SHEARER AND WOOL HANDLER TRAINING PROGRAM

IMPACT ASSESSMENT

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Executive Summary

The Shearer and Wool handler training program has been providing free training to novice, improver and professional shearers and woodlanders since 2015. AWI works to promote best practice in wool harvesting through our regional coaching program and extensive training resources. Shearers and woodlanders are central to the success of the Australian wool industry and the proficiency, and their expertise and proficiency is an important focus for the industry.

Background

The 2022/23 training program was available for 3,500 novice and improver shearers. These training sessions are delivered through in-shed training, sharing schools or workshops presented by AWI accredited trainers.[1]

The program's main objectives are:

- Maintaining a retention rate above 75% of those participants trained
- Collaborating registered training organizations to enable added funding and support for competency-based training.
- Forming a closer working relationship with TAFE NSW & AAT.

Summary of results

It was estimated that for every $1 invested by AWI, there is a $6.05 return on investment, with net benefits generated by the program of $14,755,240. These benefits are expected to be received by the woolgrowers in the form of increased productivity and increased income due to less wool wastage and less costs related to wool shearing and wool handling.

Benefit-Cost analysis

To calculate the BCR of the program, this evaluation considered the estimated number of people who completed the in-shed shearer and wool handler training program during 2022/23: 2,649.

Counterfactual approach

To estimate the economic benefit generated by the program, two scenarios were considered:

Scenario 1: Where the 2,649 shearers and wool handlers do not participate in the training program and enter the industry to develop their skills with experience acquired through time.

Scenario 2: Where the 2,649 shearers and wool handlers participate in the training program and due to their learnings, they can become more efficient compared to the group in scenario 1.

[1] www.wool.com

The following variables were considered:

Increased shearing efficiency

For the sake of the calculations, it was assumed that trained shearers become, on average, 50% more efficient during the training process compared to untrained shearers, which leads to a faster shearing process and a potential increase in the number of sheep shorn per day.

In a scenario without training, it was assumed that the shearer would also increase their efficiency by experience gained through their time in the industry. A trained shearer is expected to increase their efficiency by 50% more than untrained shearers.

Improvement in cleanly shorn wool and reduction in wool wastage

It was assumed that there would be a 5% increase in the cleanly shorn wool rate due to experience acquired, which leads to less wastage of wool and increased revenue for woolgrowers.

Increased retention rate

The main project's target is to achieve a 75% retention rate, which means that at least 75% of the trained shearers and wool handlers will stay in the industry after participating in the program. For the sake of the calculations, it was assumed that if not having participated in the training, the retention for shearers and wool handlers' rate would be 70%: it is assumed that the program increases the retention rate by 5%, for a total retention rate of 75% compared to a scenario without the training.

Costs associated to increased productivity (1 year)		
Shearing costs		**Total**
Number of extra wool (kgs)		4,105,420
Shearing costs for extra sheep ($)	$11.00	$10,490,040
Crutching ($)	$1.75	$1,668,870
Wool handlers' salary ($)		$15,820,800
Total		$27,979,710
Wool and livestock selling costs		**Total**
AWI levy (% of gross income)	1.50%	$714,343
Warehouse, testing, cartage and packs (per bale - 170 kgs each)	$44.10	$1,064,994
Livestock transportation & cartage (per head)	$2.50	$2,384,100
Bales and packs	$30.00	$724,485.92
Total		**$4,887,923.33**

Total extra costs		**$32,867,633.33**
Training costs/project cost (including overhead costs)		$2,439,000.00
Overhead costs		$264,000.00
Net benefit		**$14,755,240.99**
Benefit-cost ratio		6.05

Summary of Shearer and Wool Handler Training Program Benefit-Cost Analysis

In evaluating the Shearer and Wool Handler Training Program for the 2022/23 period, an economic analysis was conducted to assess its effectiveness and economic impact on the industry.

In the scenario without training, a total of 2,649 shearers and wool handlers commenced, with a retention rate of 70% after one year. It is expected that they will experience a productivity increase of 50% after one year due to experience acquired, going from shearing 20 sheep per day to 30 sheep per day after one year; 70% of them are expected to stay in the industry after one year, resulting in 1,834 staying in the industry and collectively shearing 3,337,740 sheep per year. The production of 11,214,806 kilograms of cleanly shorn wool incurred industry expenses totalling $36,715,140 annually (in wages)

Contrastingly, in the scenario with training, 1,986 shearers and wool handlers (reflecting a 5% increase in retention) remained in the industry after one year. Their enhanced skills allowed them to shear 4,291,380 sheep and produce 15,320,226 kilograms of cleanly shorn wool. This translated to industry expenses of $47,205,180 (in wages).

The comparison between both scenarios reveals a 5% increase in retention rate, along with 132 additional shearers and wool handlers remaining in the industry due to program participation. Furthermore, 953,640 more sheep were shorn, and 4,105,420 more kilograms of wool were produced as a result of the improved cleanly shorn wool rate. Converting the additional wool production to Australian dollars using the average EMI for the period and considering additional wages, the program was estimated to generate an extra benefit of $29,979,710 for the industry.

Additionally, wool selling costs for this additional wool, including AWI levy, warehouse testing, cartage and packs, livestock transportation, and bales and packs, were accounted for, amounting to $4,887,923. Moreover, the annual training program costs of $2,439,000 were incorporated into the benefit-cost analysis.

The calculated benefit-cost ratio of 6.05 underscores the program's substantial return on investment. For every dollar invested by AWI, there is a $6.05 return to woolgrowers, emphasizing the program's economic viability and positive impact on the industry.

In conclusion, the Shearer and Wool Handler Training Program for the 2022/23 period demonstrates significant benefits for the industry, including enhanced productivity, increased retention rates, and improved quality of wool, thereby contributing to its sustainability and growth.

Conclusion

In conclusion, the 2022/23 Shearer and Wool Handler Training Program has delivered substantial economic and operational benefits to the Australian wool industry, supporting long-term productivity, workforce retention, and the production quality of cleanly shorn wool. The benefit-cost analysis revealed a robust return on investment, with every dollar spent by AWI generating $6.05 in return. By equipping shearers and wool handlers with skills that promote best practices and increased efficiency, the program has not only reduced wool wastage and operational costs but has also bolstered income for woolgrowers. This outcome underlines the program's critical role in maintaining and advancing the industry’s standards and profitability, making it a valuable asset for the ongoing success and sustainability of wool production in Australia.

References

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Websites

AWEX Wool Market Indicators

Australian Wool Innovation – wool.com/market-intelligence

NSW Department of Primary Industries

MLA Statistics – Meat & Livestock Australia