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Intensification in animal production and it's effect on animal welfare

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Abstract

The term "animal welfare" is being used increasingly by politicians, veterinarians, corporations and consumers in last decades. There are three welfare concepts use to define "animal welfare" which are physical (normal health, growth, development, body condition, sustainable productivity), mental (emotions and feelings, especially unpleasant states such as hunger, thirst, discomfort, pain, fear and distress) and natural (to express normal behaviour) aspects. Different specialist define the term "animal welfare" by different view. Scientists working on animal welfare tend to reflect their own views on which aspect is important in their definition of welfare. Basically the mean of animal welfare is the "how an animal copes with the environment that the animals live in". That means condition and quality of animals' life, including husbandry and management, health and disease and behaviour. Different farm animal species are under control of human being for their production traits since domestication. Animal production has raised globally to suffice to increase in the consumption of the animal product. Therefore, in order to obtain a large quantity of animal products such as meat, milk, and eggs, many farm species have been breed in intensive production systems which including large herd size, high stocking density, feeding with high nutrient, limited environmental conditions in shelters and automation control of breeding practice. Modern farming systems or production models focused on high yields and ignore the animals. However, there are plenty of scientific work demonstrated that animals are sentient, capable of suffering and feeling pain. So it is an ethical responsibility to provide their needs to the animals under human care. Animals' hunger, thirst, injury, pain, fear and suffering, which caused by production system, should be minimized to protect animal welfare in the farm. The five freedoms (freedom from hunger and thirst, freedom from discomfort, freedom from pain, injury or disease, freedom to express normal behaviour and freedom from fear and distress) provide a convenient list to protect physiological and behavioural needs of animals. To understand the concerns about the intensification of animal production, firstly we need to understand how intensification affects animals' welfare. Farm animals have been selected by human being ever since their domestication. At first, selection was probably limited to manageability but in the last 200 years breeding programs have focused on the genetic improvement of the production traits. As a result, production traits such as milk yield, growth rate and number of eggs have dramatically increased. On the other hand, the adaptation ability of the animals to the environment decreased, and animals became unable to cope with their environment. These adaptation problems and the intensification in the farming systems have concluded with certain behavioural, immunological and physiological problems in animals and, the level of their welfare has decreased. Nowadays, most problematic farming systems or practices which cause hunger, injury, pain or suffering to farm animals in terms of animal welfare are considered as battery cages for laying hens, broiler rearing, intensive and indoor cattle production, veal crates for calves and, overcrowded environments. The farm animal welfare may be improved by providing good management and stockmanship, food, water, appropriate space allowance and climatic conditions, vaccination and, opportunities to exhibit normal behaviour to animals throughout the whole animal production process. It should not be forgotten that social awareness and consumer demands for welfare-friendly products are the key factors for the improvement of animal welfare in farming systems.

Keywords: animal welfare, behaviour, intensification