Food Policy 38 (2013) 105–114

Contents lists available at SciVerse ScienceDirect

Food Policy

journal homepage: www.elsevier.com/locate/foodpol

Reconsidering the political economy of farm animal welfare: An anatomy of market failure

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ARTICLE INFO

Article history:
Received 4 March 2012
Received in revised form 9 October 2012
Accepted 11 November 2012
Available online 20 December 2012

Keywords:
Animal welfare
Citizen/consumer gap
Public goods
Consumption externalities
Willingness to pay
Political economy
Market failure

ABSTRACT

Animal welfare is often cited as a classic *public good*, which implies market failure and, thus, that government intervention is required. However, the current literature does not provide an accessible account of how governed markets are supposed to cope with the issues of animal welfare. This paper seeks to fill this gap by re-considering the political economy of animal welfare. Conceptual analysis shows that the major cause of market failure in the case of farm animal welfare is a problem of *consumption externalities*. It is the specific regulation of animal welfare conditions which is a public good (or bad). Two important conclusions follow from this analysis, which are largely unexplored in the literature on animal welfare. First, measurement of potential market failure, through identifying actual willingness to pay (WTP) for animal welfare friendly products, is potentially misleading. The difference between citizen votes and consumer WTP for animal welfare is not *prima facie* evidence for either market failure or a gap in the market. Second, conventional arguments in favour of subsidies and assistance to producers for better animal welfare are misconceived and potentially counterproductive. A more rational policy is to subsidise the consumption of animal welfare friendly products.

Introduction

The European Commission has recently published its strategy for the protection and welfare of animals for the period 2012–2015 (European Commission, 2011). It notes that between 2000 and 2008 "*the Union has dedicated on average nearly €70 million per year to support animal welfare, of which 71% is directed to farmers as animal welfare payments*" (p. 3). Meanwhile, in June 2010, DG Sanco launched the first of its biannual animal welfare newsletters: *Action and Understanding*. The tag line chosen to symbolise the Commission's approach is interesting – "*everyone is responsible*". This is in rather distinct contrast to the traditional view that government is ultimately responsible for animal welfare. For instance, the late UK Farm Animal Welfare Council (FAWC) identified the first condition for ethical consumerism and improved farm animal welfare as: "The Government to act as the guardian of farm animal welfare" (FAWC, 2009). It is also somewhat contrary to a conventional economic view, that animal welfare is a '*classic public good*', 'susceptible to a number of inter-related types of market failures' (Lusk and Norwood, 2011, p. 12).

As participants in one of the several research studies commissioned by the European Commission to support the development of European animal welfare strategy (EconWelfare[1]), we found it necessary to reconsider the political economy of animal welfare, including the potential for market failures to prevent socially progressive improvements in animal welfare, and the implications for government intervention. This is particularly important as the achievement of high(er) farm animal welfare through imposed legislation and regulations remains highly controversial. Until very recently, there was a distinct lack of substantial yet concise explanation of the political economy of animal welfare in the literature. Lusk and Norwood (2011) (and, more extensively, Norwood and Lusk, 2011) provide much more on economists' contributions to the problems of ensuring adequate and acceptable animal welfare in modern mixed economies. However, even these experienced and knowledgeable authors do not provide a readily accessible account of how the governed market system affects animal welfare. Notwithstanding the Lusk and Norwood major contributions, it remains difficult for the non-expert to comprehend the major interacting socio-economic factors on which the costs and benefits of improved animal welfare depend. The first contribution of this paper is to provide a framework for the general understanding of legislative and market responses to animal welfare.

As an account of the political economy of animal welfare, we frame our analysis in terms of the provision of animal welfare by

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[1] FP7 programme: "good animal welfare in a socio-economic context: project to promote insight on the impact for the animal, the production chain and European society of upgrading animal welfare standards."

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http://dx.doi.org/10.1016/j.foodpol.2012.11.006

farmers and their marketing chains (the supply side) in interaction with the consumer and citizen demands and requirements for improved animal welfare (the 'demand' for improved animal welfare). We begin with the supply (provision) side of the governed market place (Section 'The supply side of animal welfare'). Section 'The social determination of animal welfare' considers the social determination of the supply chain's animal welfare practices against this provision framework. Section 'Market failures and consumers' willingness to pay for improved animal welfare' deals with the potential for market failure, i.e. the incapacity of free markets to deliver the levels of animal welfare which society demands and requires. This leads to the second contribution of this paper (Section 'WTP and actual spending on animal welfare: a thought experiment') which considers the extent to which consumers' willingness to pay (WTP) for improved animal welfare products can indicate the extent of market failure. In particular, we conduct a novel 'thought experiment' concerning the character of estimates of peoples' willingness to pay (for animal welfare, in this case), and identify, at least conceptually, the appropriate measure of market failure as the 'free rider deficit', while also providing an anatomy of potential market failure. Section 'Summary and implications' summarises, draws out the implications for policy and concludes.

The supply side of animal welfare

Socio-economic evolution of markets and associated government and governance (including R&D) has progressively explored the possibilities of increasing animal productivity and, more lately, of improving animal welfare. The current set of best possible practices for animal productivity (reflected in the full costs of providing animal products) and the welfare of the animals involved can be defined conceptually as a production (supply) possibility frontier. This is shown in Fig. 1 as the black curve including points O, A and Y. Although a simple diagram cannot portray the complexity of farming or marketing chain reality, this economic framework is logical, robust and well accepted, at least amongst economists (McInerney, 1991). As the curve illustrates, domestication and subsequent cultivation of wild animals has resulted in improvement in both animal productivity and animal welfare (top left hand segment of the frontier). Similarly, as not infrequently illustrated, over-intensification can result in reductions in both productivity and welfare (bottom right hand segment of the frontier).

The wide variety of production systems within the EU livestock sector can be distributed across a range of points on the frontier. Intensive systems are closer to point Y, extensive systems further up the curve and organic livestock production (including higher animal welfare standards) perhaps approaching O. Similarly, different types of livestock enterprise will be arrayed along the curve. Broilers and caged egg production are considered as located at, and (for battery cages in the EU) now beyond, the legal limit of welfare acceptability, with modern high yielding dairy cow husbandry perhaps only slightly higher up the curve. One might then consider that the production of housed beef, outdoor pigs, free range poultry, suckler beef and lowland sheep, and finally hill cattle and sheep located at successively higher points on the frontier away from Y and towards O.

Alternatively, rather than considering the possibility frontier as representing the whole of animal agriculture throughout the EU (or the world), it can also be considered as representing the possibilities for any given species, country or region. In any event, the frontier is conceived as representing the most effective use of resources possible, given current knowledge, skills and availability of resources (land, labour, capital and management). Since these conditions differ between regions, (especially the availability and hence costs of capital, land and labour), any particular frontier will be different for different regions and countries, particularly when measured in economic terms. This is the only way in which different aspects of both welfare and productivity can be aggregated into single indices and considered in commensurate terms, as implied by this representation.

The real world is always in the process of adapting and adjusting to changing conditions and circumstances. As farms change ownership, or generation, for instance, they frequently also change their production practices and mixes, as well as their investment in plant and equipment. This process of adaptation and adjustment, including the incorporation of R&D results and innovations, continually shifts the possibility frontier outwards, reflecting both improved productivity and better animal welfare. As a result, there will always be operations (firms and businesses) which are not on the frontier but inside it (such as point X in Fig. 1). With existing

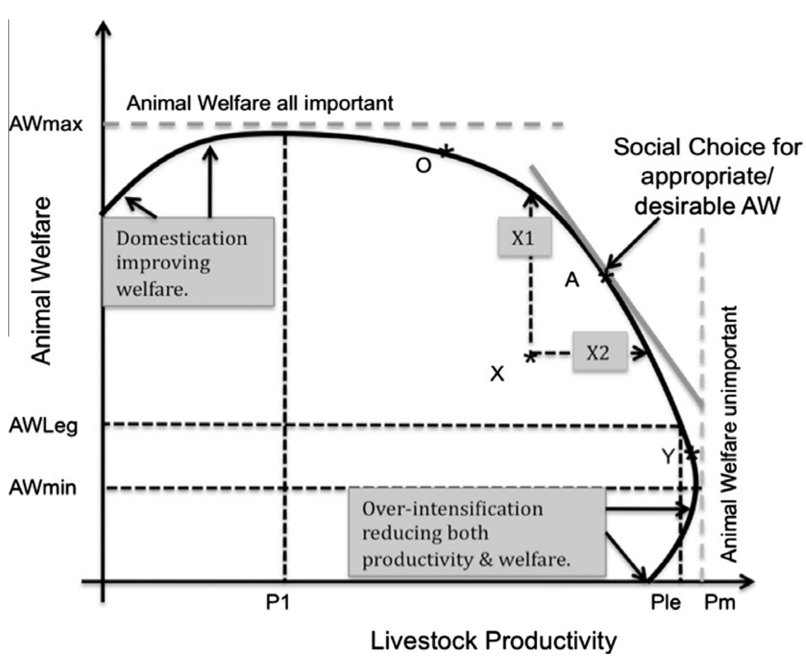

Fig. 1. Animal welfare possibility frontier. Source: adapted from McInerney, 1991.