Perceptions of Food Retailers Regarding Climate Change and Greenhouse Gas Emissions

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ABSTRACT

Greenhouse gas (GHG) emission and its associated effects have been a debate in literature for many years (Hoffman, 2011:5; Williams & Schaefer, 2012:175; Whitmarsh, 2011:690). According to Jackson (2016), climate change is seen as a yearly change within the earth's climate that is a result of changes in its atmosphere, as well as interactions between the atmosphere and other chemical, geologic, geographic and biological factors within the earth's system. Climate change has primarily caused a warming effect of the earth's atmosphere that has affected all aspects of life (Pachauri & Reisinger, 2007:7). While there are limited studies that measure greenhouse gas emissions arising from the entire global food chain, there have been estimates of GHG emissions attributable to global agricultural production (Garnett, 2011:23). Energy consumption is one of the biggest challenges food retailers are facing as it not only increases overhead costs but also GHG emission (Tassou, Hadawey & Marriott, 2011). Garnett (2011) alleges that the food chain produces greenhouse gas (GHG) emissions at all stages in its life cycle, from the farming process and its inputs, through to manufacture, distribution, refrigeration, retailing, food preparation in the home and waste disposal. Technological improvements, while essential, will not be sufficient in reducing GHG emissions. The combination of population growth and rising per capita anticipated consumption of meat and dairy products will undermine the cuts that technological and managerial innovation can achieve. Over the last few years food retailers in South Africa started to focus their attention towards GHG emissions, but there is still no framework for food retailers to reduce GHG emissions in South Africa (Tassou et al. 2007:2988). Various studies have argued that the food and drink, transportation, and construction industry sectors are regarded as the most significant contributors to GHG emissions (European Commission, 2006; SEI, WWF & CURE, 2006 and UNEP, 2008). Significant changes in food production and increases in food transport have resulted. The production of food on farms has become increasingly mechanised, large-scale, and specialised; and food supply chains have become more complicated and transport-intensive (Roelich, 2008). Food retailers are contributing to GHG emissions by means of electricity usage through refrigerator equipment, lighting, heating, air conditioning, baking and other secondary services. There is no general strategy for food retailers to reduce GHG emission and minimal research has been done in this sector (Tassou et al. 2011).

Keywords: climate change; food retailers; greenhouse gas emission; perceptions; strategies