



Challenges and opportunities facing the Australian wool industry

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AWI – investing in our future

40% of AWI's investments are in RD&E to drive wool industry profitability, competitiveness & sustainability

25%

On-farm
RD&E

15%

Off-
farm
RD&E

60%
Marketing

45% of RD&E spend is the 'E' - extension – since practical, commercial impact is needed to generate returns

1-in-5 RD&E dollars is invested with another RDC or equivalent

A vibrant and productive wool industry



‘Vibrant’ means.... Attractive to investment capital
(prospects for long-term return on investment)

+

Recruitment of the young
(rewarding career & family prospects)

A wide-angle landscape photograph of a green valley under a blue sky with scattered clouds. Two children are running in the middle ground. The sun is in the top right corner, creating a lens flare. The text 'A vibrant and productive wool industry' is overlaid at the top.

A vibrant and productive wool industry

‘Productive’ means.... The return on investment is
attractive
(relative to rainfall, and other land uses)

... which then means it is attractive to
investment capital, and rewards the young!

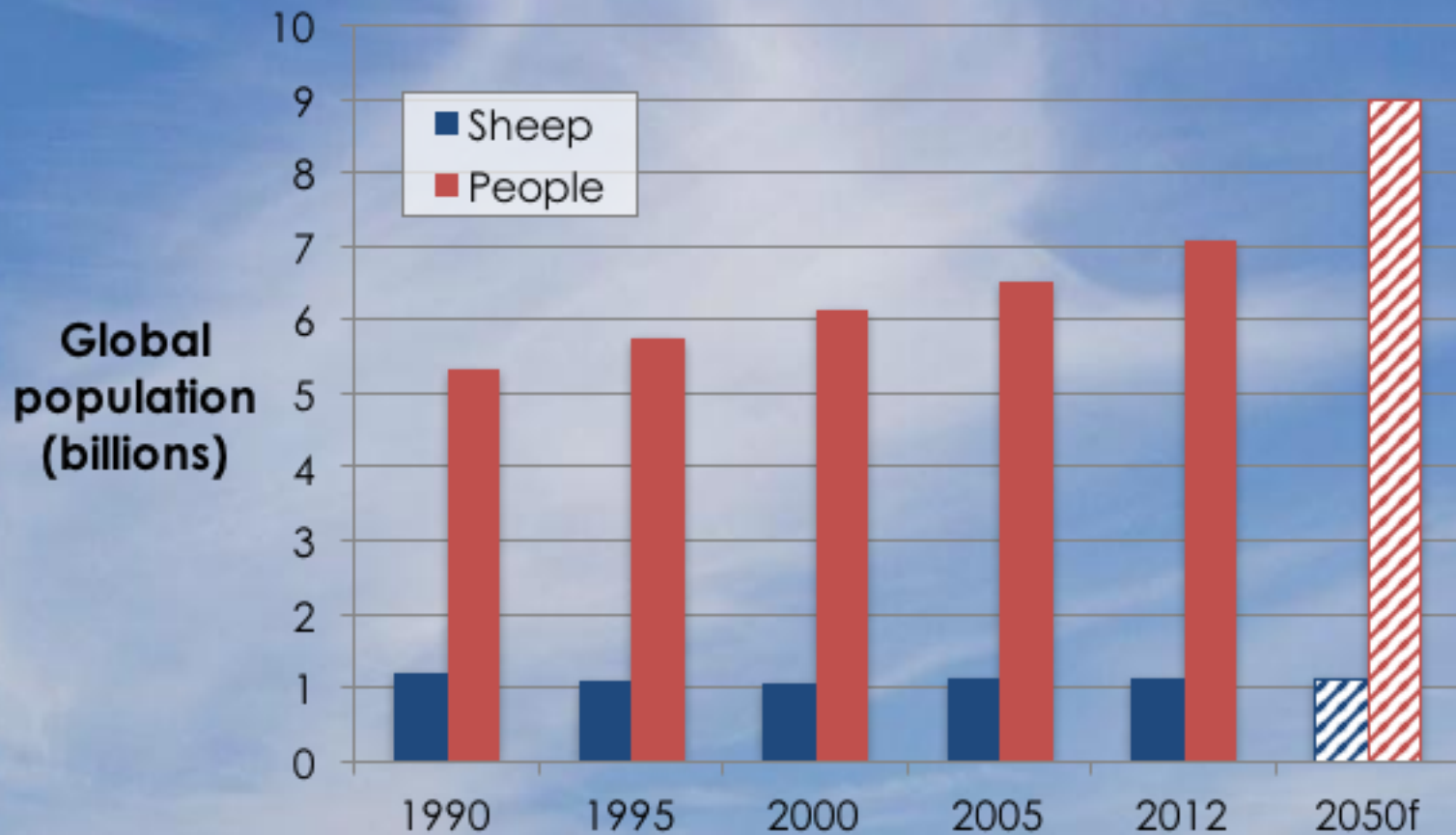
Vibrant, productive & wool - requires both ...

Clear, preferential demand for our wool and
sheepmeat outputs

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Tools and attitudes to achieve cost-effective
productivity growth

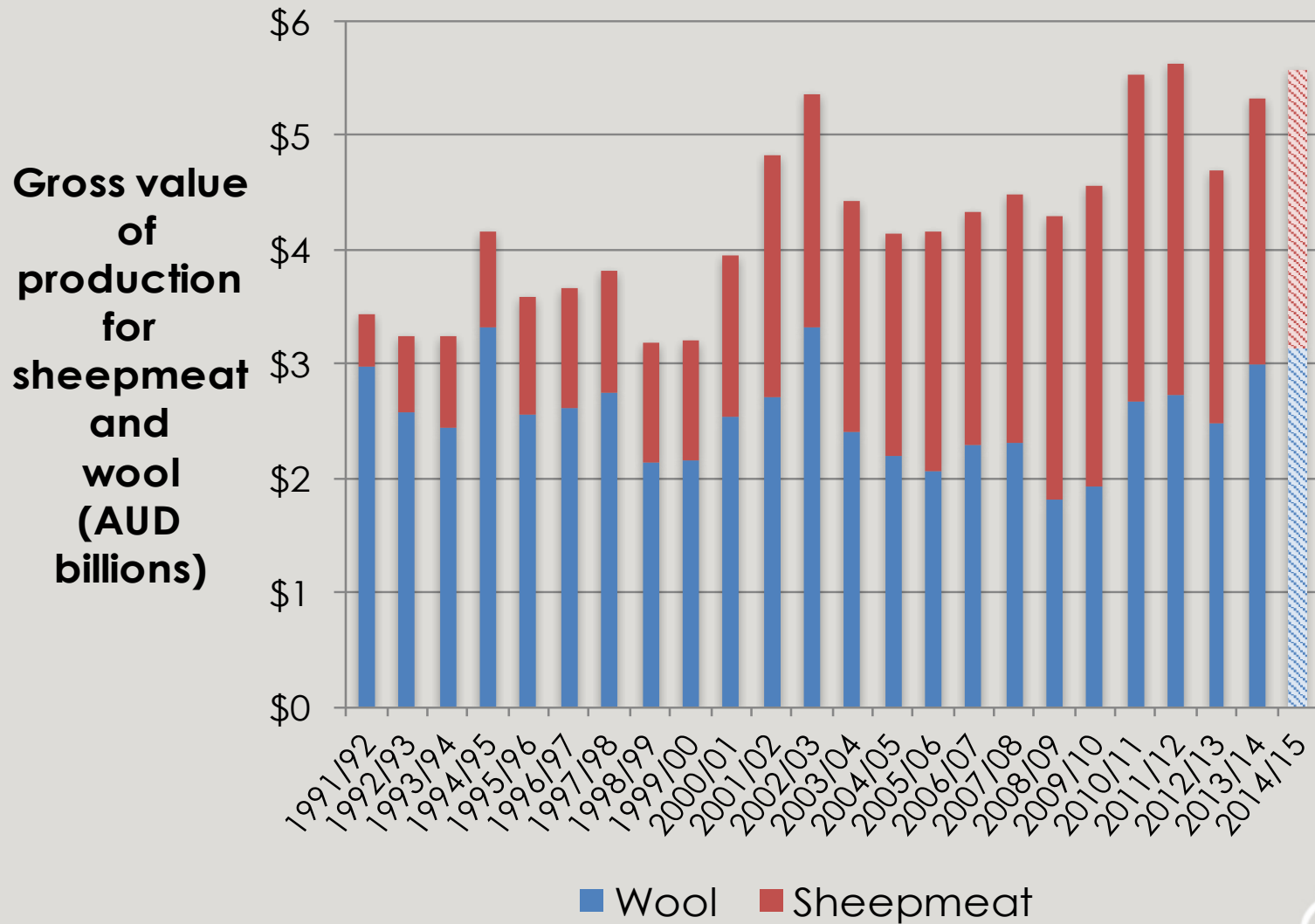
Our proteins are rare & expensive to produce...



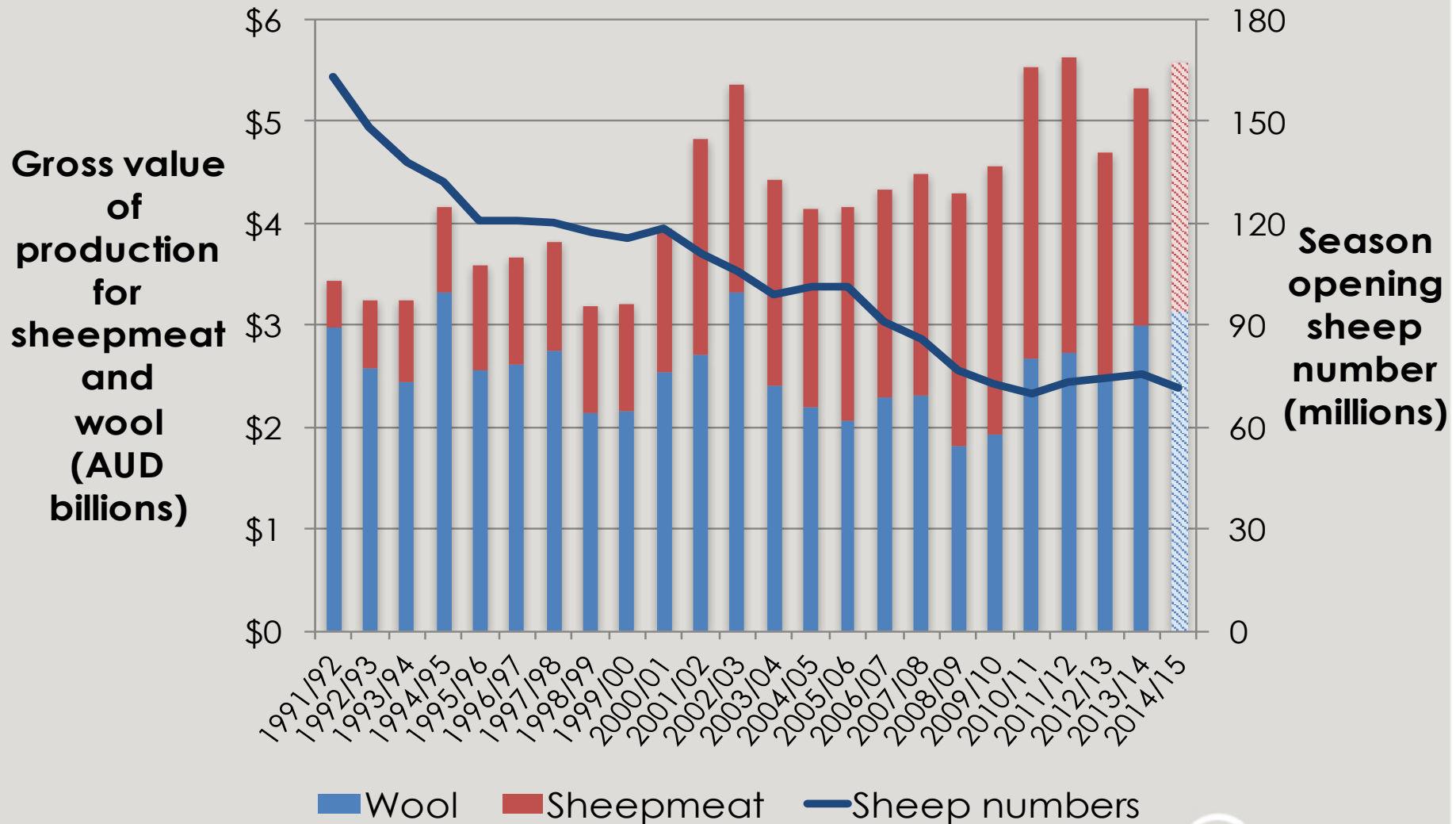
Mass-produced 'factory' fibres & meat increasingly dominate supply (chicken, pork, man-made fibres, cotton ...)



Rising protein demand is transforming our industry

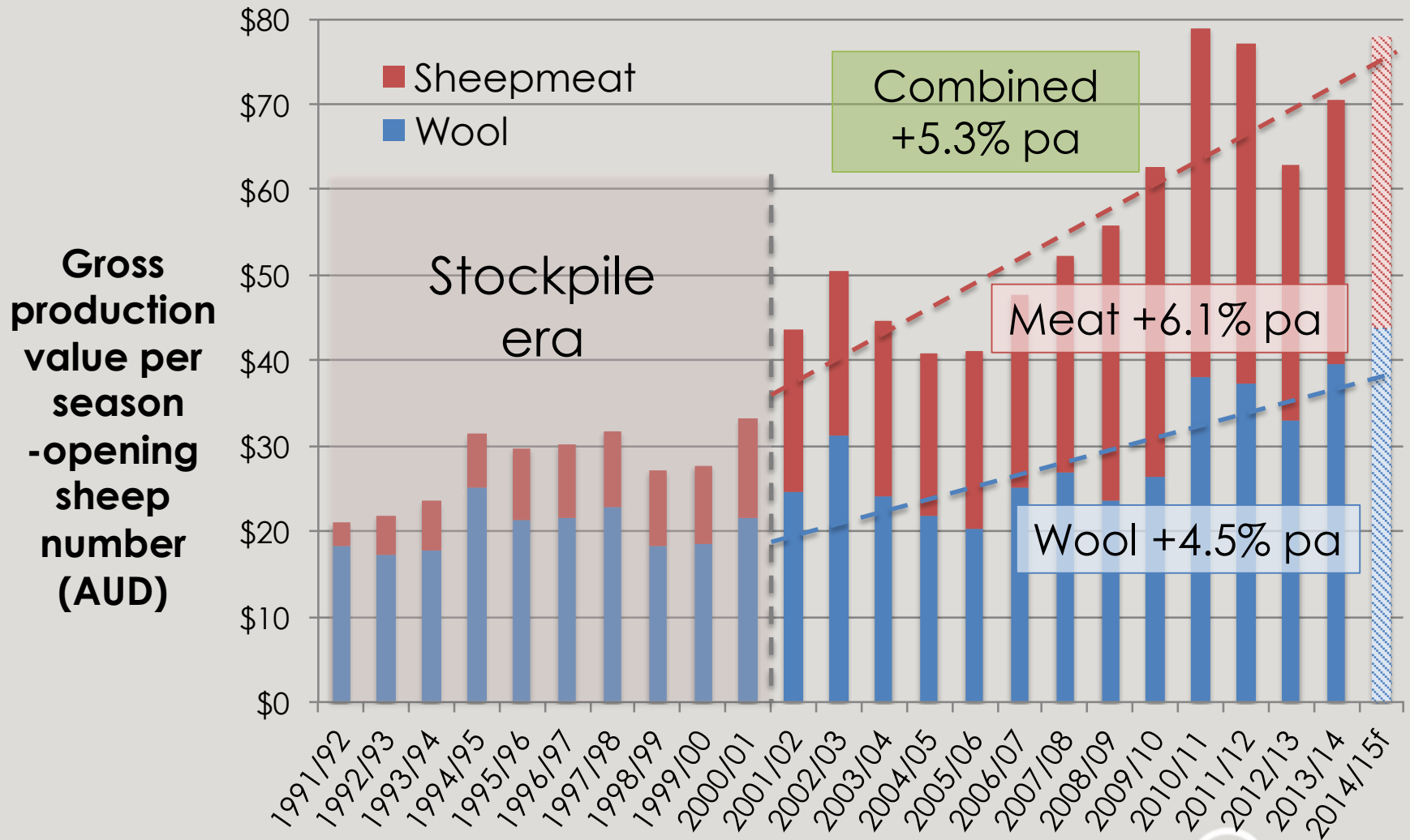


Rising protein demand is transforming our industry



SA: 1992/93: \$0.43b GVP, from 16 m sheep
 2015/16: \$1.45b GVP, from 11 m sheep

AUD production value per head has doubled in 14 years



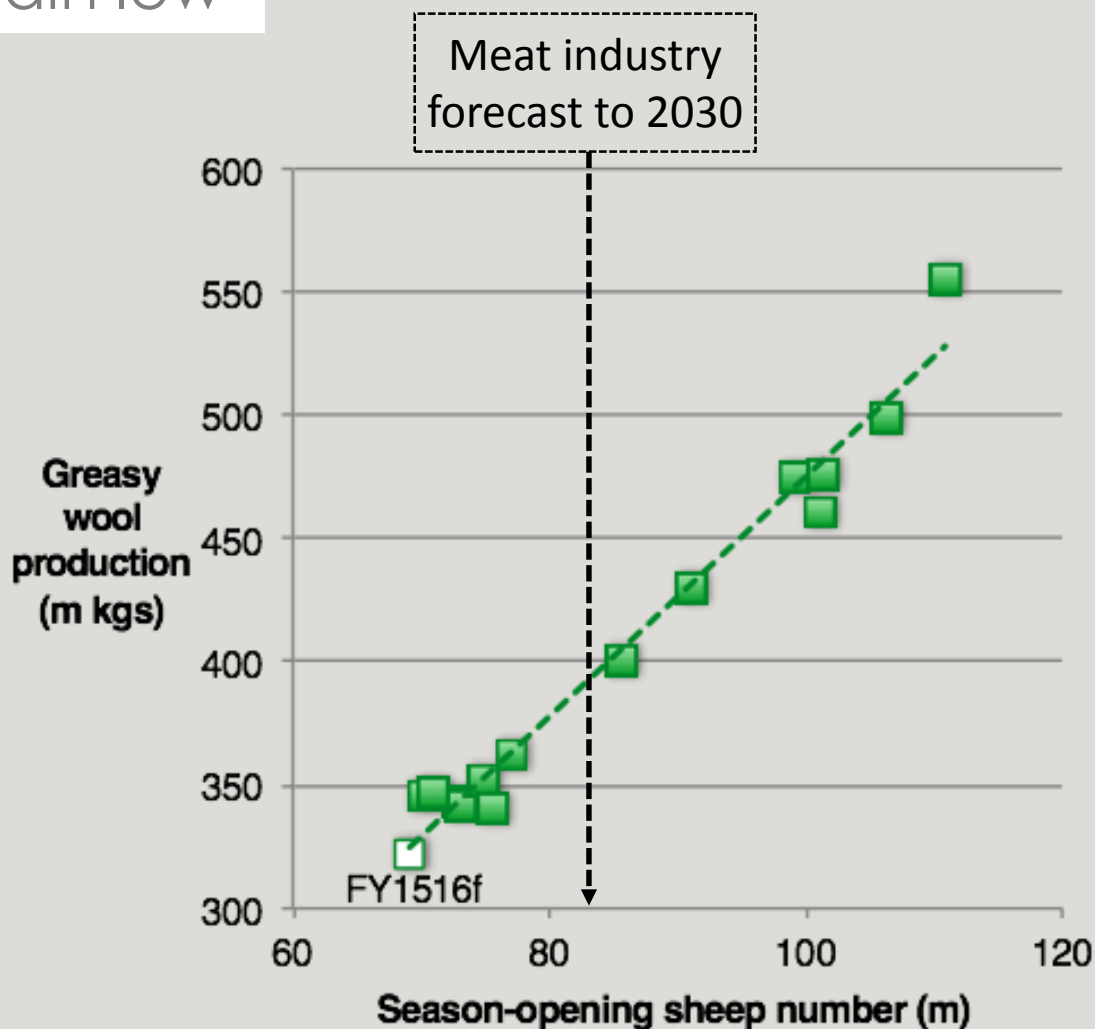
How do we continue to drive value growth?

Ewe numbers will remain low

If adult ewe numbers are to remain low ...
... our ability to grow industry wealth means growing productivity per ewe.

Her lifetime:

- number of lambs reared
- fleece value, especially fleece weight

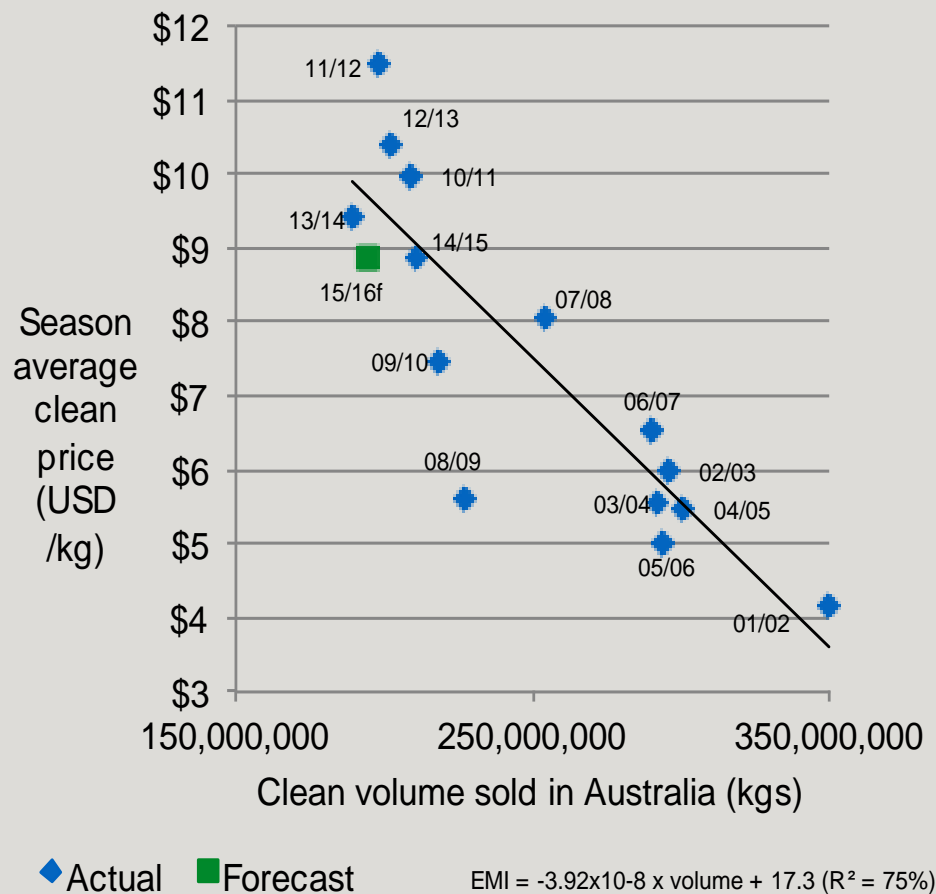


Sheepmeat and wool prices will remain high

Tight supply = high prices

1. MISP20 foreshadows red meat prices to remain level at current high values
2. Wool price will also remain high, since driven by clean volume we supply

Future GVP growth will be driven by productivity per head within a per hectare context



Sheep meat and wool: the key alignments

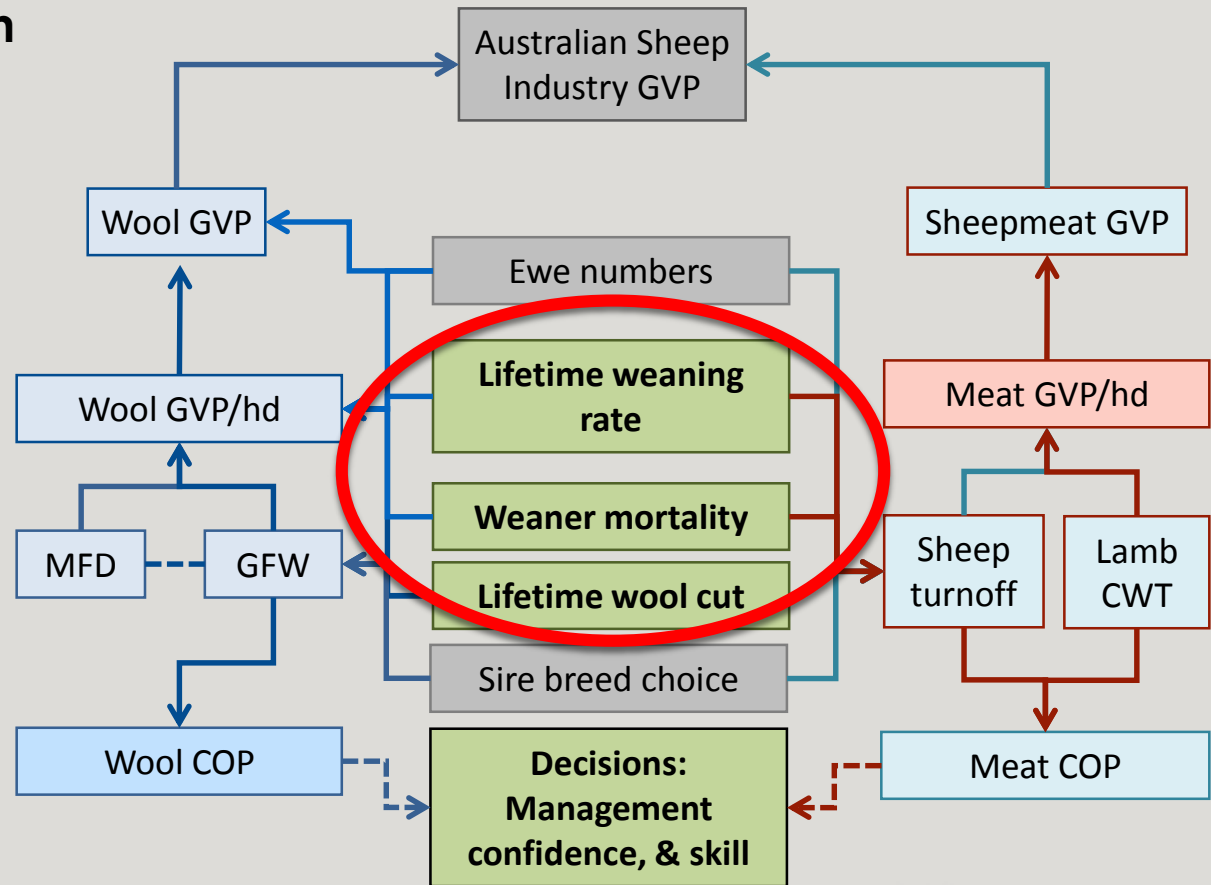
1. Increasing production efficiency in wool sheep enterprises:

- Lifetime weaning rate (lower mortality)
- Weaner mortality
- Lifetime fleece value

2. Improved stock management skill levels

3. Making life easier

4. Protecting against reputational and biosecurity risks



LTEM as a platform

LTEM is a critical foundation for industry growth.

Critical that we deepen adoption, especially in SA & WA.

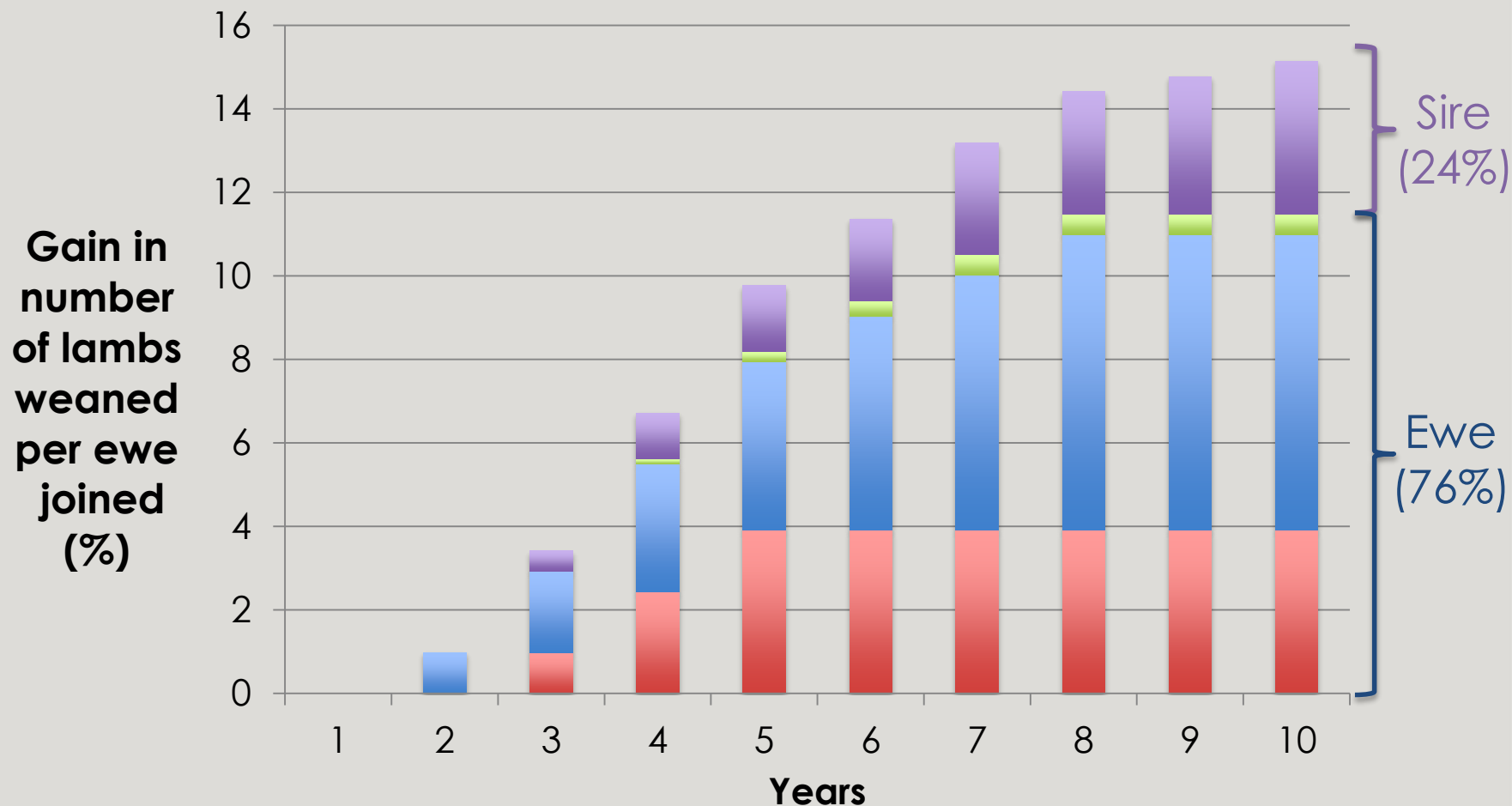
20% of national ewe flock to 50% by 2019.



Build next 'levels' for LTEM

- Lambing density project – 10 SA sites, through a partnership of SA Blueprint, AWI, JS Davies Bequest (U.Ad), Elders, Landmark
- Alumni

Culling passengers, and keeping performers



Ram Genetics

Keeping best 50% of old ewes

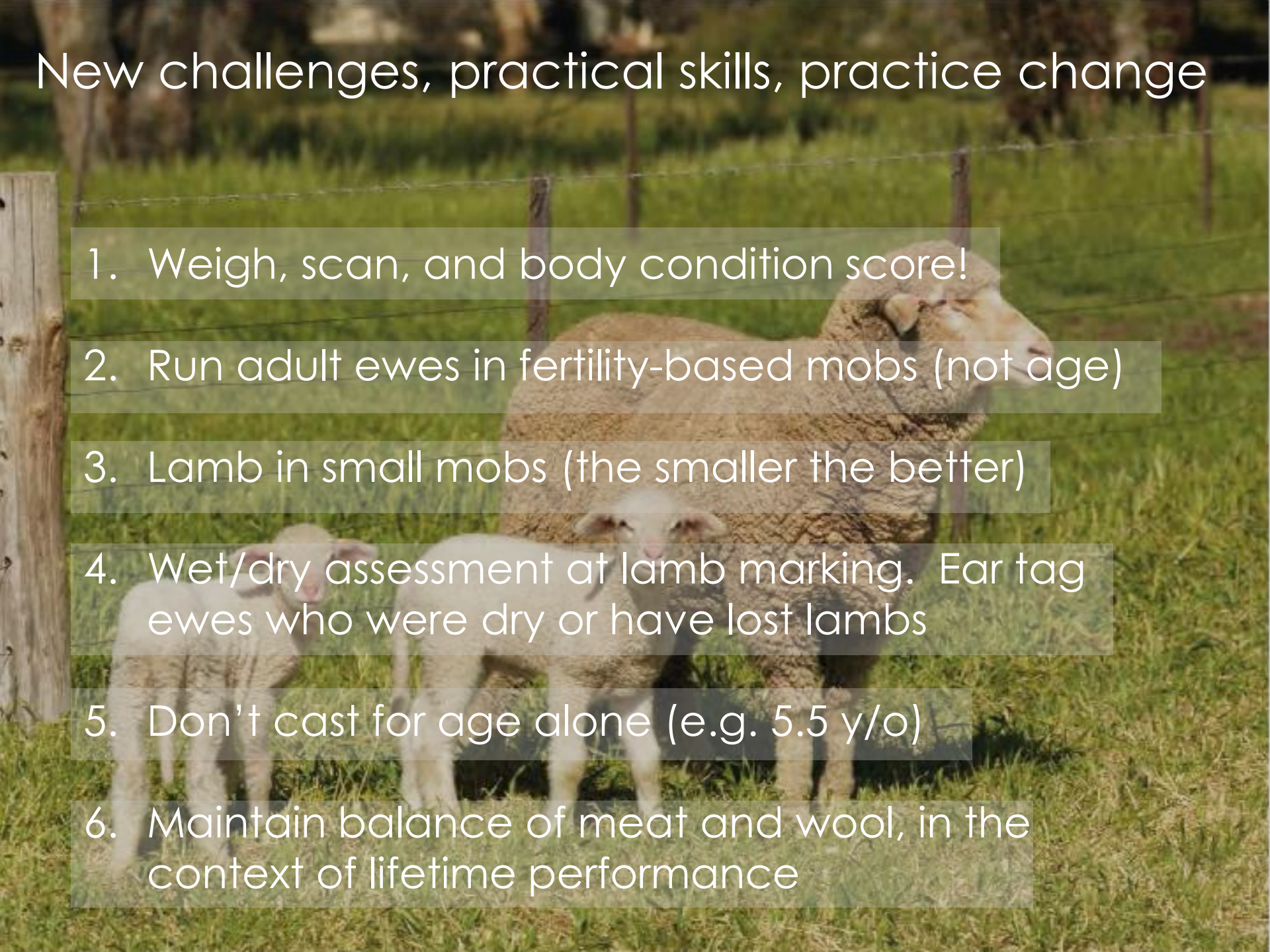
Improved ewe genetics

Culling ewes dry at 2 & 3 y/o



Australian Wool
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New challenges, practical skills, practice change

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- A photograph of a sheep and two lambs in a grassy field. The sheep is in the center, facing right, with a thick, brownish-grey woolly coat. Two lambs are in the foreground, one on the left and one in the center, both facing forward. They have lighter, fluffier wool. A wire fence is visible in the background, and the field is green with some dry patches.
1. Weigh, scan, and body condition score!
 2. Run adult ewes in fertility-based mobs (not age)
 3. Lamb in small mobs (the smaller the better)
 4. Wet/dry assessment at lamb marking. Ear tag ewes who were dry or have lost lambs
 5. Don't cast for age alone (e.g. 5.5 y/o)
 6. Maintain balance of meat and wool, in the context of lifetime performance

AWI & Practice change

45% of AWI investment in R&D is in 'Extension'

This is because R&D investment which does not need lead to change is wasted



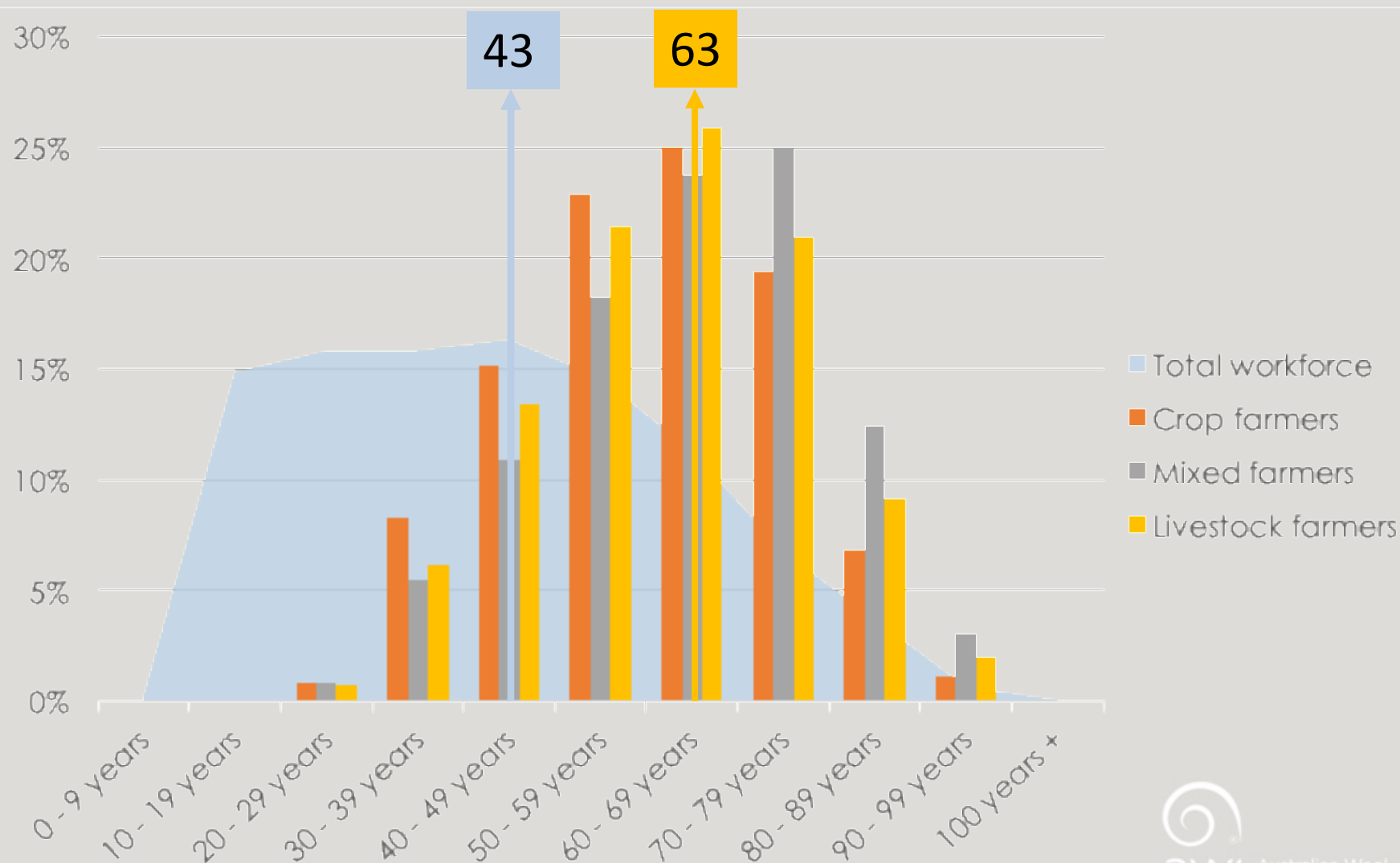
Sheep handling Forum – Campbell Town, TAS



2014 Breeding Leadership Course,
Clare, SA

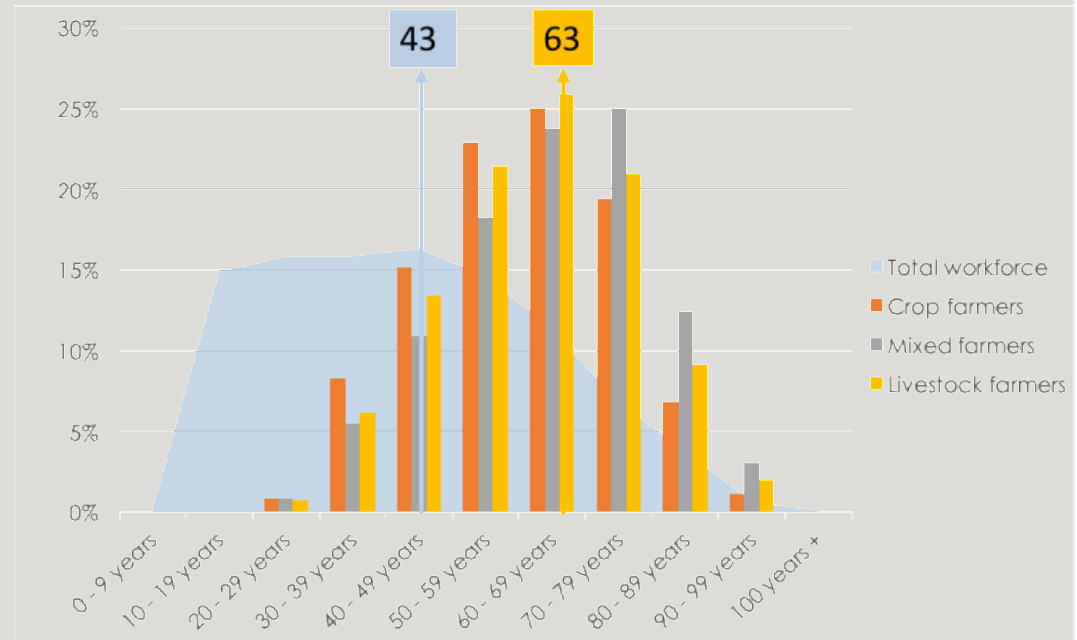
Our critical challenge is to reach out to, and connect with, the next generation of wool investors

Our ageing farmer population



Some implications

1. Livestock farmers average 20 years older than the overall workforce (63 vs 43 years of age)
2. They work an average 49 hours of work per week
3. On average, they manage \$3.3m of business assets
4. Over the coming decade, retirements will lead to...
 - Around \$400 billion in asset transfers required
 - Recruitment challenges

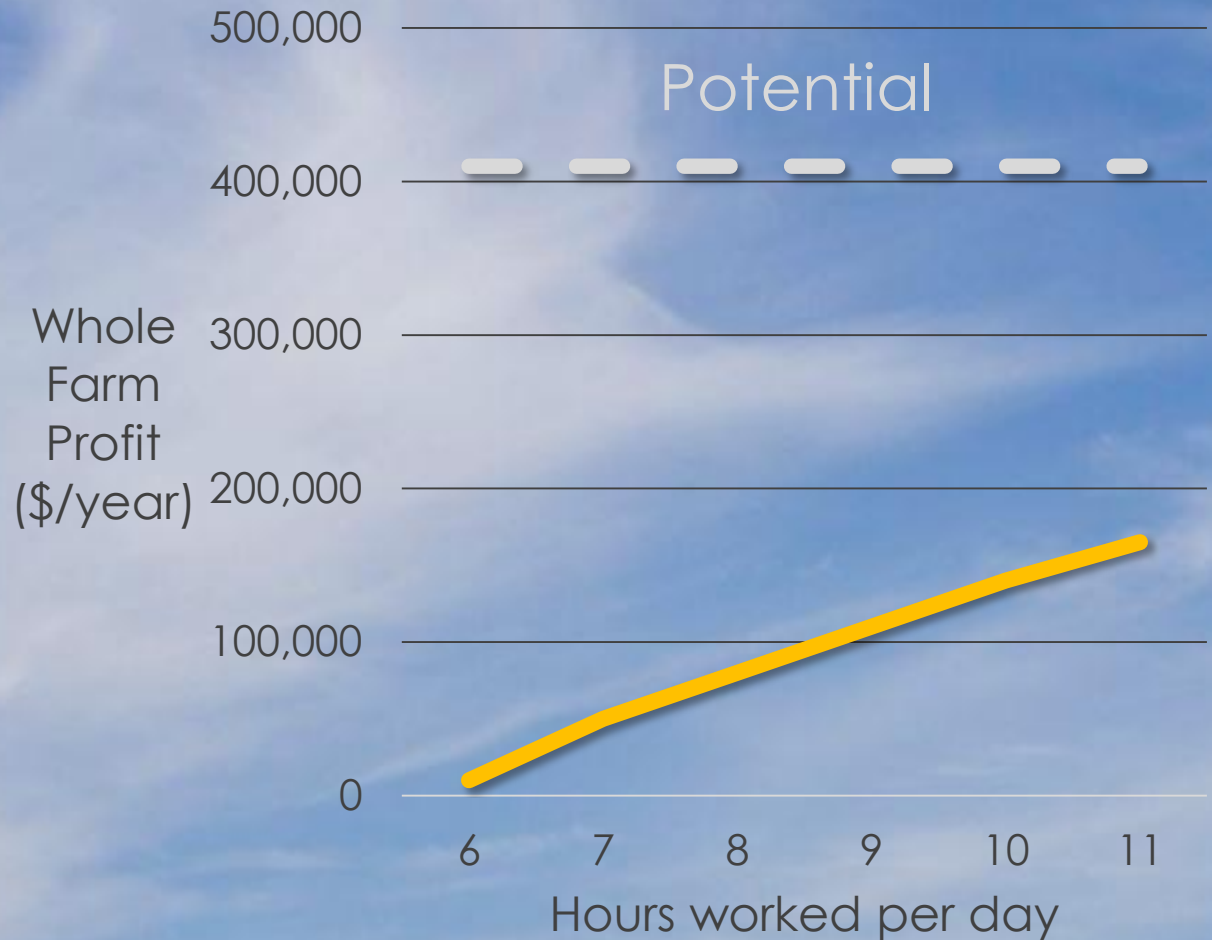


Farming easier is becoming our greatest challenge

Labour is a
constraint to
profit

Labour saving
devices are
becoming
critical

Automation of
operation is a
opportunity



Farm automation innovation

Smart ear tags:

- maternal pedigree (mothering up)
- behaviours (onset of lambing)
- localisation within paddock (theft, dog alerts, grazing)

Farm trials start later this month



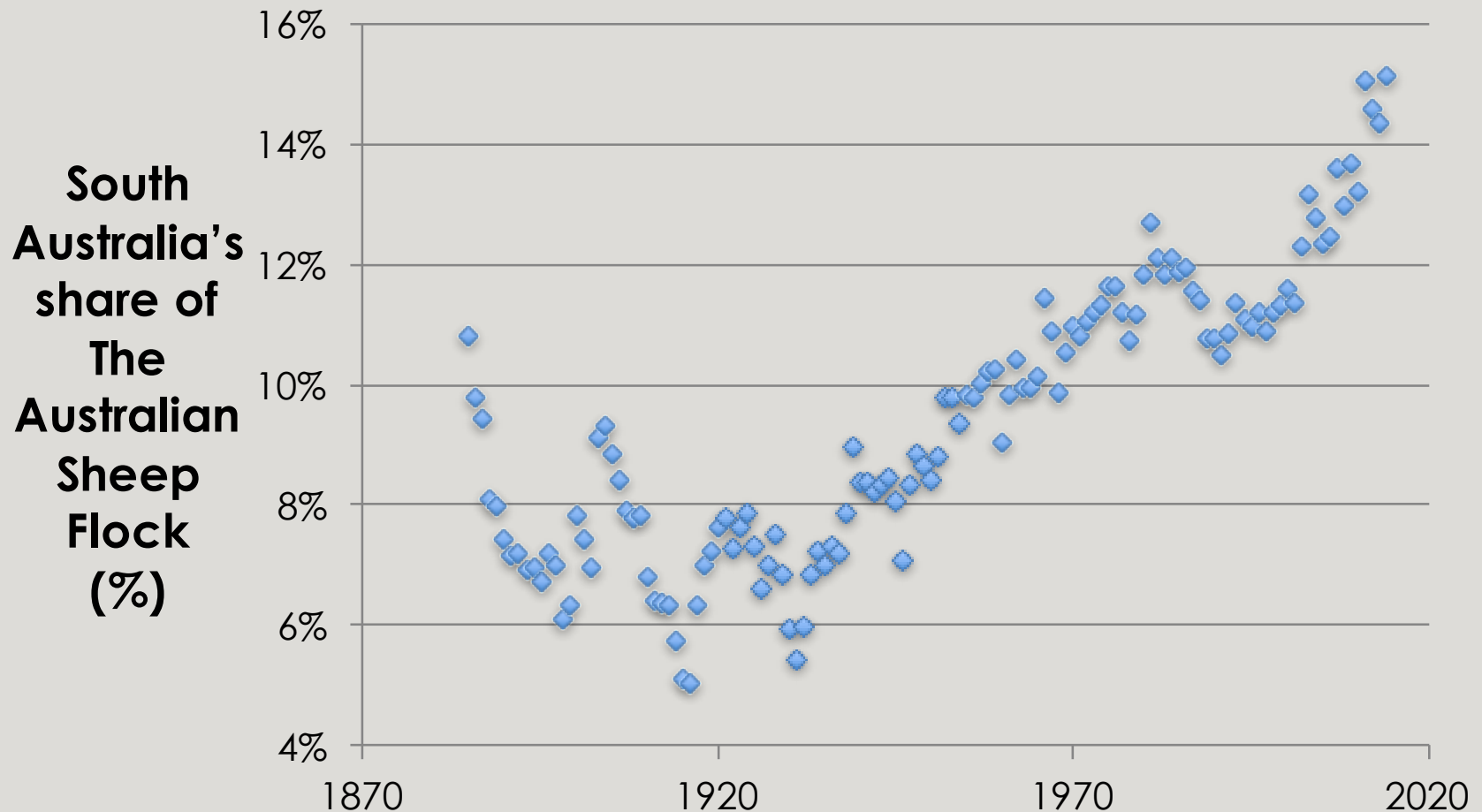
Hardware components: smart tag & sensor node

- smart tag to broadcast unique ID and sensor data
- sensor node to read broadcasted ID, RSSI & sensor data, compress and send to server along with additional local sensor values



A major challenge, but
also opportunity

South Australia's role is critical



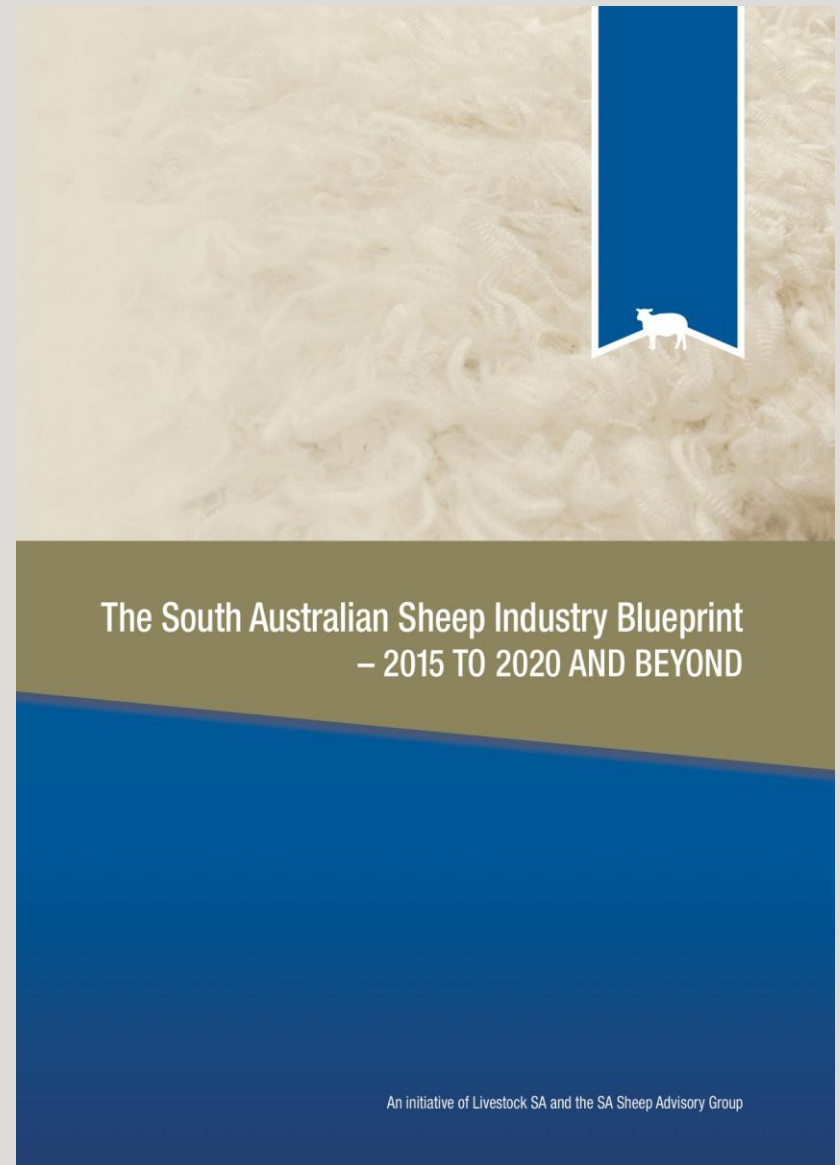
Roughly 1-in-7 of Australia's sheep are in SA, and rising

South Australian Sheep Industry Blueprint

An excellent initiative

A platform for partnership
and co-investment

A model for other states
and territories



Vibrant, Productive & Wool

A scenic landscape photograph of a green field with two people running, under a blue sky with clouds and a bright sun.

We have the foundations built for wonderful decades

Yet 20% value growth by 2020 requires wide-scale
practice change, and strong partnerships

These will be key to managing the demographics of our
young growers, and our young ewes



Thank you

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