Technological innovation in animal welfare at the time of killing for the implementation of OIE standards

Rebeca García Pinillos

Animal and Plant Health Agency / Department for Environment, Food and Rural Affairs, Animal Welfare Team, Nobel House, 17 Smith Square, London, SW1P 3JR, United Kingdom.
Email: onewelfare@outlook.com, Rebeca.Garcia@apha.gsi.gov.uk

Through time, with the increase consumption of meat in different countries, demand has pressed for slaughterhouses to become highly specialised establishments where animals are slaughtered for the production of meat in the most cost-effective way. Equally, increasing concerns about animal welfare in society have sustained a parallel stream where technological advances have been made to support both productivity and animal welfare.

This paper highlights key technological developments in the following areas of slaughterhouse operation: unloading, lairaging, restraining, stunning, bleeding, post-mortem, surveillance/data analysis and education. All of them play a unique role and contribute to animal welfare improvements.

The paper studies this topic from two angles:

1. Technological developments that are already fully operational at, mainly, high throughput slaughterhouses, such as the use of infrared technology;

2. Innovative developments that are already in use in other animal related areas, such as farms, but have not yet been transferred to the slaughterhouse environment.

Keywords: animal welfare – innovation - killing – slaughterhouse – technology.