MLA’s Perspective on Clean, Green and Ethical Sheepmeat Production

Rob Banks
Manager, On-Farm R&D Southern Australia
MLA
Key Topics:

- Clean, green and ethical – what is it, and does it matter
- On-farm R&D
- Current practice across industry
- Prospects and challenges
Clean, green and ethical:

• Integrity, integrity, integrity:
  – Always meet or exceed the customer’s expectations
  – Do nothing to cause unease in the customer’s mind (or that of the community)
Clean, green and ethical:

• Integrity, integrity, integrity:
  – Always meet or exceed the customer’s expectations
  – Do nothing to cause unease in the customer’s mind

• Does it matter?
  – Customers have choice – at all points in the chain
  – As choice increases, “intangibles” matter more and more
  – For meat, differentiation depends on “intangibles”
  – Customer satisfaction is the best guarantee of future sales
Clean, green and ethical:

• On-Farm R&D:
  – Product characteristics
  – Impact of production systems on environment
  – Animal welfare
  – Accessibility to knowledge, skills and opportunity
Product characteristics:

- **1st generation – 1985 to 2005:**
  - More lean meat, less fat
  - Trim Lamb, Fresh Australian Range Lamb, Prime Lamb Key Program
  - Spectacular success:
    - Massive growth in exports
    - Massive increase in real price
    - On-farm GVP from $380m to $1,400m in 15 years
    - Supply tight because demand keeps growing
Product characteristics:

• 2nd generation – 2005 to 2025:
  – More lean meat,
    ▪ Distribution between tissues
  – Designed and controlled fat
    ▪ Omega-3, unsaturated, IMF, branched chains …
  – Muscle fibre profile
  – Human nutritional composition
    ▪ Iron, Zinc, other minerals, vitamins
  – Think of designer wines …
Impact on environment:

- Use and cycling of nutrients
- Water usage
- Methane production
- Biodiversity impact of production systems
- Processing effluent, energy use
- Chemical residue in product, in environment
Impact on environment:

- Sustainable Grazing Systems (SGS)
  - The ‘grand-daddy’ of all production/environment R, D & E programs in Australia – started in mid 1990s
  - Mix of:
    - applied R&D
    - on-farm learning
    - Producer network
  - “Descendants” include SGSL, Land, Water and Wool, Evergraze, Enrich, Grain and Graze, FFI, post-G&G
Impact on environment:

- Grain and Graze:
  - Impact on mixed farming systems
  - Between-enterprise nutrient transfer
  - Reduction in chemical use in weed control
  - Working with 10 CMAs & 50 other organisations
Impact on environment:

• **Grain and Graze:**
  - Impact on mixed farming systems
  - Between-enterprise nutrient transfer
  - Reduction in chemical use in weed control
  - Working with 10 CMAs & 50 other organisations

• **Evergraze:**
  - Aiming for increased production per ha, coupled with reduced recharge
  - Management of ground water
  - Focus on use of perennials
  - Right plant, right place (different plants for different parts of the landscape)
  - Clear evidence of improved gross margins despite drought
Impact on environment:

- **Lifecycle Analysis:**
  - Aiming to accurately estimate nutrient consumption
  - Counter to “50,000l of water per kg meat”
  - Underpinning for accurate (trustworthy) nutrient
  - Likely soon piloting on-farm monitoring systems

- **Processing:**
  - Energy and water use
  - Nutrient dispersal
Animal Welfare:

- Objective measurement of current practice
  - Challenge to identify measures
  - Challenge to define “pain”, discomfort, well-being

- Transport
  - Impact of time, water access, feed access, on a range of welfare attributes
  - Challenge from EU expectations (<3-6 hours v 24 or 48 hrs)
  - Live export!

- On-farm mortality
  - lambs and adult sheep
  - Animals maintained in acceptable body condition score

- Community attitudes
Access to knowledge, skills, opportunity:

- “Knowledge is power” Francis Bacon (1600’s)

- R&D is knowledge generation

- Most R&D is effective in generating knowledge
  - But adoption varies widely
  - Different producers have different aims on TBL continuum
  - All producers have impact on environment, animal welfare, industry credibility
Knowledge makes a difference:

Farm Gross Income v Total Factor Productivity

\[ y = 129.27x - 137.1 \]

\[ R^2 = 0.9087 \]
Knowledge makes a difference:

Farm Gross Income v Total Factor Productivity

\[ y = 129.27x - 137.1 \]

\[ R^2 = 0.9087 \]

Return on Investment v Total Factor Productivity

\[ y = 4.8841x - 7.6612 \]

\[ R^2 = 0.9154 \]
Access to knowledge, skills, opportunity:

- All service organisations – but especially publicly-funded ones - must meet needs of mainstream plus innovators

- Integrity challenge means balancing equity and efficiency, innovation and diversity

- Maximising direct producer involvement in R&D is good for knowledge, innovation, ethics, service integrity
MLA On-Farm R&D and CGE:

- Efficient resource use
- Right product
- Practicality
- Profit
- Neutral/+ve for environment
- Positive welfare

Neutral/+ve for environment

Positive welfare

Practicality

Profit

Efficient resource use

Right product
MLA On-Farm R&D and CGE:

The “sweet spot”
- producers have effective choice and can act with integrity

Efficient

Neutral/+ve for environment

Right product

Practicality

Profit
MLA On-Farm R&D and CGE:

• Integrity, integrity, integrity

• Farming for our grand-children and great-grand-children

• Managing production, environment, welfare, ethics demands

Right Knowledge coupled with Right Attitude