# IS ANIMAL WELFARE REWARDING? ANIMALS, ETHICS AND HUMAN BENEFITS IN THE LIGHT OF ALTERNATIVE ECONOMIC INDICATORS

## Szilvia VETTER

Department of State Veterinary Medicine and Agricultural Economics, Szent István University, Faculty of Veterinary Sciences, Budapest, Hungary E-mail: szilvia.vetter@maat.hu

## **Summary:**

The goodness of societies has been traditionally measured through wealth: this was formalized in the 1930s. Gross Domestic Product (GDP) is commonly used, representing the value of all goods and services produced within a nation: a country with high GDP is better than one with low GDP. Nowadays, according to a controversial statement, GDP's sun is set. Much more widely accepted is the thought, that economic growth in itself does not guarantee the well-being of people. That is how the alternative indicators were born. These indicators contain aspects of environment, education, mental and physical health etc. But how other living creatures fit in this system?

Society uses animals for many ways to support our own interests. In recent years though, animal welfare has become a prominent issue for citizens, companies and official bodies in many countries. Ethical based concern for animals is evident now throughout many societies. Therefore, countries and relevant organizations of certain countries (such as the European Union) regulate via provisions the enforcement of animal welfare aspects with regard to economic activities. There are certain fields of economic activities, where the question of animal welfare is intensively in focus, for example in companies working in the food industry. "People, planet, profit", also known as the triple bottom line, are the key factors that should be practiced in every move a person, a company or a country makes, where 'planet' refers to sustainable environmental practices and environment-friendly solutions. This paper describes the links between animal welfare, sustainability and alternative economic indicators.

**Keywords:** animal welfare, alternative economic indicators, sustainability, food industry, GDP

#### 1. Introduction

The train of thought which is followed in this paper is based on the chain of interdependency. The alternative economic indicators were born to highlight some factors of the human wellbeing which cannot be expressed through GDP. The question of animal welfare has become an important issue in the past decades, partly because of the revealed connection with the well-being of people. Although there are more and more types of alternative economic indicators all over the world, it is hard to find one, which directly includes animal welfare. On the other hand, the role of animal welfare can be detected through environmental issues, such as pollution or degradation of biodiversity.

#### 2. Definitions and terms

In the literature, several examples can be found, in which different authors used different heterogeneous definitions and terms in this topic. In this section the paper's main terms are explained, providing 'fit-to-purpose' interpretations.

'Animal welfare' means how an animal is coping with the conditions in which it lives. An animal is in a good state of welfare if (as indicated by scientific evidence) it is healthy, comfortable, well-nourished, safe, able to express innate behaviour, and if it is not suffering from unpleasant states such as pain, fear, and distress (Vapnek, 2011).

'Environment' refers to natural environment, which include biodiversity (habitats and ecosystems), water quality, supply and demand, the marine environment, the soil environment, landscapes; air quality, and recreation and access to the natural environment. According to this definition, non-human animals are integral part of the environment.

There have been many definitions of 'human well-being' (Alkire, 2002). According to one of the most significant approaches, the main dimensions of wellbeing are the following:

- the necessary material for a good life (including secure and adequate livelihoods, income and assets, enough food at all times, shelter etc.);
- health;
- good social relations;
- security (including secure access to natural and other resources and controllable environment with security from natural and human-made disasters);
- freedom and choice (including having control and being able to achieve what a person values doing or being)(Narayan et al. 2000).

The OECD's Better Life Initiative identifies three pillars of people's well-being:

- Material living conditions (or economic well-being),
- Quality of life, which is defined as the set of non-monetary attributes of individuals that shapes their opportunities and life chances,
- And the sustainability of the socio-economic and natural systems where people live and work, which is important for well-being to last over time (OECD, 2013).

# 3. Human-wellbeing, animal welfare and environment

As the final goal of every economic activities is providing and raising human wellbeing, it's worth to examine the connections between human and animal well-being.

The idea of environment has changed a lot recently. The traditional anthropocentrist idea of the environment - dominated by the human person - was produced by the religious concept of men considered to be the centre of the universe. This idea is strengthened by modern man's ability to manipulate environment through modern technology. According to this approach, the environment is nothing other than components submitted to the man. Nowadays this approach's sun is set. Western science has given up identifying absolute values, it has started to focus on the path that might help defining what is morally wrong or right. This approach helped people to distance from the purely anthropocentric point of view towards a system much more complex, which has led to respect of the environment and responsibility in connection. Legally spoken, environment cannot be considered the subject of a right, being but the object of a duty (Raudsepp-Hearne, C. et al., 2010).

## 3.1. Moral aspects

Being responsible means being morally involved, and it also means, that there became an interdependency between human wellbeing and the condition of the environment, including animals. A statistically significant negative correlation was found concerning environmental degradation and well-being (around 81% of the individuals demonstrate concern for the ozone layer) and a statistically significant positive connection between caring for animal extinction and well-being (about 85% of the individuals revealed concern for the extinction of species) (Ferrer-i-Carbonell et al., 2007).

So a system that results in poor welfare is unsustainable because it is unacceptable to many people (Broom, 2010). It is moral to protect animals given that they are capable of experiencing pain or of feeling pleasure, therefore there is no moral justification for causing anyone pain, including animals (Singer, 1985). The moral dimension and concept of the non-human factors (environment, animals) has emerged. Having a higher level of animal welfare concludes to a higher dimension of human moral stage. So there is evidently a connection between the well-being of non-human animals and the moral, psychological aspect of human well-being. If we examine the five dimensions of human wellbeing, this kind of moral questions can rather be included in the fifth dimension about the freedom and choice: can we choose the moral principles of our life? Psychological health has not been meausured globally, and it makes the scalability of this dimension very difficult.

# 3.2. Health aspects

There is a much more evident link between animal and human wellbeing, which can be found among the five dimensions of human wellbeing directly. About 75 percent of the new diseases that have recently affected humans are caused by pathogens originating from animals or from products of animal origin (FAO, 2009, 84.) Moreover, the causality between animal welfare problems and animal diseases has also been proven. Like humans, when experiencing severe stress, animals can succumb to disease or fail to reproduce or develop properly (Moberg, 1985). One of the Five Freedoms is freedom from fear and distress (legislative, 6). These harmful effects of stress highlights the importance of stress to an animal's wellbeing (Biology of animals stress).

If we look at the production side, animal healthcare statistics prove that the large majority of losses in livestock breeding (mortality, compulsory slaughtering, diseases, poor reproduction and body mass index (BMI) results, medical expenses, etc.) are not caused by obligate pathogens. Most losses are the direct result of diseases due to unfavourable conditions related to animal breeding, feeding and raising or other external factors (power failure, damages from hail, etc.) (Vetter et al., 2014). In summary, animal health and welfare is inextricably linked to human health.

# 3.3. Economic aspects

The third connection is the economic link, which refers to the first dimension of human wellbeing directly. Animal welfare regulations generally jolt enterprises from the usual minimum cost-maximum return intersection, so animal protection may appear costly at first. However, in the long term in most cases, they do not bring lower revenues because applying the new – often more expensive – method or technology boosts productivity and because the loss of competitors due to compliance failure may increase the market share for complying companies. The consumers' behaviour is a paradox: on one hand, they are becoming more and more aware of the environmental impacts of their daily lives, whereas on the other hand, concern for the ethical treatment of animals does not always mean changes in purchasing habits.

#### 4. Raison d'être of alternative economic indicators

According to OECD, in recent years, there have been increasing concerns about the adequacy of traditional macro-economic statistics, such as GDP, as measures of people's current and future living conditions, national or societal well-being. That is inevitably true: GDP makes no distinction between transactions that add to well-being, and those that diminish it. GDP assumes that every monetary transactions (including crime, pollution etc.) adds to wellbeing,

but it's definitely not the case. GDP does not measure human health, environmental health/decay and destruction of the natural environment or lack of concern for future generations. As the GDP increases, well-being does not necessarily increase along with it (Cummins et al., 2003).

Alternative economic indicators were mainly born to measure either one single aspect of the human wellbeing, or they are making a subjective effort to define the wellbeing as a whole. It's clear, that these indicators are the tools for comparison: one single number in itself cannot be interpreted without comparison.

## 5. Alternative economic indicators and animal welfare

Lots of the alternative economic indexes contain environmental issues as well. Based on the presumption, that animals are integral part of environment, animal welfare can also be part of an indicator.

How can an alternative economic indicator include animal welfare? The first question is the interpretation of the expression 'economic', whether it can contain factors that are hardly quantifiable, and doesn't necessarily have direct effect on the consumption. According to Samuelson (2009), economics is the study of how men and society choose, with or without the use of money, to employ scarce productive resource which could have alternative uses, to produce various commodities over time and distribute them for consumption, now and in the future among various people and groups of society. That means, only those aspects of animal welfare could be included in the economy, which cause change in producing commodities or consumption. Some aspects of the animal welfare are highly economic: if the owner doesn't have the financial background, he cannot pay for accommodation and food for the animal etc. But the question of animal welfare is much more complex. If we're observing 'economics' from a higher perspective, and searching for its final goals, the wellbeing of people, animal welfare can fit in the system as an alternative target of redistribution.

Indicators could theoretically include animal welfare directly or indirectly as well. Regarding the already mentioned connection between animal and human wellbeing, the examination of animal welfare in itself can be an alternative - partly economic - indicator, as well. Animal welfare can also emerge among the environmental factors of an indicator, so it can effect some indexes indirectly. In this case the animals are not explicitly affected at individual level, but as livestock, or at species level.

While creating alternative economic indicators, there were efforts to capture the environmental sustainability aspects among the main factors which determine human wellbeing.

## 1.1. Pollution, as a link to animal welfare

Although the majority of the existing environmental-type alternative economic indicators are influenced by the issues of animal welfare only indirectly, these indicators contain certain aspects of pollution, which has a strong link to the wellbeing of animals at individual level as well.

Environmental pollutants can adversely affect animal health and reproductive function, through either direct or indirect effects on numerous organs and systems. These effects are not generally reflected in visible reductions in animal performance but subclinical effects may result in reductions in animal performance, with associated economic consequences (Rhind, 2010). There are myriads of concrete examples for that from the recent decades. Just to mention one concrete study: a cross-sectional epidemiologic study associating air quality with swine health was conducted on 28 swine farms in southern Sweden. Correlation of housing air environment to swine diseases and productivity were investigated. Several air contaminants

(dust, ammonia carbon dioxide, and microbes) were found to be correlated with serious swine health problems, such as pneumonia, pleuritis and neonatal pig mortality (Donham, 1991).

Let's see some examples. The GPI (Genuine Progress Indicator) assigns value to the natural environment so that the destruction of this and its replacement with commoditisized substitutes no longer appears as growth. It's incorporating environmental and social factors. Among lots of others, GPI accounts for pollution or long term environmental damage.

The Gross Environmental Sustainable Development Index (GESDI) measures the quality of growth and development. It includes over 200 indicators of non-market values. Besides the economic development, it's incorporating dimensions of psychological, physical and spiritual indicators as well as available resources and questions of the environment.

## 1.2. Degradation of biodiversity, as a link to animal welfare

Besides pollution, degradation of biodiversity is also a possible factor of alternative economic indicators. According to some authors, massive losses of biodiversity are also a form of animal abuse (Bekoff, 2009). Moreover, recent trends in animal husbandry raise serious sustainability issues, affecting both animal welfare and biodiversity. The extension of markets and economic globalization have contributed significantly to the loss of domestic breeds, especially livestock (Tisdell, 2003).

For instance, Gross Sustainable Development Product (GSDP) measures the cost of growth and development. It's incorporating economic impacts of environmental and health degradation or improvement, resource depletion, impact of people activity on environment, the quality of environment, welfare, quality of life of future generations, expenditures on pollution, health, and last, but not least the impact of economic growth on biological diversity. The United Nation Human Development Index (HDI) is a composite index measuring average achievement in three basic dimensions of human development—a long and healthy life, knowledge and a decent standard of living (HDR, 2014). It is a statistical tool used to measure a country's overall achievement in its social and economic dimensions Although the Index itself doesn't contain a direct link to animal welfare, according to the Human Development Report one of the shocks and threats to human development is the migration or extinction of plants and animal species, in addition to polluted air and degraded land.

## 6. Suggestion

The link between animal and human welfare can be regarded not only through measureable factors like health or economic issues, but as strong ethical connection as well. Because of these interfaces, it would be advisable to incorporate animal welfare more prominently in alternative indicators. Moreover, an animal welfare indicator itself could provide useful information in the light of human wellbeing and our future.

## References

- 1. Alkire, S. (2002). Dimensions of Human Development. In: World Development, 30 (2), 181-205.
- 2. Autralian Unity Wellbeing Index. In: Social Indicators Research 64., 160.
- 3. Bekoff, M. (2009). Conservation Psychology and Animal and Human Well-being: Scientists Must Pay Attention to the Social Sciences. In: https://www.psychologytoday.com/blog/animal-emotions/200908/conservation-psychology-and-animal-and-human-well-being-scientists-must

- 4. Broom, D.M. (2010). Animal welfare: an aspect of care, sustainability, and food quality required by the public. In: Journal of Veterinary Medical Education, 37(1):83-8
- 5. Donham, K. J. (1991). Association of environmental air contaminants with disease and productivity in swine. In: American Journal of Veterinary Research 52(10): 1723-1730.
- 6. Donham, K.J. (1991). Association of environmental air contaminants with disease and productivity in swine. In: American Journal of Veterinarian Research, 52(10):1723-30.
- 7. Ferrer-i-Carbonell, A. & J.M. Gowdy. (2007). Environmental awareness and happiness. In: Ecological Economics, 60(3): 509-516.
- 8. Genuine Progress Indicator. In: www.genuineprogress.net
- 9. Human Development Report 2014 Sustaining Human Progress: Reducing Vulnerabilities and Building Resilience. (2014). United Nations Development Programme, New York.
- 10. Narayan et al. (2000). Voices of the poor: Crying out for change. Oxford University Press for the World Bank, New York, 22-31.
- 11. OECD Framework for Statistics on the Distribution of Household Income, Consumption and Wealth. (2013). OECD Publishing. 27.
- 12. Raudsepp-Hearne, C. et al. (2010.) Untangling the Environmentalist's Paradox: Why Is Human Well-being Increasing as Ecosystem Services Degrade? In: BioScience, 60, 8, 576-587.
- 13. Rhind, S. M. et al. (2010) Effects of environmental pollutants on the reproduction and welfare of ruminants. In: Animal, , 4:7, 1227–1239.
- 14. Samuelson, P.A. & Nordhaus, W. D. (2009). Economics. Mcgraw-Hill Publ.Comp, 34.
- 15. Singer, P. (ed). (1985). In Defense of Animals. New York, Basil Blackwell, 13-26.
- 16. The state of food and agriculture: livestock in the balance. (2009). FAO. Electronic Publishing Policy and Support Branch, Communication Division, FAO.
- 17. Tisdell, C. (2003). Socioeconomic causes of loss of animal genetic diversity: analysis and assessment. In: Ecological Economics, 45, 3, 365–376.
- 18. Vapnek, J. & Chapman, M. (2011). Legislative and regulatory options for animal welfare. In: FAO Legislative Study, 104, 9.
- 19. Vetter et al. (2014). Economic Aspects of Animal Welfare. In: Acta Polytechnica Hungarica. 11, 7, 119-134.