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Current Status of Pre-Slaughter, Slaughtering and Post-Slaughter Handling Practices Affecting the Quality of Fresh Meat in Pastoral Areas of Kenya

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Abstract

Meat quality and safety is dependent on proper pre- and post-slaughter handling practices in abattoirs and meat outlets. The meat value chain in Kenya is challenged with a myriad of problems due to poor pre-slaughter, slaughtering and post-slaughter processes. Poor practices can lead to serious contamination and spoilage of meat and meat products. These losses in the meat value chain predispose the livestock communities who are majorly dependent on pastoralism to food and nutritional insecurity as well as loss of income. There is limited data and knowledge gap with regards to post-harvest handling and preservation of meat in Kenya especially the pastoral regions. Hence the need for these present findings. This study was, therefore, designed to analyse and validate pre- and post-slaughter handling practices that contribute to the poor quality and safety of meat and meat products in Kenya. Mixed research methods using a pretested structured questionnaire, key informants interviews and focus group discussion were used to collect data from four pastoral counties including Marsabit, Turkana, Garissa and Kajiado counties. The selected livestock facilities included abattoirs, slaughter houses, butcheries, and other meat selling outlets. The findings of the study shown that 90 % of the selected facilities involved in meat production and processing have poor handling practices. About 40 % of the meat operators in Nairobi had poor hand washing practices with personnel from facilities in pastoral regions indicating 60 % non-compliance to hand washing. Results also show that 65 % of the personnel operating in the meat facilities were not using personnel protective clothing in Nairobi and 88 % in pastoral areas. Poor transportation practices were shown with 38% of meat being transported in metallic boxes mounted on a motorbike in urban towns while 26 % in boxes mounted on bicycles in rural pastoral areas. Meat quality deterioration was caused mainly by unhygienic handling practices (80%). In the slaughter operations, extreme hot weather conditions, inadequate water supply, long distances and lack of refrigeration facilities accelerated spoilage. To enhance the meat safety and quality, interventions are required along the hot spots identified along the meat value chain in Kenya. The adherence to best practices in meat production and practices can lead to better meat quality and competitive market prices for meat products in Kenya.

Keywords: Microbial contamination, post-slaughter, pastoral regions, slaughtering