Module 31

Economics and Animal Welfare

This lecture was first developed for **World Animal Protection** by Dr David Main (University of Bristol) in 2003. It was revised by **World Animal Protection** scientific advisors in 2012 using updates provided by Dr Caroline Hewson.

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This module will teach you

How improving animal welfare can increase the farmer's income

- What prevents this from happening
- The economic reasons why farm animal welfare may remain poor

How animal welfare impacts on sales in domestic and export markets

Introduction 1

Economics = study of our preferences and priorities
(Norwood & Lusk, 2011)

- As farmers
- As consumers (food, fur, pets, endangered species)
- As government (acting on our behalf)
- Our preferences and priorities include
- Animals' welfare
- Our welfare
- These are reflected by the farmer's 'willingness to pay'

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Introduction 2

Increasing global demand for food ⇨ increased and more intensive livestock farming (Robinson et al., 2011)

Cheap food policy

- **Benefits: affordable food, improved human health, employment in food processing**

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Introduction 3

Hidden financial and non-financial costs not reflected in purchase price of food (Hewson, 2007), e.g.

- **Animal suffering**
- **Farmer suffering (depression, suicide)**
- **Human obesity ⇨ diabetes, etc.**
- **Environmental damage**

How improving welfare can increase farm income

Three ways that improving welfare can increase farm income (World Bank, 2006)

- Increase efficiency and profitability of the farm
- Meet local consumers' demand for welfare-friendly products ⇨ more sales on domestic markets
- Meet international consumers' demand ⇨ more export sales

Better welfare increases farms' profitability 1

Direct financial benefits, e.g.

- **Fewer treatments and thus lower costs**
- **Increased productivity, e.g. gentle handling ⇨ better milk letdown**
- **Maximises sale value, e.g. no bruising at slaughter**

Indirect financial benefits

- **Maximises income, e.g. schooling, mortgage repayments, farm upkeep, etc.**

Non-financial benefits, e.g.

- Peace of mind
- More time

Better welfare increases farms' profitability 2

Direct costs of clinical lameness to dairy farmer
(Bruijnis et al., 2010; Cha et al., 2010)

US $75–$300 per case because of

- Reduced milk production
- Increased calving interval
- Extra labour on the part of the farmer
- Veterinary visits
- Foot trimmer
- Treatment
- Discarded milk
- Replacement value if have to cull

Better welfare increases farms' profitability 3

Direct cost if animals are stressed at slaughter (Grandin, 2010):

- **Reduced meat quality ⇨ abattoir loses contract with retailer**
- **Penalties, e.g. $20 for each fatigued pig in USA**

Better welfare increases farms' profitability 4

Direct costs of overworking draught oxen
(Lawrence & Pearson, 2002)

- One day of normal work uses same energy as 1 kg of weight gain or 4–5 litres of milk
- Overwork and lack of supplementary feed ⇨
- Reduced fertility
- Reduced milk output for calves
- Reduced growth of animals for sale as meat when ~12 years old

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Better welfare increases farms' profitability 5

Direct costs of malnutrition in free-range merino sheep (Kingwell, 2002)

- **Body condition score 1 ⇨ reduced profits:**
- Very thin so reduced price for meat
- Poor quality wool ⇨ price is reduced by 25 per cent
- Reduced lambing
- Reduced wool yield
- Higher death rates

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Why do farmers not maximise welfare? (Leach et al., 2010) 1

Developing countries – limited income and access to government services ⇨ cannot control diseases
(Rich & Perry, 2011)

Uncertainty re. exact costs of the problem

The welfare problem may not be seen as important, despite the costs

Willingness to pay, e.g. training staff, veterinary fees

Non-financial costs, e.g. extra time needed

Why do farmers not maximise welfare? (Leach et al., 2010) 2

Hopelessness? Farmer may feel weighed down by other factors such as low market price

Communication (Kristensen & Enevoldsen, 2008)

Capital and running costs of better husbandry system

Examples of links between better welfare and profitability

Capital and running costs of changing husbandry system (Stevenson, 2011)

- Laying hens, UK: changing from cages to free-range increases production costs by 33 per cent
- Sows, USA: changing from gestation stalls to group housing increases production cost by ~ US 10¢/kg of finished pig meat; outdoors ⇨ increased production cost of ~ US 17¢/kg meat
- Supplying growing pigs with straw, Italy: labour + 0.35 kg straw per pig per week ⇨ increased production cost of ~ US 0.1¢/kg pork

Better welfare = more sales in domestic markets 1

Assurances to consumers – codes of practice and legislation

- **However, farmer has to bear all costs of complying**
- **Public funding? For example, in Ireland, suckler cow welfare plan (Stevenson, 2011)**
- Improves welfare-related genetic traits
- Minimum calving age
- Weaning procedure
- Training farmers on welfare aspects
- Result: improved performance and quality; major reduction in disease and treatments required

Better welfare = more sales in domestic markets 2

Assurances to consumers – supermarkets and chain restaurants

- Top five supermarket companies control 30 per cent of grocery market in USA; 50 per cent in UK; 60 per cent in Germany; 90 per cent in France (Holz-Clause & Geisler, 2012)

Corporate ethical responsibility – farm assurance schemes

- Market advantage for retailer
- Can dictate price and specification to farmer, but may not increase price paid to them
- Difficult for farmers in low-income countries to meet standards

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Better welfare = more sales in domestic markets 3

Examples of farm assurance schemes

- UK: Freedom Foods
- USA: Certified Humane
- Brazil: Ecocert Brazil
- Namibia: Farm Assured Namibian Meat

Better welfare – not always a selling point 1

Not all consumers value animal welfare

If welfare is not a public concern, it is hard for retailers to promote it (Veissier et al., 2008)

- **Cheap food policy**
- **Under international trade law, countries cannot restrict imports on the basis of production method:**
- Local farmers with high welfare standards have to compete with cheaper, low-welfare imports – especially processed products, e.g. dried egg, dried milk

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Better welfare – not always a selling point 2

Consumers may not want to pay higher prices for better animal welfare

- **E.g. EU and Chile**
  (Schnettler et al., 2009; Toma et al., 2011)

Educating consumers and labelling food? (Toma et al., 2011)

- **Consumer concerns about labelling**
- **Stated willingness to pay vs. actual behaviour**

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Potential solutions

Solution 1: state support (Stevenson, 2011)

- Tax breaks for farmers' capital costs
- No government services tax (value-added tax) on sale of welfare-friendly products, i.e. retailers pay farmers more and adjust retail price. However, because there is no extra tax, the total cost to consumer remains unchanged

Solution 2: tariff discrimination? (Grethe, 2007)

- Charge tariff to producer if not high-welfare, rather than tariff to country

Better welfare can supply export markets

Examples

- Farm Assured Namibian Meat (beef) exported to the EU
- Brazilian beef supplied to Carrefour supermarkets in Europe

WTO trading restrictions – a country cannot generally

- Ban imports of products on ethical grounds
- Insist that laws designed to protect animals must apply to imported products as well as those produced domestically

Retailers are exempt from WTO rules

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Summary

How improving animal welfare can increase a farmer's income

- What prevents this from happening

Increased profitability of the farm

- Why farmers may not take advantage of this

More sales in domestic markets

Why consumers may not want to pay more for products

More export sales

- How international trade law may reduce welfare

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- **What did you like about it?**
- **What did you not like?**
- **Do you have any tips to share?**

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