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Topic 2 - Product and process quality in Organic Agriculture: methods and challenges

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ORGANIC PIG AND POULTRY PRODUCTION: WHAT ARE THE ANIMAL WELFARE CHALLENGES?

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Abstract: Although organic animal production is based on farming systems that enable a high degree of expression of natural behaviour by the animals, there are still some welfare challenges in such systems. Our study provides a state of the art of practices that could improve animal welfare in organic productions and interviews with key informants have been conducted to identify gaps and opportunities for animal welfare. This study provides a shortlist of practices that could be used to improve animal welfare while taking into account farmer wellbeing and sustainability and so contributing to "One Welfare".

Introduction: Organic animal production enables a high degree of expression of natural behaviour but there are still welfare challenges in such systems (van de Weerd et al 2009, Sutherland et al 2013). In pigs and poultry, some issues are similar to conventional production such as limiting adverse effects of castration or the killing of one-day old layer male chicks and others are specific to outdoor systems such as the risk of various infectious diseases like parasitism. The situation is complicated due to the high diversity in the rearing practices applied within different organic labelling schemes and the diversity of welfare problems which are faced by these systems. In order to improve rearing methods in organic pig and poultry production, it is important to screen the practices applied in organic farming systems and to identify the best practices from the welfare point of view.

Material and methods: A comprehensive inventory of current and prospective production practices in the pig and poultry sectors has been created via the systematic review of research project outputs and in depth interviews with key informants. Major animal welfare challenges and concerns in organic laying hen, broiler chicken and pig farms have been

synthesized at the EU level. First, national and international standards, regulations and labelling schemes governing animal welfare and farming practices in organic livestock farming across all the EU have been shortlisted and described. Moreover, results arising from on-going and past research (such as Welfare Quality, Econwelfare, ACCEPT, POWER, FreeBirds, PigWatch, FareWellDock, AssureWel, GroupHouseNet...) have been systematically reviewed to ensure state-of-the-art information on practices and their welfare implications. Structured interviews with key informants (farmers, experts from industry, public bodies or academia) have been conducted in Finland, United Kingdom, Italy and France to identify gaps and opportunities for animal welfare and to obtain in-depth information on frameworks for solving the animal welfare challenges.

Results: Our study provides a state of the art of practices that could improve animal welfare in organic productions. The 'One Welfare' concept (Pinillos et al., 2015) appears to provide an effective framework since it points out the interconnections between animal welfare, human wellbeing and the environment. It suggests to use a multi-criteria assessment of livestock production practices in order to have an exhaustive view of the global impacts of these practices beyond gains for animal welfare and human wellbeing. The literature provides a consistent number of animal welfare issues in organic productions, however, the interviews highlight aggressiveness due to sexual nervousness or hierarchy building and current mutilations whether it is castration or beak trimming. The relationship between animal welfare and human wellbeing is poorly documented, nevertheless, according to our interviewees, both are positively related in small production units. Thanks to the examination of standards, the on-going research and the interviews, we have built an inventory of welfare practices in organic poultry and pig production systems in the EU and identified the various perceptions regarding welfare in the production practices currently employed.

Discussion: The inventory of animal welfare practices in organic and low-input outdoor poultry and pig production systems helps understanding barriers and levers to welfare. The ethical and socio-economic evaluation of the various European organic and low-input systems and the results of the interviews enlightens the perception of stakeholders regarding welfare in these systems and the production practices currently employed. It also provides an evaluation of the reactions of the general public and farming sector to new approaches to pig and poultry production.

This study provides a shortlist of practices that could be used to improve animal welfare while taking into account farmer wellbeing and sustainability and so contributing to "One Welfare". This shortlist will be used further to work on improving welfare in organic and low input systems directly with the farmers in a participatory approach.

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References: Pinillos RG, Appleby M.C, Scott-Park F & Smith C.W (2015). One Welfare. *Veterinary Record*, 177. Sutherland M.A, Webster J & Sutherland I (2013). Animal Health and Welfare Issues Facing Organic Production Systems. *Animals* 3, 1021-1035.

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