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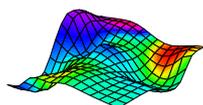
Australian Wool Innovation

# Benefit Cost Analysis of AWI's China Luxury Program Investment

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**BDA Group**  
*Economics and Environment*

**BDA MELBOURNE**  
PO Box 6009  
Hawthorn West, VIC 3122  
Ph (03) 8684 9707

**BDA CANBERRA**  
PO Box 4022  
Manuka ACT 2603  
Ph (02) 6282 1443

## BACKGROUND

BDA Group was commissioned by AWI to complete a benefit cost analysis (BCA) of their marketing investment in the China Luxury Program. This investment was made under AWI's 2010-13 Strategic Plan, Marketing Strategy 1 Fibre Partnership Marketing, Program 1 Consumer Education. The analysis was completed with the primary purpose of providing a robust assessment of the potential returns to Australian wool growers from that investment.

The analysis reported here also includes a Program Investment Logic which provides a brief summary of the value of the investment to Australian Wool Growers, investment targets and activities and identified funding gaps that will aid in directing future funding in this area (Attachment).

## INVESTMENT

The China Luxury Program follows the WoolMark Gold initiative that targeted the men's luxury market in China. The China Luxury Program is aimed at women's luxury market where wool is viewed as a traditional and outdated fibre. The program seeks to reposition wool as a high quality fibre for women where it is seen as stylish, elegant and tasteful, and relevant to contemporary fashion.

Investment is largely directed at marketing activities in China. The main strategy of the Program has been to engage several emerging designers and assist them to develop a range of wool garments that inspire consumers in the target segment. Complimentary marketing activities are undertaken to change consumer perceptions of wool as a quality fibre and encourage them to purchase wool garments from the ranges created by the partner designers. Activities include:

- Training and education support for partner designers to assist them to work with wool, including input from the Wool Lab.
- TV series (Beauty Mission) that documents the journey of 6 design partners through Australian wool production areas to the design of fashionable garments for selected celebrities (Chinese female role models).
- Media exposure of the 6 designers and the TV series.
- Provision of information on wool attributes and tips for easy care.
- Support for sales of designer ranges through use of pop-up stores.

The Chinese Luxury Program was launched in 2011 with designers producing a collection for Autumn and Winter. A similar campaign will be undertaken in 2012. The AWI investment is around \$1.6m a year or \$3.2m over two years.

The six designer partners have around 1,100 stores across the major cities in China. These designers were not overly familiar with wool and did not include wool to any significant extent in their designs, yet were seen as upcoming designers that will influence future Chinese fashion. Increasing the amount of wool used by these designers will represent new demand. Further, consumer surveys will be undertaken to determine the change in attitudes towards wool as a luxury fibre for young women, which if positive, will demonstrate that new demand opportunities for wool have been created rather than the substitution of lower quality wool garments for high valued wool garments.

## BENEFITS

Benefits will flow to Australian woolgrowers through higher prices for greasy wool. Prices will, to some extent, increase in response to the increase in the demand for wool stimulated through the China Luxury Program. The extent of the price rise will be determined by the;

- (1) **Price effect** -responsiveness of demand at the consumer level (how much the growth in demand increases consumer prices) and the extent to which this price increase is “passed back” to Australian woolgrowers; and
- (2) **Volume effect** - increase in demand that is generated by the Program.

### 1 Price Effect

Various economic agencies have tried to model the returns to Australian woolgrowers from increased consumer demand for wool products<sup>1</sup>. The problems with these models include: they require regular updating; are difficult to understand; and are typically aggregated to a level where it is hard to separate out price effects across different market segments.

In this evaluation a different approach has been used, which is broadly consistent with previous economic modelling work, but is easier to update and understand<sup>2</sup>. The basic principle underlying the approach is that an increase in wool demand at the consumer level will stimulate a similar quantity of supply at the farm level. The value of this extra supply can be quantified in terms of the additional gross margin that would be earned. This value is then adjusted to reflect Australia's share of total fibres in the extra fibre (garments / units) demanded at the consumer level. For the purpose of this evaluation it was assumed that the extra demand would occur in worsted mainly wool garments. On this basis the return to Australian wool growers from the price effect of a 1 mkg of wool increase in consumer demand was estimated at \$3.9m. This estimate was based on:

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<sup>1</sup> These include ABARE, BDA Group and WA DAF.

<sup>2</sup> This approach was detailed in a BDA Group report to AWI in February 2012. Estimates will provide a minimum value.

- 145 m kgs of final product with Australian wool contributing 125 m kgs and non-wool fibres contributing 20 m kgs; and
- The gross margin for fine wool expressed on a kg clean basis was \$4.49<sup>3</sup>.

## 2 Volume Effect

The volume effect relates to the increase in wool (by weight) demand. This could be determined from information provided by design partners on their increase in annual wool sales or garment units sold. Information was collected from partners based on their percentage increase in wool sales and this will ultimately be converted to volume estimates by AWI staff in Sydney and China.

In the interim an assessment has been made here based on broad industry averages using the estimated percentage increase in wool sales as report by partners. The first volume impact is defined as the *Primary Effect* and is based on increased sales across the design partner stores in the years in which the AWI program was / will be implemented. It was assumed that:

- There are 1,100 stores operated by the six design partners, mainly in cities with large populations and high rates of economic growth (1<sup>st</sup> and 2<sup>nd</sup> tier Chinese cities)<sup>4</sup>.
- Wool garments are targeted at price points between AUD200 and AUD6,000 per piece.
- The average weight of garments is 665 grams<sup>5</sup>.
- Increase in sales in first year (average 14%) was 100 garments. The extra wool demand is estimated at 66.5kg per store or 73.2 tonnes across all partner stores.
- The increase in the second year (30%) was 215 garments. The extra wool demand is estimated at 143kg per store or 157 tonnes across all partner stores.

The volume effect will also have a time dimension (*Secondary Effect*), depending on the extent to which interest in wool luxury garments can be sustained across design partners into the future once the AWI investment ceases. There will also be a *Ripple Effect*, where consumer interest is stimulated and other designers expand their quality wool range.

- *Secondary Effect* – it was assumed that the design partners would continue to develop and market luxury wool garments in the years following the AWI investment. A period of 10 years was chosen to reflect market developments in women's luxury wool garments from elsewhere<sup>6</sup>. Two scenarios are considered: static growth and growth at 5%.

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<sup>3</sup> Based on AWI's RMCG farm model.

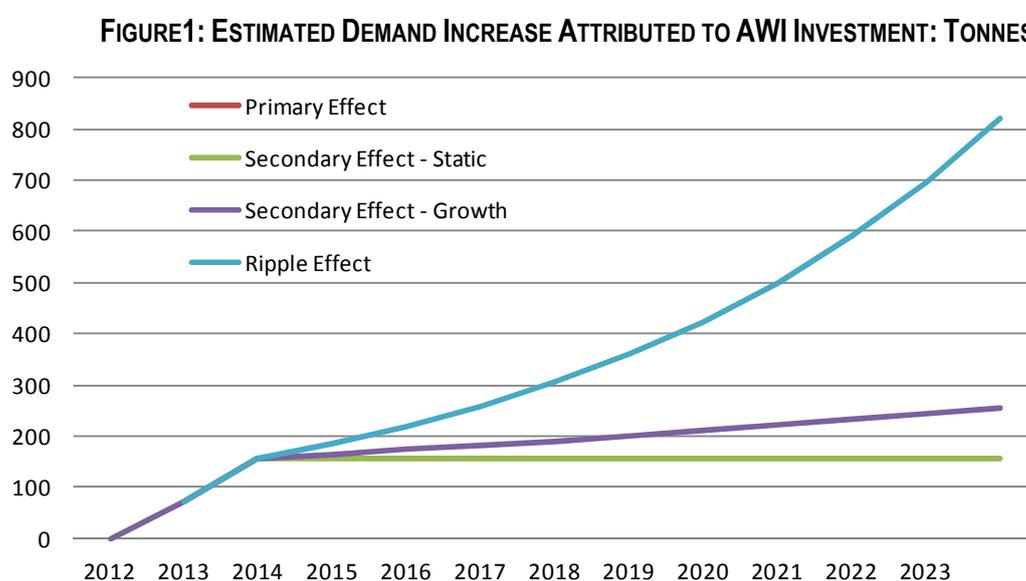
<sup>4</sup> AWI 2011/12 China Luxury Campaign Report, March 2012.

<sup>5</sup> Derived from AWI conversion factors – average of ladies suit, skirt and jacket.

<sup>6</sup> The Chinese luxury market follows trends in Europe and it would be expected that there would be some penetration by European suppliers into this market as women's disposable incomes continues to increase.

- *Ripple Effect* – Consumer surveys will indicate the extent of changes in consumer attitudes to wool as a quality fibre in women's luxury fashion. If there is a positive shift in attitudes then it would be expected that other designers (Chinese and international) would target this segment. For the purpose of this evaluation an annual growth of 18%<sup>7</sup> above the volumes achieved across the design partners was assumed. This figure represents the growth rate expected in the Chinese luxury market (to 2015) and corresponds to the increase in Chinese household income that has occurred and anticipated in the future. This effect across the broader market segment is the aim of the campaign, and where the greatest gains are expected to be made.

Estimated increases in wool demand across the various scenarios reported above are provided in Figure 1.



On the basis of the price and volume effect estimated for different scenarios above the benefits to Australian woolgrowers through time was derived. Estimates are provided in Table 1. Total benefits through time (undiscounted) were estimated at between \$1m and \$18m.

## PAYOFF

In this section the estimated pay off on the AWI investment is reported. Measures are reported in Table 2. It was estimated that the AWI investment will generate benefits to Australian wool growers of between \$0.8m and \$11.3m in present value terms<sup>8</sup>, depending on how much wool sales can be increased by

<sup>7</sup> McKinsey 2011 China Luxury Market Survey

<sup>8</sup> A discount rate of 5% was used.

design partners and across the Chinese population more broadly. This represents a return of between \$0.3 and \$3.80 on every dollar invested by AWI in the China Luxury Program over 2011 to 2013.

**TABLE 1: ESTIMATED BENEFITS TO AUSTRALIAN WOOL GROWERS FROM CHINA LUXURY PROGRAM: \$M**

| Yea          | Primary Effect | Secondary Effect |               | Ripple Effect  |
|--------------|----------------|------------------|---------------|----------------|
|              |                | Static           | Growth        |                |
| 2012         | \$0.28         | \$0.28           | \$0.28        | \$0.28         |
| 2013         | \$0.61         | \$0.61           | \$0.61        | \$0.61         |
| 2014         |                | \$0.61           | \$0.64        | \$0.72         |
| 2015         |                | \$0.61           | \$0.67        | \$0.85         |
| 2016         |                | \$0.61           | \$0.70        | \$1.00         |
| 2017         |                | \$0.61           | \$0.74        | \$1.18         |
| 2018         |                | \$0.61           | \$0.78        | \$1.39         |
| 2019         |                | \$0.61           | \$0.81        | \$1.64         |
| 2020         |                | \$0.61           | \$0.85        | \$1.94         |
| 2021         |                | \$0.61           | \$0.90        | \$2.28         |
| 2022         |                | \$0.61           | \$0.94        | \$2.69         |
| 2023         |                | \$0.61           | \$0.99        | \$3.18         |
| <b>Total</b> | <b>\$0.89</b>  | <b>\$6.97</b>    | <b>\$8.92</b> | <b>\$17.75</b> |

**TABLE 2: INVESTMENT PERFORMANCE MEASURES**

| Measure                         | Primary Effect | Secondary Effect |           | Ripple Effect |
|---------------------------------|----------------|------------------|-----------|---------------|
|                                 |                | Static           | 5% Growth |               |
| Present Value of Benefits (\$m) | \$0.8          | \$4.8            | \$6.0     | \$11.3        |
| Present Value of Costs (\$m)    | \$3.0          | \$3.0            | \$3.0     | \$3.0         |
| Net Present Value (\$m)         | <b>-\$2.2</b>  | \$1.9            | \$3.1     | \$8.4         |
| Benefit Cost Ratio              | 0.3            | 1.6              | 2.0       | 3.8           |

## CONCLUSION

The pay off to Australian wool growers from AWI's investment in the China Luxury Program will be driven by the increase in wool sales achieved by retail partners. However, the major determinant of pay off will be the extent that the China Luxury Program stimulates demand across the broader target market. If growth matches the expected increase in household disposable income then the investment will deliver a positive return to Australian wool growers. If the consumer surveys carried out at the completion of the investment can demonstrate a much more significant and permanent increase in consumer purchases of wool the benefits to Australian wool growers will be significantly higher. Capitalising on the rapid increase in the luxury market for apparel in China (18% a year) represents an economically viable opportunity for Australian wool growers.

## ATTACHMENT AWI PROGRAM INVESTMENT LOGIC

|   |  |                |              |
|---|--|----------------|--------------|
| <b>On-Farm Strategy</b>   | Strategy 1 – Fibre Partnership Marketing   |                |              |
| <b>Program</b>  | Program 1 – Consumer Education   |                |              |
| <b>Value to AWI</b><br><i>Why is AWI investing in this area? In what way will value be captured by Australian woolgrowers (metric)?</i> | This program followed the 2010/11 Woolmark Gold campaign aimed at luxury men fabrics in China (Strategy 2 Program 1). Australian wool growers (18um to 22um range) will benefit through an increase in prices as a result of increased wool demand.  |                |              |
| <b>Target market(s)</b>   | Women in China with high personal incomes. Current perception is that wool is a lower quality and outdated fibre and therefore the increased consumption of wool as a luxury fibre by this segment is sought.  |                |              |
| <b>Measure</b><br><i>What could be measured to demonstrate that the value has been achieved?</i>  | Base measure is the estimated increase in wool sale volumes through time from the six Chinese designer partners.<br>There is likely to be a ripple effect to non-partner designers, and this is indeed the focus of the program. This will be supported by evidence that consumer attitudes in the target segment have changed as a result of the campaign and hence demand gains are not simple substitution of wool purchases away from other stores to designer partner stores.   |                |              |
| <b>Target(s)</b><br><i>For the measure selected what is the target change sought under the strategic plan?</i>                          | 15% increase in wool usage across partners in year 1 – the average increase achieved was 14%.<br>30% increase in wool usage across partners in year 2<br>Positive shift in consumer attitudes.   |                |              |
| <b>Investment Activities</b><br><i>What activities have been undertaken with AWI funds to achieve the target?</i>                       | <ol style="list-style-type: none"> <li>(1) partnership with 6 emerging luxury Chinese brand partners to develop and promote wool designs</li> <li>(2) Training and education of designers from these brand partners through the Wool Lab</li> <li>(3) Promotion of designers through a six part tv series in China</li> <li>(4) Marketing support to raise consumer awareness, to amplify the impact of the TV series and to promote wool sales through partner stores</li> <li>(5) Pop-up stores to promote brands and to sell garment collections by each of the 6 designers.</li> </ol> |                |              |
| <b>Investments</b>  | <b>2011-12</b>   | <b>2012-13</b> | <b>Total</b> |
| AWI cash  |  |                |              |
| AWI overheads if any  |  |                |              |
| AWI total investment  | \$1.6m   | \$1.6m         | \$3.2m       |
| Co-funding by growers   |  |                |              |
| Co-funding by others  |  |                |              |
| <b>Gaps</b><br><i>What gaps currently exist in which AWI investment might be required in the future to ensure target is met?</i>        | Need to design consumer survey so that the shift in wool purchasing behaviour in the target segment can be measured and attribution to AWI investment determined.  |                |              |