



**Education, Communication and
Knowledge Application in Relation
to Farm Animal Welfare**

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Farm Animal Welfare Committee

9 Millbank, London, SW1P 3JR, UK

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Dear Ms Hendry, Dr Voas and Professor Glossop,

I have pleasure in submitting the Committee's Report on 'Education, Communication and Knowledge Application in Relation to Farm Animal Welfare'.

The Report's argument is simple; consumers should be able to make an informed decision about their purchases of meat, eggs, milk and other animal products according to welfare provenance. This can be achieved by education of all citizens throughout childhood with information provided at the point of sale to allow the concerned consumer to make an informed choice. After all, food is 'labelled' according to many things such as its salt content, or suitability for those with allergies or dietary preferences. Labelling includes information available through web-sites, leaflets etc as well as 'on the pack', and should apply to imported food too. The Report makes specific recommendations on how information about farm animal welfare should be communicated.

The Report also suggests how farmers and others within the food supply chain can 'learn' about farm animal welfare: other farmers are an excellent source of good practice, though there are others. Benchmarking serves farmers especially well in knowledge transfer about farm animal welfare.

I commend the Report to you and those within other Government departments and agencies, who are responsible for education and the efficiency of markets.

Yours sincerely,



Professor Christopher Wathes

Chairman

PART I – INTRODUCTION

1. The Farm Animal Welfare Committee (FAWC) is an expert committee of the Department for Environment, Food and Rural Affairs and the Devolved Administrations in Scotland and Wales. It was established in 2011. The Committee publishes its advice independently, see www.defra.gov.uk/fawc.

2. FAWC's terms of reference are: i) to provide independent, authoritative, impartial and timely advice, to Defra and the Devolved Administrations in Scotland and Wales on the welfare of farmed animals, including farmed animals on agricultural land, at market, in transit and at the place of killing; and on any legislative or other changes that might be considered necessary to improve standards of animal welfare; and ii) to provide independent scientific support and advice as required by Article 20 of Council Regulation (EC) No.1099/2009 on the protection of animals at the time of killing.

3. The aim of this Report is to review transmission of knowledge about animal welfare; to explore opportunities within education systems; and to assess the effectiveness of communication about animal welfare to society in general and how new knowledge and technology can be best communicated.

FAWC's philosophy of approach

4. Animals are kept for various purposes and, in return, provision should be made for their needs. Farm animals are recognised as sentient beings within the EU Treaty of Amsterdam 1999; the Animal Welfare Act 2006 (applicable in England and Wales with similar legislation in Scotland) defines a duty to provide for the needs of domesticated animals that depend on humans. FAWC believes that our obligations include not causing certain serious harms to farm animals and when deciding on our actions endeavouring to balance any harms against the benefits to humans to the animals affected and to other animals. At a minimum, each farm animal should have a life that is worth living to the animal itself and not just to its human keeper. Further, a growing proportion should have a good life¹.

5. There have been many attempts to define animal welfare. In our view, welfare concerns both physical and mental health, which is largely determined by the skills of the stockman, the system of husbandry and the suitability of the genotype for the environment.

6. This definition does not place an explicit moral value on maintaining or extending the lifespan of an animal. There is disagreement as to the moral significance of the quantity – i.e. duration – of life for farm animals. On the one hand, it seems to many to be commonsense that healthy animals, experiencing a good quality of life, lose out by having their lives prematurely terminated. On the other hand farm animals clearly cannot imagine the future to anything like the extent that humans can. In that sense, it is widely held that they lose very little by having their lives prematurely terminated so long, of course, as that is done humanely.

¹ FAWC. 2009. Report on Farm animal welfare in Great Britain: past, present and future

7. In considering what provisions should be made by those who use farm animals in order to avoid unnecessary suffering and to promote good welfare, the Committee is guided by the Five Freedoms:

Freedom from hunger and thirst, by ready access to fresh water and a diet to maintain full health and vigour.

Freedom from discomfort, by providing an appropriate environment including shelter and a comfortable resting area.

Freedom from pain, injury and disease, by prevention or rapid diagnosis and treatment.

Freedom to express normal behaviour, by providing sufficient space, proper facilities and company of the animal's own kind.

Freedom from fear and distress, by ensuring conditions and treatment which avoid mental suffering.

8. The Five Freedoms form a set of ideals and are the cornerstone of Government and industry policy and the Codes of Recommendations for the Welfare of Livestock.

9. Some pain and distress are unavoidable in livestock husbandry with current knowledge and farming practice, but the goal should be to minimise their occurrence. Difficult ethical and agricultural decisions have to be made when dealing with suffering, sometimes by imposing a lesser act that may still cause short-term pain or distress but provide long-term relief for the individual or group. The long-term goal should be to eliminate the source of the problem through improved husbandry and breeding rather than to ameliorate the pain and distress, necessary as this is.

10. When assessing any welfare problem, it is necessary to consider the extent of poor welfare, the intensity and duration of suffering, the number of animals involved, the alternatives available, and the opportunities to promote well-being. Where welfare is poor, the more animals that are affected, the greater is the concern. Equally important is the need to resolve any problems and improve welfare through sound husbandry: the importance of stockmanship cannot be overestimated. Most problems are avoidable while others may be intrinsic to the production system.

11. In order to offer appropriate advice about the welfare of farm animals, FAWC takes account of scientific knowledge from scientists, veterinarians and others and the practical experience of those involved in agriculture. A broad-ranging approach, drawing on relevant views and attempting to take account of human interests with a concern to ensure that the animal's interests remain to the fore, is used in FAWC's advice. Whatever the reason, the animal should be given the benefit of any scientific or moral doubt.

Scope and structure of this report

12. In 2007, FAWC established a working group to review the mechanisms for education, communication and knowledge application in relation to animal welfare. While this Report's

purpose is to offer advice to Government, the Committee also hopes that it will stimulate discussion amongst farmers, the wider food industry, citizens and consumers.

13. A public consultation was carried out in 2008/09 and written evidence was received from 15 organisations and individuals. In addition, oral evidence was taken from the livestock industry, academic and research institutions, veterinary groups, retailers, consumers and animal protection organisations. We are grateful to all who participated in the study; those who gave evidence or assistance are listed in Appendix II.

14. In essence, this Report emphasises that the responsibility of animal keepers, citizens and consumers is to have sufficient knowledge and understanding of the effect of their actions on farm animal welfare. Responsibility ranges from a stockman's need for knowledge of physiology and behaviour to a consumer's decision to purchase eggs laid by hens kept in a particular husbandry system.

15. The Report focuses on education and communication in their widest sense and is not restricted, or confined to, knowledge transfer to farmers. It is relevant not only to Defra and other rural departments in Scotland and Wales but also the Departments for Education in England, Scotland and Wales. It is based on the premise that the decisions that citizens make as adults are determined, in part, by the attitudes and moral perspectives that they acquire throughout childhood. If the informed consumer is to choose food of specific welfare provenance, then they will need to have been educated how (but not what) to think rationally and logically about their purchasing decision.

16. The Report builds upon past advice by FAWC² on motivation of stockmen to implement best practice in farm animal welfare, for example, by considering opportunities for knowledge transfer (including training) and barriers that limit knowledge uptake. Sustained action elicited by changes in attitude and behaviour by stockmen and consumers ultimately has the greatest effect on an animal's well-being; information should be presented accurately without bias.

17. Where we refer in this Report to 'Government' we are addressing ourselves to the Department for Environment, Food and Rural Affairs in England, the Scottish Government's Rural Affairs and Environment Department, the Welsh Government's Departments for Environment and Sustainable Development and Business, Enterprise, Technology and Science; and other responsible Government Departments and Agencies.

² FAWC. 2007. Report on Stockmanship and farm animal welfare.

PART II – BACKGROUND

18. FAWC maintains that all citizens have responsibilities towards farm animals, be they farmers, stockmen, others in the food supply chain or consumers.

19. The continued interest in animal welfare in many countries is sound evidence that humans place moral value on the interests of farm animals. This value has been translated to some extent into a commercial value for ‘higher’ welfare systems³. However, this commercial value alone is unlikely to drive significant improvement in welfare, hence the need to consider other ways to improve the welfare of farm animals.

20. Animal welfare initiatives are targeted. For example, communication campaigns directed at consumers might raise demand for higher welfare produce. Education programmes about husbandry systems may affect a consumer’s purchases. Promoting the use of scientific information by retailers, transporters, inspectors and producers, for example, may also improve welfare. These are examples of initiatives that are designed to improve animal welfare by modifying human behaviour.

21. Human behaviour is critical to many of society’s concerns about farm animal welfare. This Report considers how change(s) in human behaviour may affect farm animal welfare. Although different stakeholders influence welfare in various ways, there are common themes. The goal of behaviour change should be to build upon FAWC’s Five Freedoms and ensure that *“each and every farm animal used for our benefit will have had a life worth living while a growing number will have experienced a good life”*⁴.

22. The Report should stimulate debate on those approaches that are likely to be most effective. For example, producers often report that consumers should be educated about the high welfare of farm animals produced in the UK. This simple proposition raises considerable questions. Even if one assumed that farm animal welfare in the UK was of a higher standard than in other countries, how should this information be conveyed to the consumer? Do consumers want to get involved in the detail of the information (for example, how an animal is slaughtered humanely) or would they prefer a government body or the retailer to provide an assurance about welfare provenance? If information is to be communicated, who should be responsible for ensuring that it is robust and unbiased?

23. The Report highlights some of the issues that are likely to affect the value of farm animal welfare initiatives. Promoting appropriate behaviour change has significant potential to improve welfare; however, careful design and evaluation of such initiatives is needed to ensure that the moral value that society places on animal welfare is translated into improved conditions for farm animals.

³ FAWC. 2011. Report on Economics and farm animal welfare.

⁴ (1) FAWC. *op.cit.*

PART III – EDUCATION

24. In a previous report (*Farm Animal Welfare in Great Britain: Past, Present and Future* 2009), we called for citizens to be educated about food and farming from childhood and suggested that this should begin at home and in school. The information they receive on the ethics and practice of livestock production and on farm animal welfare should be accurate and unbiased.

25. In modern societies, education can usefully be seen as falling into two categories that have the potential to complement each other: formal education during schooling and subsequently; and informal education which is obtained from families, the media and other sources such as books, television programmes, the internet and visits to museums, zoos, farms, botanic gardens, etc.

26. Education can have a major impact in changing knowledge and behaviour. Our vision is of an education that enables everyone, whether or not they are involved in the production or consumption of food or other products from animals, to attain sufficient knowledge and understanding of the impact of their actions on animal welfare to mean that they put such knowledge to good effect.

27. Many respondents to our consultation exercise considered that education initiatives should focus on the perceived inadequacies of understanding where food comes from, “let alone the reality of animal welfare on farms”. Many felt that children should be better prepared for adult life and their responsibilities as citizens/consumers. Some respondents believed that provision of balanced, factual information was important to enable children to apply their own judgement. Such information was also seen to be relevant for adults.

28. The contribution that formal and informal education currently makes to education about farm animal welfare can best be described as patchy. At its best, school pupils learn about farm animal welfare in a range of subjects and are taken on visits and use other ways to enable them to learn about farm animal welfare in terms of the needs of farm animals, the legal requirements for those who rear and slaughter them for food and best practice, for instance as enshrined in the Five Freedoms.

29. Pupils may also be helped, whether as a result of formal or informal education, to develop their own views about such issues as whether it is morally acceptable to keep animals under intensive conditions, to mutilate them (e.g., beak trimming, castration and tail docking) and whether life is better as a domestic animal or in the wild.

30. However, most pupils do not receive such a comprehensive education about farm animal welfare. We maintain that better education about farm animal welfare is desirable – for pupils as well as for farm animals. Suitable learning outcomes could include an understanding of where our food comes from, a basic knowledge of how farm animals are reared and an understanding of why animals are reared in this way.

School education

31. There are a number of reasons why schools are so important in the role they do – and should – play in education about farm animal welfare. In countries such as the UK, around 95% of the population from age 5 to 16 is in full-time education on any school day.

Pupils are taught by professionals, who have a vital role in enabling pupils to learn and in developing habits of learning. Pupils are taught in a skilled and balanced way, can engage with the views of others and develop skills that can help them critically to evaluate arguments.

32. Farm animal welfare receives only limited attention in schools at present from a national curriculum that undergoes regular change. Many pupils go through their schooling having learnt almost nothing about animal use, let alone the use of farmed animals. This is despite the fact that many find such issues engaging and that a range of subjects, including biology, geography, citizenship and design and technology (e.g., food technology) offer ample scope for teaching in this area. In addition, teaching in this area can meet some of the aims of the Every Child Matters agenda.

33. Much of the material that is produced for UK teachers to use has little, if any, quality control. It can be difficult for teachers to access good quality, objective materials about farm animal welfare. Many organisations that provide materials about animal welfare have clear agendas. A further problem is that few teachers have a well-grounded understanding of animal welfare; indeed only a small minority of primary teachers has any specialist training in science. While initiatives exist to train teachers in the UK about welfare, no research has been undertaken into their effectiveness. In contrast, since 2006 Austria has had a high quality initiative called *Tierschutz macht Schule* (animal welfare goes to school) that is based on the science of animal welfare. The initiative provides teaching materials and workshops for school pupils and training for teachers. Such training helps with both content (what is to be learnt) and pedagogy (how the teaching can be most effective).

34. Respondents to our consultation exercise commented on specific inadequacies of current primary and secondary education including the lack of focus on farming as a moral and environmental activity and the potential lack of balance from teachers. Other respondents suggested that farm animal welfare can be discussed in the curriculum if the will and the knowledge are present within the teaching profession. Education about farm animal welfare was considered important to produce better informed, responsible consumers and citizens able to contribute to public debates on animal welfare policy. In addition, the value of linking empathy for animal and humans was highlighted. Some respondents suggested that animal welfare should be explicitly included within the National Curriculum.

Farm visits

35. Many young people have a natural interest in, and empathy for, animals. Farm visits stimulate learning and are especially valuable where there has been no previous contact, though the benefits of repeat visits and long-term associations between schools and farms should not be underestimated. Farm visits can also be particularly valuable for disadvantaged pupils, in part because the experiences visits offer are more concrete and more authentic than much of what is received in the classroom. Additionally, most schools involve family members, and learning assistants, which can provide richer discussions and a more holistic environment for learning, which may continue post-visit. At the same time, visits to farms with intensively reared animals can cause visitors to become more negative in their attitudes towards farming. Those in charge of farm visits need to consider whether this is desirable, perhaps on the grounds that one is developing the critical faculties of visitors, and how these visits can be appropriately managed, perhaps through appropriate

preparation and more detailed explanation of the systems and why they are used. In some circumstances, for example very young children, it may be preferable to take visitors to farms with more extensive systems. In addition to the educational benefits, the feedback from children during and after a visit can help farmers better understand the attitudes, knowledge base and perceptions of their (future) customers.

36. City farms can provide a valuable green space in an urban environment and can enable children (and others) to see farm animals when a visit to a conventional farm would be unlikely. Furthermore, some city farms have outstanding records of working with disadvantaged pupils or with individuals experiencing rehabilitation from drug misuse or crime. However, some city farms are so divorced from the commercial and other realities of conventional farming, verging on theme parks, that they can give a misleading impression of farming to visitors.

37. A number of organisations are involved in providing farm visits. Sometimes there is a link simply between a single school and a local farm. However, county, or even countrywide, events (e.g., Open Farm Sunday) and organisations have become more commonplace. Farmlink, for instance, provides what it refers to as *A Classroom in the Countryside* while FACE (Farming and Countryside Education) and LEAF (Linking Environment and Farming) provide a great deal of support to farmers and schools alike.

38. The extent of such schemes is greater than many realise. Nationally, approximately one million school children visit working farms and farm attractions each year. In the Year of Farming and Food (September 2007 – July 2008) over 250 farms registered in the South West region alone to take school visits and some 300,000 young people went on visits to farms in this region during the year. Although some schools are anxious about insurance for such visits and health and safety issues while on them, FACE and other organisations and networks (including the Council for Learning Outside the Classroom) provide detailed and helpful advice and guidance; many schools find that such apparent barriers exist more as perceptions than realities. The Countryside Educational Visits Accreditation Scheme (CEVAS) provides a quality assurance scheme to underpin the quality of the visit for the user and assist the provider in improving delivery.

Education other than in schools and on farms

39. Pupils of school age do not learn only about farm animal welfare in schools and during farm visits. They learn about animal welfare, as they do about other issues, from family members, the media and other sources; collectively, these, as an influence on attitudes and behaviour, are generally more important than is school.

40. Further categories of learners can be distinguished. There are those, such as veterinarians, farmers, retailers, those in the retail, catering, health and nutrition industries, for whom issues of farm animal welfare are central to their jobs. Then, there are many who learn about animal welfare on further and higher education courses, whether or not these have 'animal welfare' in their names, and use such knowledge in their work. Training programmes aimed at stockmen can promote increased animal welfare knowledge and

animal handling skills. Research in Australia by Hemsworth and his colleagues⁵ has also shown that training programmes aimed at modifying attitudes towards animals can influence human behaviour towards stock, the response of animals to the stockmen and even productivity of the animals. Animal welfare is increasingly an academic discipline in its own right with a growing body of knowledge and a community of researchers and practitioners in many countries. There is an increasing expectation that those who work with farm animals should know about animal welfare and animal behaviour issues. In addition, there are other citizens for whom issues of animal welfare are important in their day-to-day lives.

41. It seems clear that there is a particular need for veterinarians and farmers to receive a thorough education about farm animal welfare, for example, through formal training of veterinarians that leads to 'day-one competences' and informally 'on the job' (as well as more formally through continuing professional development). On the job training has the advantage that it is 'real', i.e., situated in the day-to-day realities of the job. However, if completely unstructured, and in the absence of opportunities for reflection, it may do no more than reinforce existing beliefs whether or not these are warranted.

42. Education (i.e., primarily information) about farm animal welfare for the average citizen is provided by many organisations including the Levy Boards (e.g., British Pig Executive, English Beef And Lamb Executive, HCC Meat Promotion Wales and Quality Meat Scotland), the Royal Society for the Prevention of Cruelty to Animals, Compassion in World Farming, the People's Dispensary for Sick Animals, the British Nutrition Foundation and by the media. Some materials do include specific information on the purchasing options that are described in the communication section of this report. Inevitably, this is more partial than that provided by formal educators, though CBBC (Children's BBC), for example, takes particular care to provide balanced reporting, regularly features such socio-scientific issues as our use of animals and is watched by about one in six of all four to fifteen year-olds. Partiality in itself is not a bad thing, providing people have developed the tools to evaluate a range of viewpoints.

Reflections

43. We have been encouraged by the tremendous amount of goodwill and enthusiasm there is among many who provide education about farm animal welfare. It seems unlikely that there is a single optimal age for such learning. Three to 6 year-old children have a tremendous capacity to learn biology so there is a role for early years and foundation stage learning. Good educational practice should foster the natural sense of respect and empathy that younger children often have towards animals. Seven to 12 year-olds are very open to learning about animals and generally hold very positive attitudes to them so that it has been suggested that this is a prime age group to target. Older pupils are more capable of abstract reasoning which means that the 13 to 16 years-old age range may be particularly appropriate for ethical discussions and the development of moral reasoning about our use of animals, including consideration of such sensitive issues as mutilations and methods of slaughter.

⁵ The effects of cognitive behavioral intervention on the attitude and behavior of stockpersons and the behavior and productivity of commercial dairy cows. 2002. Hemsworth, P.H., Coleman, G.J., Barnett, J.L., Borg, S. and Dowling, S. *Journal of Animal Science*, 80: 68-78.

44. Given the pressures on the school curriculum and the large number of interest groups campaigning for their particular topic to be included, it is unlikely that special pleading about the importance of farm animal welfare will, on its own, achieve all that its advocates would wish. It may be more effective to argue that the issue of farm animal welfare allows broader interests to be met, for example, learning outside the classroom, environmental education (use of land), citizenship education (our responsibilities to others) and technology and health education (nutrition).

Ethical difficulties

45. It might be supposed that the contentious nature of farm animal welfare raises particular ethical difficulties for school teachers. However, farm animal welfare is no more contentious than many other issues addressed in schools, such as racism, sexism, abortion and religion. Furthermore, teachers in many subjects are used to dealing with controversial and sensitive issues. Nevertheless, it is the case that science teachers are often uncomfortable at handling classroom discussions about controversial issues though attempts to promote such teaching about ethics in the science classroom have had some success.

46. There is much about animal welfare that can profitably be taught. We support these attempts and note that the notion of sentience among farm animals is widely held and is enshrined in EU legislation, while ethical principles such as a 'duty of care' for animals in one's charge are widely accepted. High quality continuing professional development for teachers can help them teach more effectively and with greater confidence.

Links with the curriculum

47. A fundamental element of school education is helping young people to develop the knowledge, skills and dispositions that they need for their adult lives when they will make a myriad of choices about matters both large and small. Considering the extensive use of farm and other animals in our society, there is a strong argument for these issues being addressed in school education, particularly as increasing urbanisation and the seeming inexorable decrease in the numbers of those who work on farms mean that fewer and fewer young people have any first-hand experience of farming or an awareness of how food is produced. Many pupils have considerable interest in the use of animals and food provenance. Learning about these topics can help pupils in their learning about science (e.g., how welfare connects to animal physiology) and other school subjects (e.g., land use in geography; our use of animals in philosophy/religious studies). Furthermore, learning about such contentious issues as how we should use animals for our benefit can sharpen pupils' thinking, making them more able to think rigorously and evaluate arguments they may come across outside of school, whether in the media or elsewhere.

Value of farm visits, logistical issues, funding difficulties

48. Given increasing urbanisation, most pupils have no experience of farm animals despite the majority regularly consuming farm animal produce. A visit to a farm can therefore help address this lack of experience.

49. There are also financial costs to consider (a figure of £5 per visitor was quoted to us), and a great deal of unpaid time by farmers and others on farms is expended both before and after a visit. Furthermore, there are health and safety considerations and child protection issues to be addressed. All this means that the loss of even the modest amounts of funding that are available can have a disproportionate effect on the education of very large numbers of school pupils. The Higher Level Environmental Stewardship Scheme (HLS), currently providing £100 per group visit for those choosing the educational element, provides valuable leadership and indicates commitment from Government. This could be further enhanced by linking it to a recognised accreditation scheme, such as CEVAS, to promote confidence in the farm visit, and incorporating the educational element in Entry Level Stewardship schemes to allow access to a greater range of farm types.

Recommendations

50. *Any government revisions of the national curricula in England, Scotland and Wales need to ensure that school pupils, in an age-appropriate manner, learn about where our food comes from and about how farm animals are – and should be – treated. Educational initiatives should, at a minimum, address the basic legal obligations for farm and companion animals, such as the duty of care and the requirement to provide an animal's five needs.*

51. *Programmes of initial teacher training, whether determined at national or institutional level, should ensure that good practice in the use of farms for visits is addressed when learning outside the classroom is considered.*

52. *Primary teachers and secondary teachers in a wide range of subjects should be provided with the necessary continuing professional development by suitable providers to enable them to teach about animal welfare and the needs of animals. Initiatives that raise interest and enthusiasm in teaching farm animal welfare should be promoted within the teaching community.*

53. *Visits to commercial farms by school age children should be encouraged and facilitated as they have a wide range of educational benefits and are popular with pupils and parents alike. The Government should actively encourage improvement of such visits through linkage to accreditation schemes, and widen access to a greater range of farm types, for example, by extending the educational element to the Entry Level Stewardship scheme.*

PART IV – COMMUNICATION

54. In the previous section, we considered how education can help to raise awareness of farming and farm animal welfare amongst schoolchildren. The availability of accurate, unbiased information on farm animal welfare should not stop here. Communication with adult consumers often attempts to convert awareness into a change in choice. Such choices can only be expressed when consumers have access to information that permits comparisons between products and retailers. Market forces, self regulation and statutory controls can all influence choices.

55. Communication is important throughout the food chain. Where there is consumer demand, initiatives require effective communication strategies operating between food chain actors to encourage improved husbandry. Animals raised to welfare standards higher than minimum legal requirements, and products derived from those animals, should be identifiable as such within the food chain through assurance or certification schemes. Many opportunities for a greater market share for higher welfare⁶ production systems are lost or constrained in current food chain practice. Price premiums from higher welfare systems are only obtainable on some products or cuts. Improving the relative proportion of cuts that can be sold in this way (the so called carcass balance) to ensure the maximum use of higher welfare products across product ranges would increase availability to the consumer, improve the offering from the retailer and provide greater economic benefit to support high welfare production.

56. There are numerous opportunities for the communication of information about farm animal welfare. These include individual product information and labelling for branding and range segmentation, corporate social responsibility statements and public information campaigns. A debate on farm animal welfare should engage citizens, empower consumers and encourage greater transparency in the food chain. The consumer should be able to compare meat and other animal products in terms of welfare provenance either at the product, the brand or the retailer level.

57. Some aspects of food policy, such as promotion of sustainable diets, regulation of labelling and reform of the Common Agricultural Policy (CAP), are a part of Government policy. Food policy is relevant to all in society and not just those that consume livestock products. Food choice is a key policy instrument for other food-related policies. As an example, the recent Foresight report on Global Food and Farming Futures⁷ included a specific review of the *“levers for changing consumers’ food patterns”*.

58. In 2010, the UK Government at the time stated that one of its goals for food policy was *“by 2030, consumers are informed, can choose and afford healthy, sustainable food”*⁸. Animal welfare was an attribute of a *“sustainable diet”*. Some stakeholders we consulted agree with much of this sentiment. If future information campaigns promote a sustainable, healthy diet, then the Government should decide how animal welfare is to be included as a central component of Government food procurement policy.⁹

⁶ i.e., welfare standards which are above the current legal statutory requirement.

⁷ Foresight Project on Global Food and Farming Futures. 2011. Lynn Stockley WP2: Review of levers for changing consumers’ food patterns

⁸ Defra. 2010. Food 2030 (p.7)

⁹ See, for example: Scottish Government. 2009. Recipe for Success: Scotland’s National Food and Drink Policy, Edinburgh (p.18)

59. There is widespread political support for empowering the consumer to ensure properly functioning retail markets and genuine choice, both within the UK and elsewhere in the EU. FAWC has previously advised that food – from wherever it is procured – should be labelled according to its welfare provenance¹⁰.

60. In general, those consumers who specifically and consistently seek products from higher welfare production systems can and will find them. However, there is a need to raise broader awareness of the welfare of farm animals within food production through better and more coherent information, by improving general consumer understanding of the importance of welfare in animal husbandry and by encouraging purchasing of products or brands from higher welfare systems. This will help to promote wider changes in consumer behaviour and purchase choice leading to growth in the spread and the value of such systems and, through this, the improvement of the lives of our farmed animals. Behavioural change will only result if consumers are engaged and motivated by the information presented to them.

61. Connecting the consumer to the source of foods through visual media, concrete examples and even live events is a good example of ‘positive attention grabbing’. Positive information on the benefits of higher animal welfare could focus on stockmanship, husbandry and standards, while recognising that farm animals are sentient beings for which both physical and mental health is important.

Communicating information to consumers

62. A large number of surveys across Europe and within individual European countries have shown that a significant number of consumers describe themselves as concerned about the welfare of farm animals and feel that steps ought to be taken to improve the welfare of animals in a number of production systems. The Eurobarometer studies of 2005 and 2007 showed this clearly while other studies have subsequently confirmed it. Much of this research identifies strong consumer concern for the lack of suitable information on animal welfare at point of sale.

63. In the Eurobarometer survey of 2007¹¹, 58% of respondents expressed a wish to know more about farming conditions while 54% disagreed with the statement that they could easily find information on products sourced from higher farm animal welfare production systems. A report on consumer concerns over animal welfare¹² similarly reported that: *“the issue of lack of availability of ‘animal-friendly’ products is related to lack of information, confusion over current labelling, lack of demand and premiums associated with increased animal welfare”*. Finally the Welfare Quality® research project revealed through extensive surveys¹³ that the vast majority of consumers considered farm animal welfare to be a key concern and believed that more and better information would have an impact upon their purchasing behaviour; as yet there is little empirical evidence to demonstrate this link in practice as many other factors also affect choice.

¹⁰ FAWC. 2006. Report on Welfare Labelling.

¹¹ Eurobarometer. 2007. Attitudes of EU citizens towards animal welfare. European Commission.

¹² Harper, G. and Henson, S. 2001. Consumer concerns about animal welfare and the impact on food choice. Final Report to the European Commission, FAIR project CT98-3678.

¹³ Evans, A. and Miele, M. 2007. Consumers' Views about Farm Animal Welfare. Part I: National Reports based on Focus Group Research. Welfare Quality Report Series No.4. Cardiff University; and Evans, A. and Miele, M. 2008. Comparative focus group report. Welfare Quality Report Series No.5. Cardiff University.

64. More information and better communication can thus contribute directly to generating the momentum for change towards improved farm animal welfare through changes in the consumer's purchases. In a YouGov survey in 2007, 50% of respondents described themselves as likely to change retail outlets if higher welfare products were not available¹⁴. Concluding its own initial survey, Eurobarometer reported: "*In all the Member States of the European Union, a majority of respondents state that they can influence animal welfare by their purchasing behaviour*"¹⁵.

65. The absence of adequate information to inform consumers means inevitably that welfare is not a major factor influencing purchases, except for a minority of concerned buyers. Other everyday concerns, such as cost, value, familiarity and convenience, dominate purchases, while other ethical engagements (such as Fair Trade or air miles) may compete with welfare for consumer attention and commitment. Moreover, when it is considered, animal welfare is often seen as a food quality and consumer health issue¹⁶. For these reasons, specific communications on animal welfare need to work alongside other market responses and rationales that encourage the purchase of higher welfare products, as well as a more coherent regulatory (both voluntary and mandatory) environment and more directly comparable standards and claims.

66. There has been significant recent media interest in (farm) animal welfare as a societal issue. Television documentaries and events, such as those presented by celebrity chefs, have covered issues ranging from broiler production and pig husbandry to welfare at slaughter. In addition, there have been several news stories concerning welfare on UK farms.

Communication about farm animal welfare

67. Despite the limitations identified above, farm animal welfare has become an increasingly important ethical concern amongst both citizens and consumers. There is evidence of a growing demand for animal products from higher welfare production systems and, in certain instances, consumer avoidance of products derived from systems with poor welfare (e.g., *paté de foie gras*). Critically, meeting that demand requires information and communication that are available to concerned retailers, citizens and consumers.

68. Food chain actors have responded in a number of ways to citizen and consumer demand in this area perhaps most noticeably through market segmentation backed by farm assurance. As we have noted previously, "*Farm assurance schemes have a major role in ensuring acceptable standards of farm animal welfare*"¹⁷. Other drivers for assurance schemes are the need for retailers and other actors to demonstrate due diligence for food safety and quality. Assurance schemes also have a certain amount of brand recognition and aim to communicate their role directly to consumers. Farm animal welfare has become a significant business driver for many within the food sector.

¹⁴ Institute of Grocery Distribution. 2007. Consumer attitudes to animal welfare: A report to Freedom Foods by IGD. Watford.

¹⁵ Eurobarometer. 2005. Attitudes of consumers towards the welfare of farmed animals. Eurobarometer, European Commission.

¹⁶ Kjærnes, U. and Lavik, R. 2008. Opinions on animal welfare and food consumption in seven European countries. Welfare Quality Reports Series No.7, Cardiff University.

¹⁷ FAWC. 2005. Report on Welfare implications of farm assurance schemes.

69. Critically, farm animal welfare, often linked to other 'quality' product or system characteristics, has become an element in the differentiation of products, product lines and brands. Most major retailers now offer quality ranges that are often distinguishable from standard ranges by, amongst others, higher welfare criteria though these higher criteria are rarely identifiable from the front-of-packet information or labels. Consumers can sometimes identify the generic brand qualifications from websites and information leaflets.

70. A second approach adopted by food retailers has been the gradual introduction of farm animal welfare criteria into corporate social responsibility (CSR) statements. These statements, again rarely available at retail outlets but posted on websites, seek to validate the ethical position of the retailer and assure consumers that due diligence requirements are being met. CSR statements are also an important component of retailer branding, helping to retain customer fidelity and to identify the retailer's ethical position. However, most CSR statements are only relevant to a retailer's own brand products.

71. While market segmentation and CSR have allowed food retailers to respond to consumer demand for food products from higher welfare production systems, they have inevitably led to a proliferation of variable standards as retailers and others seek to differentiate not only products but also their own brand from competitors. Consumers may be confused by the different standards used, different units of measurement, means of welfare assessment employed, assessment times in the animal's life cycle and distance from mandatory welfare requirements that limit their ability to compare products, ranges and brands directly and thus ultimately frustrate choice.

72. The specific labelling of individual products as coming from higher welfare production systems has not, to date, been widely used by retailers and manufacturers, with the notable exception of the Freedom Food scheme, operated by the Royal Society for the Prevention of Cruelty to Animals and described as "*exemplary*" by EU Commission¹⁸. Recent research has suggested that many retailers and other actors across Europe generally reject the idea of stand-alone welfare labels arguing that on their own, higher standards of farm animal welfare will only sell to a limited proportion of consumers¹⁹. Recent research within the UK has similarly argued that "*animal welfare as a stand-alone issue is unlikely to provide an effective marketing 'hook' to encourage people to buy higher welfare products*"²⁰. The same research has concluded, though, that there is a need for a common higher standard and that the presumed lack of interest in a label may "*simply be due to lack of publicity*". On an issue with so much latent public interest the need to remedy the absence of comparable information is considerable.

73. The use of any organic claim is regulated by EU regulation 834/2007. This states that organic production "*delivers public goods contributing to the protection of the environment and animal welfare*". Certification of organic livestock farms is undertaken by several bodies that also require additional standards beyond the regulation. In addition to the organic label, several organisations communicate the messages associated with organic products to consumers.

¹⁸ European Commission Directorate General for Health and Consumer Protection. 2009. Feasibility study on animal welfare labelling and establishing a Community Reference Centre for Animal Protection and Welfare *Part 1: Animal Welfare Labelling*. Final Report, Civic Consulting.

¹⁹ Kjaernes, U., Bock, B.B., Higgin, M. and Roex, J. 2009. *Farm animal welfare within the supply chain*. Welfare Quality Report No. 7, Cardiff University.

²⁰ Brooklyndhurst Report. 2010. Are labels the answer? Report to Defra.

74. For some livestock sectors, there are descriptions of production systems that are used on labels or other supporting materials; for some sectors, such as laying hens, these descriptions are controlled by legislation. In the UK, the pig industry has proactively developed a code of practice for labelling pork and pork products as free range, outdoor bred and outdoor reared. For other livestock sectors, such as the dairy industry, there are no agreed production system descriptors. In addition, information that applies to one or more component of the production system such as the method of slaughter method may be provided.

75. It is often not possible to state that one production system always provides better welfare than another. For example the welfare advantages and disadvantages of different laying hen production systems have been described in the EU's LayWel project. The design features of each system (cages, barn, free range etc.) may have a significant effect upon behavioural freedom. Indeed the behavioural restriction seen in conventional battery cages has resulted in their prohibition within the EU. However, other welfare relevant outcomes, such as feather loss and bone damage, may vary considerably within free range, barn and enriched cage systems depending on multiple management factors. It is important to consider welfare over the animal's entire life.

76. Since each production system may affect welfare outcomes in different ways, it can be difficult to give an overall welfare rating to each system. It may, therefore, be more appropriate to describe the key differences between systems than to simplify the analysis by saying that any one system is always better than another in welfare terms. In recognition of the variable effect of management, another term that has been used to describe differences between systems is to describe a system's welfare potential, i.e., the level of welfare that could be achieved if it was operated according to the best management. In order to deliver a rigorous assurance on welfare, production system descriptions could also include requirements for minimum welfare outcomes.

77. Various methods are used by retailers and caterers to control animal welfare standards. For example, some retailers and caterers engage in 'choice editing' and no longer sell eggs from hens kept in conventional battery cages. Other ways are to work with suppliers to improve welfare or to encourage farm assurance schemes to include specific welfare requirements. Although the motivation is often protection from criticism, some use these requirements within their marketing and publicity material.

78. While consumers who intentionally and regularly seek out products emanating from higher welfare systems can find them, either by purchasing specifically labelled items, by buying brands with identifiable higher welfare standards or by buying from outlets with higher generic commitments to farm animal welfare through corporate social responsibility, there remains considerable confusion. Firstly, information on the comparative welfare benefits of one process or procedure or set of claims over another; secondly the extent to which these various claims go further than legal regulatory compliance; and thirdly, the precise nature, and welfare implications, of the terms employed (such as free range or outdoor). Standardising the descriptors would provide an important platform upon which animal welfare claims could be made.

79. In addition to information on labels, additional marketing material that makes animal welfare claims, or suggests better qualities of animal life, may influence food choice. This is controlled by the Advertising Standards Authority (ASA) and legislation. In response to

complaints, the ASA can apply tests of honesty and truthfulness. It relies upon evidence from publicly available material.

80. Some advertising claims about animal welfare have been referred to the ASA. For example, in 2003 complaints were received about a retailer's claim that *"all our chickens come from good homes"*. The ASA considered that the *"advertisement referred to the advertisers vetting farmers who reared their chickens and to their animal welfare specifications and noted the advertisement did not refer to the chickens being free range or organic"*; it adjudicated, *"consumers were unlikely to be misled by the claim"*. Also in 2003, after examining a claim that *"Soil Association organic animal welfare standards are the best around"*, it concluded that the advertiser had not substantiated the claim and told them not to repeat it. More recently, in 2010, complaints were made that a retailer's television advertisement on outdoor bred pigs was misleading. The complaint was upheld as the ASA considered that even though the term outdoor bred might be commonly understood in the pig farming industry, it considered that *"the average viewer was unlikely to be aware of its particular meaning"*.

81. FAWC strongly believes that information must be unbiased, accurate and suitable for the target audience. Its effectiveness is likely to be influenced by the trustworthiness of the source; greater use should be made of consumer protection and advertising standards legislation to ensure that only valid and accurate claims are being made.

Improving Communication

82. Information at the point of purchase is an important communication tool for products sold via both retailers and caterers; but what should be communicated? Retailers and other food chain actors make a variety of different claims, sometimes in combination, relating – either directly or indirectly – to the welfare of farm animals used in food production (see Figure 1). Some of these claims are identifiable through a label, others appear in published or web-based form:

- Assurance claims: that the food has been produced in compliance with one or more UKAS accredited assurance procedures (i.e., compliant with EN45011, ISO/IEC Guide 65), which may or may not exceed statutory requirements and which include the treatment of animals (e.g., the Red Tractor or Freedom Food schemes);
- Production system claims: that the food has been produced according to production system processes which are governed either by legislation (such as free range eggs), or by industry codes of practice (as in pig production). These production system claims may or may not include specific welfare standards;
- Organic claims: that the food has been produced according to organic standards governed by EU regulation and by internal standards operated by organic certification bodies;
- Animal welfare claims: that the food has been produced according to identifiable standards set out by the retailer or other food chain actor. These may or may not be based upon existing assurance procedures but may include additional welfare claims

that differentiate products and product ranges from those offered by competitors (e.g., many of the standard schemes operated by leading food retailers);

- Corporate social responsibility claims: that the food has been produced in compliance with the retailer's commitment to corporate social responsibility, which may or may not include compliance to stated assurance procedures;

83. Other claims that may be relevant to welfare include the country of origin that may imply that different levels of welfare have been achieved due to compliance with different national regulatory standards, and the method of slaughter that may be used selectively for some specific slaughter methods but not generalised across the food chain.

84. Each of these claims is governed in different ways; some by legislation, some by third-party certification and others by self-regulation (see Figure 1). Moreover, similar claims can be made in different forms, leading to potential confusion over which products come from genuinely higher welfare systems.

85. Various approaches have investigated how to improve the consistency and coherence of animal welfare information provided for consumers, while at the same time facilitating appropriate market segmentation and competition. Although, the European Commission has yet to advocate an animal welfare label formally across the EU, many organisations recognise the need for greater clarity and comparability in welfare claims²¹. Some promote production system labelling similar to that that is mandatory in the EU for eggs, while others advocate specific labelling schemes such as Freedom Food.

86. Accepting the significant role played by accreditation schemes and market initiatives but recognising the confusion this can present to food consumers, thereby potentially, FAWC believes that the critical issue is the lack of clarity and consistency about welfare claims. Consumers should be able to compare meat and other animal products in terms of welfare provenance either at the product, brand or retailer level.

87. There is a need for welfare claims by food chain actors to be comparable across sectors, including food services. A range of approaches could be envisaged. One might be the development of a common higher welfare standard governed by an independent body; another might be the alignment of existing schemes and claims to common, identifiable objectives and outcomes. Critical to both would be the need for change in the governance. While recognising the role played by specific assurance schemes, FAWC maintains that greater effort is needed by food chain actors in promoting the comparability of welfare claims.

Conclusions

88. Many consumers are motivated about animal welfare but are confused with information that is provided and are thereby frustrated in their choice.

²¹ Commission of the European Communities. 2009. Options for animal welfare labelling and the establishment of a European Network of Reference Centres for the protection and welfare of animals. COM 2009. 584 Final.; Commission of the European Communities. 2009. Impact Assessment Report: Options for animal welfare labelling and the establishment of European Network Reference Centres for the protection and welfare of animals. SEC. 2009. 1432.

89. Although accredited assurance schemes exist that offer identifiable products from systems and methods operating to welfare standards that are higher than legal minimum requirements, many welfare claims presented to consumers are not comparable across all food sectors. Moreover, certain specific claims, including those employing terms such as higher or better animal welfare often offer little systematic evidence of improved welfare over and above current minimum legislative compliance.
90. Existing production system claims require far clearer and more coherent definition of the production systems concerned. Clarity is unlikely to be achieved unless these are defined legally.
91. Animal welfare outcomes are an essential part of demonstrating good welfare standards.
92. The current practice of retail outlets restricting corporate social responsibility statements on welfare to own brand products creates confusion.
93. Consumer protection legislation and advertising standards are rarely used to control misleading animal welfare claims.
94. Consumers currently have no means of distinguishing imported food products that do not meet minimum UK requirements for animal welfare.
95. Welfare issues are part of societal concerns, which influence purchases. Government food and farming policy that is focused on sustainability places little emphasis on animal welfare compared with other societal concerns.
96. Government could also show a leadership role with respect to animal welfare by aiming to *“promote the public procurement of animal-based products which at least meet the UK minimum welfare standards”* as recommended previously.

Recommendations

97. *Independent governance, is needed to align higher welfare claims to a common and identifiable set of defined welfare objectives and outcomes against which welfare claims can be compared directly by interested consumers. The governance framework should develop codes of practice to provide guidance on appropriate marketing claims about farm animal welfare.*
98. *Where marketing claims are used that imply that animals enjoy higher welfare standards this should be demonstrated by whole life welfare advantages over and above current minimum legislative compliance.*
99. *Where absent in a livestock sector, Government, working in partnership with relevant stakeholders, should draw up formal legal definitions for production system descriptors.*
100. *Food retail and food service outlets should develop corporate social responsibility policies for all food products sold thereby allowing consumers to make genuine comparisons between the claims made.*

101. *Animal welfare outcome safeguards should be incorporated into industry, private and other assurance and certification procedures associated with animal welfare claims. A summary of information on important welfare outcomes should be freely available to consumers.*

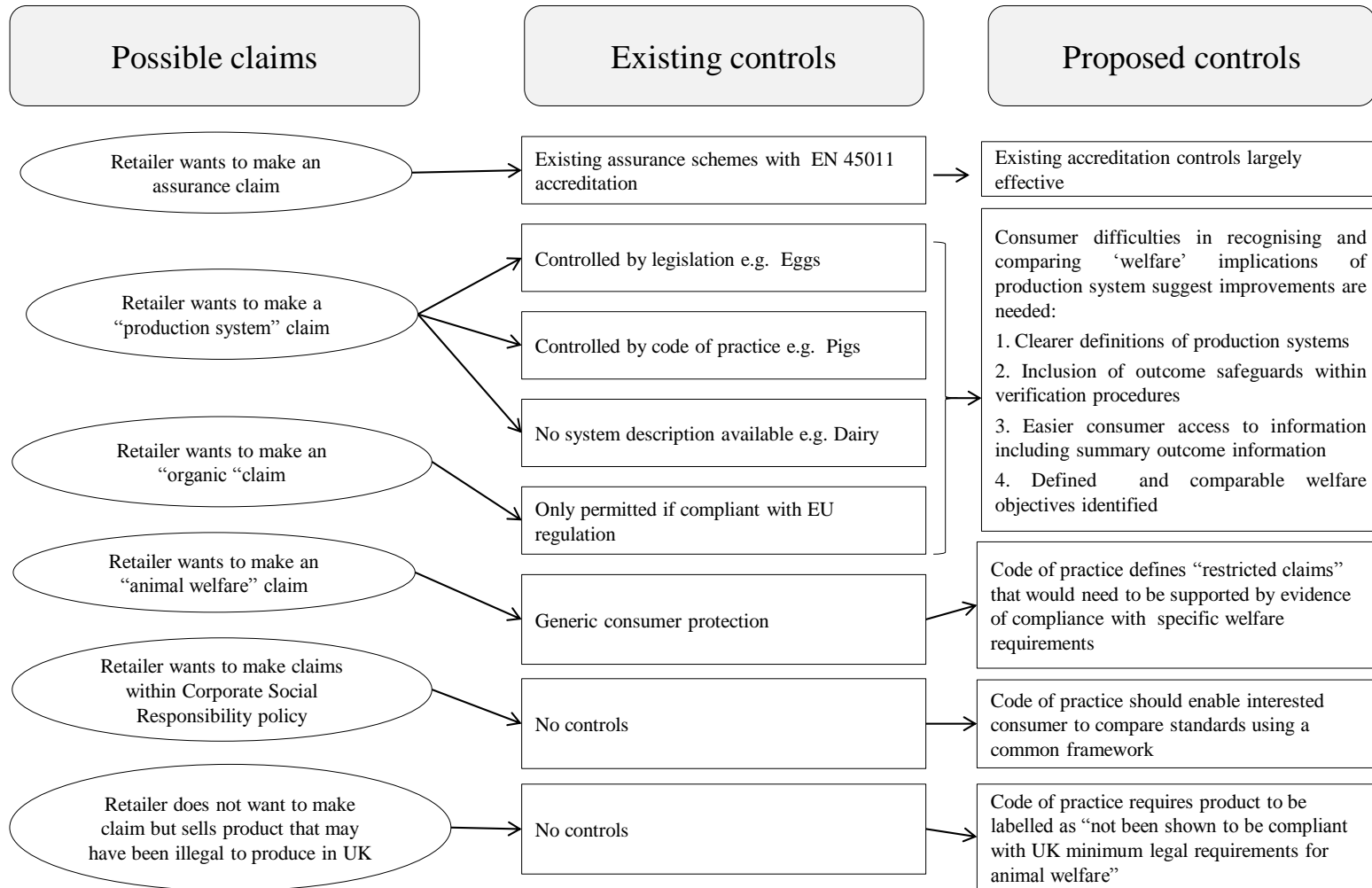
102. *Consumer protection legislation and other controls should be invoked and enforced to regulate the misuse of welfare claims in the food sector.*

103. *Food products derived from farm animals imported into the UK, but which do not meet minimum UK requirements for animal welfare, should be identified at point of sale.*

104. *Whilst consideration should be given to the development of initiatives that combine other society concerns, such as greenhouse gas emissions, clear signposting for consumers should still enable comparability on animal welfare.*

105. *Government policy for livestock production should include animal welfare concerns within future definitions of sustainability.*

Figure 1. Governance of welfare claims: possible welfare-related marketing claims and their existing and proposed controls. The 'retailer' includes food service and processing.



PART V – KNOWLEDGE GENERATION, TRANSFER AND APPLICATION

106. There often seems to be a gap between the generation of knowledge and its application. In the field of farm animal welfare, as in many other contemporary areas of science and policy, information, knowledge and practice are changing quickly, both as new technologies and methods of animal husbandry are introduced but also as old assumptions about animal treatment and welfare assessment are challenged.

107. Advances in knowledge about animal health and welfare are not always translated into improved husbandry, because the mechanisms for knowledge application are ineffective or, in some cases, because new procedures and techniques are inadequately field tested in commercial farming contexts. Alternatively, certain on-farm practices can elude scientific investigation because of operational difficulties associated with scientific verification. Moreover, not all information is accepted by all parties as the basis for change. Finally, distinctive knowledge, advice and practice relating to animal welfare is sometimes difficult to disassociate from that of animal health²², leading to an under-emphasis on non-health welfare concerns, particularly those relating to the enhancement of positive welfare.

108. Those responsible for the lives of animals are faced with many sources of information, advice and knowledge from advisors, the media, veterinarians and, perhaps most importantly, from their peers. That advice can be reactive, problem-solving based, in response to specific issues and circumstances, or it can be proactive, either as part of routine health and welfare planning or forward-looking, as part of farm enterprise development. There are many useful examples of knowledge exchange and knowledge sharing initiatives. Yet, in farm animal welfare, the pace and uptake of change is often slow, despite the demonstrable benefits of such changes to the animals concerned. There are, therefore, significant and persistent barriers to uptake.

109. Welfare enhancements have rarely been communicated as a positive economic benefit to the producer, leading to change reliant on premiums in the marketplace, which are often niche and linked to certain production systems. In some sectors, there had been a significant gap at the stockman level in continuing professional development leading to some individuals missing out on career development opportunities and a growing gap between knowledge at research level and on-farm application. Conflicting advice from professional advisors and NGOs further delays change. Many welfare improvements require a holistic, joined up approach involving different and complex elements of the production process, to reach an appropriate resolution, which delays uptake as producers focus instead on short-term solutions to immediate challenges. There are opportunities to improve welfare through the adoption of new technologies, materials and system design. However, the 'lumpy' nature of most agricultural investments, and the recent removal of the agricultural buildings allowance, acts as a disincentive to invest in high welfare systems.

110. As knowledge grows, increasing attention has been paid to its movement through society. The development of agricultural technologies in the early 20th century contributed to the success of 'Innovation Diffusion Theory', still widely held as a model for understanding the process by which innovations, new practices and knowledge are communicated, applied

²² See for example: Nicholas, P. and A.Jasinska, A. 2008. Animal Health and Welfare Planning: A Review. University of Aberystwyth.

and implemented. Agricultural advisory and extension services became the standard mechanism for innovation diffusion.

111. More recently, however, there has been a reassessment of the aims and mechanisms of classic knowledge transfer with a shift from a supply-driven to a demand-driven approach. There are six reasons for this. First, there has been recognition of an implementation gap. In a number of fields, and despite considerable investment in agricultural research, the expanding knowledge base is simply not leading to intended changes in practice. Secondly, this gap throws into question the traditional reliance on external advisory and extension services to transfer knowledge from one group to another. Thirdly, and concomitantly, such mechanisms have arguably not always given enough attention either to the value and role of local knowledge and experience or to the importance of farmer networks in assessing, communicating and adopting new knowledge and information. Fourthly, the introduction of new technologies, procedures and practices can disrupt and divide communities. Fifthly, innovation diffusion methods have often tended to be highly specific rather than holistic, leading to a multiplication of advisory channels and a lack of broad, integrated application. Finally, new social concerns for environmental sustainability, climate change, farm animal welfare and so on, shift the context of specialist knowledge.

112. Accompanying the expanding research on the methods and pathways of agricultural and animal welfare knowledge transfer has been a growing need to understand better how those responsible for the care of animals respond to that knowledge. A significant amount of recent social science research has thus focused on farmer decision-making, knowledge application and receptivity to knowledge transfer. This research has been and remains an important step in identifying appropriate strategies of knowledge transfer (e.g.²³).

113. Political and institutional change has also influenced current interest in knowledge transfer. Privatisation of advisory services, de-regulation of certain domains formerly regulated by the State, new roles played by food chain actors, and shifting sources of veterinary advice have all complicated knowledge transfer and application.

114. FAWC argues that maintaining and, where necessary, improving farm animal welfare depends on: i) promotion and dissemination of new and existing knowledge to alter behaviour; and ii) effective deployment and sharing of information, practical experience and knowledge. These are not always the same thing and different pathways, strategies and instruments are needed for each.

115. There exists today a significant and expanding body of scientific and technical research and information on the welfare of farm animals, including the effect of a wide range of farm, transport and slaughter practices.

Advisory, knowledge transfer and extension services

116. Advisory, knowledge transfer and extension services are crucially important in welfare knowledge application; first, in promoting changes in practice (including technology), secondly, in informing farmers of changes to legislative or regulatory requirements and,

²³ Defra. 2008. Agricultural Change and Environment Observatory Report, 'Understanding Behaviours in a Farming Context'. London.

thirdly, in facilitating farmer access to information and knowledge. Conventionally, advisory and extension services provide knowledge to farmers and other food chain actors. However, they also inform research of the circumstances of its application on the ground, therefore ensuring feedback between knowledge generation and its implementation.

117. A recent survey²⁴ of UK agricultural advisory services pointed to the variation in their size, from single farm consultants to large-scale national organisations, many of which use sub-contractors.

118. Although the bulk of agricultural advisory services in the UK are primarily concerned with farm management and agricultural production, specific animal health and welfare advisory roles are performed by a variety of services, including the Animal Health Veterinary Laboratories Agency, private veterinarians, consultants, levy boards²⁵ and professional bodies, private companies and local authorities²⁶. Increasingly, retailers and certain NGOs use advisory and extension services to develop their own assurance and certification schemes.

119. All the sector bodies in livestock including, for example, EBLEX, BPEX and DairyCo, have laid considerable emphasis on knowledge transfer and farmer training in recent years²⁷, operating national networks of extension knowledge transfer officers offering farm-specific advice on animal health and welfare and ensuring compliance with legislation and Codes. Additionally, EBLEX, BPEX and DairyCo run training schemes and a number of farmer-owned 'Producer Groups', facilitated by a knowledge transfer team and providing forums for sharing ideas, learning and networking.

120. For a number of years Defra has used ADAS to run advisory services for farmers to encourage good animal welfare. Recent advisory campaigns include 'The Welfare of Finished Pigs', 'Lameness and Herd Mobility Scoring' and information about new transport regulations. The Welsh Farm Advisory Service offers advice on, amongst other matters, welfare codes and animal care²⁸.

121. Advice on farm animal welfare is generally delivered through farm visits or group activities, awareness campaigns, meetings, visits, workshops and demonstrations, though a recent report²⁹ suggests that telephone and increasingly web-based advice is also a significant method. A survey³⁰ of the advisory delivery services within the livestock sector identified the most used methods as 'group meetings' and farm/site visits by advisors and concluded that group methods offered notable advantages and effectiveness in both knowledge transfer and client empowerment, particularly when run by private sector bodies.

²⁴ AEA. 2010. Agricultural Advisory Services Analysis. Report to Defra. ED47617, Issue 4. Didcot.

²⁵ Crute, I. 2011. The role of the Agriculture and Horticulture Development Board (AHDB) in knowledge transfer. Paper given to the BSAS Best Practice Knowledge Transfer Seminar, Worcester.

²⁶ Eves, D. 2006. *Review of the Animal Health and Welfare Delivery Landscape*, Report to Defra, London.

²⁷ Wilson, M. 2007. Research, Development and Knowledge Transfer Dimensions of the British Pig Executive Health and Welfare Strategy, BPEX.

²⁸ Farming Connect. 2009. *Invest in the Farm Advisory Service*. Cardiff.

²⁹ (1) FAWC *op. cit.*

³⁰ Garforth, C., Rehman, T., McKemey, K., Tranter, R.B., Cooke, R.J., Yates, C.M., Park, J.R. and Dorward, P.T. 2003. Improving the targeting of knowledge and technology transfer in the livestock sector by understanding farmer attitudes and behaviour. Final project report for LINK SLP Programme project LK0647.

122. As a method for transferring and applying knowledge, the success of advisory and extension services might be assessed in two basic ways: first, are the right people being informed and, second, if appropriate, are they subsequently changing their practices as a result of that advice? While awareness of the issue of farm animal welfare amongst farmers and others has increased significantly in recent years, the extent to which advisory and extension services alone have been able to promote changes in welfare practices not imposed by legislation or other regulations is less clear.

123. Garforth and his colleagues suggest that the provision of advice should take into consideration: *“the number of options presented to the decision maker; the degree to which the advice includes an assessment of advantages, disadvantages and range and probability of different outcomes; and whether the service includes continuing support during implementation of the advice.”*³¹

124. Various studies have pointed to cases of farmer resistance to voluntary and mandatory pro-welfare changes following traditional advisory mechanisms³² because either such changes are seen as affecting adversely profitability or existing practices are regarded as sufficient or because of persistent resistance to what are perceived as either constantly changing mandatory requirements or UK gold plating of European rules³³. Understanding the motivations of farmers and the potential receptivity of advice is an important prerequisite for effective delivery³⁴. These factors, coupled with continued concern for the often low level of uptake in response to advice for improving farm animal welfare, suggest that additional, less uni-directional strategies, and more integrated advisory pathways are increasingly required to accompany traditional advisory and promotional roles.

Veterinarians as advisers on the mental and physical health of farm animals

125. While some may hold that the veterinary profession’s historical reluctance to engage with societal concerns over farm animal welfare lies in the misguided belief that such concerns are inimical to scientific veterinary practice, in fact, as Bernard Rollin points out, the growing welfare agenda is increasingly placing veterinarians at the forefront of on-farm knowledge dissemination and practical advice. The Animal Health and Welfare Strategy for Great Britain states: *“veterinarians play a crucial role in providing advice and expertise to animal owners. They can train owners to identify health and welfare problems, prevent routine illnesses and deal with minor ailments”*³⁵. Moreover, the growing use of health planning and veterinary audits, particularly in the pig and poultry sectors, provides veterinarians with an increasingly strategic and investment-related role within farm businesses.

126. For many livestock farmers, veterinarians are an obvious source of advice on animal health and welfare. FAWC has previously stated that: *“Veterinary surgeons have a*

³¹ *Ibid*

³² For example: Bell, N.J., Bell, M.J., Knowles, T.G., Whay, H.R., Main, D.C.J. and Webster, A.J. 2009. The development, implementation and testing of a lameness control programme based on HACCP principles and designed for heifers on dairy farms. *Veterinary Journal*, 180: 178-188.

³³ Farming Regulation Task Force. 2011. Striking a balance. Defra, London

³⁴ Leach, K.A., Whay, H.R., Maggs, C.M., Barker, Z.E. Paul, E.S., Bell, A.K. and Main, D.C.J. 2010. Working towards a reduction in cattle lameness 2. Understanding dairy farmers’ motivations. *Research in Veterinary Science*, in press.

³⁵ Defra. 2004. Animal Health and Welfare Strategy for Great Britain.

particularly valuable role in educating and training stockmen about animal husbandry³⁶. Similarly, Lowe³⁷ argues that veterinarians are increasingly providing strategic and advisory functions for farmers, while Eves³⁸ also saw an important role for veterinarians in giving “valuable advice based on operational experience on the deliverability, implementation and effectiveness of existing policies and new proposals”. However, it is difficult for the farming community to determine the merit of the animal welfare advice provided by different veterinary surgeons.

127. The Veterinary Surgeons Act of 1966 does not formally address responsibilities in animal welfare (as distinct from animal health), particularly in the modern conception of the term involving both mental and physical well-being. Effective communication and engagement with farmers about animal welfare are seen by many as new and emergent roles³⁹. Jansen *et al.*⁴⁰ found that veterinarians did not always have the skills, approach or confidence to enable them to address broader issues of welfare advice over and above more conventional advice on animal health. Their training and expertise has traditionally placed them in the position of proxy decision-makers with farmers often effectively letting veterinarians make decisions about animal health and welfare planning.

128. While veterinarians, in common with other vocational professions, used to be the gatekeepers of knowledge in their field, the advent of the information age has resulted in a large change in farmers’ sources of animal health information. Some will prefer to source their own knowledge. For these individuals, rather than attempting to sell them knowledge by giving advice, it is better to adopt a coaching role, thus selling facilitation of change⁴¹. Veterinarians also have a role in facilitating input from experts in a number of disciplines such as genetics, nutrition and housing design.

129. Animal welfare advice arguably requires a more collaborative and thereby co-owned decision-making procedure involving the establishment of common goals and outcomes, investigating possible solutions, communicating the results in a manner that responds to the learning style of the farmer and the effective review of the results⁴². In short, as Atkinson claims: “veterinarians are perfectly positioned to be translators of science for their farm clients”. We note a number of initiatives where veterinarians combine with farmers, professional bodies and industry to work together in achieving positive changes in farm animal welfare (for example, the National Pig Health Initiative established by BPEX and drawing on the framework of the England Rural Development Plan of the CAP). Yet, despite this critical and emerging role and new configurations of practice, Lowe’s Report argues that overall the role, responsibilities and training of veterinarians in farm animal welfare advice and knowledge application are not always clear.

130. In response to our consultation, a number of bodies considered that farm health planning, such as quarterly veterinary visits in the pig sector, represented a significant

³⁶ (2) FAWC *op. cit.*

³⁷ Lowe, P. 2009. *Unlocking the potential: a report on veterinary expertise in food animal production*. Defra, London.

³⁸ (26) Eves *op. cit.*

³⁹ Atkinson, O. 2010. Communication in farm animal practice: 1. Farmer-vet relationships. *In Practice* 32:114-117.

⁴⁰ Jansen, J., Steuten, C.D.M., Renes, R.J., Aarts, N. & Lam, T.J.G.M. 2010. Debunking the myth of the hard-to-reach farmer: effective communication on udder health. *Journal of Dairy Science* 93: 1296 - 1306.

⁴¹ Atkinson, O. 2010. Communication in farm animal practice: 2. Effecting Change. *In Practice* 32, pp. 163-165

⁴² *Ibid*

occasion for a more proactive involvement of veterinarians in providing health and welfare farm advice directly linked to future-looking farm business development. Here, as identified in the 2004 Strategy: *“The veterinary profession needs to identify gaps and to develop new skills to meet this opportunity.”* It is regrettable that, to date, similar schemes involving regular proactive veterinary visits do not systematically exist in other sectors.

131. There has undoubtedly been a substantial increase in the level of communication skills training for veterinary students, which has resulted from collaboration between the UK veterinary schools. However, the primary focus of this training is traditional veterinary consultation rather than any attempt to promote uptake of advice regarding improvements to the mental as well as physical state of farm animals. FAWC notes, however, and welcomes the fact that increasingly, veterinary schools are adapting their curricula to include more animal welfare education.

Sharing knowledge

132. Participatory learning, as opposed to top-down forms of knowledge transfer, has become increasingly commonplace in a wide number of public policy arenas. In the field of farm animal welfare, participatory approaches, linked to processes of social learning, can be particularly valuable in situations where classic advisory channels might not necessarily reach all of the relevant actors (including other family members), where specific local circumstances create distinct practices that need to be taken into account in the adoption of new welfare considerations or where local initiatives and innovations lend themselves to horizontal diffusion of ideas and practices.

133. Workshops, local meetings and farm visits are common participatory methods. However, in many cases, a professional advisor plays a role, though largely one of facilitation, promoting exchange and mutual advice rather than dispensing expert knowledge and directing future practice. Where external facilitators take on the role of an expert, participating farmers are less likely to offer their own experience and knowledge for fear of being seen as ‘wrong’⁴³.

134. Participatory approaches are effective in identifying and recognising common problems and creating common strategies for addressing them. In doing so, they allow farmers to retain ownership and control over possible solutions and methods to achieve them. On their own, however, some regard them as unlikely to stimulate behaviour change.

Social marketing

135. To be effective in practice, new knowledge has to be seen as relevant and beneficial to, the activities of the farm. Animal welfare, like environmental protection, is sometimes perceived as an area where the uptake of external advice can reduce profitability or challenge long-established practices. Drawing initially from advertising and marketing principles in the 1970s, social marketing seeks to market advice and knowledge transfer, first, through a closer understanding of the needs and requirements of the ‘consumer’ of that

⁴³ Vaarst, M. and Roderick, S. 2009. Implementation of farmer groups for animal health and welfare planning considering different contexts In Vaarst, M. and Roderick, S. (eds), *The process of researching animal health and welfare planning*. CORE Organic Project Workshop Report. ICROFS, Tjele, Denmark.

knowledge and, secondly, through an emphasis on the individual and collective benefits of doing things differently. Such an approach requires a collaborative engagement of advisor and farmer to identify the real benefits of changed practices.

136. The use of social marketing approaches in animal welfare is growing. Recent research⁴⁴ identifies five components of social marketing in the field of farm animal welfare: identifying both internal and external benefits of, and barriers to, change; facilitating farmer-generated solutions appropriate to individual farm situations; normalisation, creating a sense that change is 'normal' amongst peers; displaying commitment; and prompting through reminders and action lists.

137. Social marketing has considerable potential as a method of knowledge application. It builds directly upon a farmer's knowledge of his enterprise. This can make it relatively labour intensive, necessitating one-to-one on-farm facilitation and therefore costly. However, rather than be seen as a distinct activity, social marketing techniques might advantageously become integrated into existing advisory pathways.

Benchmarking

138. Benchmarking is emerging as a tool for transferring and diffusing knowledge of farm animal welfare⁴⁵. In its simplest form, benchmarking is a mechanism for identifying best or better practice through specified conditions and setting this as an aspirational standard for others. In agriculture, it is most commonly employed as a tool for farm business management and profitability⁴⁶ as it enables farmers to identify areas of strength and weakness and implement remedial action. Benchmarking is closely linked to learning and continuous improvement of farming practices⁴⁷ and indeed, in certain circumstances, is more akin to a process of benchlearning than benchmarking. Within agriculture and the agro-food sector, as elsewhere, benchmarking, linked to standards, has also become a component of competitive marketing. In farm animal welfare, such competitive benchmarking by, for example, retailers, can improve animal welfare practices⁴⁸.

139. Benchmarking consists of collecting comparable data across participating farms, or within individual farms over time, in order to identify best or better practice and create aspirational levels to reach. It can operate at a number of scales, deriving from large-scale surveys like the Farm Business Survey, through medium scale labelling and assurance schemes, to much smaller groups of farmers or individuals.

140. Benchmarking can be a formal process, with formal requirements for data submission and monitoring, or a largely informal process, wherein farmers discuss best practice amongst themselves. It is increasingly used within Quality Assurance schemes operated by professional bodies, NGOs and retailers. The British Pig Health Scheme

⁴⁴ Whay, H. and Main, D. 2009. Improving animal welfare: practical approaches for achieving change. In Grandin, T. (ed) *Improving Animal Welfare: A Practical Approach*. Colorado State University Press, Boulder.

⁴⁵ Huxley, J.N., Burke, J., Roderick, S., Main, D.C.J., Whay, H.R. 2004. Animal welfare assessment benchmarking as a tool for health and welfare planning in organic dairy herds. *Veterinary Record* 155: 237-239

⁴⁶ Whitehead, P. 2009. Farm benchmarking in the UK: An assessment by the Food Chain Centre, 2002-7. In Jack, L. (ed). 2009. *Benchmarking in Food and Farming*. Basingstoke, Ashgate, pp. 63-72

⁴⁷ Jack, L. (ed). 2009. *Benchmarking in Food and Farming*. Basingstoke, Ashgate

⁴⁸ Roe, E. J. and Buller, H. 2008. *Marketing farm animal welfare factsheet*. Wageningen, Welfare Quality

benchmarks animal health on UK farms. The Scottish Government's Animal Welfare Monitoring and Benchmarking System⁴⁹, established in 2009, sets out to:

- highlight and analyse health and welfare issues on a farm that may be preventing herds or flocks reaching their true potential and propose solutions;
- monitor progress in improving health and welfare on a farm over time and demonstrate the impact of actions taken;
- benchmark health and welfare on a farm against similar farms across Scotland; and
- feed information back into health and welfare planning.

141. Benchmarking, through condition scoring, is employed in dairy herd health as a means of identifying problems, for example mastitis or lameness, and thereby encouraging the adoption of practices to reduce animal suffering⁵⁰. However, it is clear that benchmarking cannot act alone. It needs to be accompanied by appropriate advice⁵¹.

142. Finally, and perhaps most importantly, at a smaller, individual scale, benchmarking serves an important validating function in recognising and acknowledging the good practice of farmers and stockmen in achieving high standards of welfare over time and communicating that good practice to food chain actors and ultimately food consumers.

143. Although it has not been greatly applied to date within the field of farm animal welfare, being developed essentially for issues of food health and safety, the use of Hazard Analysis Critical Control Point (HACCP) principles of critical control points in animal welfare is certainly under discussion within the livestock industry⁵², though a number of difficulties to using the procedure extensively have been identified⁵³.

Communities of practice and learning groups

144. In previous report on stockmanship, we maintained that "*Skilled stockmen provide a cornerstone of successful livestock farming*"⁵⁴. The relationship between a stockman's behaviour and animal welfare has long been shown to be vital⁵⁵. Sharing and building upon a stockman's experience and expertise in improving the welfare of farm animals are vital components of promotion and transfer of animal welfare knowledge.

145. The increasing development in the UK of new forms of farmer cooperation, for example linked to the development of territorially-specific producer groups, has arguably established new frameworks for the sharing of knowledge and experience in farm animal

⁴⁹ see: www.animalhealthscotland.gov.uk/

⁵⁰ Amory, J.R., Barker, Z.E., Wright, J.L., Blowey, R.W. and Green, L.E. 2008. Associations between sole ulcer, white line disease and digital dermatitis and the milk yield of 1824 dairy cows. *Preventative Veterinary Medicine* 83: 381-391

⁵¹ (30) FAWC *op. cit.*

⁵² See for example: Grandin, T. 2011. Animal welfare audits for cattle, pigs and chickens that use HACCP principles of critical control points for outcome based measures. <http://www.grandin.com/welfare.audit.using.haccp.html> ; Hegelund L. and Sorenson, J. 2007. Developing a HACCP-like system for improving animal health and welfare in organic egg production. *Animal* 1: 1018-1025.

⁵³ Von Borrell, E. 2000. Assessment of pig housing based on the HACCP concept - critical control points for welfare, health and management. In: Blokhuis, H.J., Ekkel, E.D. and Wechsler, B. (eds): *Improving Health and Welfare in Animal Production*, EAAP publication No. 102, Wageningen Pers, The Netherlands, pp 75-80

⁵⁴ (2) FAWC. *op. cit.*

⁵⁵ For example: Coleman, G. 2004. Personnel Management in Agricultural Systems. pp. 167-183 in Benson, G. and Rollin, B. (eds) *The well-being of farm animals*. Blackwell Publishing, Ames.

welfare practice as well as in other areas of farm and enterprise management. Communities of practice and farmer learning groups provide a model of practice-led knowledge promotion and exchange. Evidence from the Danish experience of exchange groups or field schools has been well documented⁵⁶.

146. In the UK, self-organising frameworks, such as the Agriculture Development in the Eastern Region's (ADER) Key Farmer Network, offer, through joint meetings, internal training courses, farm visits and internal advisory channels (which are often linked to more traditional production and market concerns of the producer group), a mechanism for the collective application of new practices. This is a strength but also a possible limitation as such collective structures might also resist more conventional forms of knowledge transfer from external advisors and extension services⁵⁷.

Open and demonstration farms

147. Many organisations operate open or demonstration farms as a means of disseminating good practice and facilitating knowledge transfer and sharing amongst farmers. LEAF (Linking the Environment and Farming), for example, has been operating its demonstration farms since 1991 to share beneficial practices, arguing that: *"It is essential to have a clear and focused vision and voice that unites the farming industry, enabling farmers to access information more easily, see its practical relevance in real, farm situations and inspiring them to adopt new practices"*⁵⁸.

Seeking Knowledge

148. A final component of knowledge transfer and acquisition is continuing professional development (CPD). CPD in this area leads to greater knowledge of animal husbandry, raising both the standard of welfare and productivity while increasing job satisfaction⁵⁹. Moreover, in addition to enhancing stockmanship, husbandry-based CPD contributes cost effectively to the Government's policy objectives of food safety and environmental improvement.

149. In our Stockmanship report, three essential attributes of stockmanship were identified, i.e., knowledge of animal husbandry, skills in animal husbandry and personal qualities⁶⁰. The report highlighted the importance of education and CPD to build these essential components. An increasing level of knowledge is imperative to maximise the benefits of new information and to provide the skills to use increasingly complex technologies.

150. Recommendations were made for the Government, the Sector Skills Council and industry to work together to encourage and facilitate ongoing accreditation and knowledge

⁵⁶ Vaarst, M, Nissen, T, Østergaard, S, Klaas, I, Bennedsgaard, TW & Christensen, J. 2007. Danish Stable Schools for Experiential Common Learning in Groups of Organic Dairy Farmers. *Journal of Dairy Science*, 90: 2543-2554.

⁵⁷ *Ibid*

⁵⁸ Drumond, C. and Mitchell, K. 2011. *Sticky Knowledge*. Paper presented at a one day workshop held on 3 March 2011 at the Sixways Stadium, Hindlip, Worcester.

⁵⁹ (2) FAWC. *op.cit.*

⁶⁰ *Ibid*

exchange. The formation of the AgriSkills Forum in 2008 and publication of its strategy in 2010 are significant steps forward towards coordinated and structured industry-led solutions. The strategic vision is of a new professionalism, whereby industry benefits from improved productivity and efficiency and a wider recognition of this professionalism results in increased consumer confidence and appreciation of the food supply chain. There are many opportunities for farm animal welfare to be embedded in this circle of self-improvement and external recognition and reward.

151. A key theme of the AgriSkills strategy is the need for formal recognition of the professionalism of the workforce by recording existing skills and informal skills development activity. There has already been significant progress in the livestock sectors. The Poultry Passport Scheme, an on-line skills recording scheme supported by the industry and Poultec Training Group, recorded over 2000 registrations. The Pig Industry Professional Register has over 500 registrations and the dairy industry is consulting on the formation of a new scheme. There are moves to establish a mixed farm scheme to suit the needs of the smaller business with several livestock enterprises. Recognition of the opportunities has led to a host of innovative initiatives spearheaded by the levy bodies, veterinary organisations and training colleges. The requirement for uptake of new knowledge is also increasingly recognised and built into programmes of research and development.

152. There are many examples of knowledge exchange leading to welfare improvement. Formal accreditation is essential to underpin the industry with recognised standards and there remains substantial work to be done to break down barriers to access and to establish systems that allow accreditation of the flexible training that suits industry needs and delivers appropriate career progress and opportunities for individuals. Since the publication of our report on Stockmanship, progress has been relatively slow on both accreditation and access to accreditation within certain sectors. Government should ensure that the industry is not disadvantaged in delivery of this through the sectors' fragmented nature and requirement for flexible delivery.

153. The AgriSkills strategy has received strong Government support, which is essential to engender confidence in all parts of the food supply chain, industry bodies and training providers and to provide the frameworks in which knowledge exchange, knowledge transfer and accreditation can provide the earned recognition that will motivate the industry further. The Government has a key role to play to encourage and promote progress, and to ensure that the earned recognition is delivered. Ultimately a more professionalised industry will deliver a more secure supply chain, aware of and responsive to customer needs.

154. It is notable that many of the reviewers taking part in the recent review of Defra-funded animal welfare research⁶¹ identified gaps in knowledge transfer as a persistent issue in the field of animal welfare. Continuing uncertainty remains as to why it is that those responsible for animal lives do not adopt changes with proven benefits to the welfare of the animals in their care. Additionally, it is still the case that many animal handlers remain unaware of legislative requirements regarding animal care. In their final report, the England Implementation Group⁶² acknowledged that while a significant legislative and policy framework now existed for animal welfare in Britain, implementation, in which we include the engagement of those directly concerned, lacks specific actions and appropriate timetables.

⁶¹ Defra. 2010. Review of the animal welfare research programme 2005-2010. Defra, London.

⁶² England Implementation Group, EIG. 2010. Third and final report on progress and challenges in delivering the animal health and welfare strategy in England. London.

We are encouraged by the increasing requirement for specific welfare training in a number of recent welfare-related legislation, including the certificate of competence under the implementation rules of EU Council Directive 1/2005 on animal transport and the requirement under the Broiler Directive (EU Directive 2007/43) for those responsible for the lives of chickens to undertake training courses in welfare. Farm assurance schemes may also have a role in consolidating good practice initiatives on CPD in each livestock sector.

155. In conclusion, becoming aware of, implementing, adopting and practising knowledge on animal welfare are all emerging as critical stages in the improvement of farm animal lives.

Recommendations

156. *Understanding, addressing and overcoming barriers to the transfer, adoption and implementation of knowledge should be a major priority for government policy, research and stakeholder engagement.*

157. *Government and the livestock industries should continue to provide authoritative, accessible advice and promote knowledge exchange initiatives in farm animal welfare. These activities should, where appropriate, include farmer-led and group approaches.*

158. *The use of benchmarking procedures to disseminate examples of best practice should be encouraged by farmers and others in the food supply chain. While the focus on innovation in livestock husbandry is valuable, there should be more accessible information available on best practice in farm animal welfare within existing technologies.*

159. *Continuing professional development opportunities that include animal welfare should be promoted for farmers, stockmen and their advisors associated with all livestock sectors.*

160. *Current initiatives developed under the AgriSkills strategy should be supported by Government, including via the Rural Development Plans. The Agriculture and Horticulture Development Board (AHDB) should play a key role in the development of industry led CPD schemes, ensuring that such schemes draw on experience of all sectors, are cost effective and promote best practice with respect to animal welfare.*

161. *The current and potential future role of veterinarians in promoting the uptake of strategic and forward-looking welfare advice to farmers should be reviewed by veterinary professional bodies in association with the Government and livestock industries. The review should consider the responsibility and training of veterinarians in providing animal welfare advice. Any reviews of the mechanisms and value of external scrutiny of the veterinary profession should include consideration of animal welfare expertise alongside any assessment of clinical competence.*

APPENDIX 1 - Membership of the Farm Animal Welfare Committee

Professor Christopher Wathes - Chairman
Professor Michael Appleby
Professor Richard Bennett
Professor Henry Buller
Dr Joanne Conington
Huw Davies
Professor Sandra Edwards
Professor Laura Green
Gwyn Jones
Dr David Main
Professor Richard Moody
Professor David Morton (Member of FAWC's predecessor until March 2011)
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British Egg Industry Council
British Poultry Council
DairyCo
Farming and Countryside Education
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National Farmers Union – Scotland
Peoples Dispensary for Sick Animals
People for Ethical Treatment of Animals
Royal Society for the Prevention of Cruelty to Animals
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