

Benchmarking: the key to measuring improvements in animal welfare.

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“You (Socrates) have discovered the reasons why some farmers are so successful that husbandry yields them all they need in abundance, and others are so inefficient that they find farming unprofitable. I should like to hear the reasons in each case, in order that we may do what is good and avoid what is harmful”

Xenophon, 4th C

What is benchmarking?

“Covers any activity where owners/
managers compare their practices and
performance with someone else’s and make
changes intended to result in improvement
of both”

Jack and Boone, 2007

Types of Benchmarking

Numerous definitions and categorizations exist in
Benchmarking literature

- 1) Best practice benchmarking
- 2) Benchmarks for performance analysis

Distinction is between benchmarking for best practice and
the practice of setting benchmarks for the analysis of the
performance of an entity

Bogan and English 1994



Best Practice Benchmarking

In general business practice benchmarking is a systematic approach in which business evaluates its own operations and procedures through a detailed comparison with those of another business in order to establish a best practice and to improve performance



Best Practice Benchmarking

- Mass participation data sets
- Financial accounting data
- Production of bench mark figures
- Detailed analysis of processes with the business

- To be used to as an aid to problem diagnostics and business planning.



Benchmark for Performance Analysis

- Reference point or standard against which the performance of a business can be judged
- Pooled data through surveys or client bases provide standardized data against which financial and production performance can be measured
- Widespread, highly institutionalized in agricultural sector since late 1800's
- "Comparative analysis"

Agriculture

- Similar goals (improve efficiencies and profit) but the process is very different
- Benchmarking involves a # of small, often family owned businesses working in a international market place.



Agriculture Producers

- Must perform economically (livelihood of many at stake)
- Producing affordable food and fibre for others
- Minimize damage to the environment
- Provide for the safety of workers
- While addressing animal welfare



- Husbandry Ethic
- “We look after the animals and the animals look after us”

Bernie Rollin



Cultural shift



- Perception of farm animals has shifted from production animals to sentient beings (consciousness, feelings)
- More emphasis on animal feelings and minds
- Retailers, customers will expect industry assessments, standards and continuous improvements to reflect this change.

Animal Welfare

- “the state of an animal in it’s attempt to cope with its environment” (Broom 1986)
- Animal welfare is to do with the feelings experienced by animals: the absence of strong negative feelings, usually called suffering, and (probably) the presence of positive feelings, usually called pleasure (Duncan, 2005)
- Animal welfare refers to the state of the animal; the treatment that an animal received is covered by other terms such as animal care, animal husbandry, and humane treatment.” (OIE, 2008)

What to Measure

- Resource based
 - Engineering standards

- Animal Based
 - Production
 - Affective states

Animal Welfare and Benchmarking

- In its infancy
- At least 3 major types of benchmarking activities
 1. Establish benchmarks for what is happening in the industry
 2. On farm comparative analysis with feedback to producers
 3. Assessments/Audits to Animal Welfare standards

Animal welfare and benchmarking

- 1) Establish benchmarks for what is happening in industry
 - Prevalence of illness, lameness
 - # of animals on trucks, distances travelled, environment on trucks
 - Baseline that could be used in the future to Benchmark
- Provides important but limited information
- Often focused on specific areas
- Economic analysis, holistic analysis through food chain missing.
- Baseline data is often used to establish goals etc. Unclear how this process occurs and the implications on animal welfare.

Animal welfare and Benchmarking

- 2) On farm comparative analysis of specific animal welfare issues with feedback to producers
 - Vasseur et al 2010
 - Producers all agreed that this tool was easily usable at the farm level and would help improve practices by providing new ideas and materials to reach good management targets.
 - Ito et al, 2009, Bond et al., 2011
 - Cluster project on comfort (Vasseur, Rushen, de Passille)
 - Cluster project on lameness (Orsel et al)
 - Heifer practices, (Bond et al.)

Benchmarking

- Create motivation for change
- Provide a vision for what an organization can look like after change
- Provide data, evidence, and success stories for inspiring change
- Identify best practices for how to manage change
- Create a baseline or yardstick by which to evaluate the impact of earlier changes

Bogan and English 1994.

Benchmarking

Benchmarking is, first and foremost, a learning process structured so as to enable those engaged in the process to compare their performance in order to identify their comparative strengths and weaknesses as a basis for self improvement and/or self-regulation

Jackson and Lund, 2000

Animal Welfare and Benchmarking

- Assessments/Audits to Animal Welfare standards
- Plethora of standards and certification programs have been produced
- Programs/schemes have different goals

Types of standards

- Regulations
- Inter-government agreements
- Quality assurance programs
- Non-mandatory welfare codes and guidelines
- Product differentiation and labeling programs

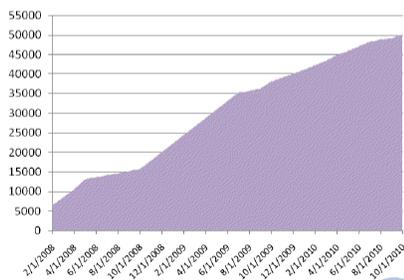
(Fraser, 2006)

- Most of these require some form of assessment or audit.
- Assessments/audits are not designed to be benchmarks or even baselines... but could be
 - How information is used internally
 - How program is set up

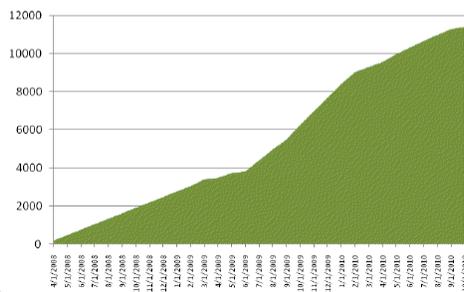
PQA Plus Participation

- Certified Trainers = 69
- Certified Advisors = 1,107
- Certified Individuals = 49,978
- Sites Assessed= 11,391
- Total = 43,317,141
- 66.7% of U.S. Inventory

Certifications



Site Status



DOING WHAT'S RIGHT.



3rd Party Verification

- On-farm assessments and action plans are key
- Provide credibility to packers and customers
- Measure the effectiveness of the PQA plus program (assessments, plans, and follow through) not identify farms not in compliance

Why benchmark?

- “People manage the things that they measure.”
- “Measurement also provides a benchmark that enables people to see if their performance has improved or become worse.”

Temple Grandin

Why Benchmark/Baseline?

- To identify on-farm concerns that should be fixed. You cannot address issues if you do not know they exist.
- To demonstrate and instill trust in consumers, retailers, interested parties, that welfare standards are being met
- To protect access to international markets
- To assess industry performance on animal welfare

Why Benchmark/Baseline?

- To provide essential data
- To evaluate the effectiveness of outreach programs
- To understand various attitudes and perspectives on animal welfare
- To assist and demonstrate continuous improvement

Scotland



Animal Welfare Monitoring and Benchmarking System

- Highlight and analyze health and welfare issues on a farm that may be preventing herds or flocks reaching their true potential and propose solutions
- Benchmark health and welfare on a farm against similar farms across Scotland
- Monitor progress in improving health and welfare on a farm over time and demonstrate the impact of actions taken

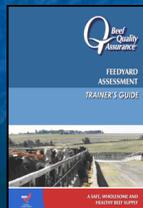
Scotland



- Feed information back into health and welfare planning
- The ability to monitor health and welfare trends on a local and national level using anonymous data.
- The ability to provide anonymous data for research into health and welfare issues

BQA

Booklets designed to help all cattle feeders cow-calf producers, benchmark their operations in areas such as animal welfare, cattle handling, record keeping, etc.



Metrics to Benchmark Stock Handling

Grahame Coleman

- Research has shown that stockpeople have a major impact on the welfare of their livestock,
- While welfare monitoring schemes are likely to improve animal welfare, the impact of such schemes will only be realized by recognizing the limitations of stockpeople and including stockperson benchmarking in welfare audits.
- Monitoring the stockperson is a key component of any welfare monitoring scheme.



Benchmarking that concentrates on emphasizing the learning element in benchmarking as a lever for learning can support the development of a culture of continuous improvement

Jack and Bourne, 2009



- We are committed to continuous improvement of the welfare of animals in our supply chain
- Keeping a Close Eye on Our Performance So We Can Continuously Improve

2008-9 GLOBAL AUDITING PERFORMANCE	
PERCENT TOTAL ABATTOIRS AUDITED	
2008	97%
2009	100%
PERCENT BEEF ABATTOIRS AUDITED	
2008	100%
2009	100%
PERCENT POULTRY ABATTOIRS AUDITED	
2008	91%
2009	100%
PERCENT PORK ABATTOIRS AUDITED	
2008	94%
2009	100%
PERCENT TOTAL ABATTOIRS THAT PASSED THEIR AUDIT	
2008	99%
2009	100%
PERCENT BEEF ABATTOIRS THAT PASSED THEIR AUDIT	
2008	98%
2009	100%
PERCENT POULTRY ABATTOIRS THAT PASSED THEIR AUDIT	
2008	100%
2009	100%
PERCENT PORK ABATTOIRS THAT PASSED THEIR AUDIT	
2008	100%
2009	100%

Percentage of Beef Plants That Stunned 95% or More Cattle with the First Shot



USDA survey prior to industry wide auditing

McDonald's Audits started

Continued auditing by major customers
Continuous auditing maintains good performance

Comparison of 1996 USDA Survey Cattle Vocalization Scores to 2002 Vocalization Scores



1996
Before
Customer
Auditing
(8 plants)

2002
After 4 Yrs of
Customer
Auditing
(52 plants)

Avg Score

8%

2%

**Worst Plant
Score**

35%

6%



Sustainable
Agriculture Code



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9. Animal Welfare

9.1	Records	Unless specified elsewhere in the text, all records must be accessible and kept for at least 2 years. Records to be kept in this section include:	
9.1.1	(Checklist of records related to this section)	1. Application records for veterinary medicines (Vn) given to animals.	Must
9.1.2		2. Training records of animal stock persons.	Must
9.1.3		3. Records of withdrawal periods following the administering of medication (Vn) to animals.	Must
9.1.4		4. Animal health plan.	Must
9.2	Continuous Improvement	Continuous improvement in this section includes:	
9.2.1		Unilever suppliers should raise awareness and share knowledge/opportunities for monitoring improved animal welfare.	Should
9.2.2		Unilever suppliers should stimulate farmers to start monitoring, benchmarking and improving animal welfare.	Should
9.2.3		Unilever suppliers should support the farmers in finding the right tools and information to improve animal welfare.	Should
9.3	Animal Welfare		
9.3.1	Introduction		
	Why this is important	Animal welfare is an often-used term, but also a much debated concept. During the last 25 years, scientists have engaged in defining animal welfare, but no consensus has been reached. While the complexities of defining animal welfare and the limitations of any definition are recognised, the 'five freedoms' are considered an adequate and appropriate working basis for monitoring and improving animal welfare. The five 'freedoms' are: 1. Freedom from thirst, hunger and malnutrition 2. Freedom from discomfort 3. Freedom from pain, injury and disease 4. Freedom to express normal behaviour 5. Freedom from fear and distress. These 'five freedoms' form the basis for the Unilever Code.	
9.3.2	Mandatory requirements		
9.3.2.1	Measuring progress	Not defined. No requirement at the moment.	
9.3.2.2	Legal compliance	Unilever suppliers must be aware of and demonstrate compliance with national legal obligations with respect to animal welfare. Regulations typically relate to diet, availability of water, accommodation, prevention/diagnosis of disease, sufficient space for normal behaviour, facilities, companionship, conditions which prevent mental and physical suffering, and in the case of severe illness asking for adequate help (preferably from a veterinarian).	Mandatory requirement
9.3.2.3		Unilever suppliers must ensure that farmers are aware of all national legal requirements as above.	Mandatory requirement

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9.3.2.4	Prohibitions	Direct physical abuse and mental suffering of animals is prohibited.	Mandatory requirement
9.3.2.5		Supplying animal products (e.g. meat, milk, and eggs) without taking into account the legal waiting times for supplying medicines (like antibiotics) is prohibited.	Mandatory requirement
9.3.2.6		Feeding animals with ingredients that have been treated with C_{12} without taking into account the legal waiting times is prohibited.	Mandatory requirement
9.3.3	Good practices		
9.3.3.1	Food and water provision	Animals must have freedom from hunger, thirst and malnutrition by ready access to fresh water and a diet to maintain full health and promote a positive state of well-being.	Must
9.3.3.2		Feed and water must be distributed in such a way that animals can eat and drink without undue competition.	Must
9.3.3.3	Environment	The environment in which animals are kept must take into account their welfare needs and be designed to protect them from physical and thermal discomfort, fear and distress, and allow them to perform their natural behaviour.	Must
9.3.3.4	Management	A high degree of caring and responsible management and stockmanship is vital to ensure good animal welfare. Managers and stock-keepers must be thoroughly trained, skilled and competent in animal husbandry and welfare, and have a good working knowledge of their system and the animals under their care.	Must
9.3.3.5	Animal health	Animals must be protected from pain, injury and disease.	Must
9.3.3.6		The environment in which animals are kept must be conducive to good health.	Must
9.3.3.7		All producers must develop a documented health plan in consultation with their veterinary surgeon.	Must
9.3.3.8		Antibiotics and hormones should only be used prudently with the aim of optimising therapeutic efficacy and minimising the development of antibiotic resistance.	Should
9.3.3.9		The health plan records must be accessible and kept for two years after disposal of the animal.	Must
9.3.3.10		The health plan records must be traceable back to the animal and contain: the reason for applying the treatment; time of application; product or active ingredient name (where relevant); and amount applied (where relevant).	Must

⁷ The 'Five freedoms' were developed by the Farm Animal Welfare Council (FAWC), which was established by the British Government in 1979, <http://www.fawc.org.uk/fivefreeds.htm>.

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9.3.2	Mandatory requirements		
9.3.2.1	Measuring progress	Not defined. No requirement at the moment.	
9.3.2.2	Level compliance	Unilever suppliers must be aware of and demonstrate	Mandatory



- The Unilever Sustainable Agriculture Code ...will act as a benchmark and we will only ask for changes in areas where the standard in place and our code are significantly different.
- This Code is applicable to all Unilever suppliers of agricultural goods, the farmers producing them and contractors working on farm. We hold our suppliers responsible for implementing this Code. However, many good practices must be applied by farmers, not suppliers.

9.2. Continuous Improvement

- Unilever **suppliers should** raise awareness and share knowledge/opportunities for monitoring improved animal welfare
- Unilever suppliers **should** stimulate farmers to start monitoring, benchmarking and improving animal welfare.
- Unilever suppliers **should** support the farmers in finding the right tools and information to improve animal welfare.



- “Overall continuous improvement is crucial for sustainable development. By continuous improvement, we mean that suppliers and farmers should improve their management practices over time. We recommend suppliers create an annual action plan,…”
- “Specific improvements in animal welfare are based on awareness of and solutions to the issues that are present.”
- “Monitoring and benchmarking systems should be developed to support overall continuous improvement of animal welfare. An example of a monitoring scheme (“The Cow Compass”) can be seen by…”



Disclaimer:

- The Unilever Sustainable Agriculture Code and the accompanying implementation guides aim to be a reference source of current best practice for sustainable agriculture, at the same time it is not meant to be an exhaustive compilation.
- The ultimate responsibility for which practices are implemented, and how, resides with suppliers and their farmers.

Conclusion

- Baseline and Benchmarking Animal Welfare are important for the sustainability of agriculture
- Becoming an expected practice and follows a tradition in agriculture
- Allows producers to manage what you measure.
- Allows producers to take credit for the good things that they do (baselines and continuous improvements).