seeking supply through the sequential open cry auction system because 90% of our wool clip is offered through it, it is also worth bearing in mind that unquestioning adherence to this mechanism has stifled progress in the past.

During 2008 and 2009 parties within the industry attempted to collectively identify opportunities to improve the efficiency of wool selling within Australia. In the end minimal progress was achieved. This was mainly because a central assumption of the reforms tabled was that all wool trading be concentrated in Melbourne employing the sequential open cry auction process. As this divided the industry between those already equipped to operate in Melbourne and the others no consensus could be achieved. Given even a modest level of lateral thinking at the time existing technology could have provided an alternative trading mechanism capable of accommodating decentralised operators.

3) **The Need to Fully Appreciate the Extent to Which Wool Trading Can be Streamlined by the Enlightened Application of Modern Computer and Communications Technology**

For a variety of reasons the most spectacular available advances in wool trading efficiency undoubtedly lie in incorporating a comprehensive integration between computer technology and the objective specifications of the wool on offer, within an alternative 21st Century computerised trading system.

What does this mean?

On the one hand it means that, whereas originally each Lot listed in a sale catalogue was previously listed as say X Bales of AAA, and where prospective purchasers had to estimate the characteristics of the wool involved, these prospective purchasers are now confronted by a row of measured specifications for each lot - and perhaps by the likes of TEAM formula conversions.

On the other hand we now have the extraordinary capacity of computers to both retrieve and to sort vast quantities of data at speeds that are literally unbelievable.

In the simplest sense, if a cross section of available lots of wool, along with their various specifications, are included in a computerised inventory, and if a buyer enters the specification of wool required, the computer can almost instantly identify the listed wools that meet the buyer's needs.

A further development of this process would be where wools are offered in modules of say 250 lots and buyers, from whatever location, simply entered the specifications of their requirements along with minimum prices offered, maximum price limits and quantity limits, to meet a time deadline. Say 2pm in the afternoon.

Once this deadline was reached the computer would "resolve" the sale by first working out which lots suited which buyer's needs and then working out which buyer had successfully outbid the second highest bid available on each lot. Although significant pioneering in this area was developed by Computer Sciences of Australia and used commercially by Economic Wool Producers (EWP) Ltd from 1972, and later by the Farmers & Graziers (F&G) Co-Operative, it was, for better or worse, discarded in 1984 when F&Gs were taken over by Dalgetys.

Another advantage of this concept is that the collection of all bids on all lots prior to the resolution of the sale allows the rational distribution of buying strength and significantly assists in countering the instability of prices discovered for similar wools through the vagaries of the sequential open cry auction system.

SEGMENTS WITHIN THE SUPPLY CHAIN:

1. Wool Preparation

Since the early 1970s, particularly during the 1990s, there have been repeated demonstrations that the application of Objective Clip Preparation at shearing reduces costs to growers and delivers more uniform wool tops for processors. AWI is to be commended for circulating relevant video footage from "Wyvern Station" at Carrathool.

Essential in achieving these win/win outcomes is that the focus on quality control shifts from unnecessary fragmentation of the clip to the removal of outright impurities, and that compatible combinations of the resulting larger farm lots are aggregated for early stage processing.

Among the most advanced demonstrations of the efficacy of this concept was the original supply chain innovation established by Australian Wool Enhancers Ltd that was eventually publicly acknowledged by German based spinner Sud Wolle in 2008 following their extensive independent assessment of that efficacy. (See Attachment 1 - NSW Farmers' submission to the Code of Practice review and Attachment 2 - Sud Wolle presentation from 2008).

It is also worth noting that the ability to prepare wool in fewer and larger lots can help to reduce the number of small lots that result from the application of current Code of Practice for Wool Classers.

However, despite demonstrations of this nature, there is the fact that where wool prepared in accordance with the principles of Objective Clip Preparation (OCP) or of Radical Objective Clip Preparation appear in the mainstream auction process the existing Code of Practice classifies them as being non compliant and allocates a "D" Certificate to them. This invites price discounting that is unnecessary and inappropriate.

Hence there is a need for the various parties involved, from IWTO through AWTA, AWEX and the exporters, to review the Code with a view to reaching an updated consensus that recognises the technical soundness of Objective Clip Preparation within the mainstream wool trading arena and encourages these wools to be priced appropriately.

There may also be merit in the provision an independent advisory and auditing service to be present at the commencement of shearing and/or to make random inspections during shearing to give on site guidance on the implementation of OCP and to ensure that the required standards of quality control are understood and being met. For obvious reasons brokers' representatives may be reluctant to risk alienating clients by making an issue of errors in in shed procedure.

2. Delivery and Testing

Since the introduction of sale by sample and description by Economic Wool Producers (EWP) Ltd in 1972 it has been possible to trade wool that is stored on a variety of decentralised locations. For a range of reasons handling and testing wool through decentralised warehouses has proven significantly cheaper than doing this in the major centres. The differences in cost are clearly expressed in the comparable presentations made to the 1979 "GO-WOOL SEMINAR" in Goulburn by Ian Hay, the manager of Sydney's Yennora Wool Centre and David Johnstone of B J Underwoods, operators of the regional handling centre at Ararat in Victoria (See Attachment 3 - from the 1979 GO-WOOL Report).

3. Wool Appraisal

Particularly from the commentary by R B Whan (see Attachment 3) it is noteworthy that sale of wool by description has been feasible since the 1970s. Following the collapse of the Reserve Price Scheme for wool the bulk of the wool stockpile was sold by description. Whilst there is no obvious reason why this process could not be applied to the offering of current production the use of effective tests to discover coloured and medullated fibres could be a useful asset.

4. Price Realisation/Discovery

Almost the sole virtue of price discovery using the traditional sequential open cry auction system is that it does allow some competition in discovering the price of wool. In some parts of the world the private buyers divide up the territory between them and producers only receive one price offer.

On the other side of the coin are the facts that requiring the presence of prospective buyers on a given location tends to limit the level of competition, the trading process is arguably laborious and time consuming, and, at the end of the day, this trading process regularly discovers unstable price patterns for comparable wools.

Partly because of this instability in patterns of price discovery, but principally in order to receive bids from buyers on varying locations, EWP Ltd employed a process of "sealed bid auction" (or sale by tender) from the first day of their operations in August 1971. In part this was done with an awareness of the content of the AOMP report that was then in progress. Page 107 of that report notes that, *"The system* (of sealed bid auction) *strengthens the bargaining position of sellers..."*).

From February 1972 EWP's sales were fully computerised. Whilst buyers on diverse locations were able to bid on wool stored on equally diverse locations the actual processing of the bids and the resolution of the sales (see Attachment 4 from the 1979 GO WOOL Report) was initially conducted through a computer terminal at Phoenix House on Northbourne Avenue in Canberra.

Although other systems such as AuctionsPlus/Wooltrade now sell wool through electronic mechanisms it is understood that these tend to mimic the fundamentals of the sequential auction process more than than they embrace the concept of the sealed bid auction/sale by tender process.

At this point in time it appears to us that the proposal with the greatest potential to incorporate the strengths of the EWP system and to efficiently automate the matching of supply with demand has been proposed by Professor David Cottle and his associates from the University of New England (UNE).

At this point this proposal, which has been formatted in the form required by AWI as it requires funding for its development, has been titled simply ***"A Better Way of Selling Wool".*** Its intent is perhaps better described from its earlier title which referred to ***"The Optimal Matching of Wool Supply With Demand"*** (see Attachment 5).

In essence it seeks to employ the capabilities of modern evolutionary computational technology to align relevant wools with buyers specified requirements and to determine which is the successful bidder in an environment that also includes competitive price offers.

In all probability, where this system is given buyers' aggregate requirements, it may also be highly efficient at allocating wools from an inventory that is increasingly offering the fewer and larger lots delivered by OCP.

Why have previous attempts at computerised selling failed?

Perhaps the most unfortunate failure in computerised selling has been the termination of the system devised by Computer Sciences of Australia and operated by economic Wool Producers (EWP) Ltd from 1972. When EWP closed down later in the 1970s its clients and the operation of its system were taken over by the Farmers & Graziers Co-Operative.

Although the F&G continued to sell the wool of ex-EWP clients through this system it is probable that no serious thought was given to recognising its advantages and promoting it as an improvement on the existing mainstream trading process. In essence, particularly given the industry's formidable resistance to change and its inability to even begin to recognise the opportunity cost of serial market failure, this advance was simply way too far ahead of its time. Given this precedent it was probably inevitable that the use of the system would be uncritically discarded when Dalgetys took over the F&G business in 1984.

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The Most Rewarding Producer Orientated Supply Chain Ever Devised?

It is very likely that the original supply chain model established by Australian Wool Enhancers Ltd (AWE), later Fibre Direct, in the early 1990s generated both the highest returns and incurred the lowest costs in the history of the industry. (Although Fibre Direct, having been acquired by Wesfarmers later in the 1990s continues to operate constructively within Landmark its modus operandi differs significantly from the model originally established by AWE.)

The advantageous returns enjoyed by AWE clients were maximised partly because they retained ownership of their wool until it was sold to spinner customers as a wool top. Thus they received the a price based on the value of the top rather than a price derived from the domestic greasy wool traders' market.

In addition to this AWE clearly established the simplest, lowest cost handling system that the industry has seen. It worked like this:

1) Pre Shearing

All urine stain had to be removed less than three months prior to shearing. Up to 8 weeks before shearing mid side samples were taken from 5% of the sheep. These were used to collect the data so that the TEAM formula could be used to predict the average fibre length in the resulting top.

2) At Shearing

At shearing any particularly seedy jowls & shanks and any wool with non scourable colour, cotts etc. was removed. Apart from this the unskirted, unclassed wool, including bellies, was baled up as it came off the board. Each bale was hand cored prior to being closed up. Bales were not branded. Each bale was identified by a cattle eartag placed in the top flap marked in texta colour with the allocated Farm Lot Number and Bale Number.

Because of the side samples being taken prior to shearing and the core samples taken prior to bale closure the woolpacks (nylon packs were used to minimise contamination risk) were undamaged and readily reusable. At the time nylon packs cost $42 each so recycling was an attractive option. With AWTA performing a guidance test on the core samples it was possible to confirm micron, yield, vegetable matter etc. What was important was for AWE staff to check the bale weighing scales in clients shearing sheds to ensure their accuracy.

3) From the Farm Gate

The wool was delivered direct from the farm gate to Independent Wool Dumpers and from there it was shipped to PIV wool combers in Biella. Here compatible wools were aggregated into processing lots on the basis of their test results and predictions to meet the requirements of the various spinner customers.

4) Sales to Spinners
From Biella AWE's original marketing agent Alvigini would ascertain the requirements of spinner customers and where AWE had the required stocks a price would be negotiated so that the top could be combed and delivered.

5) Accuracy of Predictions
As it turned out the predictions derived from the on farm testing turned out to be remarkably accurate. This was assisted by the fact that PIV had collaborated in the development of the TEAM formulas and set their machinery with an acceptance that, no matter how the contents of the bales may appear, the prediction supplied would be accurate. (See Attachment 6 - from the November 1995 issue of the Australian Farm Journal.)

6) Uniformity of Wool Tops
It was the opinion of the Marchesa Umberto Fracassi, the boss at PIV, that the predictions provided by AWE were significantly superior to measurements and predictions provided with other deliveries. The Marchesa also applauded the fact that AWE's Radical OCP wools were *"so beautifully prepared"* for conversion into highly uniform wool tops.

7) Bridging Finance
Although AWE was originally disadvantaged by being unable to provide vendor finance to its spinner customers, as was provided by the likes of BWK, the company was soon able to establish an arrangement where Rabobank could provide this facility and also provide cash advances to grower clients.

8) A "Brand Name" - or "Sub-Brand Name(s)" for Australian Wool?
Particularly because the growers retained the ownership of their wool until the resulting wool top was delivered to the spinner purchaser, and because AWE and its agents were able to exercise quality control at both shearing and in the aggregation of compatible wools for processing, AWE was able to establish not only a premium quality product but also a quality Australian brand name to be associated with it. In the light of the increasingly recognised need for Australian agriculture to shift from bulk commodity marketing to employing a more boutique concept based quality related brand names this initiative in establishing a brand name could be an additional available option for improving growers' returns.

9) Independent Assessment of "AWE Australian Clean Tops" by Sud Wolle
Before long overcrowding at PIV lead to AWE wool being diverted to BWK in Bremen for processing. Among other things this brought the superior quality of "AWE Clean Tops" to the notice of one Goetz Giebel. He in turn commended them to Sud Wolle when he was recruited by them to be their Purchasing Manager. Sud Wolle conducted a rigorous independent evaluation of

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"AWE-Clean Tops" before expressing a private preference for them. It was not until 2008 that Giebel was able to publicly confirm this preference at the NSW Farmers' Annual Wool Forum in Armidale.

9) Transparency
From the outset the AWE process was highly transparent with all costs incurred, including commission, being visibly subtracted from the sale price of the wool top.

10) Acquisition by Wesfarmers
During the 1990s Wesfarmers acquired the AWE system with a view to promoting it as a marketing option to help differentiate them from Elders. For various reasons best known to them things have not turned out as originally intended.

Future Through Chain Transparency & Quality Control
Particularly if serious consideration is to be given to the use of a brand name, sub-brand name (or names) within the supply chain to assure the delivery of premium quality wool tops to spinner customers through chain transparency and quality control will be of primary importance to attract and maintain price premiums.

Although the bulk of our Australian wool is processed offshore this should not prevent suitable administrative arrangements being established with or through collaborative overseas early stage processors.

Within Australia there is at least one well established business organisation that lists itself as "Specialists in demand and supply chain management". This firm is Graeme Forsythe & Associates of 28 Auld Avenue, Eastwood in Sydney. The Wool Committee at the NSW Farmers' Association has previously been addressed by Graeme Forsythe on the efficacy of through chain transparency and quality control. Thus we are confident that his firm are well equipped to submit a model that is an appropriate replacement for the inconsistencies that exist within the present supply chain. The interdependence between through chain quality control and the successful promotion of relevant brand names is addressed in the 2014 Summer Quarter Edition of the AFI Farm Policy Journal.

Synergies Between Radical Objective Clip Preparation (OCP) and Upright Posture Shearing Systems (UPSP)
There is the distinct possibility that advantageous synergies will increasingly emerge between the wider acceptance/adoption of Radical OCP and the further development of the concept of Upright Posture Shearing Systems (UPSP).

As wool removed from the animal during UPSP shearing does not finish up in bundle that can be conveniently picked up and thrown on the wool table for skirting and classing there is a significant potential compatibility between Radical OCP and UPSP shearing. .../9

Significant advances in this area are possible particularly as updated manipulators/cradles are perfected to allow teams to shear animals delivered by the kind transportable multifunction sheep handling equipment that has already been developed by Narrogin grower and innovator Alistair McDougall.

From the point of view of the operator this concept removes the injury risk associated with the traditional "catch and drag" procedure. It also reduces the level physical stamina and coordination required to remove the wool. Among other things it provides an increased opportunity for the shearer to separate out seedy jowls and shanks in much the same manner as the belly wool is removed and cast aside during traditional shearing.

From the point of view of the farmer, particularly where age and the design of a shearing shed makes wool harvesting particularly labour intensive and inefficient, adding on the bay required to integrate a transportable multifunction sheep handling equipment and UPSP manipulator/cradles may be a welcome option.

Previous Initiatives in Supply Chain Reform:
On one hand past industry reviews have tended confine themselves to making recommendations about where the industry stood and where improvements could be made. On the other hand industry bodies such as the AWC tended to focus their efforts primarily on endeavouring to improve growers returns by successfully stimulating demand.

As today's review also on both improving competition in the trading arena and reducing the various costs that are either directly or indirectly subtracted from growers' incomes, it may be worth briefly reviewing the agenda of 1970s innovators Economic Wool Producers (EWP) Ltd. Even at that time EWP recognised the importance to combating the cost price squeeze and maximising competitive tension in the marketplace. As the EWP prospectus included a competent technical report, little of which is obsolete and much of which has stood the test of time, it may well contain insights that are worth renewed consideration in the present day. (See Attachment 7.)

Competitive Tension Beyond The Wool Auction Room
Perhaps a key phrase that has emerged from initial discussion of this review is the need to achieve more effective "competitive tension" in the marketplace. Although it may be predictable for some to assume that this challenge can be successfully addressed in the local greasy wool trading arena it is important to think holistically and to understand that true success depends on achieving effective competitive tension for wool in highly competitive world fibre markets. Within this context this submission includes relevant observations extracted from the 1990 "Wool Into the 21st Century report from the Centre for International Economics (Attachment 8).

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Future Directions

Alternative fibres, particularly man made fibres, have become increasingly versatile and are reliably uniform. Faced with such competition the restoration and future ascendancy of wool in the marketplace depends not only on its unique features, but also on delivering comparable standards of uniformity to later stage processors who can readily switch between competing fibres.

Whilst most of those responsible for combining greasy wool farm lots to meet targeted end uses may claim and believe that there is a high level of compatibility in the aggregations that they assemble for early stage processing let us just say that there may well be room for improvement and that the importance of that improvement is best not underestimated.

The question then becomes one of, if there is room for improvement and a need for improvement, how is its pursuit best nurtured among parties that perceive their current performance as adequate.

Perhaps a useful example can be drawn from the application of the concept of Total Quality Management (TQM) to the reinvigoration of Japanese manufacturing industry following World War II, manufacturing that was widely recognised as being generally inferior at that time.

TQM is a concept that was devised and applied in the United States during World War II by W Edwards Demming to both improve the standard of the manufacture of munitions and other products, and to ensure that all suppliers were achieving appropriate minimum benchmarks in product quality.

After the end of the war Demming went on to offer this novel and collaborative concept to American manufacturers for application in their manufacture and distribution of products for the domestic market. The response was largely, “Thanks, but no thanks”.

On the other hand Japanese manufacturing, not least motor vehicle manufacturing, readily embraced and applied this concept. Within a relatively few years not only had the likes of Toyota overtaken the likes of General Motors but the inventors of improved features for these vehicles, having found the Japanese a more receptive audience, were offering them to the Japanese motor car industry ahead of the US industry.

An awareness of this kind of precedent may be helpful in encouraging parties within our wool industry supply chain to appreciate the potential gains that may lie on adopting a more enlightened and collaborative approach.