

AgResearch 2020 Science: Meat Strategy

Jimmy Suttie, Meat Industry Workshop,
MIRINZ
October 21st, 2008



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Farming, Food and Health. **First**

Te Ahuwhenua, Te Kai me te Whai Ora. Tuatahi

Contents

Generic Slide

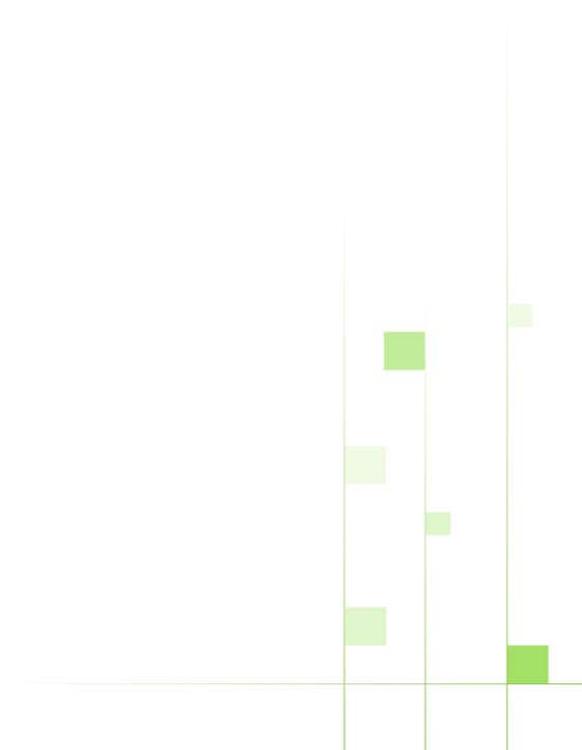
2020 Process

2020 Scenario

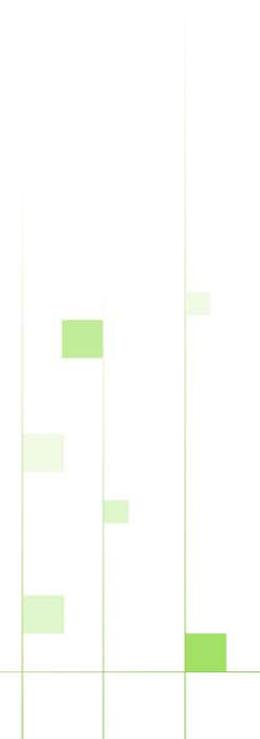
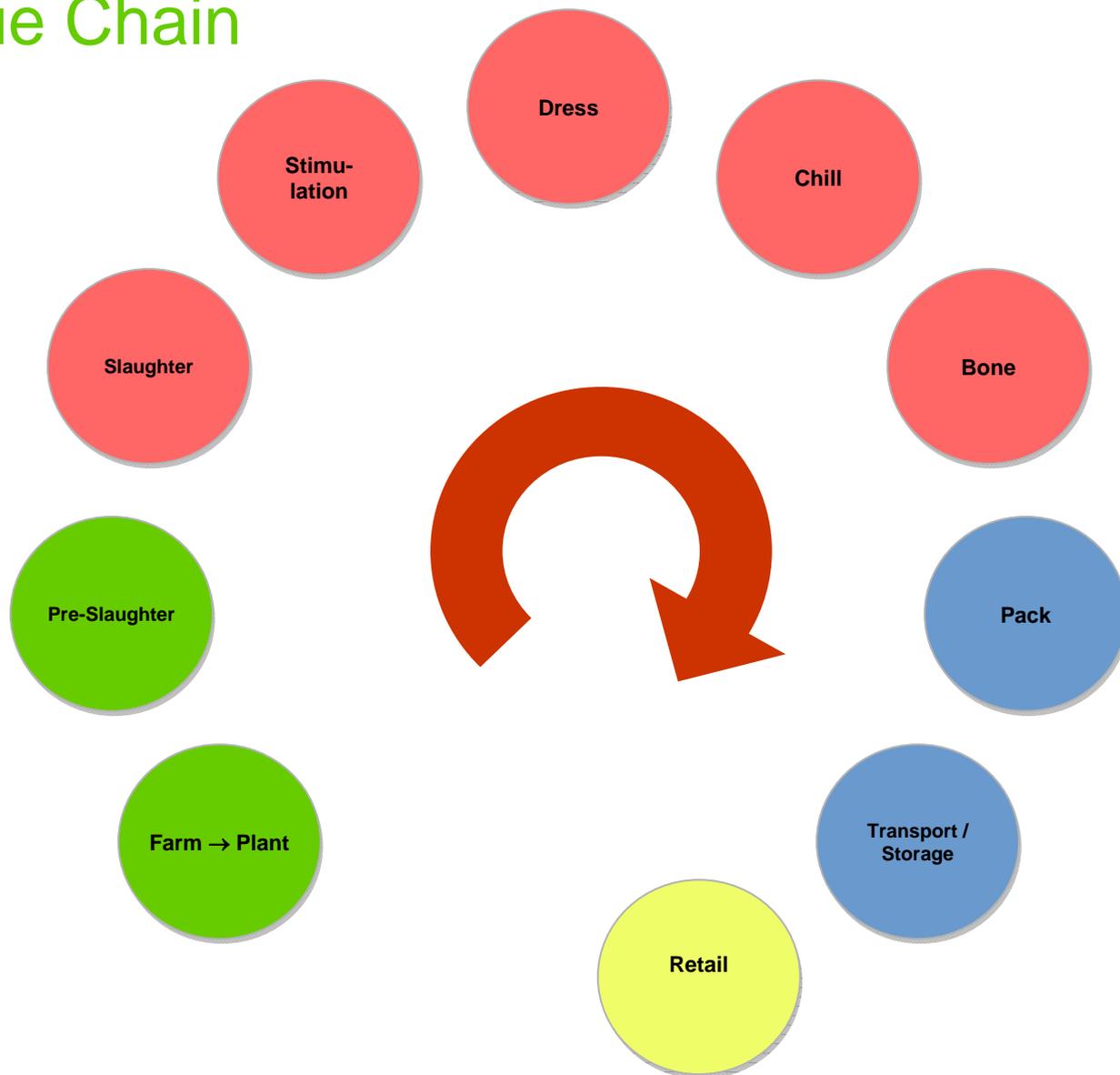
Objectives

Themes

Desired outcomes

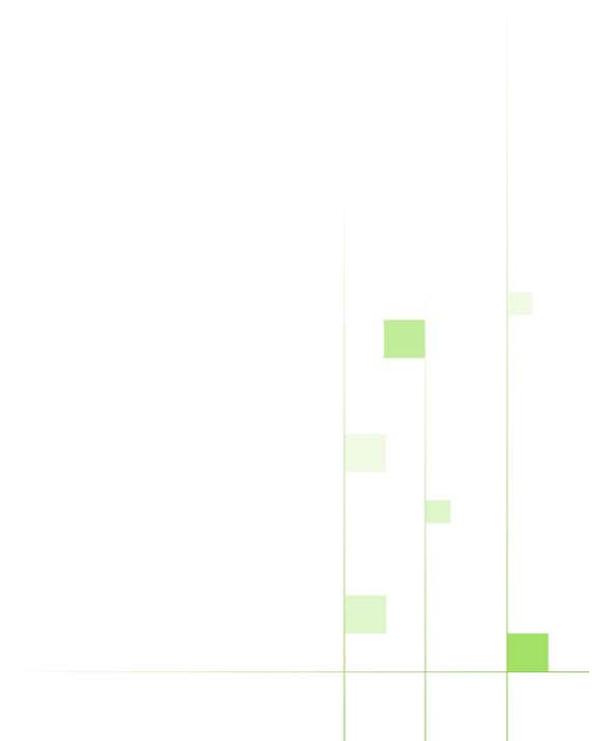


All Value Chain



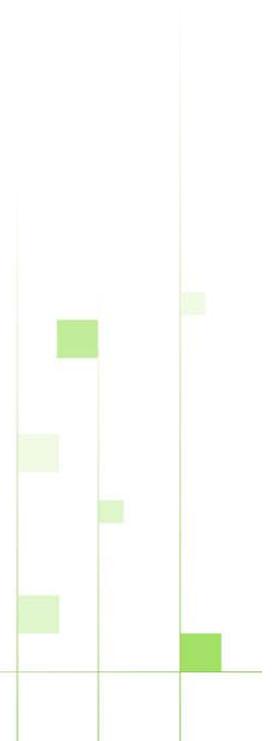
2020 Process

- 5 Big Ideas
 - Future dairy industry
 - **Future meat** & fibre industry
 - Pestilence-free agriculture
 - Agriculture & society
 - Opportunities beyond food & fibre
- Committee
 - Jimmy Suttie (Chair)
 - Margot Buick
 - Warren McNabb
 - Syd Easton
 - Greg Lambert
 - Anette Becher
 - Theresa Wilson
 - Travis Glare



2020 Process (continued)

- Situation analysis
- Vision
- Threats and Opportunities
- Objectives
- Themes
- Two rounds of internal consultation
- (external consultation)
- (implementation)
- (6 monthly review)



2020 Scenario



Threats (abbreviated)

- Changing land use in New Zealand. Meat farming may be uneconomic due to high land value high opportunity cost of investment and decreased freedom to operate.
- Higher costs of production from fuel, fertiliser and labour rates obviating New Zealand production advantages of an extensive farming system.
- Climate change and water quality constraints together with the consumer perception that ruminant meat and milk is produced in a way which is detrimental to the climate.
- Failure to innovate and capture innovations.
- Reduced market access due to trade barriers erected to protect food autonomy.
- Health e.g. the link between saturated fat and obesity and heart disease.

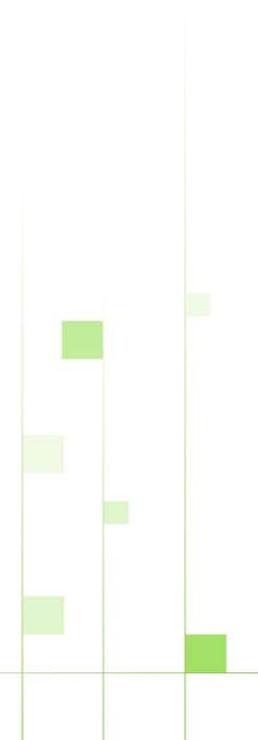


2020 Scenario (continued)



Opportunities (abbreviated)

- High world food demand particularly for sophisticated products of greater value by importers who are comfortable about building relationships with suppliers.
- Meat plus – meat as a protein source that can be integrated with other foods like soya to produce entirely new food formats; many of which could be targeted at specific age groups
- Plant and animal genomics coupled with better systems of phenotype identification.
- Improved farm systems using high technology embedded decision support products.
- Integrated business across the value chain.





Objectives



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Objective 1: Environment

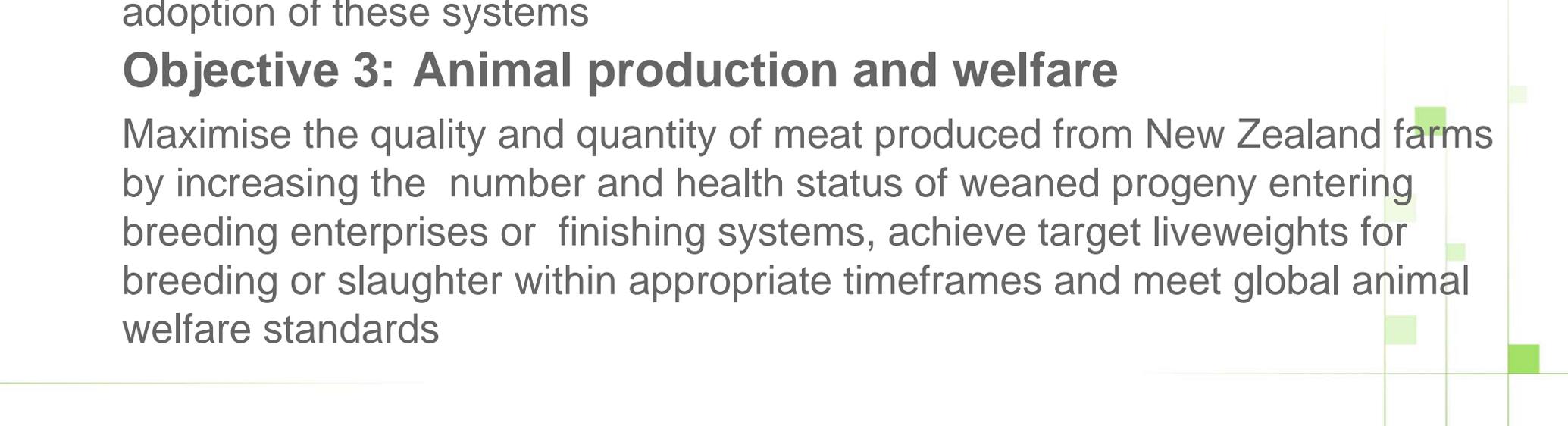
Minimise the environmental impacts of the NZ meat industries by developing and applying technologies to reduce soil erosion and improve soil quality, lower emissions, improve water quality, improve energy efficiency, improve nutrient management and increase biodiversity

Objective 2: On farm production

Maximise the sustainability of meat production by developing efficient farm systems, using appropriate information and on-farm technologies, based on feed supplies and animals tailored for the environment and ensure the adoption of these systems

Objective 3: Animal production and welfare

Maximise the quality and quantity of meat produced from New Zealand farms by increasing the number and health status of weaned progeny entering breeding enterprises or finishing systems, achieve target liveweights for breeding or slaughter within appropriate timeframes and meet global animal welfare standards

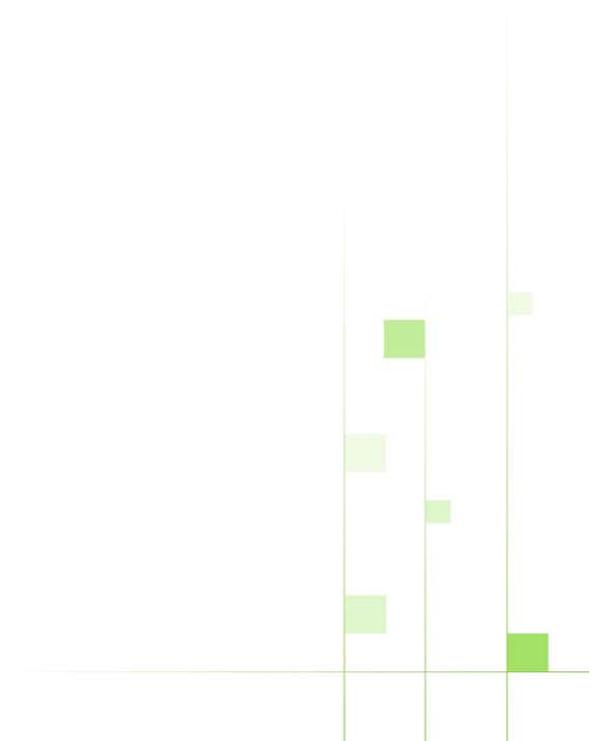


Objectives (continued)



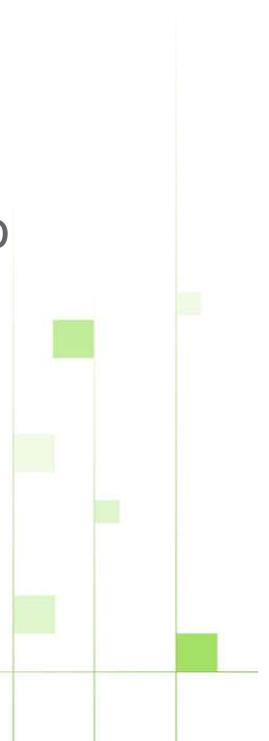
Objective 4: Processing to Marketplace: High value meat and meat products

Ensure the meat industry increases export earnings from its range of select, high-quality New Zealand-produced meat and meat products and future meat-based food ingredients that promote human well being and performance by increasing efficiency of processes, adding value to both meat muscle and other products and providing the processing industries with technologies to measure non-invasively the meat quality characteristics



Themes (Meat Product Objective Only)

- 4.1 **Delivering High Value Meat to Export Markets.** The value of NZ's meat exports will be increased by providing high quality and safe meat to discerning consumers willing to pay a premium for a guaranteed eating experience.
- 4.2 **Improving the value and reducing the cost of NZ meat.** Net export earnings for NZ meat will be increased by upgrading lower value cuts, processing meat into higher value products and reducing the cost of processing.
- 4.3 **Food Tailored to Human Requirements for Health and Wellbeing.** Move NZ meat away from a commodity focus and into branded/differentiated products and manufactured goods.
- 4.4 **Meat- and co-product-derived functional ingredients.**
- 4.5 **Traceability technology over the entire value chain**



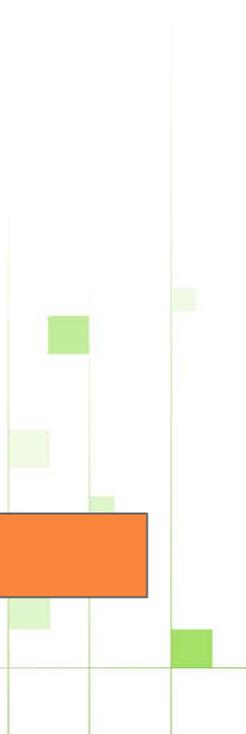
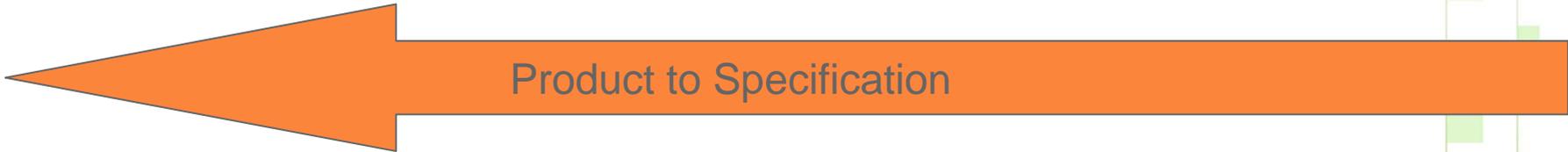
Meat Value Chain



Plate

Farm Gate

Pasture



Meat Value Chain

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Plate

Farm Gate

Pasture

Consumer

Retailer

Distributor

Processor

Finisher

Breeder

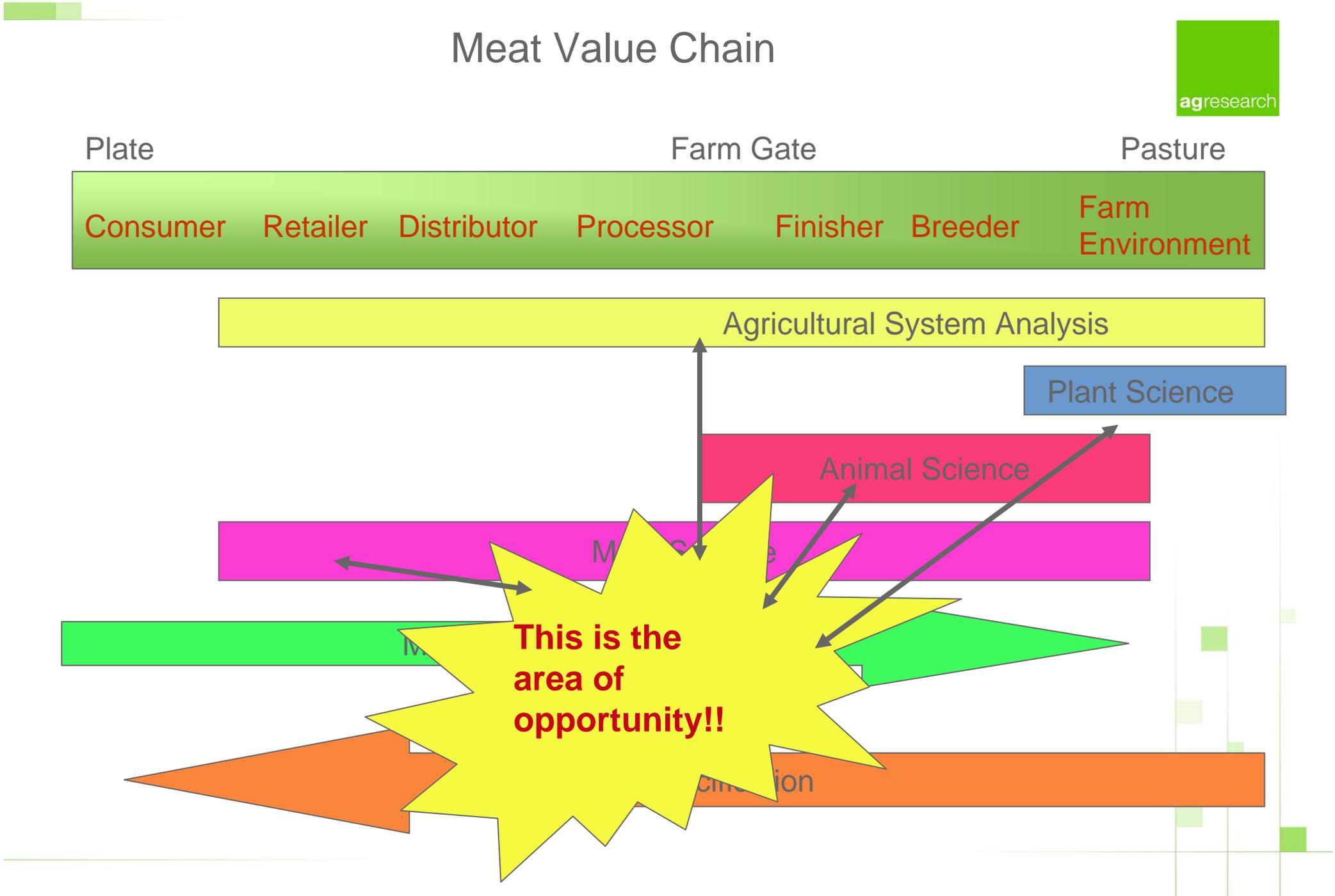
Farm
Environment

Agricultural System Analysis

Plant Science

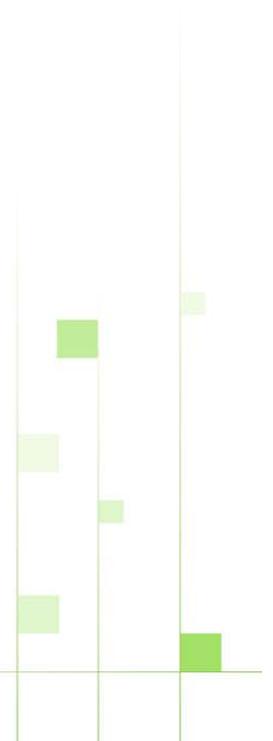
Animal Science

**This is the
area of
opportunity!!**



Desired Outcomes

- Value chain approach to meat. Plate to pasture
- Optimised land use
- Minimised inputs (water, labour, fertiliser)
- Integrated farm systems
- Climate change response
- Improved storage life of chilled meat
- Non invasive measurement techniques
- Upgrade carcass value
- Consistent meat product attributes
- New food ingredient products
- Traceability
- Health focus



Ultimate Outcome



- Production system driven by consumer preference, which fulfils sustainability and profitability drivers.
- A transformation change in integrated systems

WHILE

- Maintaining the highest welfare standards
- Mitigating climate change
- Considering the 'people' side of agriculture

