South Australia’s Livestock Conference

Richard Norton
Industry structure
**Cattle levy allocation**

**GRASSFED**
- National Residue Survey ($0.29)
- MLA (R&D) ($0.92)
- MLA (Marketing) ($3.66)
- Animal Health Australia ($0.13)

**GRAINFED**
- National Residue Survey ($0.29)
- MLA (R&D) ($1.50)
- MLA (Marketing) ($3.08)
- Animal Health Australia ($0.13)

**TOTAL LEVY $5**
Per head, per transaction
MDC accelerates innovation by attracting commercial investment and matching this with Government funding.

- NLIS/ NVD /eNVD
- Livestock Production Assurance
- Livestock Data Link
- Big data
Projected Investment 2017-18 by pillar

1. Consumer and community support: $37.8m
2. Market growth and diversification: $67.7m
3. Supply chain efficiency and integrity: $47.8m
4. Productivity and profitability: $68.1m
5. Leadership and collaborative culture: $24.4m
6. Stakeholder engagement: $8.2m
7. Corporate services, levy collection and AUS-MEAT: $13.2m

Total investment $267.3 million

Total may not add up due to rounding.
Projected 2017-18 investment by funding source

Total investment $267.3 million  Total may not add up due to rounding.
Projected 2017-18 investment by program

- Animal health and welfare: $13.0m
- Domestic markets: $26.2m
- International markets: $44.4m
- Eating quality: $8.4m
- Environmental sustainability: $11.5m
- Integrity systems: $15.9m
- Objective measurement: $20.0m
- Producer adoption: $13.5m
- Product and packaging innovation: $8.3m
- Value chain information and efficiency: $4.3m
- Productivity (off-farm): $19.7m
- Productivity (on-farm): $37.8m
- Capability building: $21.0m
- Communication: $9.7m
- Corporate services: $13.5m

Total investment $267.3 million  Total may not add up due to rounding.
Corporate services, levy management & AUS-MEAT
Projected 2017-18 investment by funding source

Sheep levies | Grainfed cattle levies | Grassfed cattle levies | Goat levies | Government | External

$2.9m | $0.8m | $4.7m | $0.1m | $2.2m | $2.5m

Total investment $13.2 million Total may not add up due to rounding.
MLA highlights – 2016/17

Grab-and-go beef
Hot, cooked beef products were rolled out to 900 Woolworths stores nationally

Global branding
Awareness of the True Aussie brand increased in Japan and Korea

Beef automation
Beef automation technologies advanced to working prototypes

New research
1st round of MLA’s R&D consultation process was completed, with 18 new R&D projects funded

MLA review
A key finding was for every $1 invested in MLA’s programs, industry is recouping $6.20
$3m to deliver health check on SA sheep flock

- New project - *reducing the financial impact of endemic conditions in sheep*.
- Funding through the MDC and SA Sheep Industry Fund.
- Sheep health issues to be addressed such as grass seeds, pneumonia, sheep measles, rib fractures and arthritis.
- These health issues cost Australian producers about **$140m** in lost production.
- Will cover 80% of sheep processed in SA, with data fed back to producers.
Tedera

- Forage from Canary Islands
- Perennial legume
- Adapted Mediterranean-like climates
- 300-800mm AAR
- Quality green forage all year round
- Retains green leaf (in dry)
- Summer production
- More tolerant to acid soils than lucerne
- 5 + years of R&D
Land clearing rates in Queensland on par with Brazil, new study finds

Sustainability group to drive industry plan

I went vegan for week and it planted a seed

Where To Eat Meat, Guilt-Free

Celebrate no-meat day

Court ruling is a first step toward controlling air pollution from livestock farms

Global warming presents rising cost to Australia’s livestock industries, vets told

Power-hungry diets — what meat really means

Anti-meat line laid bare

Farmers call for climate action
Red meat – big data
myMLA – a personalised online dashboard
Why are we doing Big Data and Objective Measures?

- Meat Industry Strategic Plan
- ACCC market study recommended more objective measures
- Levy Payer Feedback – “Transparency of payment”
- Research started today – delivered in 5 years
$3m to deliver health check on SA sheep flock

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Why is data important?

Data drives efficiencies:
- more value from the same environmental resources
- data delivers a better price
- price drives change

Price is driven by consumer demand
DNA data

• Highly accurate genomic evaluations for any breed/cross/composite
  – for all traits contributing to profit
  – increasing use of genomics for management decisions
• At low cost
• And high speed – crush side genotyping
## Live animal measurement R&D update (all species)

### LIVE ATTRIBUTES (SINGLE)

<table>
<thead>
<tr>
<th>DEXA Live</th>
<th>CT Live</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Program 1 – Using existing carcase DEXA solutions for live animal LMY</td>
<td>• Program 2 – Using equine CT to measure marbling and health attributes</td>
</tr>
<tr>
<td>• 2017/18 evaluation R&amp;E</td>
<td>• A working prototype to be delivered to Australia early 2018 for evaluation.</td>
</tr>
<tr>
<td></td>
<td>• Will require the development of a carbon fibre crush section.</td>
</tr>
</tbody>
</table>

### LIVE ATTRIBUTES (MOB)

<table>
<thead>
<tr>
<th>Aviation baggage CT (at scale)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Continuous race and or truck scale CT.</td>
<td>• Health, marbling and LMY measurements.</td>
</tr>
<tr>
<td>• Small scale system delivered to Australia by end of 2017 for 2018 evaluation purposes.</td>
<td>• Small scale system delivered to Australia by end of 2017 for 2018 evaluation purposes.</td>
</tr>
</tbody>
</table>
On-Farm Yield Prediction

- 3D Red, Green, Blue, + Depth (RGBD - xbox) camera technology
- Trialed to show great ability to assess body condition score
**Dual Energy X-ray Absorptiometry (DEXA)**

**DEXA data by carcase:**
- saleable or lean meat yield
- bone
- fat

**OCM data by carcase:**
- eye muscle
- colour meat/fat
- IMF

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**DEXA**  
**Automation cut lines**  
**Carcass cut out calculator**
DEXA – technology, algorithm and LMY correlation

\[(x + a)^n = \sum_{k=0}^{n} \binom{n}{k} x^k a^{n-k}\]

Endorsed by whole of industry
What about quality? (NMR/MRI)
$28 million for new research into the objective measurement of eating quality

Utilising CT scanning for the red meat industry to generate an increased amount of objective measurement data for

- animal health disease identification
- eating quality
- advancing boning automation
- the scanning of live animals
Meat Standards Australia

- Almost 40% of cattle slaughter has MSA grading information collected
- Over 54 million pieces of information collected in 2015/16
- Over 2.8 million MSA compliant animals received an MSA Index value

Illustration for example purposes only
Using MSA data to benchmark eating quality

Biennial Australian Beef Eating Quality Audit released to:

• measure current performance
• identify areas for improvement
• identify the key drivers of eating quality and compliance
• benchmark amongst others in different production categories.
myMSA feedback system

Allows real-time carcase feedback and benchmarking for 47,000 producers

- MSA compliance is currently worth ~$60/head (price differential to non-MSA cattle)
- In 2015/16, 7.3% MSA non-compliance = approx $13.5 million lost opportunity
What is Livestock Data Link?

- Centralised on-line feedback system
- Identifies non-compliant carcases and the associated costs
- Allows performance benchmarking
- Will include some sheep animal health data
- Includes NLIS and MSA information
- Links to ‘Solutions to Feedback’
- Turns complex information into simple decision making through analysis and reporting
How do I measure up?

Carcase Analysis Report

Grid compliance to HSCW (kg) and Fat

Gender Breakdown

<table>
<thead>
<tr>
<th>Compliance by Gender</th>
<th>Male</th>
<th>Female</th>
<th>Unknown</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. Head</td>
<td>576</td>
<td>296</td>
<td>0</td>
<td>872</td>
</tr>
<tr>
<td>No. Condemned</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total HSCW (kg)</td>
<td>202,635.5</td>
<td>84,729.0</td>
<td>287,364.5</td>
<td></td>
</tr>
<tr>
<td>Max HSCW (kg)</td>
<td>502.5</td>
<td>433.0</td>
<td>502.5</td>
<td></td>
</tr>
<tr>
<td>Min HSCW (kg)</td>
<td>235.0</td>
<td>166.5</td>
<td>166.5</td>
<td></td>
</tr>
<tr>
<td>Avg HSCW (kg)</td>
<td>351.8</td>
<td>286.2</td>
<td>329.5</td>
<td></td>
</tr>
<tr>
<td>Max P8 Fat Depth (mm)</td>
<td>42.0</td>
<td>41.0</td>
<td>42.0</td>
<td></td>
</tr>
<tr>
<td>Min P8 Fat Depth (mm)</td>
<td>1.0</td>
<td>3.0</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>Avg P8 Fat Depth (mm)</td>
<td>13.9</td>
<td>15.9</td>
<td>14.6</td>
<td></td>
</tr>
<tr>
<td>Non-compliance count</td>
<td>430</td>
<td>127</td>
<td>557</td>
<td></td>
</tr>
<tr>
<td>Non-compliance cost</td>
<td>$38,626.78</td>
<td>$8,089.78</td>
<td>$46,716.55</td>
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<tr>
<td>Non-compliance cost/</td>
<td>$89.83</td>
<td>$63.70</td>
<td>$83.87</td>
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</tr>
</tbody>
</table>
Consumer insights

- Macro trends
- Affordability
- Economic drivers
- Demographics
- Attitudes
- Behaviours
- Trends
- Regulatory environment

Across 100 countries and markets
Big data

Red Meat Value Chain Data

The current ‘silos’ of data:

• in the animal
• on-farm
• market reporting
• on the carcase
• carcase attributes
• eating quality
• processing requirements
• consumer drivers
• consumer feedback
We have started the discussion!

Three principals agreed within industry:
• common data language
• share data
• cloud based storage for ease of ‘plug in applications’

Future R&D models must sign on to data sharing.

Existing data bases are being merged.
myMLA – a personalised online dashboard
Thank you – any questions?

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