



Meaningful brands: A qualitative study on food waste management
in the abattoir industry

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Abstract

The issue of food waste is a universal problem, considering the extent to which many people are found to be food insecure. Food waste has a negative impact on natural resources, the economy and the environment as the practice of dumping at landfills is still frequently used as a method of waste disposal at many abattoirs. There is also a lack of documented data to quantify the extent of waste in the industry. This study explores the extent to which the waste management practices at abattoirs contribute to a meaningful brand. The study is non-empirical and employed a qualitative research method. Using the interpretivist paradigm, consumers provided input on their perceptions of abattoirs and their interpretation of a meaningful brand. Karan Beef provided input on the waste disposal methods currently being implemented in their operations. The waste management practices at the studied brand were found to contradict the literature, as Karan Beef repurposed their waste for secondary usage. The prominent themes found in the consumer research reveal that brand meaningfulness is a culmination of how the brand impacts the society, its people and the community. More studies can be conducted to assess the effectiveness of legislature in relation to waste management for better quantification to aid its implementation.

1. Introduction

The world today is faced with a number of global challenges. These challenges comprise of the increasing population, land use pressure, global warming as well as food waste (Kilibarda, Djokovic and Suzic, 2019). Food waste is not only a multifaceted moral issue for humans, but also poses a negative impact on the environment which in turn adversely affects the global economy (Kilibarda et al., 2019). The food industry is evaluated to be responsible for roughly a third of all greenhouse gas (GHG) emissions on earth (Aschemann-Witzel, de Hooge, Amani, Bech-Larsen and Oostindjer, 2015). The phenomenon also contributes to soil and water wastage, eventually diminishing biodiversity (Kilibarda et al., 2019). Food waste affects many consumers and stakeholders as an unequal and unjust 'luxury' which humanity cannot sustain, considering the amount of already stressed resources required to provide food for the growing population (Aschemann-Witzel et al., 2015). A decrease in food waste can help achieve more sustainable food security (Aschemann-Witzel et al., 2015).

This research study aims to gain an in-depth understanding of the extent to which Karan Beef is a meaningful brand, through the exploration of their food waste management systems in the slaughtering process. The research will explore the systems in place to minimise food loss and waste, as well as investigate consumer perspectives and attitudes towards the abattoir industry.

Context and Background

For the purposes of the research, it is important to define what food waste is. Aschemann-Witzel et al. (2015: 6458) describe food waste as:

"...any food, and inedible parts of food, removed from the food supply chain to be recovered or disposed (including composted, crops ploughed in/not harvested, anaerobic digestion, bio-energy production, co-generation, incineration, disposal to sewer, landfill or discarded to sea)".

Food that is utilised for animal feed is also included in this definition of food waste (Aschemann-Witzel et al., 2015).

The United Nations Food and Agriculture Organization (FAO) distinguishes the terms food loss and food waste. According to the FAO:

"Food loss refers to the decrease in mass (dry matter quantity) or nutritional value (quality) of food that was originally intended for human consumption",

whereas

"food waste refers to food deemed appropriate for human consumption being discarded, regardless of whether it is kept beyond its expiry date, or left to spoil" (Kilibarda et al., 2019).

When referring to food waste in general, irrespective of its occurrence or where in the food chain it is categorised, food wastage is used. The term encompasses both food loss and food waste respectively (Kilibarda et al., 2019).

The FAO estimates that 40% of food produced does not reach the market due to waste. The wastage can occur at any stage of the value chain (as shown in Figure 1), typically in the earlier stages in developing countries and later in developed countries (Warker, 2018). Many developing countries suffer restricted post-harvest infrastructure and underdeveloped technologies, which results in the wastage (Parfitt, Barthel and Macnaughton, 2010). In developed countries, the food waste mainly occurs in households in the consumption phase (Kilibarda et al., 2019).

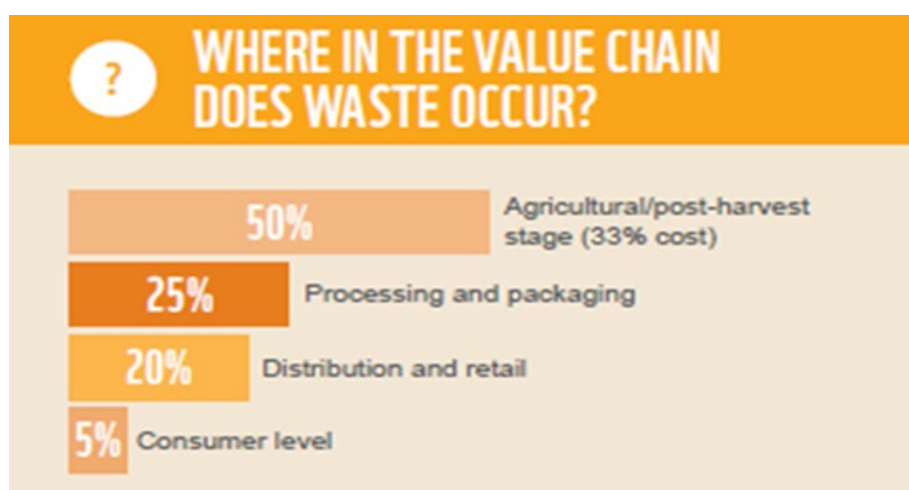


Figure 1: World Wildlife South Africa. 2017. *Food Value Chain*.

Wastage and loss generally take place early in the food chain – 50% during the post-harvest phase, 25% due to processing and packaging (quality problems and

size variations), 20% during distribution and retail, and 5% at consumer level (Farmer's Weekly, 2017). As opposed to most other product flows, food is a biological material which is susceptible to decay (Parfitt et al., 2010).

According to World Wildlife South Africa's (WWF-SA) 2017 report titled 'Food loss and waste: Facts and futures', the causes of food waste mainly has three interlinked drivers:

- Large scale urbanisation that has increased the demand for food and thus growth of the agricultural sector,
- Changes in diet to more varied and resource exhaustive foods, and
- Integration and interaction among the people, companies and governments of different countries and global trade (WWF-SA, 2017).

For this research study, the interest was found in the abattoir industry. The Red Meat Abattoir Association (RMAA) recorded a total of 10 461 596 slaughtered animals (cattle, sheep and pigs) between November 2016 and October 2017 alone (as shown in Figure 2) (RMAA, [s.a]). With such a high number of slaughters, there was an interest to learn about the waste management systems that are in place in this sector.

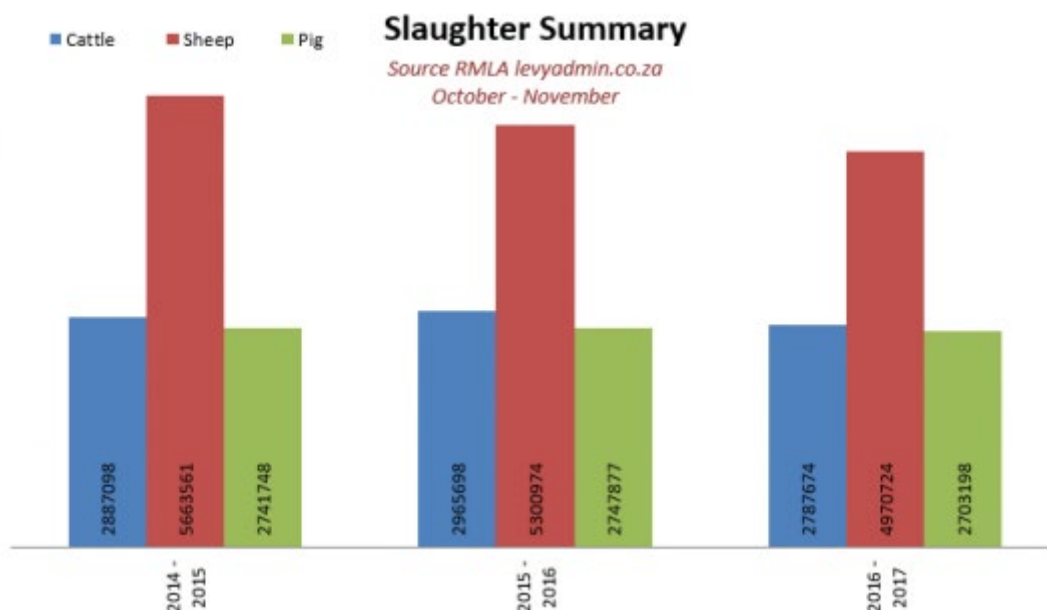


Figure 2: Red Meat Abattoir Association. [s.a]. *Slaughter Summary*.

Abattoirs generally retrieve the edible parts of a slaughtered animal for human consumption (Fearon, Mensah and Boateng, 2014). During this process, there is a substantial amount of organic and inorganic waste generated (Fearon *et al.*, 2014). The waste is mainly made up of things like bones, blood, paunch contents (undigested food in the stomach), dissolved solids, urine and gut contents. Some researchers argue that abattoir activities are a source of pollution to the quality of air for residents in the vicinity of the abattoirs, surface and underground waters and principal producers in affected water bodies which may affect fish directly (Fearon et al., 2014).

The chosen brand for this study, Karan Beef – is a part of South African heritage and was established in 1974. The Karan family began feedlotting on their family farm with less than 100 cattle. The company reports to have 150 000 head of cattle to date, making it the largest feedlot and beef production organization on the African continent (Karan Beef, [s.a]). The company has a complete supply chain consisting of the following:

- Farm and feedlot (2 330ha) located in Heidelberg,
- Abattoir located in Balfour and
- Marketing and distribution located in Johannesburg City Deep (Karan Beef, [s.a]).

With a feed mill capable of producing up to 1 740 tonnes of mixed feed per day and an abattoir processing 2 040 head of cattle per day (Karan Beef, [s.a]), it could be assumed that there is potentially a large amount of excess in this brand's operations.

What systems does Karan Beef have in place to manage the waste derived from animal slaughtering? Do these systems contribute to Karan Beef being a meaningful brand? Does how the abattoir industry manage its waste even matter to the consumer or influence their meat choices? This research study seeks to explore and possibly answer these questions.

1.1 Research Rationale

The research rationale is a reasoning and justification for why conducting the research is significant (Davis, 2014).

According to Gogela, Janse van Vuuren and Pineo (2017), there is approximately 24 000 tonnes of waste produced by red meat abattoirs in the Western Cape province per year. Of the figure, 22 000 tonnes are classified as “by-products” and 2 000 being waste. This begs the question; can these statistics be extrapolated to the other provinces? And if so, how is this amount of waste being managed?

It is therefore important to learn about how abattoirs are in fact managing the waste generated from slaughtering, to gain insight into whether the systems work effectively. Moreover, the study could raise awareness among consumers on the magnitude of food waste and its effects.

1.2 Problem Statement

The environment is faced with a severe problem of excessive amounts of waste generation and poor disposal systems worldwide, more especially in developing countries (Tolera and Alemu, 2019). The financial implications, in addition to water and energy costs, makes food waste an expensive problem to the economy and environment (WWF-SA, 2017).

Meat from animals is seen as the main source of protein for many households. As the population grows, there will be a greater demand for meat and meat products (Swanepoel, 2014) - which therefore predicts an increase in abattoir waste (Department of Environmental Affairs and Development Planning, 2015).

During the slaughter process, a great amount of organic and inorganic waste is generated with high volumes of suspended solid material, liquid and fat (Tolera and Alemu, 2019). All the waste generated by abattoirs must be disposed of in some way or another.

There is a scarcity of studies that are focused on the quantification of abattoir waste as well as employee awareness on this matter, and thus information is mainly gathered from best estimates (Tolera and Alemu, 2019). There is also a lack of abattoir waste disposal data owing to poor record keeping (DEA&DP, 2015).

If consumers are not aware of the practices that are in place to dispose of waste at abattoirs, can that have any effect on their brand choice? Additionally, what is a meaningful brand to a consumer? The interpretivist paradigm is of the belief that these views are subjective and influenced by upbringing, social and cultural background (Aschemann-Witzel et al., 2015). The paper hopes to delve into those constructs through the interpretivist paradigm.

The study seeks to investigate what food waste management systems are in place in the abattoir industry, specifically Karan Beef – as well as to explore whether these systems have an influence on the consumer's perception of a meaningful brand.

1.3 Research Goal

Big brands such as Karan Beef utilise a lot of resources (e.g. land, water, energy etc.) to be able to provide meat and meat products. In the provision of these goods, is the management of the waste implemented effectively? Many consumers may not be privy to this kind of information, and as such this may not have any bearing whatsoever on how they view the brand. However, if they were to be enlightened - would their perceptions of the brand be altered? Or does it not matter because their definition of a meaningful brand is not tied to this aspect?

Using Karan Beef as the case study, the aim of the research is to explore the food waste management systems at abattoirs and find to find if these systems have any effect on the consumer's view of a meaningful brand.

This therefore leads to the research questions for the study.

1.4 Research Questions

1. What food waste management systems are practiced in the abattoir industry?
 - a) Sub-question: Do the current waste management practices contribute to a meaningful brand?
2. What perceptions do consumers have of abattoirs?
 - b) Sub-question: How do these systems influence the consumer's perception of a meaningful brand?

The study could reveal controversial perceptions that consumers have towards abattoirs, because of issues such as global warming that are taking centre stage in a number of industries. Perhaps the study could reveal that consumers are not really bothered about what happens in the background of meat processing, as long as they can get their favourite meat product at the shop or butcher, nor does it alter their meat choices. Moreover, the study could lead to further unpacking how the perceptions of abattoirs are affected by knowing if abattoirs are doing something towards waste management and how ethical these practices are.

2. Literature Review

A literature review involves searching for, reading, analysing and summarizing as much as possible the information available pertaining to the research topic (Howard, 2014). The purpose of the literature review is to unearth what is already known and has been studied about the research topic, to gain perspective, identify any relevant theories, models and theoretical frameworks, and to identify possible information gaps relating to the topic. A literature review will help improve the search and can serve as a measure against which one can compare their outcomes (Howard, 2014).

Food waste, both precooked and leftover is a perishable waste generated from numerous sources such as food processing industries, households and even the hospitality sector (Paritosh, Kushwaha, Yadav, Pareek, Chawade and Vivekanand, 2017). Every year, the world produces enough food to feed everyone a predominantly vegetarian diet. Unfortunately, a third of this produce goes to waste (WWF, 2017). This is a sharp contrast to the fact that millions of people go hungry everyday (WWF, 2017). According to WWF-SA, if consumption behaviours remain the same and demand continues to grow, food production will have to increase by an estimated 70% to cater to 9 billion people by the year 2050. This translates to 120 million hectares more of fertile land required for crop production in third world countries (WWF-SA, 2017). Regrettably, predictions are that arable land in first world countries could potentially decline by 50 million hectares due to factors such as soil erosion, desertification and unsustainable usage (WWF-SA, 2017). For every amount of food wasted, nutrition, energy, water, capital and other resources utilised to produce and dispose of this food is wasted – further aggravating food insecurity (WWF, 2017).

The South African Context

South Africa produces about 31 million tonnes of food annually. Of the total food production, an estimated 10 million tonnes of food are wasted, which is one third of all food produced in the country (Averda, 2019). In a country where almost one quarter of South Africans are found to be food insecure, the estimated household food waste accounts to 25 – 50 tonnes annually (Schimke, 2020). The Council for

Scientific and Industrial Research (CSIR) estimates this loss to be in the tune of approximately R61.5 billion (Schimke, 2020). According to Professor Suzan Oelofse who is the central branch chairperson and spokesperson of the Institute of Waste Management of Southern Africa (IWMSA), South Africa is still lagging other first world countries in the food waste management sector, despite being the leader in Southern Africa (Averda, 2019).

Disposal by Landfill for Waste Management

The graded landfill requirement system originally developed for South Africa, was later adopted by other Southern African countries, Namibia and Botswana included (The Franchise Association of South Africa, 2019). The waste management order was initially legislated with the addition of clause 4(a) (iv) in South Africa. In the National Environmental Management Act 107 of 1998, this clause stipulates that waste is to be avoided, or where unable to be avoided altogether, should be reduced and re-used or recycled where feasible and otherwise discarded in a responsible manner (FASA, 2019). The latest South Africa State of Waste Report was released in 2018 and it is apparent that even with the change, waste disposal using landfills is still the method of choice for hazardous and general waste management in South Africa (FASA, 2019).

Municipal solid waste (MSW) was found to have contributed 23.1 million tonnes of general waste in 2017. According to national statistics, 65.9% of households had access waste collection services at least once a week in 2017, leaving 34.1% households without the provision of waste disposal services at all (Averda, 2019). These households then make use of their own or communal rubbish dumps, where the food waste constituent leads to the release of methane gas and carbon dioxide into the atmosphere (FASA, 2019). The biogas in landfills which mainly consists of methane is roughly 40 – 70% by dry volume, has a 20 – 25 times greater warming effect than carbon dioxide. This further exacerbates global warming (Thi Ngoc Bao Dung, Sen, Chen, Kumar and Lin, 2014).

Environmental Impact

An additional concern regarding food waste is the environmental impact as a result of this phenomenon. Food loss and waste leads to GHG emissions and wasted resources such as water and land (Lipinski, Hanson, Waite, Searchinger, Lomax and Kitinoja, 2013).

Food waste has an impact on climate change. For all the stages of food production, from the production of fertilizer to transportation – there is the use of fossil fuels (Kilibarda et al., 2019). In addition, food waste also has an adverse effect on biodiversity, thereby increasing the need for new farmlands (Kilibarda et al., 2019). To elaborate, due to intensive agriculture, soil degradation occurs leading to the prevalent use of artificial fertilizers, which in turn adds to environmental pollution and the depletion of arable land (Kilibarda et al., 2019). The need for the formation of new farmlands as well as deforestation in wilderness areas leads to the extinction of wildlife (Kilibarda et al., 2019).

The energy used to produce food that is not consumed is estimated to be enough to power the City of Johannesburg for about 16 weeks, and the water utilized in the production of this food could fill more than 600 000 Olympic swimming pools (WWF-SA, 2017). That is approximately 1,7 billion cubic metres of ground and surface water that goes to the production of food that will be wasted (Farmer's Weekly, 2017). In terms of power, the combined diesel and electricity cost as a result of food waste amounts to an estimate of R1 billion (WWF-SA, 2017). This indicates just how big of an impact food wastage has on resources.

Household Waste

Food waste occurs in all households regardless of which income bracket the household falls into. There may be a relationship between household food waste generation, household income and the number of people belonging to a household (Schimke, 2020). South Africa has the second highest Gini Coefficient in the world – making it the second most unequal country globally and would generally mean different spending habits for the different classes (Schimke, 2020). The Gini Coefficient, which was developed by Italian statistician Corrado Gini in 1912, is a measure of the dispersal of income over a population, frequently used to measure economic inequality and wealth distribution (Chappelow, 2020). More affluent families have more money to spend on food, with better storage facilities at home like refrigerators and freezers, and therefore can afford to buy in bulk. The result thereof is that they often end up buying more than needed, which ultimately leads to the excess being discarded as waste (Schimke, 2020). On the other hand, poorer families are thriftier in their spending and buy just what they need and can carry on foot or by taxi. Although these lower income groups may consume less

in general, the lack of proper storage facilities does contribute to a large portion of food waste (WWF-SA, 2017). In a review by Aschemann-Witzel et al., (2015: 6466) it was cited that there seems to be a lack of connection between food production and consumers. They lack the understanding of the supply chain process and what it entails (Aschemann-Witzel et al., 2015). If consumers cannot fully comprehend what it takes to get food on their plates from a supply chain level, could this influence how they view meaningfulness?

It is to be noted that there is a shortage of research, knowledge gaps and accurate up to date information on the matter of global and local food loss and waste, and as such information is mostly based of best estimates. Nevertheless, the cost of food waste is not sustainable (WWF-SA, 2017).

The Abattoir Industry

According to the Department of Agriculture, Fisheries and Forestry (DAFF) the livestock sector is one of the fastest growing sectors, contributing nearly 40% to agriculture globally (Swanepoel, 2014). South Africa is one of the primary producers of red meat in Africa, contributing 24.1% of meat production (Swanepoel, 2014). A third of protein needs is provided by red meat in the African population. From the period 1998 to 2010, Red Meat Research and Development (RMRDSA) reported that livestock contributed almost 50% of overall gross value of agricultural production (Swanepoel, 2014). The industry's input grew from 11% in 1998 to 15% in 2010. The largest part of the industry comes from beef, followed by sheep, goat and then pork. Due to the South African climate, stock farming is the most feasible agricultural activity that can be implemented over a great part of the country (Swanepoel, 2014). South Africa's ground surface covers about 122.5 million hectares, where agricultural land suitable for large-scale grazing is calculated to be approximately 80% (Swanepoel, 2014).

Between 1994 and 2004 cattle production grew from 12.7 million to 17.6 million heads, indicating a greater demand for meat products due to constant population growth. More livestock production means more slaughtering (Swanepoel, 2014).

If the average weight of cattle slaughtered is 350kg, the different parts can be split into the following:

- Edible meat - 122.5 kg (35%)
- Edible offal (heart, kidney, lungs, liver and tongue) - 19.2 kg (5%)
- Bones (skeleton, horns, head, feet and hooves) – 119 kg (34%)
- Blood and other body fluids - 10.5 kg (3%)
- Offal (intestines and stomach) - 10.5 kg (3%)
- Animal hide - 24.5 kg (7%)
- Manure and paunch contents - 10.5 kg (3%)
- Fat (edible and inedible) - 36.7 kg (11%) (Omole and Ogbiye, 2013).

Figure 4 shows the types of by-product remaining after slaughter that would be considered for waste disposal.

Group	By-product
Soft organs	stomachs, intestines, lungs, carcass trimmings, reproductive structures, floor sweepings, drainage trappings, condemned meat
Hard organs	horn and hoof
Blood	Blood
Gut contents and manure	Gut contents and manure
Feathers / pig hair	Feathers / pig hair

Figure 3: Swanepoel, J. W. 2014. *Different groups of abattoir waste with its by-products.*

This organic and biodegradable material is prone to a rapid process of acidification and chemical breakdown by bacteria, yeasts and other micro-organisms. If the waste is not disposed of properly, it can give rise to serious public health and environmental issues (Koenig and Yiu, 1999).

There are a variety of acts and legislation that govern the abattoir industry in South Africa, such as The Environmental Conservation Act 73 of 1989 (ECA), National Environmental Management Act 107 of 1998 (NEMA), National Water Act

36 of 1998 (NWA) and The Meat Safety Act 40 of 2000 (MSA). Presently South African law recommends incineration, denaturing, sterilization or any other technique approved by the director of veterinary public health as method for waste disposal (Roberts and de Jager, 2004).

In South Africa, burying is the most widely used method of waste disposal of condemned products – followed by burning. Some abattoirs use a combination of both methods (Swanepoel, 2014). It is unknown if the land on which the condemned products are buried, have secured/barred access from the general public so that people do not wander into land filled with decaying product that could harm their health.

According to the report on abattoir waste in the Western Cape by Gogela et al. (2017), despite the various forms of food waste management strategies available (avoidance, minimisation, incineration, sterilization etc) - disposal by landfills and burial on farms is still the most popular practice. There are four other pieces of literature that cited the same occurrence – (a) 'Waste Management in Hong Kong Abattoirs' by Koenig and Yiu (1999), (b) 'An evaluation of slaughterhouse wastes in south-west Nigeria' by Omole and Ogbiye (2013), (c) 'Waste Management at Free State Abattoirs' by Swanepoel (2014) and (d) 'Thailand's Fight against Food Waste: A Study on Food Loss and Waste Management' by Srisuwannaket, Liumpetch and Saelawong (2019). Based on the above-mentioned publications which are from different years and locations, it appears that not much has changed in how abattoirs are disposing of their waste. This raises a point of concern as this form of disposal is responsible for a high amount of methane gas released into the atmosphere, leading to climate change (FASA, 2019). What is the cause for the slow uptake of newer or better methods of managing waste in abattoirs?

Inadequate abattoir waste management poses several issues. There is a growing health risk because of informal recovering at landfill sites (DEA&DP, 2015). Anyone who can access these landfill sites could fall ill. In addition, there is an increasing shortage of these landfill sites (DEA&DP, 2015). What happens when there is no more space to bury or dispose of this abattoir waste? Another consideration is that many consumers are not familiar with best practices to manage waste, which leads to illegal and sometimes unacceptable waste management activities (DEA&DP, 2015).

It is thus evident that food waste is a multifaceted problem. With regards to abattoirs, the growing population threatens to have an ongoing increase in the demand for meat and meat products - which in turn places considerable pressure on resources to cater to this growing demand. The way abattoirs manage their waste becomes more important for sustainability purposes and for consumers to make more informed choices.

It is therefore important to learn about how abattoirs are in fact managing the waste generated from slaughtering, to gain insight into whether the systems work effectively. Moreover, the study could raise awareness among consumers on the magnitude of food wastage and its effects.

2.1 Theoretical Framework

Meaningful Brands® is recognized globally as a trademarked metric of brand power and the only universal framework to link brands with human wellbeing (Havas Group, 2017). Media agency Havas reported that 60% of material by the world's leading brands as clutter. This has a minimal impression on the consumer because the messaging is of sub-standard quality, irrelevant or poorly delivered (Havas Group, 2017). There are several aspects that play a fundamental role in creating a meaningful brand, as illustrated below:

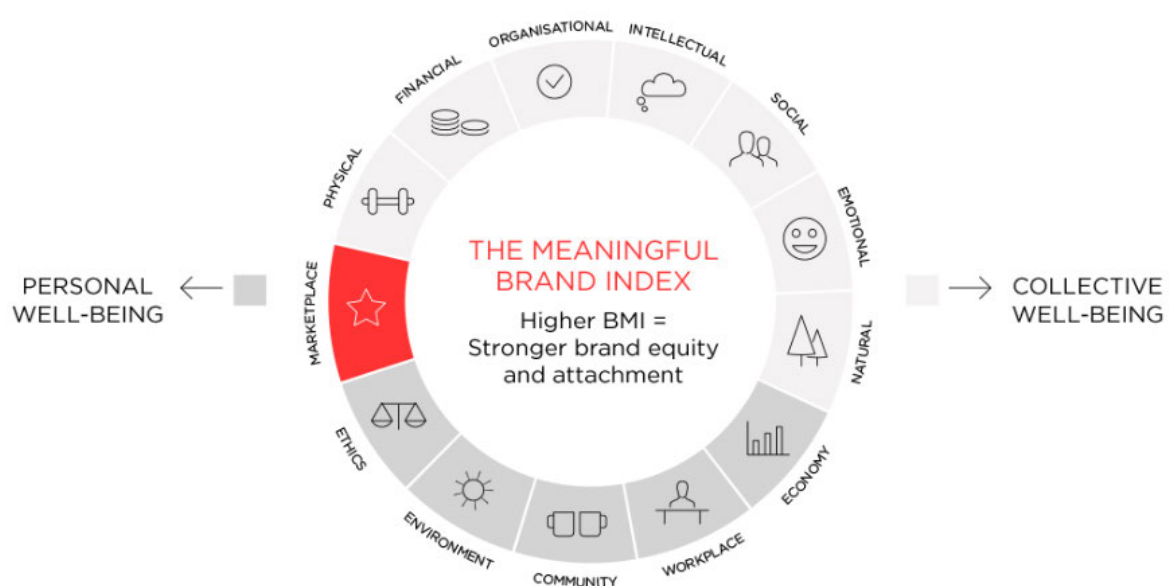


Figure 4: Cicireanu. [s.a]. *The Meaningful Brand Index*.

Havas defines a meaningful brand as a trusted brand that contributes to its sector and benefits people's collective and personal wellbeing, as well as functional benefits (Havas Group, 2017). Yannick Bolloré, who is the chairman and CEO of Havas Group, stated that it is imperative for brands to understand why people care and what a meaningful brand is to them (Havas Group, 2017). Brands that go over and above the product to make a worthwhile and noticeable impact, get a greater share in consumers' lives. Such brands enjoy stronger attachments and deeper audience connections, thereby strengthening trust (Havas Group, 2017). The Havas Meaningful Brand criteria will be used as the framework for which brand meaningfulness for Karan Beef is explored in the context of food waste management. The five principles are discussed below:

1) Understand what matters to people and what they expect from your industry

This relates to palpable benefits at a personal, collective and functional level such as making people's lives easier, playing a role in the community and commitment to developments in quality. Karan Beef is sited to be the biggest fully integrated producer of beef on the African continent (Karan Beef, [s.a]). The brand has also been awarded the Food Safety System Certification (FSSC) 22000 accreditation, which is the highest Food Safety Management System (FSMS) achievable globally (Karan Beef, [s.a]). This demonstrates the dedication that the brand has to providing consumers with a quality product.

2) Understand the types of benefits that you currently deliver

Karan Beef is involved in several Corporate Social Investment (CSI) initiatives. An example is the brand having donated land to their adjoining farm to the Tokolohong Homeowners Association which is managed by their agricultural workers (Karan Beef, [s.a]). The Agri-village has housing as well as communal areas to grow vegetables and sustain livestock. The initiative allows the people to gradually become self-sufficient. The brand also runs a medical assistance programme with a day clinic facilitating primary healthcare to the local community (Karan Beef, [s.a]).

3) Define the type of role you want to play in people's personal or collective wellbeing

Karan Beef has a value chain starting from the feedlot all the way to distribution, with a total of 2 200 employees across all sites (Dun & Bradstreet, 2017). This provides a source of income because employees are needed at every stage of the supply chain. The brand also has a sanctuary on their Heidelberg farm, being home to a collection of waterfowl and 10 species of antelope (Karan Beef, [s.a]). For conservationists these efforts are appreciated and may be considered to be meaningful.

4) Activate through an appropriate mix of touchpoints, content and experiences

The main contact point for the brand is on the website where consumers can get beef recipes, learn more about beef and what to look out for when buying, the different types of beef cuts, search for outlets where Karan Beef is stocked as well as a mobile app called Beef Easy where tips and tricks are provided. The brand also uses the website to create awareness about competitions and specials at outlets (Karan Beef, [s.a]).

5) Measure and amplify

This relates to the brand measuring meaningfulness through financial business performance, which is not an important factor for the purposes of this study on food waste management.

Therefore, the Havas Meaningful Brand Index encompasses various aspects that if incorporated into a brand's operations, can contribute to and increase the collective and personal well-being of consumers.

3. Research Paradigm

The term 'paradigm' was created by historian Thomas Kuhn. In the textbook *Research Matters*, Du Plooy-Cilliers (2014: 19) quotes the definition as

"...a cluster of beliefs and dictates which for scientists in a particular discipline influence what should be studied, how research should be done and how results should be interpreted".

Following a certain paradigm will guide how a phenomenon will be studied within the field (Du Plooy-Cilliers, 2014).

There are three frequently used paradigms, namely positivism, interpretivism and critical realism; which can be further explored in terms of their philosophical positions - epistemological, ontological, axiological, metatheoretical and methodological (Du Plooy-Cilliers, 2014).

Interpretivism was found to be appropriate for the purposes of this research study. The reason is that interpretivism is of the belief that reality is subjective and views are fluid. Because individuals are dynamic, their views can change over time and are influenced by the social constructs and surroundings in which they find themselves (Dean, 2018). Interpretivism is relevant to this study as meaningfulness is subjective for every person. What may be meaningful and impactful to one, may not be the same to another. It is assumed that generally a person's upbringing, social and cultural background also affects their perceptions and habits (Aschemann-Witzel et al., 2015). People are different and thus have different perspectives. These perspectives can be influenced by experiences or the surroundings within which they find themselves. In addition, there is the consideration that consumer perspectives do change, as noted in interpretivism. This study seeks to tap into those constructs and explore how they have moulded the consumer's mindset in relation to abattoir practices.

Exploring food waste within the abattoir industry and the effects these practices may or may not have on the attitudes and perceptions of the consumer justifies interpretivism. The same phenomenon could be experienced differently by people. The study focuses on gaining an in-depth understanding of what is meaningful to the consumer and relevant to them, and thus aligns to the aims of the research (Du Plooy-Cilliers, 2014).

The epistemological position of interpretivism argues that people are guided by common sense in their day to day lives and in order to comprehend human behaviour, one needs to first understand what people deem to be common sense (Du Plooy-Cilliers, 2014). It will be interesting to learn what different consumers deem to be good sense and sound judgment regarding food waste.

The ontological position of interpretivism states that reality is influenced by social constructs and is subject to the connotations people attribute to their experiences and interactions with others (Du Plooy-Cilliers, 2014). This position will help understand perceptions and attitudes on food waste based on individual experiences and constructs.

The axiological position of interpretivism values uniqueness and differences. The values and meanings that shape research are considered openly, together with those of participants (Du Plooy-Cilliers, 2014). Different experiences can help us understand why people make the choices they do in relation on food waste.

The metatheoretical position of interpretivism relates and explains how people existing in a certain context lead their daily lives. Interpretivist research is rich in detailed description (Du Plooy-Cilliers, 2014). This research involves unveiling the meanings and values of its participants in relation to food waste.

The methodological position of interpretivism expresses the view that social reality is always changing and is reliant on how people experience reality (Du Plooy-Cilliers, 2014). To gain understanding into multiple realities to food waste, qualitative research will be used.

Interpretivism is not without its critics. Critical theorists argue that it has an obsessive contemplation of oneself – a form of ‘navel-gazing’ which disregards the effects on individuals and their authority (Dean, 2018). Positivists question the quality of data gained through mixed methods given a lack of universal evaluative criteria to assess its merits, and the absence of generalisability and objectivity (Dean, 2018). Positivism believes there is one reality which is objective and can be observed and measured through empirical evidence. Critical realism holds that real structures occur separately from human consciousness (Du Plooy-Cilliers, 2014). Ultimately it is a matter of philosophical differences and varying worldviews (Dean, 2018). The worldview in this study holds that one cannot separate the

structures that may have moulded how people are and their viewpoints, and its impact on their consciousness and how that can change over time.

4. Research Methodology

Data collection is vital in research, as the data is intended to contribute to an improved comprehension of the theoretical framework (Etikan, Musa and Alkassim, 2016).

This study sought to understand the end-user's perception of abattoirs, as well as looked at what Karan Beef is doing with regards to food waste management. Based on these practices, the Havas Meaningful Brand Index was used to ascertain if Karan Beef is a meaningful brand. Emotive responses could be uncovered from consumers as there are people with different meat preferences for whatever reason or based on how they think the growing meat demand contributes to matters like climate change. Gaining an in-depth understanding into this topic was thus found to be aligned to the interpretivist paradigm.

4.1 Research Strategy and Design

This was a non-empirical qualitative study of applied research, as it was evaluating the existing waste management systems practiced in the abattoir industry. In exploring brand meaningfulness, the research was descriptive in nature. Descriptive research intends to relate the characteristics of phenomena and the connection between variables (Davis, 2014). The two variables in this study were abattoir waste management and meaningful brand. Using the interpretivist paradigm, the research, based on their interpretation, gathered what consumers believed to be a meaningful brand (Du Plooy-Cilliers, 2014).

The study employed a cross-sectional survey design where the overall picture of a phenomenon was gained at one point in time (Du Plooy and Cronje, 2014). The limitation with this survey design was that the study was conducted at a single point in time where the perceptions of consumers were not analysed over a certain period (Carlson and Morrison, 2009), and thus cause and effect cannot be determined (Setia, 2016).

4.2 Sampling Plan

The sampling method used was the non-probability sampling method. The type of non-probability sampling method was a combination of convenience sampling for the consumers and purposive sampling for Karan Beef. Convenience sampling consists of people who are easily accessible and whom the researcher already knows (Pascoe, 2014). Convenience sampling is cost-effective, and subjects are readily available (Etikan et al., 2016), which was beneficial considering the short time frame available to complete the study. In purposive sampling, participants are chosen based on certain characteristics and what needs to be known (Pascoe, 2014). Purposive sampling in relation to Karan Beef was used for this study because the study required information on the brand's specific waste management systems. To gain a vaster perspective from consumers who may not necessarily be consuming meat at all, the study hoped to get consumers who have varying dietary choices to participate (vegan, pescatarian, vegetarian etc.). Consumers needed to be 18 years and above to participate. The participants were asked for informed consent. The consent letter to ask for participation in the study is attached in the appendices as well as the ethical clearance, to indicate credibility for the study, the institution as well as the researcher.

4.3 Data Collection and Instrument

The research instrument used for the consumers was a digital questionnaire (Google Forms) with open-ended questions. The digital questionnaire was used due to the COVID-19 pandemic, which restricted physical contact and promoted social distancing between people. Therefore, this form of data collection instrument was found to be convenient for both the researcher and the participant, and it also gave participants ample time to think about their responses.

A questionnaire was also submitted to Karan Beef, along with consent documentation and ethical clearance. The intention was to have the questionnaire filled in and returned to the researcher. However, due to time constraints explained by the Karan Beef contact, the data collection method ended up being a telephonic interview. With the permission of the respondent, the telephonic interview was recorded and later transcribed. The study went from interpreting the end-user opinion, to analysing data from Karan Beef in order to get an

understanding of whether they are being a meaningful brand by using the Havas Meaningful Brand Index.

There was no identifying information (e.g. names, addresses etc.) asked from the participants, and their information was treated with the utmost confidentiality. Respondents were assured that their participation was purely voluntary, and they could opt out and withdraw their participation at any time without suffering any repercussions.

All the consent letters, checklists, ethical clearance, data collection instruments, responses and transcribed data is attached in the appendices.

4.4 Data Processing and Analysis

Following data collection, the qualitative data analysis method used for this study was content analysis. Qualitative content analysis is aimed at discovering and unearthing evident and concealed themes and patterns within text (Bezuidenhout and Cronje, 2014). Through the data processing and analysis, the focus was on looking for the themes that pulled through from the responses and text given by the participants to determine their meaning and gather insights.

The responses gathered from the consumer research was exported from Google Forms onto Microsoft Excel (MS Excel). All the responses were then copied and pasted onto Microsoft Word (MS Word). The data analysis process involved inductively creating codes from raw data. The responses were read line by line to identify emerging themes and patterns. These patterns were then grouped according to constructs thematically. The themes and constructs gathered were extracted using the DocTools function on MS Word. These themes and constructs were then exported back to MS Excel where the =COUNTIF function was used to determine the frequency of themes and constructs. This information was later converted into pie charts depicting the most prominent themes.

There were four questions from the consumers' questionnaire that were found to be pertinent in answering the study's research questions, and the responses were grouped into the most prominent themes namely:

- i. What influenced your dietary preference?*
 - Upbringing: Responses pertaining to factors such as childhood, family, socialization and habit.
 - Health: Responses pertaining to health matters or issues, genetics and active lifestyle.
 - Taste: Responses pertaining to preferences on taste and the love for meat.

- ii. What are your thoughts on abattoirs and why do you feel that way?*
 - Necessity: Responses that centred around seeing the sector as an important part of the food supply chain or essential business.
 - Negative: Responses that centred around negative connotations where the slaughter of animals was concerned, and possible inhumane practices or animal cruelty.
 - Conflicted: Responses centred around seeing abattoirs as an essential business but clouded with ethical concerns and questions about health protocols.
 - Other: Responses that did not answer the question. The question could have been misunderstood or lacked clarity.

- iii. If abattoirs got rid of their waste unethically, what would that mean for you as the consumer and why?*
 - Negative: Responses centred around effects to the environment, being a contributor to the problem as a consumer, supporting unethical practice and possibly exploring alternative protein sources in plants.
 - Neutral: Responses where cognizance of unethical practices did not change the consumer perception of abattoirs nor change eating habits.
 - Other: Responses that did not answer the question. The question could have been misunderstood or lacked clarity.

- iv. What is a meaningful brand to you?*
 - Societal impact: Responses centred around the effect the brand on the society, its people and community at large.
 - Ethics: Responses centred around how ethical a brand is, transparency, values, integrity and the extent to which the law was abided by.

- Quality: Responses centred around the quality of product and service.
- Environmentally conscious: Responses centred around sustainable practices and a brand's cognisance on how their actions impact the environment.
- Employee wellbeing: Responses centred around putting the employee first and the proper treatment of employees.
- Consumer centric: Responses centred around the consumer being at the forefront and catering to their needs.
- Notable/Unique: Responses centred around brand differentiation and unique selling points.
- Heritage: Responses centred around the legacy and history of a brand.
- Credibility: Responses centred around brands doing what they say they will do.
- Other: Responses that did not answer the question. The question could have been misunderstood or lacked clarity.

4.5 Research Reliability and Validity

Qualitative research is about understanding a phenomenon within a particular context, instead of the generalisation to a greater population like quantitative research (Koonin, 2014). The content analysis method involved using an inductive approach where the raw data was used to generate themes and constructs (Bezuidenhout and Cronje, 2014). The process allowed for prominent themes to emerge from the data itself through constant engagement and comparison. The data was examined repeatedly to ascertain responses consistently fell under the themes and constructs under which they were categorised.

5. Data Findings and Discussion

5.1 Karan Beef Results and Discussion

Research question 1: What food waste management systems are practiced in the abattoir industry?

Karan Beef was asked to discuss the waste management systems they have at their abattoir. There are four main waste disposal processes that were discussed, namely rendering, drying and enzymatic digestion, ingestion and wastewater treatment.

- *Rendering* – In this process the meat bones, carcasses and floor sweepings or any other discarded items are rendered. This is basically cooking under high pressure which kills pathogens. The contents are then dried, which forms carcass meal. The carcass meal is then centrifuged to release fat. The fats are used by soap producers.
- *Drying and enzymatic digestion* – In this process blood is collected and dried, which forms blood meal. Thereafter, the blood meal is mixed with carcass meal to form feed for non-ruminants or dog treats. Non-ruminant animals are omnivores or carnivores with one stomach chamber in their digestive system, otherwise known as monogastric (Lakna, 2018). Examples on non-ruminants are fowl, rabbits, swine, horses and dogs.
- *Ingestion* – In this process the paunch contents are shipped off to be used for composting.
- *Wastewater treatment* – This process involves the removal of fats to comply with local authority standards.

The above results on waste disposal practices at Karan Beef show that although waste management is not their core business, the brand does partake in the repurposing of waste in form or another. The respondent at Karan Beef did emphasize that dumping occurs when there is no market for the excess that came from the slaughter process and is often the last resort in terms of waste management. The brand has a qualified veterinarian on site to ensure that sustainable and ethical waste disposal is practiced. Relating it back to the literature, Karan Beef's waste disposal practices align with the National

Environmental Management's Act 107 of 1998, abiding by the guide to avoid, reduce, re-use and recycle waste (FASA, 2019).

5.2 Consumer Results and Discussion

1. What is your gender?

35 responses

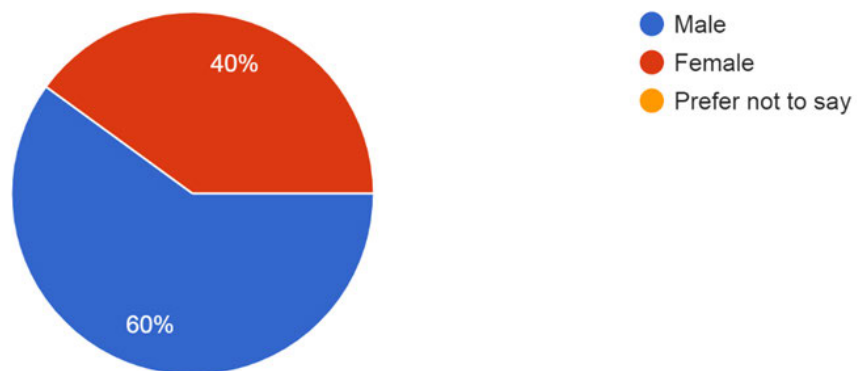


Chart 1: Consumer demographics

Which age group do you fall in?

35 responses

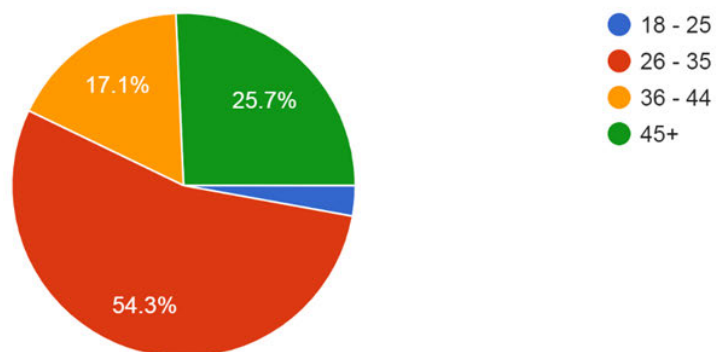


Chart 2: Consumer demographics

2. What is your dietary preference?

35 responses

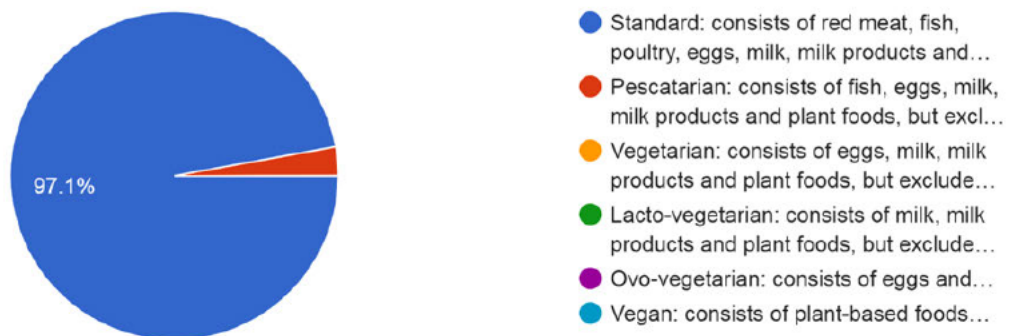


Chart 3: Consumer dietary preference

The study had a total of 35 respondents, of which 60% were male. The majority (54.3%) of respondents fell in the 26 – 35 age group, followed by 45 years and older. A total of 97.1% of respondents had a standard dietary preference which includes red meat, fish, poultry, eggs, milk, milk products and plant foods.

5.2.1 Respondents were asked what influenced their dietary preference. The following themes were derived from the analysis:

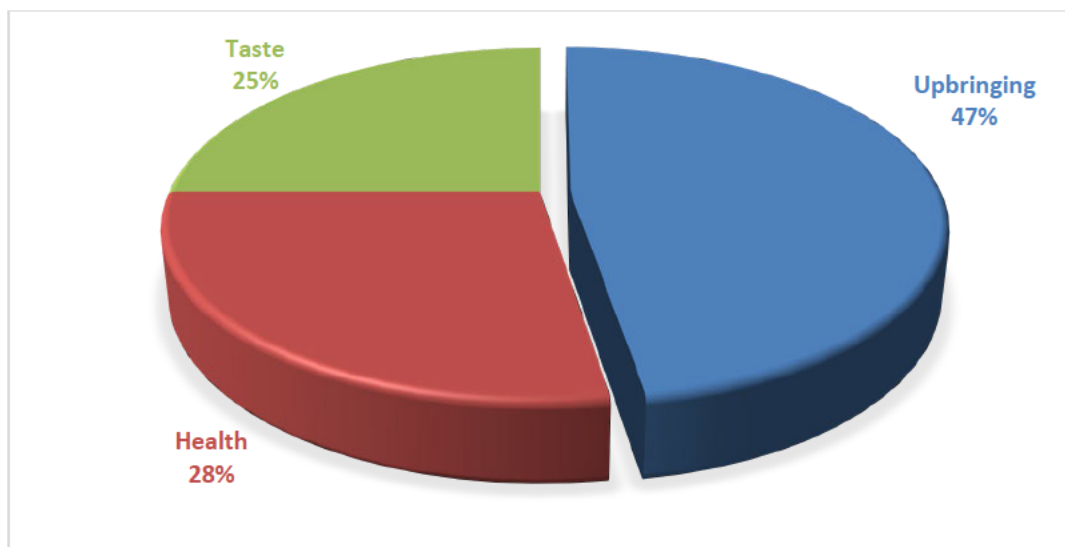


Chart 4: Consumer dietary preference influence

The most prominent theme (47%) had to do with the consumers' upbringing. The following sentiments were found in the text:

"I grew up eating meat"

"Family"

"How I was raised"

"It's generally how I have been socialised"

Consumers cited responses that mainly centred around their upbringing, which indicated that most consumers ate meat as a default setting due to the way in which they were raised, and it was what they were used to.

This echoes what interpretivism speaks to – environment and social constructs influence people's perceptions (Dean, 2018). Aschemann-Witzel et al., (2015) also echo the sentiments regarding a person's upbringing, social and cultural background playing a role in how things are perceived.

5.2.2 Research question 2: What perceptions do consumers have of abattoirs?

Respondents were asked to express their perception of abattoirs. The following themes were derived from the analysis:

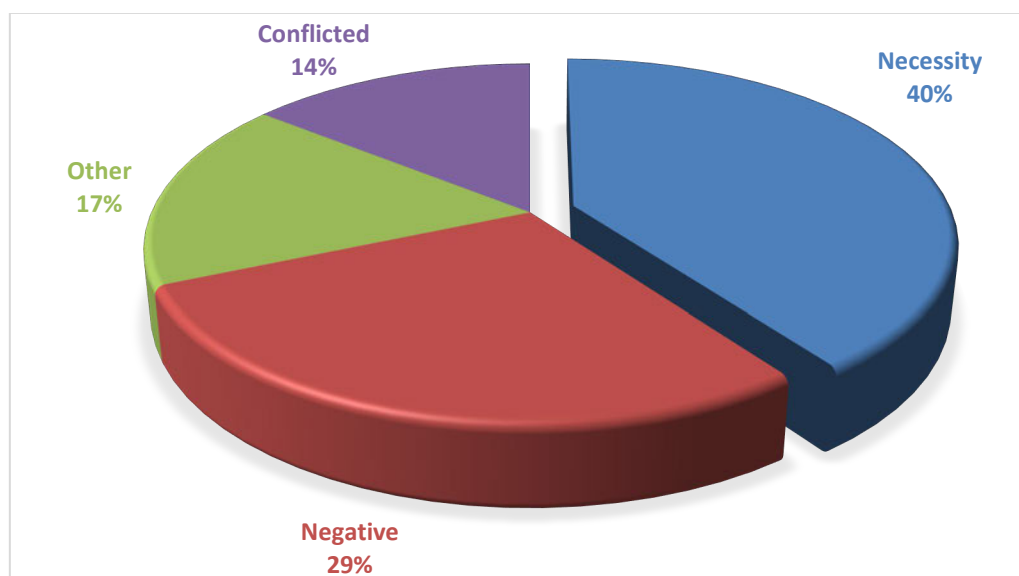


Chart 5: Consumer perception on abattoirs

The most prominent theme (40%) was that consumers perceived abattoirs to be a necessity to the food supply chain. The following sentiments were found in the text:

"They have a place in society, without them the population will starve"

"They are our major source of meat production and a crucial part of the food supply chain"

"They are a necessary part of the food chain"

Although there are negative connotations to the slaughtering process, most of the consumers perceived abattoirs as a necessary part of the food supply chain. It does not come as a surprise as most of the consumers have red meat as part of their diet as shown on Chart 2. It seems natural that they may consider abattoirs to be essential.

Similar to the study by Swanepoel (2014) on Waste Management at Free State Abattoirs, meat from animals is seen as the main source of protein for many households.

5.2.3 Research question 2(b): How do the waste management systems influence the consumer's perception of a meaningful brand?

Respondents were asked to express how unethical waste management systems would affect their perception of a brand. The following themes were derived from the analysis:

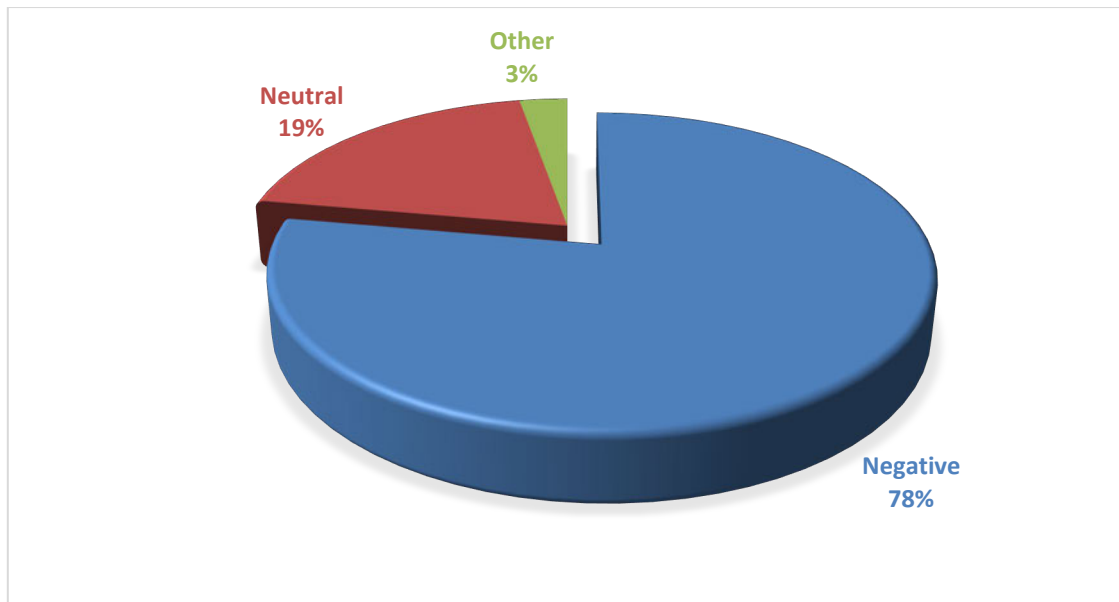


Chart 6: Consumer sentiment on how unethical waste practices influence perception of abattoirs

The most prominent theme (78%) was that of negativity if it was found that abattoirs practiced unethical waste management. The following sentiments were found in the text:

"It would just add an element of guilt for me as a consumer"

"I would have an issue with it but also feel like a contributor"

"It would mean that waste management could be toxic to the environment"

"I would be very upset and would need to find out how to action"

The result shows that while it may not necessarily change food preferences, but unethical waste management practices would give consumers a negative perception of the abattoir industry as its waste can be toxic to the environment. In addition, because they were consumers of meat that would add to the element of guilt, as it is their preference that drives up the demand for meat and meat products. They would be prepared to find out how to action against abattoirs practicing unethically.

Relating to Koenig and Yiu (1999), organic and biodegradable waste from abattoirs is prone to a rapid process of acidification and chemical breakdown that if not disposed of properly, can give rise to serious public health and environmental issues. This drives the negative impact improper waste

management practices has on the environment, and as the population grows so will the demand for meat – meaning more waste that could potentially be disposed of improperly (Swanepoel, 2014).

5.2.4 Research question 1(b): Do the current waste management practices contribute to a meaningful brand?

Respondents were asked what a meaningful brand is to them. The following themes were derived from the analysis:

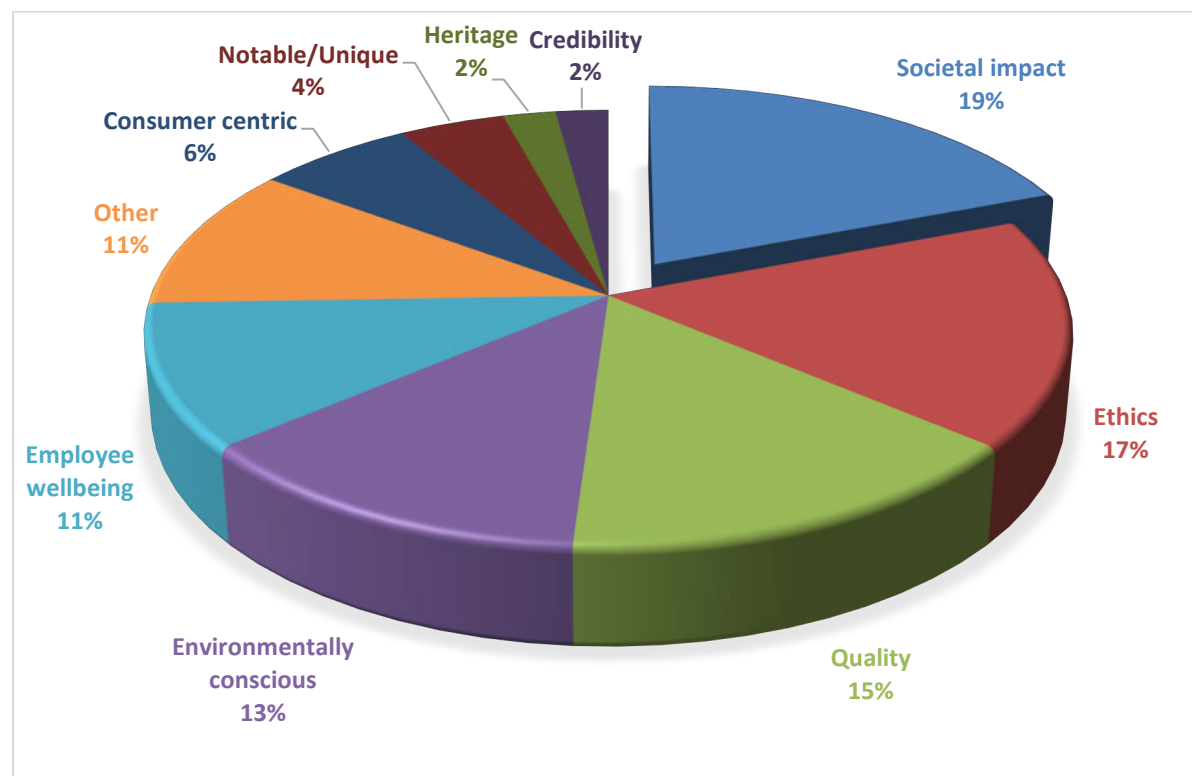


Chart 7: Consumer meaningful brand influencers

The most prominent themes were found to be societal impact (19%), ethics (17%), quality (15%), environmentally conscious (13%) and employee wellbeing (11%). The following sentiments were found in the text:

"A brand that gives back to the community it profits from"

"A brand that puts its employees first"

"A brand that makes a difference in society by leaving a positive footprint"

"One that supports people, even when no one is looking"

The research results show that a brand's impact on society, its people, community and environment greatly affect how meaningful consumers perceive a brand to be. The words "community", "people" and "society" appeared 14 times in the responses. This emphasizes how important it is for a brand to be about the society, its people and community it serves.

6. Conclusions and Recommendations

6.1 Ethical Considerations

The aim of the study was explained to all participants and the researcher made sure to acquire informed consent from all participants in the study prior to their participation. All consent was documented for each type of data collection method as to prove that participants gave permission for their responses to be used in the study. No participants were asked for any personal information or any details that would identify them. This was done to ensure confidentiality. The name of the contact at Karan Beef has been blacked out to ensure anonymity. The respondents were also supplied with the ethical clearance letter to prove that the study is ethical and approved by the IIE. There was no coercion whatsoever to partake in the study and it was made clear to respondents that participation in the study was purely voluntary. The participants were also made aware that they could stop participating at any time and should they want to withdraw their participation they could do so at any time without any consequences.

6.2 Limitations and Trustworthiness

The main limitation to the study was access to a variety of respondents. The COVID-19 pandemic has restricted personal interaction with people, and this may have had an impact on the sample size as well as getting a more representative sample. The convenience sampling method may have also attributed to bias and played a role in not being able to extrapolate the results to the wider population as the sample size consisted mainly of the people the researcher had access to. The lack of personal interaction also nullified the opportunity to observe respondents' body language in response to questions asked, where interviews or focus groups could have been conducted and non-verbal cues gotten that may have provided more in-depth data.

6.3 Recommendations

The respondent at Karan Beef emphasized that waste management is not their core business and as such, the company does not go beyond what is mandated or would probably not invest much in that function. Recommendations for possible

studies in future could be around looking into the creation of a more formal and consistent market for waste by-products from abattoirs so as to reduce the incidence of dumping, as was found to still be a frequent occurrence in the literature, simply because there is no one to make use of the waste. Another possible study could be to assess the effectiveness of current legislature in the industry and how better statistics and quantification of abattoir waste could be attained and documented so there is more accuracy in legislature development and implementation.

6.4 Conclusions

The Havas Meaningful Brand Index talks about brands benefiting people's collective and personal wellbeing as well as functional benefits (Havas group, 2017). The consumer research echoed similar sentiments in how consumers described what being a meaningful brand means to them. The waste management practices at Karan Beef indicate that although it may not be their primary business, the brand shows consideration to meaningful disposal through the repurposing of waste. This aligns with some of the themes found on the Havas Meaningful Brand Index. It is thus vital for brands to not only take from the land and its people, but to plough back into it and also contribute to the positive development of its society and community thereby adding to personal and collective wellbeing.

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Appendix A – Ethical Clearance Letter



1 July 2020

Student name: Susan Marebane

Campus: Vega Bordeaux

Re: Approval of Postgraduate Diploma in Brand Context Management Proposal and Ethics Clearance

PGDIP ETHICAL CLEARANCE LETTER

Your research proposal and the ethical implications of your proposed research topic were reviewed by your supervisor and the campus research panel, a subcommittee of The Independent Institute of Education's Research and Postgraduate Studies Committee.

Your research proposal posed no significant ethical concerns and your supporting documents and instruments are in order to proceed. We hereby provide you with permission to proceed with your research.

In the event of you deciding to change your research methodology in any way, kindly consult your supervisor to ensure all ethical considerations are adhered to and pose no risk to any participant or party involved. A revised ethical clearance letter will be issued.

We wish you all the best with your research!

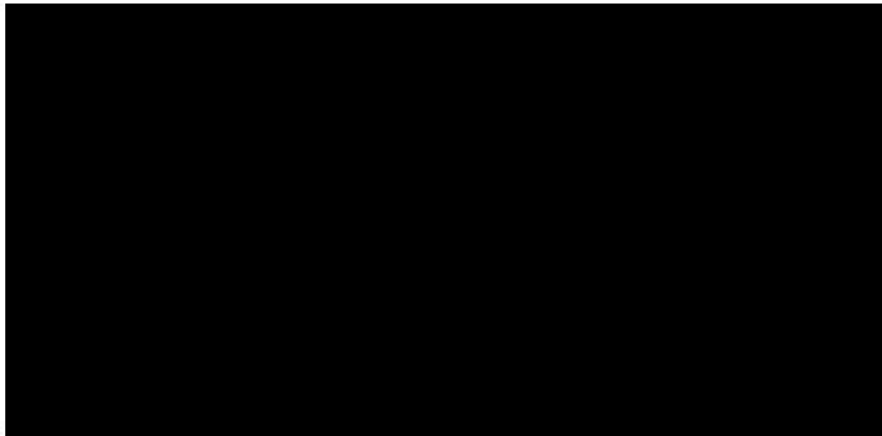
GENERAL CONDITIONS TO BE FULFILLED IN RELATION TO RESEARCH

Permission is granted to proceed with the above study subject to the conditions listed below being met and may be withdrawn should any of these conditions be flouted.

Please note: The panel has not considered the merits, accuracy or ethical soundness of the research. The only merits examined are the use of The IIE as a sample.

Permission is granted subject to the following conditions:

1. The researcher(s) will need to obtain informed consent in writing from all of the participants in his/ her sample if the study is not anonymous.
2. The researcher(s) may only use the data collected for research purposes and in no other way.
3. Photographs of human subjects may only be taken if relevant to the research, informed consent was obtained, and even with informed consent, the photographs may not be published on any online platforms.
4. The researcher is responsible for supplying and utilising his/her own research resources, such as stationery, photocopies, transport, faxes and telephones and should not depend on the goodwill of the institutions and/or the offices visited for supplying such resources.
5. No names or identifying information of participants may be used within the research and the research must be voluntary.
6. Please make it clear that the information will not be used punitively in any way and participants may in no way be counselled/advised based on this.



Appendix B – Gatekeepers Approval Letter



Gatekeepers letter / Request to conduct research

To whom it may concern

I am writing to ask your permission to conduct research at your company Karan Beef.

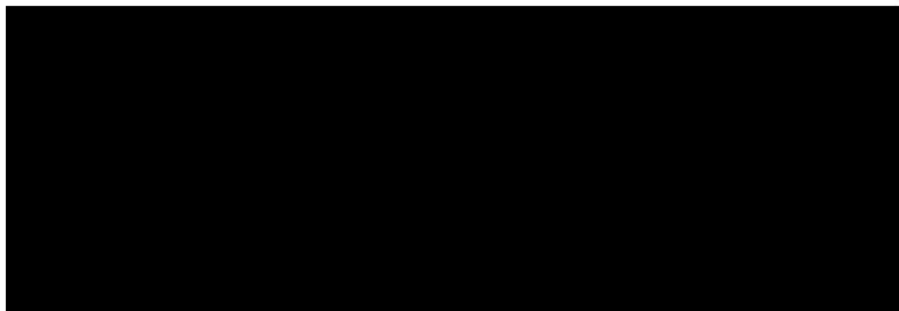
My name is Susan Marebane, a Post Graduate Diploma in Brand Contact Management student at the Vega, a brand of the Independent Institute of Education (IIE). The research I wish to conduct is for my research report in the module Research Methodology, titled Food waste management in the abattoir industry in the context of a meaningful brand.

The aim of this study is to investigate food waste management in the abattoir industry. The nature of your firm's participation will be for a manager to provide information on how Karan Beef manages their waste and the waste management systems the brand has in place. The data gathered will be strictly for the purposes of the study and will not be used outside the scope of this research study.

Yours sincerely

Student: Susan Marebane

Supervisor: Mbali Rametse



Gatekeepers Approval

Consent form to conduct research at my company	
I, [REDACTED]	
Representative of [REDACTED] Karan Beef	
[REDACTED]	
Give my permission that Susan Marebane may conduct research at my company. This research has been explained to me and I understand what participation in this research will involve. I reserve the right to withdraw this permission at any time. I also understand that research reports are available in the library and IIE Repository unless I indicate below that I would not	
Select below:	
☐ I request that my company's identity be kept confidential.	
☐ My company can be identified in the study	
☐ The study may never be available on the repository.	
☒ The study may be made available on the repository.	
☐ The study may be made available on the repository after months.	
[REDACTED]	21/07/2020
Signature	Date

CONSENT FORM TEMPLATE

Explanatory Information sheet and consent form for participants To whom it may concern, My name is Susan Marebane and I am a student at Vega. I am currently conducting research under the supervision of Mball Rametse about my research study looking at food waste management in the abattoir industry in the context of a meaningful brand. I hope that this research will enhance our understanding of meaningful brands and how food waste management in this sector contributes to the framework. I would like to invite you to participate in my study. In order to explain to you what your participation in my study will involve, I have formulated questions that I will try to fully answer so that you can make an informed decision about whether or not to participate. If you have any additional questions that you feel are not addressed or explained in this information sheet, please do not hesitate to ask me for more information. Once you have read and understood all the information contained in this sheet and are willing to participate, please complete and sign the consent form below.
What will I be doing if I participate in your study? I would like to invite you to participate in this research because as the brand that I am conducting my study on, I need input from the brand itself about the waste management systems that you have in place. If you decide to participate in this research, I would like to ask you to please fill in a questionnaire that I will send to you about the waste management systems at Karan Beef. I would also like to ask permission for a telephonic interview should there be concepts I might need clarity on based on the responses from the questionnaire. You can decide whether or not to participate in this research. If you decide to participate, you can choose to withdraw at any time or to decide not to answer particular questions.
Are there any risks/ or discomforts involved in participating in this study? Whether or not you decide to participate in this research, there will be no negative impact on you. There are no direct risks or benefits to you if you participate in this study. You might, however, indirectly find that it is helpful to talk about your food waste management systems. If you find at any stage that you are not comfortable with the line of questioning, you may withdraw or refrain from participating.
Do I have to participate in the study? - Your inclusion in this study is completely voluntary; - If you do not wish to participate in this study, you have every right not to do so; - Even if you agree to participate in this study, you may withdraw at any time without having to provide an explanation for your decision.
Will my identity be protected?

I promise to protect your identity. I will not use your name in any research summaries to come out of this research and I will also make sure that any other details are disguised so that nobody will be able to identify you. I would like to ask your permission to record the interviews, but only my supervisor, I and possibly a professional transcriber (who will sign a confidentiality agreement) will have access to these recordings. Nobody else, including anybody at Vega, will have access to your interview information. I would like to use quotes when I discuss the findings of the research, but I will not use any recognisable information in these quotes that can be linked to you.

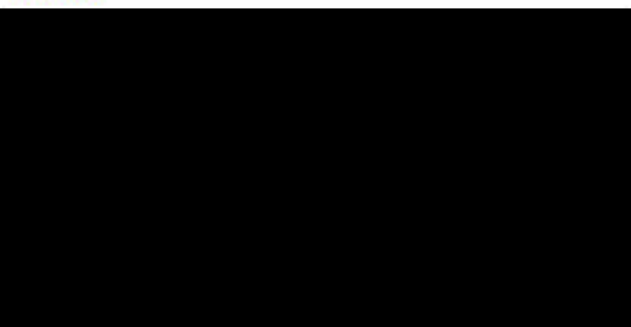
What will happen to the information that participants provide?

Once I have finished all interviews, I will write summaries to be included in my research report, which is a requirement to complete my Post Graduate Diploma in Brand Contact Management. You may ask me to send you a summary of the research if you are interested in the final outcome of the study.

What happens if I have more questions about the study?

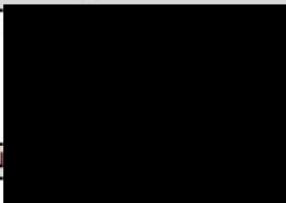
Please feel free to contact me or my supervisor should you have any questions or concerns about this research, or if there is anything you need to know before you decide whether or not to participate.

You should not agree to participate unless you are completely comfortable with the procedures followed.



Consent form for participants		
I, _____, agree to participate in the research conducted by Susan Marebane about food waste management in the context of a meaningful brand.		
This research has been explained to me and I understand what participation in this research will involve. I understand that:		
• I agree to be interviewed for this research. • My confidentiality will be ensured. My name and personal details will be kept private. • My participation in this research is voluntary and I have the right to withdraw from the research at any time. There will be no repercussions should I choose to withdraw from the research. • I may choose not to answer any of the questions that are asked during the research interview. • I may be quoted directly when the research is published, but my identity will be protected.		
		21/07/2020
Signature		Date

CONSENT FORM FOR AUDIO OR VIDEO RECORDING

Consent form for participants	
I, _____, agree to allow Susan Marebane to audio record my interviews as part of the research about food waste management in the abattoir industry in the context of a meaningful brand. This research has been explained to me and I understand what participation in this research will involve. I understand that: • My confidentiality will be ensured. My name and personal details will be kept private. • The recordings will be stored in a password-protected file on the researcher's computer. • Only the researcher, the researcher's supervisor and possibly a transcriber (who will sign a confidentiality agreement) will have access to these recordings.	
	21/07/2020
Signature	Date

Appendix C – Ethics Checklist



HONOURS RESE, RESM and RMET ETHICS CHECKLIST

Dear student

Please complete this checklist and include this in your proposals as an appendix:

Student name: Susan Marebane

Title of the research: Meaningful brands: A qualitative study on food waste management in the abattoir industry

	Yes	No	Comment: supervisor/ navigator/lecturer
Are you using human subjects in your research?	X		
I intend to use human subjects - I understand that I will not conduct research with human subjects under the age of 18 and other vulnerable groups. - I understand I can only proceed once I receive an ethical clearance letter.			
Interviews/ Focus groups An example of the written consent form I intend to use is attached.			
I will record the interview/focus groups and the sample of the letter where I ask for permission to do so is attached.			
I plan to use an interview schedule: The example of my research instrument is attached.			
I plan to use a questionnaire: The example of my research instrument is attached.	X		
I plan to use a gate-keepers letter: The example of my letter is attached.	X		
I plan to do research on an IIE site/with IIE students/staff/artefacts and I filled in the application for permission to do so. The application is attached. I understand I can only proceed once I receive IIE Approval for this.			

Signed: Susan Marebane

Appendix D – Consumer Research Instrument

Food Waste Management in the Abattoir Industry

Dear Participant

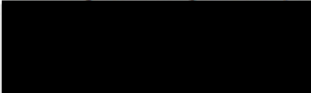
You are invited to participate in the academic research study conducted by Susan Marebane, under the supervision of Mbali Rametse at Vega. The study has received approval and ethical clearance with The Independent Institute of Education (IIE).

The study seeks to investigate and explore the food waste management systems currently in place in abattoirs, as well as gain an understanding of consumer perceptions of the abattoir industry.

To give context, food waste can be described as food which intended for consumption that is discarded along the food supply chain and cannot be used, whether or not it is left to spoil or expire. Abattoirs generally recover the edible parts of a slaughtered animal for human consumption. During this process, there is a substantial amount of organic and inorganic waste generated such as bones, gut contents and heads.

Please note the following:

- Your name will not appear in the findings and responses given will be strictly confidential.
- Your participation is voluntary. You may choose not to participate, and you may also stop participating at any time without any negative consequences.
- Please answer the questions as completely and honestly as possible.
- No compensation is to be given to the participant or the researcher.
- The results of the study will be used for academic purposes only.
- Should you have any concerns, the contact details for the supervisor are as follows:



1. Please mark the boxes below to indicate that: *

Check all that apply.

- ☐ You have read and understood the information provided above
- ☐ You give your consent to participate in the study on a voluntary basis

2. 1. What is your gender? *

Mark only one oval.

- ☐ Male
- ☐ Female
- ☐ Prefer not to say

3. Which age group do you fall in?

Mark only one oval.

- ☐ 18 - 25
- ☐ 26 - 35
- ☐ 36 - 44
- ☐ 45+

4. 2. What is your dietary preference? *

Mark only one oval.

- ☐ Standard: consists of red meat, fish, poultry, eggs, milk, milk products and plant foods
- ☐ Pescatarian: consists of fish, eggs, milk, milk products and plant foods, but excludes red meat and poultry
- ☐ Vegetarian: consists of eggs, milk, milk products and plant foods, but excludes red meat, fish and poultry
- ☐ Lacto-vegetarian: consists of milk, milk products and plant foods, but excludes red meat, fish, poultry and eggs
- ☐ Ovo-vegetarian: consists of eggs and plant foods but excludes red meat, fish, poultry, milk and milk products
- ☐ Vegan: consists of plant-based foods only and excludes animal foods of any kind

5. 3. What influenced your dietary preference? *

6. 4. What are your thoughts on food waste? *

7. 5. What has influenced your opinion on food waste? *

8. 6. What are your thoughts on abattoirs and why do you feel that way? *

9. 7. How do you think abattoirs manage and dispose of their waste? *

10. 8. How would knowledge of how abattoirs manage their waste influence your perception of abattoirs? *

11. 9. If abattoirs got rid of their waste unethically, what would that mean for you as a consumer and why? *

12. 10. How do the corporate social investment (CSI) initiatives of a brand influence your perception of a brand? *

13. 11. How does a brand's employee empowerment program influence your perception of a brand? *

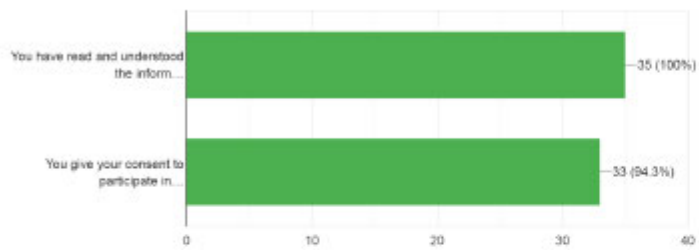
14. 12. What is a meaningful brand to you? *

15. Thank you for taking the time to participate in the study. If you have any questions, please note them below.

Appendix E – Consumer Questionnaire Responses

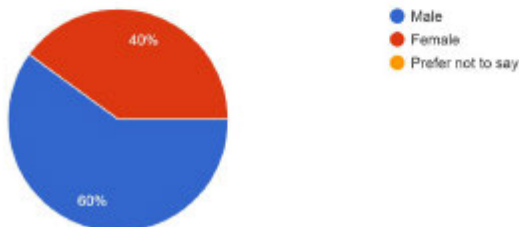
Questionnaire Responses

Please mark the boxes below to indicate that:
35 responses



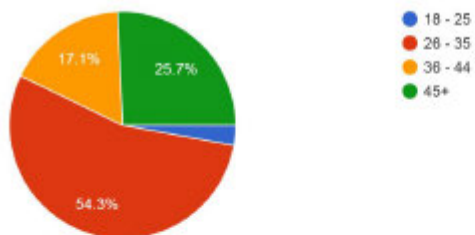
1. What is your gender?

35 responses



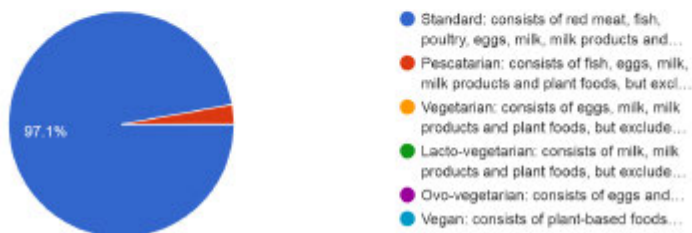
Which age group do you fall in?

35 responses



2. What is your dietary preference?

35 responses



1. What is your gender?	Which age group do you fall in?	2. What is your dietary preference?	3. What influence did your dietary preference?	4. What are your thoughts on food waste?	5. What has influenced your opinion on food waste?	6. What are your thoughts on abattoirs and why do you feel that way?	7. How do you think abattoirs manage and dispose of their waste?	8. How would knowledge of how abattoirs manage their waste influence your perception of abattoirs?	9. If abattoirs got rid of their waste unethically, what would that mean for you as a consumer and why?	10. How do the corporate social investment (CSI) initiatives of a brand influence your perception of a brand?	11. How does a brand's employee empowerment program influence your perception of a brand?	12. What is a meaningful brand to you?	Thank you for taking the time to participate in the study. If you have any questions, please note them below.
Male	26 - 35	Standard: consists of red meat, fish, poultry, eggs, milk, milk products and plant foods	I grew up eating meat.	Never really thought about it but I am aware that in the production of anything there are always waste disposal consequences. A lot of these waste disposal methods are not	My understanding of the production industry.	They are our major source of meat production and a crucial part of the food supply chain.	I think that they sell off all the usable materials to other industries and dump the rest.	It would depend on the overall impact that their waste management practices have on the environment. I doubt however that it would affect my dietary preference.	It would just add an element of guilt for me as a consumer.	I suppose it goes a long way in easing the guilt.	It definitely improves my perception of the brand's integrity.	A brand that makes a difference in society by leaving a positive footprint.	

				environmentally friendly.									
Female	26 - 35	Standard: consists of red meat, fish, poultry, eggs, milk, milk products and plant foods	My blood group	More work should be done to prevent or decrease the rate of food waste. This good should be given to the needy.	The amount of good that is wasted is not recovered for consumption	I love meat, so I think abattoirs are necessary. However, good hygiene in abattoirs is vital.	Some of the edible food is discarded or lost in the waste management system. The meat should be given or donated to the hungry.	It would be great to know what the process is, so that I get a better understanding of it.	It would mean that waste management could be toxic to the environment.	It's a big influence, because it gives me a better understanding of what the company values are.	An employee represents the brand and what the brand values are. An employee's actions may be a reflection of what the brand represents.	A brand that cares about the environment, it's employees and the community.	
Male	26 - 35	Standard: consists of red meat, fish, poultry, eggs, milk, milk products and plant foods	My upbringing. However, my current diet is influenced by my need to lead a healthier lifestyle.	With the many starving people in the world, I think food waste is irresponsible and inhumane.	I grew up poor, knowing and appreciating that each meal should be cherished.	they are a necessary part of the food chain.	I do not know. I have never experienced it.	Knowing that they waste food that could be given to the needy would make me feel negatively about them.	It wouldn't mean much to me as a consumer because I am never aware of where my food comes from.	They shift my spend. I am more inclined to buy from a brand that does good in initiatives I believe in.	Positively, but not necessarily enough to shift my spend.	A brand that gives back to the community profits from.	
Male	36 - 44	Standard: consists	Family	Food waste	It's impact	I see them as	Incineration.	It would really	It would mean	Well that's	It shows that the	A brand that puts	

		of red meat, fish, poultry, eggs, milk, milk products and plant foods		should be minimized at all cost. Care should be taken when discarding food waste into the surrounding environment due obvious health reasons.	on humans and the environment.	great businesses however I sometimes worry about their health protocols and ethics.		boost my confidence to know that they're following all health protocols.	they have broken their ethical Code in order to cut costs at the expense of humans and the environment. Its environmental impact would probably contaminate our water supplies and its effect on the flora would be devastating.	purely marketing and I'm sure I'd be persuaded to follow their perception.	company puts principles and values through their employees. I'd be influenced to buy into their vision.	its employees first.	
Male	26 - 35	Standard: consists of red meat, fish, poultry, eggs, milk, milk products	Family	It is not good to waste food.	Poverty around the community.	They serve fresh meat. The animals are slaughtered and	Donate it to the Zoo or wild animal conservation places.	Not sure	Might have an impact on how I view the industry.	I view them as marketing exercises therefore they have no influence	Plays huge role in whether I will support the brand or not.	A brand that delivers on their promise, including quality and	

		and plant foods				prepared on site.				on how I support the brand.		efficiency.	
Female	45+	Standard: consists of red meat, fish, poultry, eggs, milk, milk products and plant foods	I eat the normal way because it keeps me healthy. I understand many other people struggle and adapt their dietary preference accordingly.	We waste way too much that could go to hungry people.	Seeing so much excess around me, and not having any recourse to redistribute food waste to the needy.	I don't even want to think about them. I'm scared of the moral implications if I know what's going on there.	I don't think. I can't think. It's too much.	I would probably be horrified and become vegetarian	As a consumer, I'd probably avoid anything from that abattoir.	It's important and I support brands that care and do things for the community and the planet.	It's difficult to know exactly WHAT the EE program is, but certainly I support brands that look after their people. E.g. I boycott my local Pick 'n Pay because I learnt that they treat their staff so badly.	A brand that hears us and sees us and is in the trenches with us. E.g. Vodacom has just launched an initiative to start conversations on gender-based violence. That's meaningful and relevant and I can't praise them enough.	
Male	26 - 35	Standard: consists of red meat, fish,	Up bringing	If it can be recycled for consumption	Nothing	Very neutral. They provide a necessary	Not sure	Not much	Not much difference	If that brand has a positive impact	Very important	A brand that is understandable and acknowledge	None

		poultry, eggs, milk, milk products and plant foods		tion by animals, it would be better		service in food industry				on society than I prefer to support them		edges the environment it's operates in	
Male	26 - 35	Standard: consists of red meat, fish, poultry, eggs, milk, milk products and plant foods	It's generally how I have been socialized and affordability	It should be avoided at all cost as there are those who less fortunate .	Society issues or socio-economic challenges that persist globally.	They play an important role in ensuring that we receive quality meat & they slaughter the animals in painless manner. They are central in the distribution process or value chain.	I would think they recycle any waste to formulate fertilizers	Knowledge would help me formulate a better understanding of their waste management process. Either to support it or oppose it.	I would be greatly concerned about their ethics and would doubt the quality of the meat one gets from abattoirs	I'm not really swayed by it as it's an act imposed on corporations rather than a kind act from them.	Not much	Quality	
Male	26 - 35	Standard: consists of red meat, fish, poultry, eggs, milk, milk	It's culture and the taste of delicious food.	I feel that it's not right because we have lot of people who	Life and the daughter I'm raising in being responsible.	I've nothing against it. Because that is where what I enjoy is	I have no idea and never thought about it.	I don't know.	I believe something is better if you don't know them.	I believe they do what is best to get standards right.	They do their best to keep to the brand standards .	Power to consumer	

		products and plant foods		need food. I'm really against wasting food.		being manufactured.							
Male	26 - 35	Standard: consists of red meat, fish, poultry, eggs, milk, milk products and plant foods	Have not put any thought into it. Just grew up consuming the products.	curious about where the waste goes? How is it discarded ?	I have worked in the industry	As an animal lover, I attach a form of animal cruelty but then I also understand the commercial part of it.	Some goes into processed meats, the rest I do not know.	Will be good to understand the environmental impact the waste has if any.	I would feel implicit as I am supporting the business and would demand accountability and change.	Not much, sometimes it feels like corporations are indirectly paying reparations for behind closed doors practices.	I'm a big supporter of this initiative, as long as it is applied ethically and correctly	One that puts people, community and environment first.	
Male	26 - 35	Standard: consists of red meat, fish, poultry, eggs, milk, milk products and plant foods	Taste of the food	I don't particularly have any thoughts but know it's important	Consumption of food and health and safety	Abattoirs are okay if clean	I have no idea	It would probably make me think about them slightly differently	I would have an issue with but also feel like a contributor	It can only make my perceptions of a brand stronger if the CSI program touches me	Not entirely too sure as I can't confidently say I know this for each brand	Brand that differentiates itself from other, has a strong salience and drives meaning	
Male	26 - 35	Standard: consists of red meat, fish,	Pretty much my upbringing.	Grates my tits for a lack of a better	Poverty	Nothing much to be honest. Have not	Recycling of some sort.	It would give me an idea of what's going on	Definitely have a change of how and what I	In a good way. A lot of help and work is	In a very positive way. The people should	Stryker	

		poultry, eggs, milk, milk products and plant foods		phrase. With the amount of poverty and hunger we live with. We should be doing better.		much of an opinion as all I think of them is part of the supplying chain to our food.		with what I consume.	consume. Goes back to what I said earlier with regards to poverty and way we should start doing things.	needed to try and eradicate poverty.	come first.		
Male	26 - 35	Standard: consists of red meat, fish, poultry, eggs, milk, milk products and plant foods	Simply Being an Omnivore.	I think it is run by people who don't care about the fact of living in a country that doesn't have a balanced economy when it comes to Rich vs Poor. At the same time, I don't	The situation you find in every township compared to what you find in suburbs.	None yet.	I need more info on the parties involved. I know some have deals with butcheries - some with wholesalers and some sell remains to locals.	I don't know. I'd have to wait for the info first.	Not much - I don't have a problem with how they handle "remains", I have a problem with the fact that a long time ago slaves were given remains of animals, and still	Every business has to take care of their image. Corporates will do anything to not come off as a brand only concerned about profits!	Positively - makes one think that the brand isn't scared of competition and wants its employees to think for their consumers.	None really. The "best brands" do things guided by laws and how consumers would end up feeling towards them. "Other brands" are guided by profit and being within laws.	None yet.

				have any problem with the "waste". Poor people or people with less income don't deserve to eat remains of animals! We never find animal heads/horned in urban areas, only best parts of animals... I'll politic another day.					in 2020, remains of animals end up in the market to cater for low income or poor individuals.			"Others" by "profit by any means". So, since I'm not brand loyal - I don't have a particular brand that's meaningful, though often gravitate to brands that have been in existence for years (if you can make the same quality for years, then you can be easily persuasive)	
Male	26 - 35	Pescatarians: consists of fish, eggs.	My training	I dislike it completely, hence I try to recycle as	Doing research on sustainability	Can stand the sight of them to	I don't know, at all actually	Greatly, I believe transparency is key	We would require clarity and	Builds a bridge of trust with the brand.	Somewhat, as long as it's not done to save face	One that supports people, even when no	

		milk, milk products and plant foods, but excludes red meat and poultry		much as possible	ility options	be honest			transpare ncy on their side, and highlight abattoirs who aren't being open	but depends if their intentions seem clear or not		one is looking	
Male	36 - 44	Standard: consists of red meat, fish, poultry, eggs, milk, milk products and plant foods	Health and fitness	Try to minimize as much waste as possible by portioning according to and discarding in a correct manner.	Attitude towards trying to conserve as much as possible.	An unwanted necessity. As long as the practice is done in a humane manner.	Not certain, hoping they are abiding to ethical practices.	Either good or bad, depending on their practices.	I would be reluctant in supporting suppliers that practice unethical practices.	They may have some influence in how I view them. Depending on the level of transparency and honesty they operate on.	They would serve as "ambassadors" so if they advocate truthfully, I would take what they say as some truth.	Transparent and ethical one.	
Male	36 - 44	Standard: consists of red meat, fish, poultry, eggs, milk, milk products and plant foods	Family	Food waste should be minimized at all cost. Care should be taken when discarding food waste	It's impact on humans and the environment.	I see them as great businesses however I sometimes worry about their health	Incineration.	It would really boost my confidence to know that they're following all health protocols.	It would mean they have broken their ethical Code in order to cut costs at the expense of	Well that's purely marketing and I'm sure I'd be persuaded to follow their	It shows that the company puts principles and values through their employees. I'd be influence	A brand that puts its employees first.	

				into the surrounding environment due obvious health reasons.		protocols and ethics.			humans and the environment. Its environmental impact would probably contaminate our water supplies and its effect on the flora would be devastating.	perception.	d to buy into their vision.		
Male	36 - 44	Standard: consists of red meat, fish, poultry, eggs, milk, milk products and plant foods	Active lifestyle	It can be repurposed to make feed for other animals or compost to grow other plants	Environmental safety	They are necessary but can be made more efficient so that whatever waste is derived can be reused	If they can't resell or repack these are discarded to landfills	It would enhance and ensure that I know they are playing their part socially to preserve the environment	Would look at other sources such as plant-based foods, which are rather still expensive	They make me support the brand even more	Keeps me loyal to the brand as it's investing in employees	A brand that focuses on client service, it's people and the environment in which they trade	
Male	36 - 44	Standard: consists of red meat,	Health and taste	It's too high	Knowledge in the public domain	They are the key to all our	They have collectors to	I'm not sure	Not much.	Not much	Not much	One that meets my needs	None

		fish, poultry, eggs, milk, milk products and plant foods				problems	dispose and make use of the waste I got other products.						
Male	36 - 44	Standard: consists of red meat, fish, poultry, eggs, milk, milk products and plant foods	I've always been a meat eater, growing up I didn't even know vegetarians existed	hopefully food that can still be consumed is donated to people less fortunate and anything else that is not safe for human consumption should be discarded safely.	a lot of people cannot afford decent meals and food is discarded by big chain stores on a daily basis.	I just hope everything is above board and the meat we get is safe to eat.	I have no clue.	that is two ways, it could be good or bad depending on what I find out.	I don't know if there is anything I could do, short of signing a petition if one came to light. I would assume there are regulatory bodies that hold the abattoirs responsible for their processes.	Supporting your community anyway you can be a plus for me and I would support that business wherever I could.	if they value their people's growth than I would have a great perception towards them	A brand that treats their employees like family and cares about the communities they operate in	
Female	45+	Standard: consists of red meat, fish, poultry, eggs, milk, milk	How I was raised	No food should be wasted	Knowledge of poor people's situation.	Honestly if I had to see what happens there, I would become	They probably use for feed of animals	It would change my perception of them	I would be very upset and would need find out how to action.	Brands need to prove themselves	Positive	Proven quality/s social and ethical company with proven results	

		products and plant foods				vegetarian						Not just a name	
Female	45+	Standard: consists of red meat, fish, poultry, eggs, milk, milk products and plant foods	Love of all food	It needs to be used or discarded in a way as to not cause harm to people or animals. If possible, usable food waste should be utilized	Home disposal of unused food	I would rather not know what really goes on there, but it can't be very humane	Either repurposed for animal food or in a responsible, hygienic way	I would still eat meat but perhaps be more proactive in finding out how it's done	I would object and sign a petition for change. Food contamination is a concern	I am interested to know which companies do ICS but am not brand conscious	Interesting but not critical	Something useful that is not a waste of money. Not a big luxury item consumer	
Male	45+	Standard: consists of red meat, fish, poultry, eggs, milk, milk products and plant foods	Health conditions	Never thought of it in this way, thought it was used for pet food	That it's rotten and toxic	They have a place in society, without them the population will starve	Gets minced and put into containers	I really wouldn't want to know.	I believe they should be fined, heavily but will not stop me from eating meat	Don't really pay attention to CSI	Not at all	Brand that continues to produce high quality goods, in this case superior meat	
Female	26 - 35	Standard: consists of red meat, fish, poultry, eggs,	Health studies	It can be prevented by getting what is needed only	People tend to buy in bulk because of price.	Can be filthy and stinky. I have been to a few a where	Use it for manure or fertilizers	I'd assume that it's clean because is managed	I would also question the quality of their product,	This gives a sense of what the brand is all about and what	This will tell if the brand values the people that	A brand that is ethical and has values.	

		milk, milk products and plant foods				hygiene a quiet poor		adequately	because there might be something shady with their products as well.	their long-term goals are.	represent it.		
Female	45+	Standard: consists of red meat, fish, poultry, eggs, milk, milk products and plant foods	Not much - eat anything	A waste - I recycle everything	Waste dumps and hungry people	I have nothing against abattoirs - as long as they use humane ways to kill the animals and have all health protocols in place	Use it again - make protein products for other animals, like dog food	I have been to a few. Not hangout, but again how they do things do count a lot of points	It would make me cross. Animals, food and waste must be handled with respect. Our environment is under a lot of pressure	If it is accredited to do it - I will notice	People must be trained proper and I will value it	Clover - they do a lot of training and education to empower people to make a better living	
Female	45+	Standard: consists of red meat, fish, poultry, eggs, milk, milk products and plant foods	It's genetic/hereditary.	If has an effect on the environment.	This can have an effect on the environment and health.	It looks mentally challenging because it appears to be cruel to animals.	I would imagine the waste gets donated to the pig farmers.	It will give me knowledge that waste is disposed Legally.	It will not be acceptable. I	Some brands are A class.	I will respect that brand.	Grade A.	
Female	18 - 25	Standard: consists of red	Taste	It is not just costly,	Agriculture	I don't have negative	I think they compose	It is good to compose	It would mean that we	It influences me	It is a strong point	Kellogg's	None

		meat, fish, poultry, eggs, milk, milk products and plant foods		but a lot of energy was put into preparing the food, from the ground and growing it or from abattoirs		thoughts about it simply because it helps every class to get access to meat whether you have a farm or not.		because it helps the group to be more fertile	can breathe unpolluted air because of all the bed smell we can get	because sometimes we buy certain products because of the brand we know and trust	companies can use		
Male	26 - 35	Standard: consists of red meat, fish, poultry, eggs, milk, milk products and plant foods	Taste of the food	I don't particularly have any thoughts but know it's important	Consumption of food and health and safety	Abattoirs are okay if clean	I have no idea	It would probably make me think about them slightly differently	I would have an issue with but also feel like a contributor	It can only make my perceptions of a brand stronger if the CSI program touches me	Not entirely too sure as I can't confidently say I know this for each brand	Brand that differentiates itself from other, has a strong salience and drives meaning	
Male	26 - 35	Standard: consists of red meat, fish, poultry, eggs, milk, milk products and plant foods	upbringing and preference.	Not good at all, wasted could feed many underprivileged mouths through donations, likely	Economic climate of our country and the much larger population who are low income earners.	It's an essential service which I might not be too familiar with on their processes however play a	No idea.	Not sure.	I would gladly support a movement to challenge any abattoir/organization that poses health	Any corporation that stands out for adding back to society will always get first consideration	There are a lot of brands that give back to their employees through such programs and for	Integrity, availability, environmental cognisance and social responsibility.	

				to have a negative impact on environment as well if not discarded correctly, possible contribution to inflation as it drives up cost/price as business will pass the cost of this waste to the consumer.		vital role on meat availability, quality and the pricing structures, it is also key that they be highly regulated for health compliance.			risks to society.	tion from me amongst its competitors also taking into consideration the quality of their product, availability and price.	me that is not a qualifying criteria. What is key to me is the quality of their product offering, their price, availability and social responsibility programs if any that I might be aware of. For any organization it should now be a norm that employee development is part of their growth and		
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											social responsibility strategies.		
Female	26 - 35	Standard: consists of red meat, fish, poultry, eggs, milk, milk products and plant foods	My family	Not familiar with the processes involved	Not applicable	Very little knowledge about abattoirs	Maybe they recycle for animal consumption such as dogs and pigs	Probably significantly since I have no knowledge currently	I'd be consuming unethical products if their disposal causes harm to the environment or humans	Significantly - how the product is branded is how I perceive it	Significantly influence my perception of the brand	Quality products	
Female	45+	Standard: consists of red meat, fish, poultry, eggs, milk, milk products and plant foods	Love of all food	It needs to be used or discarded in a way as to not cause harm to people or animals. If possible, usable food waste should be utilized	Home disposal of unused food	I would rather not know what really goes on there, but it can't be very humane	Either repurposed for animal food or in a responsible, hygienic way	I would still eat meat but perhaps be more proactive in finding out how it's done	I would object and sign a petition for change. Food contamination is a concern	I am interested to know which companies do ICS but am not brand conscious	Interesting but not critical	Something Useful that is not a waste of money. Not a big luxury item consumer	
Male	26 - 35	Standard: consists of red	upbringing and	Not good at all, wasted	Economic climate of our	It's an essential service	No idea.	Not sure.	I would gladly support a	Any corporation that	There are a lot of brands	Integrity, availability.	

		meat, fish, poultry, eggs, milk, milk products and plant foods	preference.	could feed many underprivileged mouths through donations, likely to have a negative impact on environment as well if not discarded correctly, possible contribution to inflation as it drives up cost/price as business will pass the cost of this waste to the consumer.	country and the much larger population who are low income earners.	which I might not be too familiar with on their processes however play a vital role on meat availability, quality and the pricing structures, it is also key that they be highly regulated for health compliance.			movement to challenge any abattoir/organization that poses health risks to society.	stands out for adding back to society will always get first consideration from me amongst its competitors also taking into consideration the quality of their product, offering, their price, availability and price.	that give back to their employees through such programs and for me that is not a qualifying criteria. What is key to me is the quality of their product offering, their price, availability and social responsibility programs if any that I might be aware of. For any organization it should now be a norm	environmental cognisance and social responsibility.	
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											that employee development is part of their growth and social responsibility strategies.		
Female	45+	Standard: consists of red meat, fish, poultry, eggs, milk, milk products and plant foods	How I was raised	No food should be wasted	Knowledge of poor people's situation.	Honestly if I had to see what happens there, I would become vegetarian	They probably use for feed of animals	It would change my perception of them	I would be very upset and would need find out how to action.	Brands need to prove themselves	Positive	Proven quality/social and ethical company with proven results Not just a name	
Female	26 - 35	Standard: consists of red meat, fish, poultry, eggs, milk, milk products and plant foods	How I was raised, and Society I guess	As long as it's done in a secluded area, I'm all good.	Being a mother	No thoughts	In my area I think it's done well because I've never seen a bad food waste area	legends say Knowledge is power so know how it's managed will help with whatever I may come	not sure	One feels safe	just knowing that there is a group of people behind a product erasure you that you can at least communicate	one the is transparent and is about quality	no questions

								across concerni ng food waste manage ment.			cate with someone should the product be problematic in anyway.		
Female	26 - 35	Standard: consists of red meat, fish, poultry, eggs, milk, milk products and plant foods	Health studies	It can be prevente d by getting what is needed only	People tend to buy in bulk because of price.	Can be filthy and stinky. I have been to a few a where hygiene a quiet poor	Use it for manure or fertilizers	I'd assume that it's clean because is managed adequate ly	I would also question the quality of their product, because there might be somethin g shady with their products as well.	This gives a sense of what the brand is all about and what their long- term goals are.	This will tell if the brand values the people that represent it.	A brand that is ethical and has values.	
Female	45+	Standard: consists of red meat, fish, poultry, eggs, milk, milk products and plant foods	How I was raised	No food should be wasted	Knowledg e of poor people's situation.	Honestly if I had to see what happens there, I would become vegetaria n	They probably use for feed of animals	It would change my perceptio n of them	I would be very upset and would need find out how to action.	Brands need to prove them selves	Positive	Proven quality/s ocial and ethical company with proven results Not just a name	

Appendix F – Karan Beef Telephonic Interview Transcription

