Submission No 25

INQUIRY INTO IMPACT OF THE PHASE-OUT OF AUSTRALIAN LIVE SHEEP EXPORTS BY SEA ON NEW SOUTH WALES

Organisation: NSW Farmers' Association

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NSW Farmers submission to the NSW Legislative Council inquiry into the impact of the phase-out of Australian live sheep exports by sea on NSW

September 2024

NSW Farmers' Association

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About NSW Farmers

NSW Farmers is Australia's largest state farming organisation, representing the interests of its farmer members in the state. We are Australia's only state-based farming organisation that represents farmers across all agricultural commodities. We also speak up on issues that matter to farmers, whether it's the environment, biosecurity, water, animal welfare, economics, trade, workforce or rural and regional affairs.

Agriculture is an economic 'engine' industry in New South Wales. Despite having faced extreme weather conditions, pandemic and natural disasters in the past three years, farmers across the state produced more than $23 billion in 2021-22, or around 25 per cent of total national production, and contribute significantly to the state's total exports. Agriculture is the heartbeat of regional communities, directly employing almost two per cent of the state's workers and supporting roles in processing, manufacturing, retail, and hospitality across regional and metropolitan areas. The sector hopes to grow this contribution even further by working toward the target of $30 billion in economic output by 2030.

Our state's diverse geography and climatic conditions mean a wide variety of crops and livestock can be cultivated here. We represent the interests of farmers from a broad range of commodities – from avocados and tomatoes, apples, bananas and berries, through grains, pulses and lentils to oysters, cattle, dairy, goats, sheep, pigs and chickens.

We have teams working across regional New South Wales and in Sydney to ensure key policies and messages travel from paddock to Parliament. Our regional branch network ensures local voices guide and shape our positions on issues affecting real people in real communities. Our Branch members bring policy ideas to Annual Conference, our Advisory Committees provide specialist, practical advice to decision makers on issues affecting the sector, and our 60-member Executive Council makes the final decision on the policies we advocate on.

As well as advocating for farmers on issues that shape agriculture and regional areas, we provide direct business support and advice to our members. Our workplace relations team has a history of providing tailored, affordable business advice that can save our members thousands of dollars. Meanwhile, we maintain partnerships and alliances with like-minded organisations, universities, government agencies and commercial businesses across Australia. We are also a proud founding member of the National Farmers' Federation.

Executive summary

NSW Farmers strongly supports the live animal export trade[1] and the federal Department of Agriculture, Fisheries and Forestry Export Supply Chain Assurance System for managing the welfare of sheep and cattle that are exported live from Australia[2]. We seek an overturn of the Australian Government's decision to phase-out the live export of sheep by sea, for reasons including that:

- The phase-out of live sheep exports by sea will impact Australia's sheep and wool sectors beyond the Western Australia border.
- Impacts will also affect other commodities including grains and fodder.
- The phase-out of live sheep exports by sea will inhibit the ability for NSW sheep and lamb producers to turn-off animals if required into live export markets.
- The precedent that a legitimate, legal industry can be shutdown by any government in Australia creates significant uncertainty for other sectors, such as the live cattle export trade, and reduces confidence for supply chain investment to secure the long-term viability of export trades.

In response to the terms of reference of this inquiry, NSW Farmers submission finds that the New South Wales economy will be negatively impacted by the phase-out of the live sheep export trade by sea from Australia. In the absence of modelling reviewed by the Independent Panel to the phase-out of the live export trade, NSW Farmers extends modelling already undertaken with respect to the Western Australia (WA) context and examines the implications for New South Wales (NSW). NSW Farmers finds that there are several quantifiable market and social impacts of the phase-out, including:

- $15.03 million (present value) from lower restocking lamb availability following drought
- $125.5 million (short term) from a supply glut of sheep entering the domestic market from WA as it restructures its flock
- $3.12 million / year ($61.85 million present value) from increased shearing costs to NSW producers as a result of workforce shortages
- $21.15 million (present value) of social and community costs arising from more severe drought impacts in regions dominated by sheep farming in NSW

NSW Farmers recommends that the additional financial assistance from the Australian Government necessary to ensure the long-term viability of sheep farming enterprises in NSW cannot be less than 50 per cent of that provided for structural adjustment in WA, that is, at least $53 million. However, we note that there is serious concern that the Australian Government funding appropriated to transition the WA live sheep export by sea industry through its phase-out is gravely insufficient to appropriately support primary producers, and the post-farmgate supply chain. Funding to NSW should be targeted at measures that enhance drought preparedness and resilience in sheep farming regions in NSW[3] [4] [5]. Such funding could, for example, be used to provide funding for industry-wide resilience and capability building projects, akin to the Storm and Flood Industry Recovery Fund. These funds should be made

[1] 3301 (11WDC-Jul) - The WDC strongly support the live animal export trade; 3254 (11GoatsAC) - That the NSW Farmers' Association Goat Industry strongly supports the live animal export trade.
[2] 3337 (12EC-Oct) - That NSW Farmers support DAFF's export supply chain assurance system (ESCA) for managing welfare issues in the live export of sheep and cattle.
[3] 2704(10AC): That the Association lobby for provisions to be made for drought support to supplement drought preparedness measures in the event of a long drought.
[4] 4382 (19AC): That alternative funding arrangements for drought infrastructure and Farm Innovation projects be provided.
[5] 1371 (06Dairy-July): That NSWFA continues to support transport subsidies for drought or disaster affected areas.

available immediately, in order to give industry the ability to respond to the significant market disruptions that the export ban will inevitably cause.

Introduction

NSW Farmers supports the live export of animals by sea, and the federal Department of Agriculture, Fisheries and Forestry Export Supply Chain Assurance System for managing the welfare of sheep and cattle that are exported live from Australia.

The Independent Panel consulting on the phase out of the live sheep exports by sea failed to quantify the flow-on effects of the Australian Government's plan on the sheep farming sector and broader economy of New South Wales (NSW) and other states, limiting their view only to Western Australia (WA). As a result, there a lack of available evidence outlining the potential economic costs to NSW and other jurisdictions in monetary terms. This brings into question the suitability of the Independent Panel's analysis to inform the election commitment of the Albanese Government to phase out live sheep exports by sea.

Given the shortcomings in broader, national analysis by the Independent Panel, NSW Farmers has relied upon the modelling used in the Independent Panel's report which was the basis for demonstrating a need for financial assistance from the Australian Government for the purpose of enabling a structural adjustment in the sheep industry in Western Australia (WA) to produce further estimates of the economic damages impacting NSW resulting from the ban. It should be noted that industry holds significant concerns about the shortcomings of the funding available in the transition package provided by the Australian Government to the WA live sheep export industry, and as such, the analysis in this submission should be viewed in this context; that is, NSW Farmers economic analysis is informed by insufficient funding provision by the Australian Government and it is likely that any transition funding to NSW stakeholders should be increased beyond the minimum quantification in our submission.

To assist this Inquiry in understanding the assumptions that support our analysis of the monetary impact to NSW, NSW Farmers detailed analysis is outlined in Appendix A and B to this submission.

Several other impacts which may also add significant damages to the NSW economy, but are not modelled in detail here due to a lack of data include:

- The opportunity costs associated with not being able to export sheep from NSW by sea when this trade option would support business viability and continuity, particularly during adverse climatic conditions.
- The loss of a legitimate trade option to support the maintenance of high animal welfare standards during adverse climatic conditions.
- The negative impacts on the long-term viability of sheep farming and agriculture in NSW.
- The impacts to secondary commodities that will be affected by the dynamic changes to Australia's sheep production, including the grain and fodder commodities.
- Impacts to the availability of services such as shearing, rouseabouts, and transient workforces within the sheep and wool sector.

Impact on NSW from lower restocking supply from WA

In typical years, the number of sheep moving from WA to NSW is small. However, in years following drought, large numbers of sheep can move from WA to NSW. For example, in 2020 and 2021, approximately 1.36 million sheep moved from WA to the eastern states, the large

majority of which arrived in NSW. Farmers in NSW benefitted from this supply of sheep from WA, since the price of restocker lambs from WA was $56.10 (38 per cent) cheaper than in NSW or Victoria.

Assuming that the size of the sheep flock in WA will be 5 per cent lower than in previous years (Appendix B refers), a commensurate decrease in the supply of restocker lambs from WA would mean that following a similar drought, farmers in NSW would need to source 135,000 additional sheep locally at an additional cost of $7.57 million than if sheep were available from WA. Assuming that such a drought occurs once every 10 years, and a discount rate of 5 per cent, then the Present Value of more expensive restocker lambs to NSW is $15.03 million.

Impact on NSW from oversupply of sheep from WA

Short-run glut

The WA Government submission to the Independent Panel indicated that as WA producers restructured their flocks, the total flock size in WA would decrease by 10 per cent (566,700 head) over two years. This would amount to an additional 9.4 per cent of lambs and sheep moving through national saleyards and abattoirs both years. NSW Farmers estimates that this would depress lamb and mutton prices nationwide by 14.1 per cent ($17.1/head lamb, $16.3/head mutton). Applied to the value of the 5.17 million lambs and 2.28 million sheep slaughtered in NSW each year, this amounts to a loss of $125.5 million in the gross value of production to farmers in NSW.

Long-run supply

Over the long run, the supply of sheep entering the domestic market from WA is expected to be about 3 per cent higher, adding only 0.3 per cent of supply to the national market. While this would be expected to place a downward pressure on prices in national markets, the effect is likely to be more pronounced in WA and less substantial in NSW.

Impact on NSW from reduced shearing workforce

The WA Shearing Association has calculated that 20 per cent (80 people) of the shearers in WA, as well as 20 per cent of shedhands are likely to leave the shearing workforce as live sheep exports are phased out, due to the loss of regular year-round work. However, shearers are a transient workforce, and many shearers based in NSW travel to WA to take advantage of seasonally available work. Based on Census data, and wool production statistics, it is estimated that approximately 46 NSW-based shearers (5 per cent of the workforce) work in WA during parts of the year. If the local shearer workforce in WA collapses, then seasonal demand for interstate shearers will increase, causing the number of shearers from NSW working in WA seasonally to increase to 72 (8 per cent of the workforce).

The availability of shearers in NSW is constantly in short supply, and even a decrease of a few percentage points can have a drastic impact on sheep farming costs. Assuming NSW maintains its wool production with an increase in wages to induce more shearers to engage with the workforce, this would lead to a 2 per cent ($3.12 million) increase in shearing and crutching costs per year. In present value terms, the total impact amounts to $61.85 million.

Impact on NSW agricultural supply chains

Grains and fodder supply

The live sheep export trade supports a substantial grains, fodder and bedding manufacturing industry in WA which is expected to be negatively impacted by the restructure of the industry. As with the supply of restocker lambs, the WA fodder industry provides a valuable source of

reduced-cost feed to NSW when local supplies are low. Therefore, any reduction in supply from WA over the long term can be expected to harm the NSW agriculture industry. In 2019, 47 road trains carrying 3,500 tonnes of fodder arrived from WA in NSW at the peak of the crippling drought[6]. The event exemplified the commercial and community reliance between NSW and WA during times of acute drought, and highlights the fact that NSW is directly exposed to any reduction in supply from WA.

In addition, there may also be a national short-run supply glut of grains and fodder while the WA sheep industry restructures in light of the phase-out. This is also expected to have a substantial negative impact on grains and fodder suppliers who will be faced with lower market prices, although it may also have a positive impact on purchasers of fodder in NSW[7].

Agricultural transport

According to the Australian Livestock Road Transport Association, sheep destined for live export are carried on average 3.5 by the time they are exported, compared to 1.5 times for sheep destined for the domestic processing market[8]. The end of the live sheep export trade in WA can be expected to have repercussions, firstly to the local agricultural transport market, and then to the wider national market. In the short-term, some transport operators will likely move sheep from WA to Eastern States for processing as the structural adjustment progresses. However, in the long-term, without the certainty of a reliable live export trade, the road transport operations sector in WA may become more reliant on seasonal trade, and therefore be less resilient or available to move sheep or fodder from WA to NSW as needed (see above).

Alternate markets

The ability for NSW producers to access export markets through live sheep exports by sea will become redundant with the Australian Government's ban. With varying, extreme climatic conditions a part of Australia's landscape, live export is an additional tool enabling farmers to manage livestock while upholding high standards of animal welfare during trying seasons, and market failure[9].

Social and community impacts to NSW

As indicated above, the phase-out of live sheep exports by sea will have considerable direct monetary impacts on NSW. Most notably, there is a substantial impact on the ability for farmers to manage drought through fodder supply and recover from it using the most cost-effective restocking supplies available. However, drought is not just a commercial concern, Edwards, Gray and Hunter[10] find that for a range of economic, social and health outcomes, farmers and those in the agricultural supply chain are substantially negatively affected, with impacts extending to mental health, financial stress, and loss of services. The same is true of their families and communities, as found by Dean and Stain[11] who note the impact on younger people living on farms reporting higher levels of emotional distress, and Horton, Hanna and Kelly[12] who do the same for older generations and find links between dry conditions and poorer mental health, socio-economic hardship, and social capital. In Australia, the non-market cost

[6] https://thewest.com.au/business/agriculture/farmers-across-borders-convoy-arrives-in-cobar-with-hay-for-drought-stricken-farmers-ng-b881086011z
[7] June 2023, NSWFA submission to the phase out of live sheep exports by sea consultation.
[8] Mercado – Impact of the live sheep export trades' self-imposed moratorium and regulatory changes, 2020
[9] March 2023, Correspondence from Martin, X to Minister Watt re: Live Export By Sea Phase-Out Consultation,
[10] Edwards, B., Gray, M., & Hunter, B. (2019). The social and economic impacts of drought. *Australian Journal of Social Issues*, *54*(1), 22–31. https://doi.org/10.1002/ajs4.52
[11] Dean, J., & Stain, H. J. (2007). The Impact of Drought on the Emotional Well-Being of Children and Adolescents in Rural and Remote New South Wales. *The Journal of Rural Health*, *23*(4), 356–364. https://doi.org/10.1111/j.1748-0361.2007.00113.x
[12] Horton, G., Hanna, L., & Kelly, B. (2010). Drought, drying and climate change: Emerging health issues for ageing Australians in rural areas. *Australasian Journal on Ageing*, *29*(1), 2–7. https://doi.org/10.1111/j.1741-6612.2010.00424.x

of droughts has been quantified using life satisfaction data to be about $25,915 per year[13]. Applying this figure to households in Far Western and Orana NSW (41,704), where sheep farming is the dominant form of agriculture, and conservatively assuming that the changes to live sheep exports exacerbate the impact of drought by 1 per cent, this amounts to an additional social welfare cost of $10.81 million per drought, or $21.15 million in Present Value terms[14].

Justification for support for structural adjustment

The analysis provided in this report demonstrates that there are substantial economic impacts to NSW farmers, community and whole economy as a result of the ban of live sheep exports. In the first instance, the NSW Government must defend NSW interests against the Commonwealth Government with a view towards reversing the ban. At the same time, the NSW Government should ensure that additional Commonwealth funds, over and above that committed to WA, are also committed to NSW for the purpose of addressing the impacts of the ban, as outlined below.

The Commonwealth Government has committed $107 million for the structural adjustment of the WA sheep industry to other markets or commodities in the run-up to the conclusion of the live sheep export trade. However, the analysis provided in this submission clearly indicates that the conditions and structure of the WA sheep industry has a direct link to the conditions and structure of the NSW sheep industry. Therefore, just as the WA sheep industry rightfully requires financial support to manage any changes necessary to adapt, so too does NSW.

The economic impact modelling assessed by the Independent Panel indicated that the impacts to WA from the ban range roughly between $12-$22 million per year over the longer term, following any necessary structural adjustments. By comparison, NSW Farmers modelling suggests direct commercial impacts to NSW of at least $3.88 million per year, depending on the incidence of drought. The impacts to NSW are therefore potentially in the range of 18-32 per cent of those facing WA. Over the short-term, farmers in NSW additionally face a substantial negative economic penalty as a result of a supply glut of sheep from WA as well, amounting to $125.2 million.

Therefore, taking into account both the long and short-term impacts, it is suggested that the additional financial assistance from the Australian Government (over and above that committed to WA) that is necessary to support NSW cannot be less than 50 per cent ($53 million) of that provided to WA, noting that this financial package for WA must be sufficiently able to support transition, given the significant concern that the present funding package is insufficient to support transition of industry from live sheep exports by sea. Funding to NSW should be targeted towards drought resilience and recovery funding within sheep farming regions of NSW, noting that the short and long-term impacts of the live sheep export ban directly threaten the sustainability and resilience of the industry, particularly with respect to drought. Such funding could, for example, be used to provide funding for industry-wide resilience and capability building projects, akin to the Storm and Flood Industry Recovery

[13] Carroll, N., Frijters, P., & Shields, M. A. (2009). Quantifying the costs of drought: New evidence from life satisfaction data. *Journal of Population Economics*, *22*(2), 445–461. https://doi.org/10.1007/s00148-007-0174-3
$18,000 increased to $25,915 using RBA inflation calculator.
[14] 5% discount rate, assuming an average recurrent interval of 1-in-10 years.

Program[15]. These funds should be made available immediately, in order to give industry the ability to respond to the significant market disruptions that the export ban will inevitably cause.

Animal welfare considerations

The Australian live export industry has the highest standards of animal welfare in the world. The development of the Export Supply Chain Assurance System (ESCAS), which ensures animal welfare in market, is the first regulation of its kind globally. Coupled with the Australian Standards for the Export of Livestock (ASEL) and domestic animal health and welfare regulations, animals exported under the Australian live export trade are protected by legislation from paddock through to in-country markets.

ESCAS and ASEL are the only animal health and welfare regulations of their kind globally, meaning Australian animals are the only animals to be protected throughout the live export trade; including past the point of sale. Loss of the Australian live sheep export trade would be a loss for global animal welfare. Our trading partners agree to these requirements, as we are considered a reliable supplier of high-quality livestock and dependable to meet their food security requirements.

Since 2018, the industry has undergone significant change, demonstrating the industry's commitment to improve. Changes include:

- Industry initiated moratorium on sheep exported during the northern hemisphere summer
- which is now part of regulation.
- Increased space available for each animal as outlined in the updated ASEL 3.2.
- Improved ventilation requirements and independent auditing of ventilation systems.
- Automated environmental monitoring on decks to record deck temperatures.
- Independent government observers provide additional assurances and reports are public.
- System called LIVEXCollect implemented to ensure there is consistent comparable data being collected.

As a result of these changes, voyage mortality rates for sheep have declined by 70per cent, demonstrating the ability for the industry to adapt to animal welfare concerns, and improve outcome for sheep. Therefore, the NSW Government should take into account the likelihood that animal welfare outcomes for sheep on sea voyages have and will continue to improve in any representations it makes to the Commonwealth Government regarding the need to overturn the ban and/or provide funding to NSW for structural adjustments.

Table 1: Average voyage mortality rate, LiveCorp (2023)

Voyage Mortality Rates	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022* (Jan-Jun)
Cattle	0.11%	0.13%	0.10%	0.13%	0.10%	0.12%	0.10%	0.11%	0.08%	0.06%
Sheep	0.73%	0.72%	0.64%	0.80%	0.71%	0.47%	0.26%	0.22%	0.20%	0.13%
Daily Mortality Rates										
Cattle	0.0078%	0.0084%	0.0070%	0.0089%	0.0087%	0.0088%	0.0082%	0.0081%	0.0072%	0.0054%
Sheep	0.0287%	0.0292%	0.0287%	0.0345%	0.0303%	0.0201%	0.0122%	0.0102%	0.0091%	0.0058%

[15] The Storm and Flood Industry Recovery Program - Sector Recovery and Resilience Grants addressed a need to respond to the impacts of a natural disaster affecting different agricultural sectors. The SFIRP sought to increase the resilience and recovery of exposed industries, such as dairy, by targeting funding towards programs and initiatives that impacted and supported the entire industry, rather than specific farms or businesses. Given that the impacts of the live sheep export ban are expected to flow through the sheep and wool industries, it is considered that SFIRP model is an appropriate one to adopt.

APPENDIX A: NSW Farmers Economic Impact Modelling

Impacts to NSW from a Live Sheep Export Ban

The following analysis examines the potential magnitude of the impact to the New South Wales (NSW) sheep farming economy arising as a result of a ban on sheep live exports by sea. The analysis examines three sources of impact in detail, including impacts arising from

- Lower restocking supplies - $757,400/year (Present value: $15.03m)
- A short-term supply glut - $125.2m over two years
- A shortage of shearers in NSW - $3.12 m/year, (Present value: $61.85 million)

The total present value (5 per cent discount rate) of the estimated impacts amount to $202.1 million, representing a significant decline in the value and sustainability of the sheep industry in the short- and long-term.

In addition, there are a number of other impacts that are not quantified and monetised here, including the potential long-term changes to the viability of sheep farming in NSW, and the opportunity cost of not having the option to export live sheep from NSW to other markets in the event of another prolonged drought.

Impacts arising from lower restocking supply

Trade between the NSW and WA sheep markets is low most years, however, under certain conditions large volumes of sheep are transported from WA to NSW. These conditions can be characterised by:

- High demand and prices in NSW, such as when NSW is recovering from drought farmers require lambs for restocking[16]
- Oversupply and therefore low prices in WA, such as when drought conditions in WA drive producers to destock[17]

Between 2011 and 2016 the total sheep flock in NSW was steady at about 25 million head. However, by June of 2019, drier conditions had led to a reduction in the total sheep flock by 20per cent (5m) to 20m head. However, a return to wetter conditions in 2020 followed by rapid restocking meant that by June 2022, the NSW sheep flock had recovered back to 25 million head. In 2020 and 2021, the number of sheep moving interstate from WA exploded from about 250,000 per year (largely to South Australia and Victoria) to 1.36 million in each year[18]. Based on these figures, between 54 per cent and 44per cent of the stock contributing to the revitalisation of the NSW sheep flock came from WA[19]. Similar interstate movements from WA occurred in 2010/11, following an easing of drought conditions in NSW, leading to a commensurate increase in sheep flock numbers in NSW.

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16 https://www.abc.net.au/news/2020-05-20/nsw-farmers-restock-buying-wa-sheep/12262140

17 https://pulse.auctionsplus.com.au/aplus-news/insights/livestock-transported-out-of-wa

18 Department of Primary Industries and Regional Development (2024) The Western Australian sheep and wool industries. https://www.agric.wa.gov.au/sheep/western-australian-sheep-and-wool-industries Western Australian Government

19 Between 1.36 million and 1.11 million sheep per year, of the 2.5 million flock increase in NSW each year of the recovery, depending on the proportion of sheep leaving WA that went to SA or Vic.

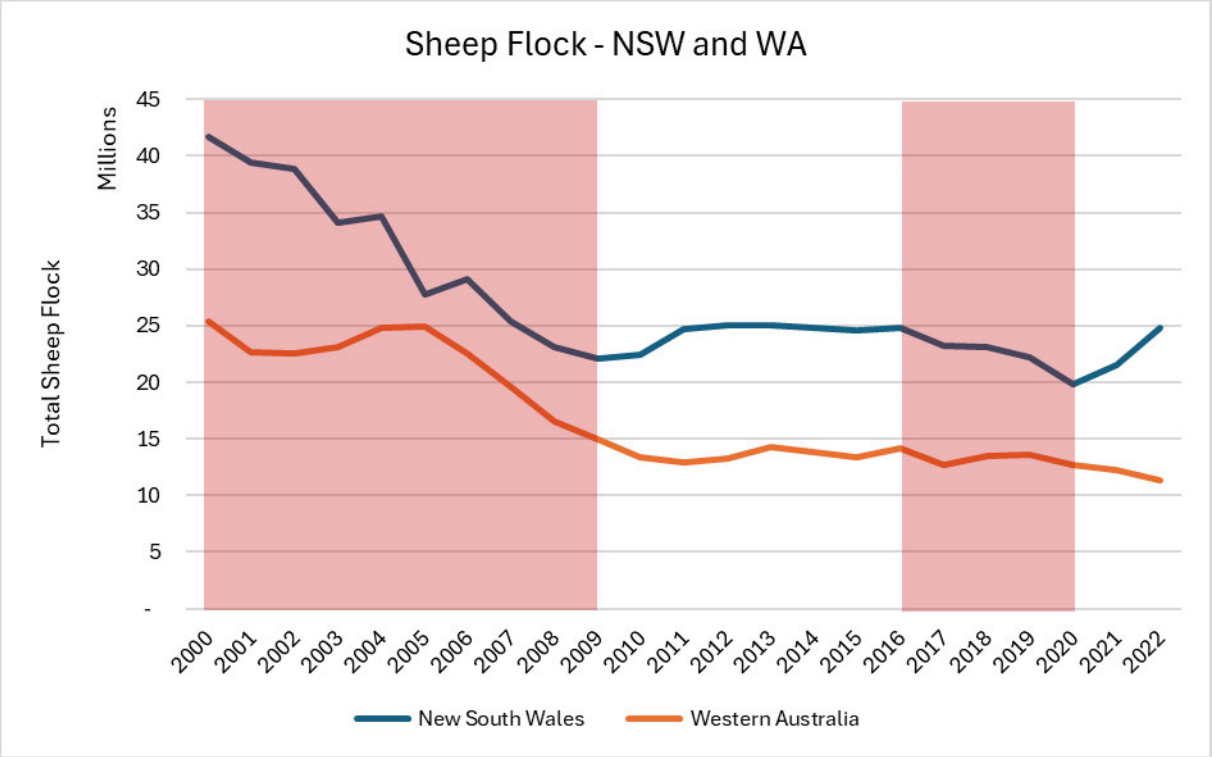

Figure 1: Total Sheep Flock, all Broadacre Farms. Red showing periods of prolonged drought in NSW. Source: ABARES – Farm Survey Data

Clearly, a reduction in the size of the sheep flock in WA will have consequences for the ability of NSW farmers to source sheep from WA during the two types of market conditions outlined above. Assuming that the availability of sheep in WA is 5per cent lower than previous years (see appendix A), NSW farmers would be short approximately 135,000 head, which they would be forced to source at a premium elsewhere as outlined below.

Given that WA restocker lambs were $56.10 (38per cent) cheaper in WA compared to NSW in 2019/2020[20] (see Figure 2), the additional cost to NSW farmers for restocking locally, or from Victoria, would be approximately $7.57 million. Assuming a recurrence interval of 10 years, and a 5per cent discount rate[21], this amounts to an expected Present Value of $15.03 million. It is important to note that this value may be substantially higher or lower, depending on the likelihood of drought, and the lamb price differential between WA and NSW.

[20] MLA National Livestock Reporting Service – Indicators Report - National Restocker Lamb Indicator

[21] NSW Treasury (2023) TPG23-08 NSW Government Guide to Cost-Benefit Analysis.

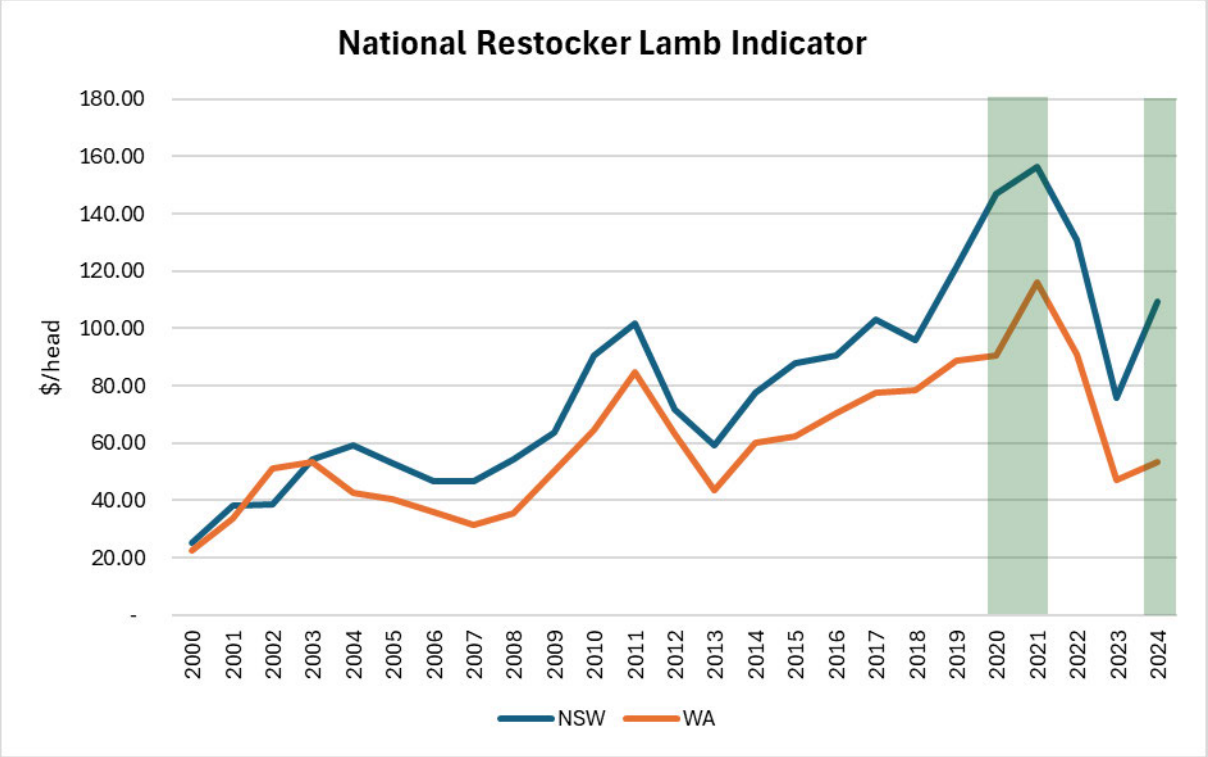

Figure 2: National Restocker Lamb Indicator for NSW and WA (Source: MLA). Green indicates where NSW sourced significant volumes of sheep from WA, illustrating the price differential as a driver of interstate demand.

Impacts arising from short-term supply glut

A reduction in the sheep flock in WA over the short term has the potential to depress sheep prices not only in WA, but in NSW and other states. Generally, sheep prices in NSW and Victoria are nearly perfectly correlated, demonstrating a close link between prices in both markets. However, sheep prices in WA are less strongly correlated with those in NSW, indicating a less than perfect, but still strong, transmission of prices between the two markets.

Assuming WA sheep producers decrease the size of their flocks by 10per cent over two years as outlined in the WA Government's submission[22] (a reduction of 566,700), then this would amount to an additional 9.4per cent of lambs and sheep moved through national saleyards each year. Using a price elasticity of -1.5, this amounts to a 14.1per cent ($17.1/head lamb, $16.3/head mutton) decrease in the market price of sheep and lamb sales in NSW and other states. In NSW approximately 5.17m lambs and 2.28m sheep are slaughtered annually[23]. If the value of those turnoffs decreased by the forecast above amount, then this would amount to a loss of $125.5 million from NSW Sheep Producers in gross value.

Over the long-run, while the total sheep flock in WA is expected to decline by about 5per cent, the total number of sheep entering the domestic state market is expected to be about 3per cent higher. However, this only adds 0.3per cent supply to the national market, and is not likely to substantially impact NSW sheep farmers.

Impacts arising from a shortage of shearers in NSW

The WA Shearing Industry Association calculated that a reduction and restructure in flock composition would result in the loss of 80 fewer shearers and 80 fewer shedhands, comprising

[22] WA Government (2023) Submission to the Live Sheep Export Phase-out Panel.

[23] Australian Bureau of Statistics (2024) Livestock Products, Australia.

20 per cent of the workforce in WA. However, shearers are a nationally transient workforce, often travelling from state to state as demand arises.

Table 1 summarises the total number of shearers by state of usual residence at the time of the 2021 Census. Based on the estimated 80 fewer shearers, this amounts to a 3 per cent reduction in the national shearer workforce, which could be expected to have an upward impact on shearer labour costs. However, insofar as the reduction in the number of shearers is precipitated by a reduction in demand in WA, there should also be a downward pressure on shearer labour costs. Therefore, the net effect on the Australian shearer labour market, and NSW farmers, is ambiguous.

Examining the supply of sheep shearers in WA compared to other states, it is clear that WA does not have the required number of shearers within its own borders, and relies upon shearers imported from other states. At current, it is estimated that WA requires 101 additional shearers from other states to bring it up to the required ratio of 7.7 shearers per mkg of wool produced. Based on national shares, approximately 46 of these will travel from NSW to do so. Following the departure of 80 shearers from the industry, and a decline the WA sheep flock of 5 per cent, the number of shearers per mkg wool produced in WA will fall to 4.8, requiring 157 additional shearers from other states. Assuming 72 of these come from NSW, this represents a substantial additional draw from the local labour pool, amounting to 8 per cent (up from 5 per cent) of local shearers travelling to WA on a seasonal basis.

Table 2: Total shearers by primary residence (ABS Census 2021), by total flock size (ABARES Farm Survey Data), and wool production (Australian Wool Innovation Limited, 2019 In Your State Report).

State	No. Shearers	Percentage of total shearers	Shearers per million sheep	Shearers per mkg wool
New South Wales	910	38%	36.6	8.7
Victoria	517	22%	36.6	7.5
Queensland	62	3%	25.0	8.1
South Australia	376	16%	36.7	6.8
Western Australia	385	16%	34.0	6.1
Tasmania	129	5%	67.2	14.3
TOTAL	**2,386**	**100%**	**36.6**	**7.7**
WA – post live export ban	*305*	*15%*	*28.3*	*4.8*

The impact on the NSW labour market for shearers resulting from this shock to the industry are highly uncertain, especially given the transient nature of the work. It is likely that there would be both some supply and price effects, with more people induced to take up incidental shearing work if wages increased. In the absence of robust economic modelling, using overtime wages set out in the shearing industry modern award rates[24] is a convenient proxy for estimating the likely magnitude of the economic impact of the supply shock, including the opportunity costs associated with drawing on other labour. Assuming that the draw of 25 additional shearers from NSW to WA occurs for half the year, and the remaining shearers must work overtime rates at time and half to clip the same amount of wool, then using ABARES Farm Survey Data, it is possible to estimate that this would add an additional 2per cent to annual shearing and crutching costs per year, amounting to $3.12 million/year, with a Present Value (5per cent d.r.) of $61.85 million.

[24] Australian Workers' Union Shearing Industry Modern Award Rates https://www.awu.net.au/wp-content/uploads/2020/06/101_ShearersAward_V01-2.pdf

APPENDIX B: Forecast Impact of the Live Sheep Export Ban on Flock Size

Forecasts on the impact of the live sheep export ban on sheep flock size or market dynamics in WA differ by study. Two of the most commonly cited studies include:

- Submission by the WA Government using research from the Department of Primary Industries and Regional Development[25], which in turn uses an industry sentiment survey (n=1,958) conducted by Meat and Livestock Australia (MLA) to estimate that the WA flock could decline by 15per cent, based on depressed sentiments and a 9per cent decline in the gross value of export lamb.
- Research undertaken by ACIL ALLEN on behalf of LiveCorp and Livestock Australia[26], forecasting a decline in lamb prices of 19per cent based on price elasticities from the academic literature.

Both studies only offer a partial analysis of sheep market dynamics, that is, they do not take into account the flow-on effect of prices on supply, and vice versa. That is, if the supply of lambs in WA falls due to a decline in prices, then in following periods the price of lamb should increase, motivating farmers to once again lift supply. Using both price and supply elasticities, it is possible to estimate where the new long-run market equilibrium may converge, using the logic of a cobweb model. Based on an own-price elasticity of supply of -1.5 (as used in the ACIL ALLEN report), and a supply-price elasticity of 0.4, we find that it is likely that after declining by about 8per cent, the size of the WA sheep flock will ultimately converge on a new long-run supply approximately 5per cent lower than before the export ban. These results broadly agree with the sentiment analysis undertaken by MLA, which find that a 10per cent reduction in sheep flock in the short term is possible.

[25] WA Government (2023) Submission to the Live Sheep Export Phase-out Panel.

[26] ACIL ALLEN (2023) Performance and value of the live sheep export trade. Final Report to LiveCorp and Meat & Livestock Australia. Live Export Program.