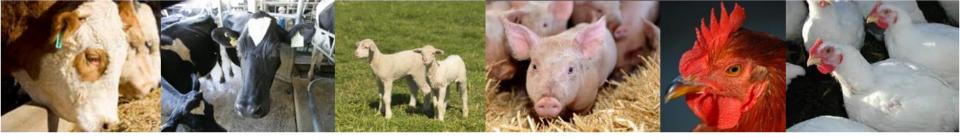
## The costs and benefits of animal welfare

What is animal welfare?

What do we mean by costs?

What do we mean by benefits?

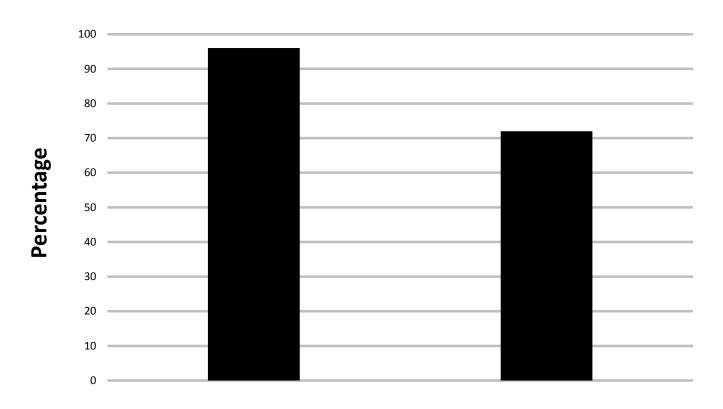


# Conceptual Frameworks for Animal Welfare

Naturalness – expression of normal or "natural" behaviours

**Biological functioning** 

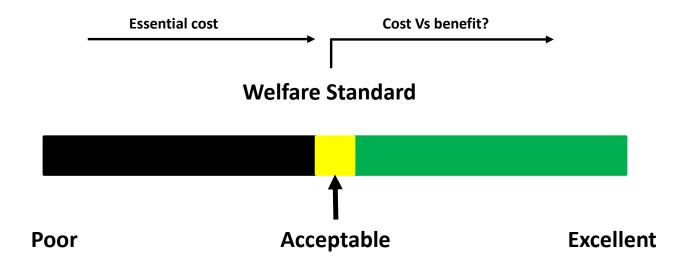
Affective states - mental functioning



Moral obligation to safeguard the welfare of animals

Concern about the way farm animals are treated

#### What is the current standard of farm animal welfare?



## Benefits

The welfare of the animal

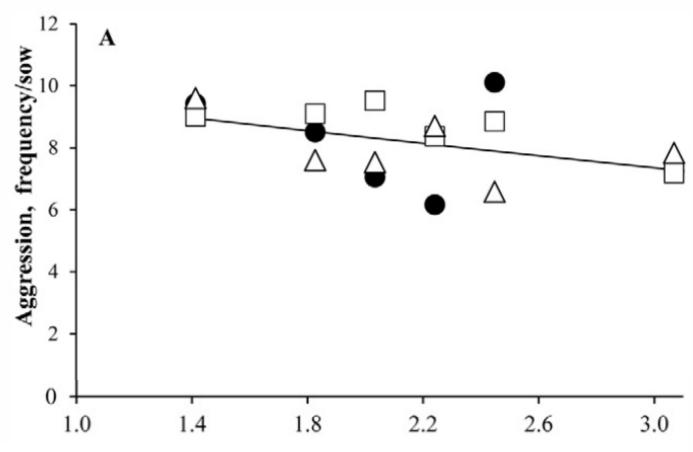
**Productivity** 

# The welfare of the animal

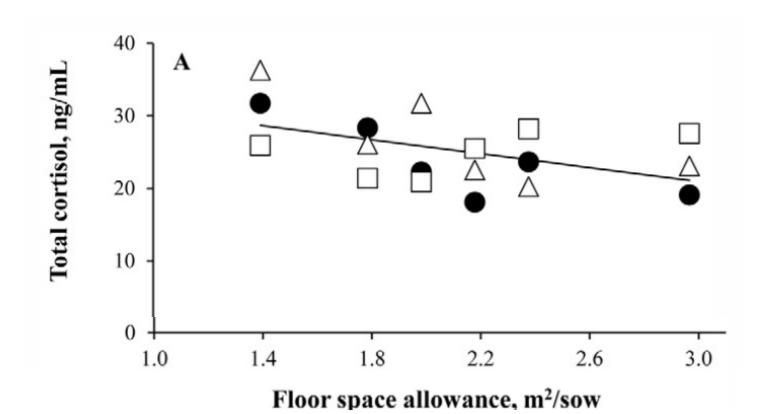




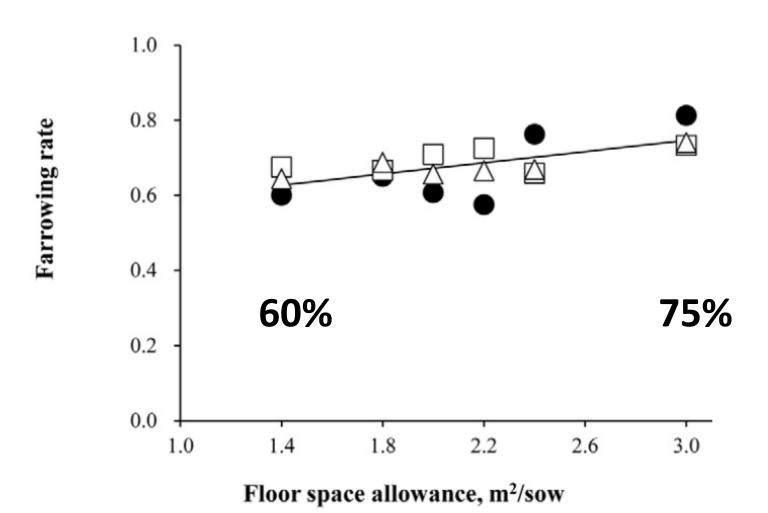
Increase the floor space per sow



Floor space allowance, m<sup>2</sup>/sow



# **Productivity**



## **FEATHER PECKING**



#### **FEATHER PECKING**

**Pain** 

**Threats** 

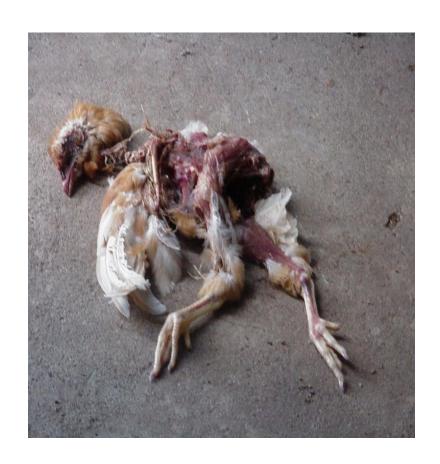
Poor feathering → Feed conversion

Cost of egg production 7-12%

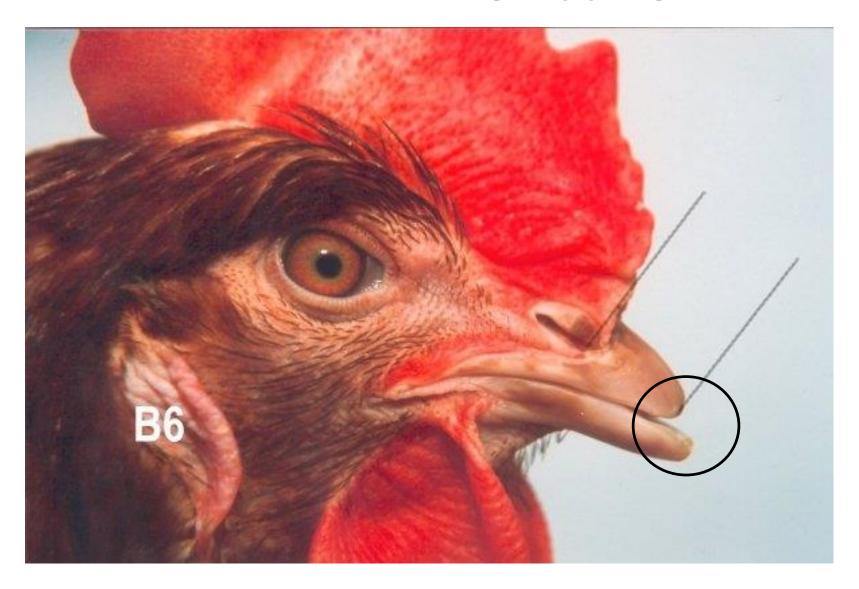
Cannibalism — Mortality
25-30% of flock

# **CANNIBALISM**





# **Beak trimming/tipping**



## **HOT BLADE BEAK TRIMMING**





### FEATHER PECKING

#### **CANNIBALISM**

**100,000** birds

\$240,000 saved

#### Conflicts between animal welfare and productivity

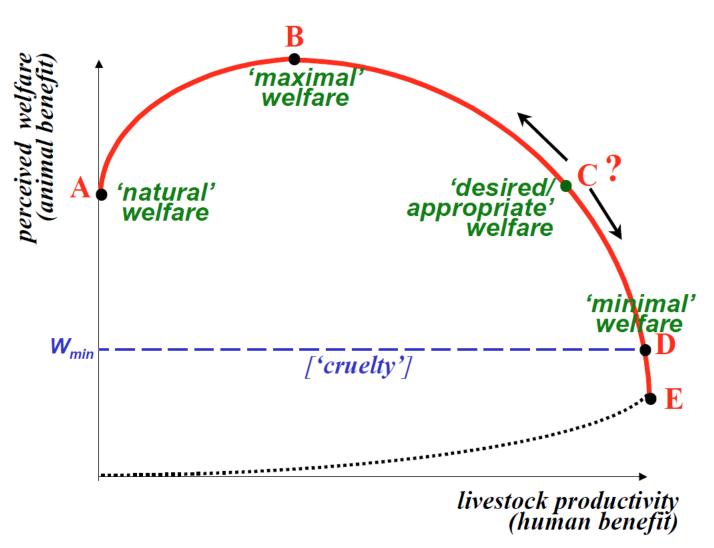


Table 1. Estimated impacts on final food prices of selected policy changes which have an animal welfare impact

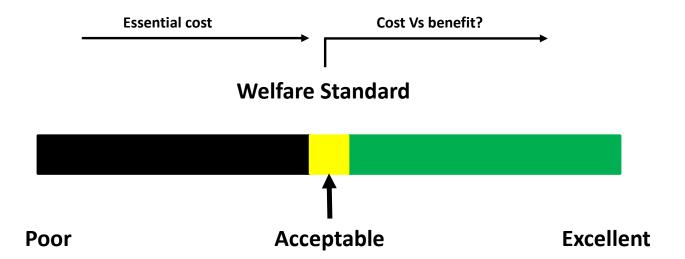
WELFARE CHANGE	Estimated effect on livestock production costs (%)	Effect at retail level		Impact on weekly food expenditures	
		Commodity	Price change (%)	Pence per person	% of total food budget
Introduce BST	-8	Liquid milk Cheese	-2.56 -1.92	-2.27 +0.27	-0.17 +0.02
Ban hormones	+4	Beef	+1.44	-0.57	-0.04
Limit transport times to 8 hours	+3	All carcase meat	+1.14	-0.47	-0.04
Ban sow tethers and crates	+5	Pork Bacon & ham	+1.9 +1.3	-0.43 +0.06	-0.03 -
Ban broiler systems	+30	Poultry meat	+13.2	+3.6	+0.27
Ban battery cages	(+28)	Eggs	+17.9	+2.87	+0.22

Any percentage rise in production cost at the farm  $\longrightarrow$  0.25% rise in retail food prices

Table 2 Mean (± SD) WTP for a one point increase in welfare (£).

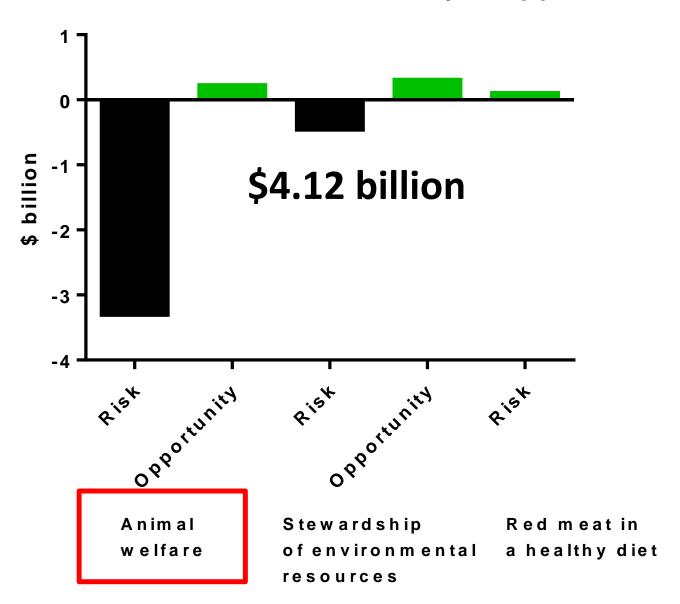
	Increase in monthly meat expenditure	Increase in annual meat expenditure	
Beef/cattle welfare	0.437 (± 0.652)	5.24	
Pork/pig welfare	0.381 (± 0.479)	4.57	
Chicken/ chicken welfare	0.425 (± 0.527)	5.10	

#### What is the standard of farm animal welfare?



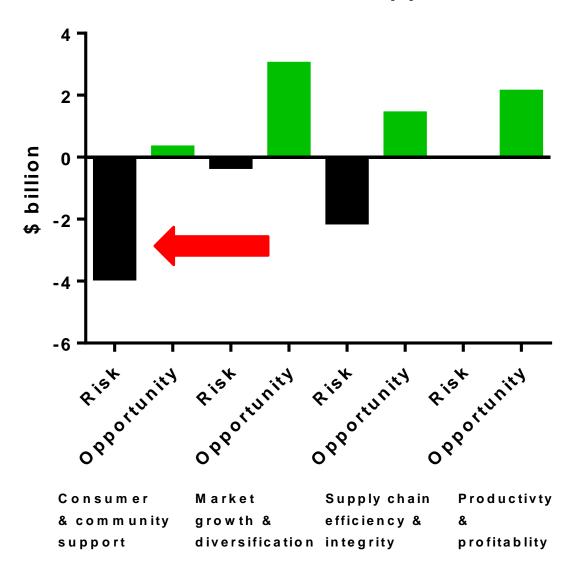
#### Australian Red Meat Industry risks and opportunities to 2030

Consumer and Community Support

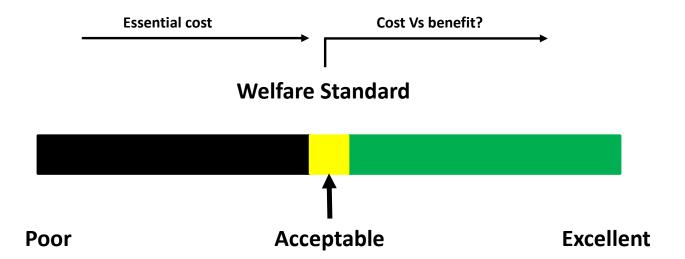


#### **Australian Red Meat Industry**

Forcast value of risks and opptunities to 2030



#### What is the standard of farm animal welfare?



# Australian National Animal Welfare Research, Development and Extension Strategy

- Beef
- Chicken meat
- Dairy
- Eggs
- Live export
- Pork
- Processing
- Sheep meat
- Wool

# Australian National Animal Welfare Research, Development and Extension Steering Committee

#### **Research Funders**

- Australian Egg Corporation Ltd
- Australian Pork Limited
- Australian Meat Processor Corporation
- Australian Wool Innovation
- Dairy Australia
- Livecorp
- Meat & Livestock Australia
- Rural Industries R&D
   Corporation Chicken meat

#### **Research Providers**

- CSIRO
- DAFF Queensland
- Department of Economic Development,
   Jobs, Transport and Resources, Victoria
- Murdoch University
- South Australian Research and Development Institute
- The University of Adelaide
- The University of Melbourne
- The University of Queensland
- The University of Western Australia

# Benefits to South Australia of high quality animal welfare

Premium food and wine from our clean environment:

- Ethical production of high quality safe food
- Increased consumer recognition
- Market protection
- Food industry growth
- Build our brand
- Grow our capacity
- Secure production