Could Animal Production Become a Profession?

David Fraser
Animal Welfare Program
University of British Columbia
Good Practice Note
Creating Business Opportunity through Improved Animal Welfare

Animal welfare is increasingly seen as an important element of commercial livestock operations around the world. This has significant implications for an industry with extremely deep and complex historical and cultural roots. Due to the scale and reach of the issue, it is being addressed by a number of people and organizations and on a number of levels. These range from individuals responsible for caring for animals on farms, to large-scale commercial enterprises providing animal-based products from different livestock systems. In response, a growing number of regional and global initiatives are emerging to provide guidance on acceptable practices.

Many corporate groups, from producers to retailers, are also acknowledging social and environmental responsibilities and pursuing programmes designed to enhance animal welfare.

- costs savings due to more efficient production processes that enhance animal welfare
- realizing growing market opportunities for food produced in animal welfare friendly systems
- becoming the producer of choice for retailers and consumers concerned with animal health and welfare, food safety and quality, human health and the environment.

IFC is determined to work with and support its clients in the reduction of losses, the potential increase of productivity and/or the accessing of new markets through the application of sustainability principles, including animal welfare standards. This Good Practice Note is part of an IFC initiative to provide enhanced support to its clients in the development of a responsible and forward-looking approach to livestock operations to, among other things, help producers to access and maintain entry into high quality and value market segments.
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What’s inside?
1. What Animal Welfare Is and How It Is Achieved?
2. Farm Improvements in Animal Welfare will Boost Productivity
3. Meeting Society’s Expectations
4. How Can Improvements in Animal Welfare be Achieved?
5. Why Is IFC Concerned with Animal Welfare?
6. How will IFC Assist Animal Welfare?
Capacity building to implement good animal welfare practices

FAO Expert Meeting
FAO Headquarters (Rome) – 28 September – 3 October 2009
Topics
1. A historic debate
2. The intensification of animal production
3. Are the existing responses working?
4. “Professional animal production”

1. A historic debate
Agrarian

The best common people are the agricultural population, so that it is possible to introduce democracy as well as other forms of constitution where the multitude lives by agriculture or by pasturing cattle.

Aristotle, “Politics”
Romantic

Landscape, Albert Bierstadt c. 1868

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The Nightingale

Hans Christian Andersen

Illustrated by Catherine Hietala
World-views

**Romantic/Agrarian**

- simple, basic life
- nature as an ideal
- emotion
- freedom of individual
- Golden Age in the past
Productivity

The Idea of Progress
History and Society
Sidney Pollard
“... progress in wealth, in civilization, in social organization, in art and literature, even in human nature ...”.

Sydney Pollard 1968
The Idea of Progress

World-views

Romantic/Agrarian
- simple, basic life
- nature as an ideal
- emotion
- freedom of individual
- Golden Age in the past

Pro-Industrial
- life improved by science/technology
- nature as imperfect
- rationality
- productivity of enterprise
- Golden Age in the future
“Drowsy and exhausted, the poor creatures fall too often among the machinery, which is not in many instances sufficiently sheathed, when their muscles are lacerated, their bones broken, or their limbs torn off.”


The “Factory Acts”
The “Factory Acts”

1802  Ventilation and cleaning
1844  Machinery to be fenced
1901  Protection from dust and fumes
1901  7 metres$^3$ per person

The “Factory Acts”

1819  12-h day for children 9-16
1833  9-h day for children <13
1847  10-h day for women
1878  No children <10 years
2. The intensification of animal production

“Intensification”

- consolidation of ownership
- automation & cost-cutting
- confinement
Factors encouraging intensification

- policy
- availability of labour
- animal production technology
Profit per animal sold, US farrow-to-finish pig farms

Data from Dr. John Lawrence
“Intensification”

- consolidation of ownership
- automation & cost-cutting
- confinement

Photo: International Livestock Research Institute
Intensification = Modernization

Intensification = Modernization

Intensification = Industrialization
"Replacing … family farms are enormous factory farms owned by huge conglomerates."
Mark Bernstein, 2004. *Without a Tear*

"In the past half century, animal agriculture in the U.S. has been taken over by corporations, turning family farms into factory farms."
Farm Sanctuary, 2009.
“A Factory Act for animals”

1988  UK hens: 450 cm²/hen, 40 cm high
2003  EU: 550 cm²/hen
2012  EU: 750 cm²/hen, perch, nest, litter
“A Factory Act for animals”

1988 UK hens: 450 cm$^2$/hen, 40 cm high
2003 EU: 550 cm$^2$/hen
2012 EU: 750 cm$^2$/hen, perch, nest, litter
2010 EU: ammonia $<$20, CO$_2$ $<$3000 ppm
2010 EU: ammonia $<$20, CO$_2$ $<$3000 ppm
2013 EU: sows in crates only 4 weeks
3. Are these measures working to safeguard animal welfare?

Photo: Lawrance Consulting and Trading
### Piglet deaths

<table>
<thead>
<tr>
<th>39 farms</th>
<th>Piglet deaths</th>
<th>5-24%</th>
<th>Andersen et al. 2007</th>
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<tbody>
<tr>
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<td>Farms</td>
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<td>Source</td>
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<tr>
<td>30 farms</td>
<td>Piglet deaths</td>
<td>10-32%</td>
<td>Friendship et al. 1986</td>
</tr>
<tr>
<td>83 organic farms</td>
<td>Piglet deaths</td>
<td>0-50%</td>
<td>Sundrum 2011</td>
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Bursitis in growing pigs

30 farms, concrete floors

<table>
<thead>
<tr>
<th></th>
<th>Bursitis</th>
<th>7-83%</th>
<th>Severe bursitis</th>
<th>0-23%</th>
<th>Temple et al. 2011</th>
</tr>
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Photo: NADIS
Sow mortality

102 farms, stalls or tethers | Annual death rate | 0-20% | Abiven et al. 1998

Photo: FAO
Dairy cow lameness
## Dairy cow lameness

<table>
<thead>
<tr>
<th>121 farms</th>
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<th>von Keyserlingk et al. 2012</th>
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<td>205 farms</td>
<td>Lame &amp; severely lame</td>
<td>0-79%</td>
<td>Barker et al. 2010</td>
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- Deaths
- Lameness
- Leg lesions
- Foot lesions
### Broiler chickens

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<tr>
<th></th>
<th>Deaths</th>
<th>1.4-14%</th>
<th>Dawkins et al. 2004</th>
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<tbody>
<tr>
<td>Lame</td>
<td>0-90%</td>
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<tr>
<td>Leg lesions</td>
<td>0-80%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foot lesions</td>
<td>0-88%</td>
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<th>Moderate/severe foot lesions</th>
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<tr>
<td>176 flocks</td>
<td>Lame</td>
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<td>Knowles et al. 2008</td>
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Very different welfare outcomes occur in the same type of physical environment.
- Warm, draft-free
- Timely fostering
- Assisting weak piglets
- Assisting sows in long parturition
- Hygiene

- Maintenance of bedding
- Hygiene
- Nutrition
- Animal handling
4. “Professional animal production”

Animal production

- Agrarian
- Industrial
Animal production

- Agrarian
- Industrial
- Professional

Florence Nightingale 1820-1910
<table>
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<tr>
<th>PROFESSIONS</th>
<th>INDUSTRIES</th>
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<td><strong>Main outcome is:</strong> Service</td>
<td><strong>Products for sale</strong></td>
</tr>
<tr>
<td><strong>Participation requires:</strong></td>
<td><strong>Market success</strong></td>
</tr>
<tr>
<td>Competence (demonstrated to peers)</td>
<td></td>
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<tr>
<td><strong>Ethical acceptability from:</strong></td>
<td></td>
</tr>
<tr>
<td>Adhering to ethical norms (self-regulation)</td>
<td>Obeying regulations</td>
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Animal production:
  • service?

Animal production:
  • service?
  • competence?
Animal production:
• service?
• competence?
• adherence to ethical norms?
Animal production:
• service
• competence
• adherence to ethical norms
Romantic/Agrarian:
- nature
- emotion
- rural life

Industrial:
- technology
- productivity
- “progress”

Different views of animal welfare:
- a “natural” life
- a healthy, productive life
- a happy life: comfort, contentment, pain control
Because these views of animal welfare are deeply embedded in our culture, standards and practices need to strike a balance among the three.

Intensification is widely perceived as Industrialization

Concerns:
- loss of rural life
- welfare (of animals)
Animal welfare reforms have been modeled on worker welfare legislation that regulated the physical environment and exposure time in factories.

But in animal production, the same type of environment can produce very different animal welfare outcomes...
because animal welfare is greatly affected by the quality of animal care.

Shifting animal production toward a professional model is a more promising approach to improving animal welfare and maintaining public trust in animal producers.
Further information:

Leg lesions

Healthy  Present  Severe
### Leg lesions

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