CASE PROGRAM 2011-127.2

The chicken or the egg?: Regulating battery cage farming in South Australia (Epilogue)

In 2006, the South Australian government established a working group consisting of representatives from welfare and industry bodies to provide advice to the Minister for Agriculture, Food and Fisheries and the Minister for Environment and Conservation. The government also commissioned a Regulatory Impact Statement (RIS) to explore the implications of the proposed ARMCANZ decision and canvass possible alternatives. The report identified six potential options:

Option 1 – Base Case
• Maintain existing regulations (that is, the *Prevention of Cruelty to Animals Regulations 2000* which provide for 450cm² per hen minimum cage floor area).

Option 2 – Industry Self Regulation
• Remove existing regulations and rely on industry to self - regulate minimum cage floor areas.

Option 3 – Proposed regulations - Update legislation as per Draft SA Regulations (excluding height)
• Based on ARMCANZ decision (550cm² per hen minimum cage floor area).
• Cages meeting the 1995 standard (450cm² per hen minimum cage floor area) have until 2015 to meet the ARMCANZ standard of 550cm² per hen minimum cage floor area.
• Includes modification of cage opening from 2008.

Option 4 – Update legislation as per Draft Regulations (including height)
• All cages from 2008 must meet height and space requirements (550cm²) plus minimum height (40cm over 65% of cage floor area and not less than 35cm at any point).
• Includes modification of cage opening from 2008.

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Option 5 – Reduce stocking density only
• Regulate floor space at 550 cm² per hen.

Option 6 – Ban caged egg production in SA
• Cages used for egg production to be banned in South Australia.[1]

Recognising the need to perform a broad assessment, including impact on social goods, the options were evaluated and compared *(Exhibit A).* In particular, options were assessed according to two main criteria:

- Promotion of hen welfare; and
- Compliance cost for the South Australian egg industry and community.

The relative weightings given to these criteria were 60 percent and 40 percent, respectively *(Exhibit B).* The justification was that the proposed regulations were designed to give effect to an Act of Parliament to protect the welfare of animals, therefore priority needed to be given to achieving this outcome.[2]

In light of the analysis, the RIS concluded that Option 3 was the preferable course of action. And on 1 January 2008, the South Australian Parliament passed amendments to the Prevention of Cruelty to Animals Regulations 2000 under the *Prevention of Cruelty to Animals Act 1985* reflecting this advice, though, with regards to height requirements it stated that: "the height of the cage must be higher than the maximum height of a fowl confined in the cage while the fowl is standing normally."

[1] 'Proposed South Australian Prevention of Cruelty to Animals (domestic poultry) Regulations: Regulatory Impact Statement' Tim Harding & Associates, 2006, p.vii.
[2] ibid, p.44.

Exhibit A:

Summary of costs and benefits of each of the options

Option	Quantitative Costs	Qualitative Costs	Qualitative Benefits
Option 1 – Base Case **Maintain existing regulation (as per Prevention of Cruelty to Animals Regulations 2000) i.e. 450cm^2**	Nil.	- decline in interstate competitiveness and long term viability of the SA egg industry, if caged eggs in SA are viewed by consumers/retailers as inferior, on welfare grounds. - inconsistent/weakened national approach to hen housing.	Nil.
Option 2 – Industry Self Regulation **Remove existing regulations and rely on industry to regulate cage floor area.**	*- production cost increase for egg producers*[161] of between $53,000 and $55,000 per annum or between **$413,490** and **$429,093** (discounted[162]) over 10 years.	- increased risks to hen welfare, compared with the base case, resulting from producers potentially ignoring voluntary codes of practice and increasing stocking density in order to save on production costs. - insufficient level of community assuredness as compared to the base case and susceptibility of the SA egg market to negative publicity, further affecting the industry's long term viability.[163]	- some reduction in production costs to the extent that producers choose to increase stocking density as compared to the 'base case'. [164]
Option 3 – Proposed regulations. Update legislation as per Draft SA Regulations (excluding height)	*- production cost increase of 3.5% for egg producers*[165] equal to $688,312 per annum or **$5,370,000** discounted over 10 years.	- SA (which has no type (2) cages[167]) would suffer from a cost disadvantage as egg farmers in other states with type (2) cages such as WA, VIC and NSW would be allowed to produce at a floor space of 450cm^2 until the end of the economic life of	- in terms of welfare benefits, the ability of hens to cope with their environment (as based on scientific evidence of behavioural and physiological responses to a change in cage floor area) would be improved.[169]

[161] According to ABARE (2004) these costs could potentially be passed on to consumers of shell egg products, due to their low price sensitivity.
[162] All costs over 10 years in this RIS are discounted at a rate of 6% to obtain their present 2006 dollar value.
[163] Regulation Impact Statement, Code of Practice for the Welfare of Animals – Domestic Poultry (4th Edition)..
[164] Such a benefit is likely to be outweighed by reduced sales and a further worsening of margins and profitability in the industry, as compared with the base case, as some consumers substitute South Australian eggs for more 'animal welfare friendly' interstate eggs.
[165] According to ABARE (2004) these costs could potentially be passed on to consumers of shell egg products, due to their low price sensitivity.

Based on ARMCANZ decision and Victorian regulations (550cm2). Cages meeting the 1995 standard (450cm2) have until 2015 to comply. Includes modification of cage opening from 2008.	-*direct capital redundancy cost* to egg producers worth up to $11,536[166] per annum or up to **$90,000** discounted over 10 years. - *enforcement cost* for the RSPCA equal to $35,000 per annum or **$273,059** discounted over 10 years. **(Total 10 year discounted cost = $5.73m)**	type (2) cages, while receiving the same price for eggs as farmers with type (1) and (3) cages.[168]	- compliance with requirements for larger cage doors would facilitate the removal of spent hens by both legs, thereby minimising injuries and pain.[170]
Option 4 – Update legislation as per Draft Regulations (including height) **All cages from 2008 must meet height and space requirements (550cm2) plus height (40cm over 65% of cage floor area and not less than 35cm at any point). Includes modification of**	-identical to Option 3, as all cages will need to be replaced (i.e. there are no Type (2) cages in SA). **(Total 10 year discounted cost = $5.73m)**	-identical to Option 3, as all cages will need to be replaced (i.e. there are no type (2) cages in SA).	- not likely to be greater than Option 3 but it may be perceived by animal welfare and rights groups as offering slightly more benefit by requiring higher cages. In fact, Option 4 could potentially result in poorer welfare outcomes than Option 3, on scientific grounds, because greater cage height has been shown to result in an increased incidence of 'body cannibalism'.[171]

[167] Cages installed after 1988 which meet the 1995 Code of Practice
[169] See Part 3 of Attachment 5 for a more detailed discussion.
[166] Assumes a 20-year economic life of cages (see Table A4.2).
[168] However, such a cost disadvantage would be mitigated to the extent that animal welfare conscious consumers become aware that eggs being produced in type (2) cages increase the risks to animal welfare leading to some substitution towards South Australian caged eggs.
[170] For the importance of husbandry practices with regards to animal welfare see Part 4 of Attachment 5.
[171] Moinard, C, *et al*, (May 1998). See Part 3 of Attachment 5 for a more detailed discussion.

cage opening from 2008.			
Option 5 – Reduce stocking density only **Regulate floor space at 550cm^2.**	-identical to Option 3, as all cages will need to be replaced (i.e. there are no Type (2) cages in SA). **(Total 10 year discounted cost = $5.73m)**	-identical to Option 3, as all cages will need to be replaced (i.e. there are no type (2) cages in SA).	- since compliance with the remaining welfare standards would not be guaranteed, Option 5 is expected to result in less incremental benefit than Option 3 or 4.
Option 6 – Ban caged egg production in SA **Cages used for egg production are banned in South Australia**	- *loss of egg production income* for the SA economy worth $20m per annum or approximately **$156m** over 10 years, discounted. - *loss of before tax employment income* from egg production for the SA economy worth approximately $8.42m per annum or **$65.7m** over 10 years, discounted. **(Total 10 year discounted cost = approximately $222m)**	- loss of livelihood. - loss of employment.	- in terms of ethical preferences, Option 6 is perceived by animal welfare and rights groups as providing the largest benefit in terms of hens having the 'freedom to express normal behaviour'. However, this benefit is not supported by scientific evidence and would in practice be negligible because 1) there would no longer be any commercial egg farming in South Australia, apart from backyard production; and 2) alternative systems of production (including barn-lay and free-range) would also increase risks to layer hen welfare in terms of a compromise of the remaining five freedoms including: freedom from discomfort, freedom from pain, freedom from injury and disease, freedom from fear and distress (see Table A5.3) - in varying degrees.[172]

[172] Elson, A, (2003).

Source: 'Proposed South Australian Prevention of Cruelty to Animals (domestic poultry) Regulations: Regulatory Impact Statement' Tim Harding & Associates, 2006, pp.41-43.

Exhibit B: Weighted criteria decision analysis

Criteria	Type of score	I Promotion of hen welfare	II Costs of compliance for SA egg industry/community	Total score
Weighting	%	60%	40%	100%
Option 1 (base case)	*Assigned*[1/3]	0	0	0
	Weighted	0	0	**0**
Option 2 (codes of practice)	*Assigned*	-1	-1	-2
	Weighted	-0.6	-0.4	**-0.2**
Option 3 (proposed regulations)	*Assigned*	+3	-2	+1
	Weighted	+1.8	-0.8	**+1.0**
Option 4 (proposed regulations with stricter cage heights)	*Assigned*	+2	-2	0
	Weighted	+1.2	-0.8	**+0.4**
Option 5 (reducing stocking density only)	*Assigned*	+1	-2	-1
	Weighted	+0.6	-0.8	**-0.2**
Option 6 (banning of cages)	*Assigned*	-1	-4	-5
	Weighted	-0.6	-1.6	**-2.2**

Source: 'Proposed South Australian Prevention of Cruelty to Animals (domestic poultry) Regulations: Regulatory Impact Statement' Tim Harding & Associates, 2006, p.44.

N.B: The rationale for the different scores is as follows. For each criterion, scores are assigned to each option on an ordinal scale of -4 to +4, based upon the analysis given in the preceding Parts 5.3 of the RIS, relative to the base case which has an assigned a score of zero for each criterion. Thus, if the option is superior to the base case for a particular criterion, it is assigned a positive score, and if it is inferior to the base case, it is assigned a negative score.