

Exploring Spar's food waste management processes in relation to alleviating groundwater pollution and world hunger



**RMET8419p: Research report
29 August 2020**

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Executive Summary

Aim and Purpose

The main purpose of this research report is to explore Spar's food waste management in relation to alleviating groundwater pollution and world hunger. It is therefore a study that aims to uncover the policies that Spar stores have in place to prevent food waste and to assess and critique whether they are effectively managing their food waste in a way that does not contribute to groundwater table pollution and world hunger. Spar is one of the biggest retailing companies in South Africa and they have stores all around the world in many other countries. In the context of meaningful brands, they have a great responsibility to conduct their business in a responsible way that does not harm humanity and the environment.

Background

South Africa is a third world country with a large amount of the population suffering from poverty and because of this some people starve daily. Therefore, world hunger is not something that is to be taken lightly as it is a major problem of modern-day society. Food waste that ends up at landfill sites is the cause of groundwater pollution and this also is a major issue as access to clean water is another basic human necessity. Therefore, in the light of humanity and its survival effective food waste management is something that should be prioritised as we all need food and clean water to survive.

Methodology

The study used a mixed methods approach, involving both qualitative and quantitative research. One on one interviews with a sample of Spar stores were conducted whereby employees were interviewed from different stores in different departments, such as the bakery, kitchen, and butchery. A survey was sent out to customers to determine how they felt about the freshness of the food sold at their local Spar store. A non-probability sampling method was made use of as it

was nearly impossible to reach all Spar stores nationwide. An inductive inference was then used to determine findings, therefore generalisations were made from the data gathered in the sample of Spar stores, from the employees who work at the different stores as well as from the customers who shop at these stores.

Overall Findings

All Spar stores have their own processes and policies in place when it comes to food waste management. Some Spar stores can improve while others are doing exceptionally well when it comes to their food waste management. All Spar stores give to the needy to avoid food waste, whether it be to car guards or beggars outside the store or to soup kitchens, charities, churches and underprivileged households who cannot afford to put food on the table or even to their own staff members. The different stores have their own unique policies for food waste management in place. Therefore, Spar is doing their part when it comes to alleviating food wastage while also combating world hunger and also because of this they have a minimal contribution to the pollution of groundwater table resources. Some of the key findings were:

- 81.82% of Spar employees feel that world hunger can be alleviated.
- 90.91% of employees feel that we all have a responsibility to work towards combating the problem of food waste.
- Larger Spar stores like Superspar which are in affluent neighbourhoods have a more detailed and precise process whereby record is kept of all food, as all food waste gets weighed and this is recorded in a journal.
- Smaller stores like Kwikspar that are in the middle class and underprivileged communities have informal food waste processes in place.
- 25% of Spar stores from the sample deliver food parcels to underprivileged households who are nominated by community members through word of mouth.
- 25% of the Spar stores from the sample give food to their own staff members.
- 25% of the Spar stores in the sample just take whatever is left over and hand it to the car guards and beggars who are outside the store daily.

- 25% of Spar stores reduce the prices of items that are not as fresh as before to match the pockets of customers and avoid food waste.

Recommendations

All Spar stores should give to the needy and their food waste management policies can be improved on. These policies and processes can be formalised and implemented. Employees can keep records of the most popular items and the least popular items that are sold in the store and use that as a guideline for what portions of food they need to prepare in the kitchen to avoid food being spoiled. All Spar stores should implement the practice of reducing the price of items that are no longer as fresh as before as this can be beneficial to both customers and the store.

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1. Introduction

Every year on the 28th of May, the issue of world hunger is zoomed in on, as this day marks World Hunger Day. It is no secret that poverty and hunger exist more commonly in vulnerable communities, however, it might become very disturbing when we consider the reality that over 820 million people in the world do not have enough food to eat every day (World hungerday.org, 2020). Food waste is defined by the UN Environment (2020) as "food that completes the food supply chain up to a final product of good quality and fit for consumption but still doesn't get consumed because it gets discarded of, whether or not it is left to spoil or expire." The WWF-SA 'Food loss and waste: facts and futures' report in 2017, found that 20% of food is wasted during distribution and retail. Therefore, each retail and distribution brand has a great responsibility to eradicate their food wastage contribution. In the context of brand building management, this leads us to the notion of meaningful brands and their connection to this crisis of food waste. We can define a meaningful brand according to its effect on our personal and collective well-being, also its functional benefits (Cicireanu, 2020). Therefore, a meaningful brand's content should take on the role of educating, informing, entertaining, inspiring, rewarding, and helping as well as still be a great driver of personal well-being and thus well-being itself (Cicireanu, 2020).

This study is focused on the crisis relating directly to the issues highlighted above, namely the wastage of food in the South African context and how a meaningful brand like Spar, can either contribute towards helping to eradicate this problem or simply add to the crisis.

2. Literature review

The literature review will focus on the following key topics, namely: Spar as a meaningful brand; food wastage, its relation to world hunger and pollution of groundwater; and Spar policies on food wastage within the South Africa context; and Spar policies on food wastage within the international context.

2.1 Spar as a Meaningful Brand

When analysing the meaningfulness of the Spar brand, the Havas group mentions six key categories of the role that a brand should encompass, these are to inspire, educate, reward, inform, help, and entertain (Havas Group, 2017). This next section will critically analyse how meaningful the Spar brand's meaningfulness is based on these criteria.

2.1.1 Inspire

Spar was founded in 1932 by Adriaan van Well and started with one Dutch store. The business now consists of 13 100 stores in over 45 countries and four continents. Founder, van Well was inspired by the philosophy, based on the concept of voluntary retailing: Independent wholesalers and retailers can achieve more by working together than working alone. This remains as the core philosophy of the business and implies that working in cooperation, uniting resources and scale, is more beneficial. The brand's core values have led the business to where it is now since its establishment, all Spar stores worldwide encompass a commitment to freshness, choice, quality, and service (Spar International, 2020).

This philosophy of unity and co-operation has kept the business operational and it has contributed to the meaningfulness of the Spar brand. Their values and the commitment to what the business was essentially founded on has led to the expansion and growth of the business worldwide, which is truly inspiring. Spar has managed to expand and grow its business globally and it continues to be one of the biggest retail brands in the countries it functions in - this makes the Spar narrative inspiring. From humble beginnings of starting with only one store to now having a total of 13 100 stores globally. In this same light Spar should then inspire communities and its customers to avoid food wastage and there should

be unity in the fight against eliminating this problem amongst Spar and its stakeholders.

Spar has implemented effective training and development programmes where their international group of independently owned and operated retailers and wholesalers, work together in partnership to help share knowledge in order to further fulfil their role as a responsible retailer (Spar International, 2020). This leads into the next characteristic of a meaningful brand - education - however it can still be considered inspiring as a brand which strives and contributes to the education of the communities in which it functions is also very inspiring.

2.1.2 Educate

Spar has implemented effective training and development programmes where their international group of independently owned and operated retailers and wholesalers, work together in partnership to help share knowledge to further fulfill their role as a responsible retailer. Their aim is to facilitate the development and growth of people as well as ensuring active contribution within the communities they function. The Spar group has found effective ways of sharing knowledge to ensure unity and collaboration to function as one big Spar family (Spar International, 2020).

They have effectively implemented Spar Academics that focuses on training academics, offering young professionals with new skills and opportunities for self-development. Spar Academics trains apprentices to specialize in retail and supply chain operations, where they are offered an opportunity to gain more knowledge on other areas of the business. These training programmes have provided young professionals with skills that assist them in providing customers with a better shopping experience based on a strengthened understanding and knowledge of their service and products (Spar International, 2020).

Their community training programmes such as the Spar South Africa Jump Start Programme, for unemployed people, have successfully empowered job seekers with relevant skills allowing them to join the retail industry. This programme offers unemployed youth valuable life skills and hands-on work experience that is in line with the Spar retail environment (Spar International, 2020). Therefore, Spar's education and development initiatives contribute to the brand being

deemed as meaningful, as such brands do not only focus on their own development but also show interest in the development and improvement of the people and communities in which they function. Spar should then also implement programmes and initiatives like these where education on food waste management processes is taught to employees, customers, and entire communities in which they function.

2.1.3 Help

The most recent charitable initiative that Spar has launched to feed those who are hungry and less fortunate, was during the extended Covid-19 lockdown period. A national shutdown on all services, businesses and public livelihood was declared by South African President Cyril Ramaphosa on 27 March 2020, which was further extended (Smith, 2020). Covid 19 (Coronavirus disease) is an infectious disease - which is primarily transmitted through droplets of saliva or other emitted fluids from nose or mouth when a person who has the virus coughs or sneezes (WHO, 2020). The national shutdown was implemented to slow down the spread of the virus.

The recent trending on social media 'Egg Challenge' was what inspired their initiative, the challenge involved videos of individuals consuming a raw egg, followed by a mouthful of sugar and then a shot of brandy or rum or any form of alcohol. This started as people are quarantined in their homes and it started out of boredom. Spar then teamed up with 'Good Things Guy' to reinvent this challenge - placing a shopping cart outside of every Spar store for people to donate a six-pack of eggs, 1 kilogram of maize and 1 litre of milk to those who need it the most. These people who participate in this donation are then also required to nominate their friends (BizCommunity, 2020). The 'Good Things Guy' is a news reporting website that reports on only good things that are happening in South Africa and around the world (Good Things Guy, 2020).

Helping those in need is very crucial for any brand and its survival. Brand's that help people and their communities are more meaningful. These brands will essentially always be supported, trusted, and respected amongst its consumers and stakeholders (Schooley, 2020).

2.1.4 Reward, inform and entertain

Meaningful brands should also reward, inform, and entertain as these are also crucial characteristics that are to be considered when evaluating how meaningful a brand is. Spar therefore needs to function, encompass, deliver and exist with content that also rewards, informs and entertains, apart from the three previous criteria above that was discussed in detail - if it wants to be defined as a meaningful brand.

'Spar Rewards' is a rewards programme that Spar has developed whereby customers are rewarded with discounts on products that they sell in their stores (Spar, 2020). This rewards programme sends electronic product coupons every month which customers can redeem automatically in store when they swipe their loyalty card or quote their cell phone number at the till (Spar 2020). Customers are required to use their cell phone numbers when they sign up online or in store and this is how Spar ensures that their customers are rewarded (Spar, 2020.)

Spar has its own pressroom page where it gives the latest news and information on what is happening in the business all over the world (Spar International, 2020). This allows for all relevant stakeholders to stay informed and up to date on what is happening in and around the business (Spar International, 2020).

When it comes to entertainment Spar has partnered with 'Ticketpro' allowing for the service of customers to purchase tickets to various events, festivals and concerts all around South Africa, including soccer, rugby, cricket matches as well as music concerts and shows (Spar, 2020). At Spar kiosks in stores, customers can book and pay for their tickets - they can also have these printed or they can pay online and simply collect their tickets in stores (Spar, 2020). However, this is limited to certain stores only (Spar, 2020).

Spar also has its own well-known annual event called 'Spar Women's Race' which began in 1992, which was initially hosted in Durban and Johannesburg, later in 1993, the event was then also hosted in Cape Town, Port Elizabeth and Pretoria (Spar, 2020). These races are looked forward to with a lot of anticipation as they allow for a great challenge which considers all levels of fitness amongst participants (Spar, 2020). Spar is also committed to supporting South Africa's sporting future as they sponsor women's sport in particular as they feel that it is greatly overlooked by sponsors - they therefore sponsor national teams and local

events in an attempt to create sport that is inclusive and allows opportunity for all (Spar, 2020). Furthermore, in line with the Spar Women's they also have another challenge the Spar Grand Prix Challenge - which allows all top female runners to race for significant cash prizes which gets collected at each race they take part in (Spar, 2020). The points are then tallied up at the end of the year and the runners who have the highest number of points in their race category get awarded with cash prizes (Spar, 2020). Spar also sponsors one of the oldest soccer clubs in South Africa, the famous KwaZulu-Natal soccer club 'AmaZulu' (Spar, 2020). The company is also very passionate about and a sponsor of Women's Netball in Southern Africa, as the Spar South African Netball Team, The SPAR National Netball Championships and The Botswana Women's Netball League are amidst its beneficiaries (Spar, 2020).

Based on the above evidence involving Spar, the brand can be deemed as a meaningful one. Spar contributes to the personal and collective wellbeing of its communities in which it exists, and also encompasses functional benefits which have a positive impact within the communities in which the retailer operates.

2.2 Food Wastage

Under food waste, there are two types of levels that account for food wastage, namely: food loss and food waste. Food loss refers to food that is discarded or lost at the production or processing phase (i.e. during agricultural production and harvest; also processing) (Environmental Affairs, 2020). Food waste refers to food that is not consumed because it is left to spoil or discarded by retailers or consumers (i.e. during distribution and retail; restaurants and catering; also, domestic consumption) (Environmental Affairs, 2020). There are various causes, impacts, and ways of avoiding food wastage therefore in relation to this study, therefore in the scope of this research paper we will discuss and analyse these in food wastage.

The various causes of food wastage in the retail industry might include overstocking, resulting in food expiring before the stipulated use-by date; preparing too much food; poor preparation of food and incorrect serving (Environmental Affairs, 2020). Therefore, it is the responsibility of retailers to be

conscious of these causes and avoid these to ensure a reduction of food wastage.

Food wastage negatively impacts consumers socially, economically, and environmentally on a local and international scale. Food wastage affects food security, which refers to the notion that all people have ongoing physical, social and economic access to sufficient, safe and nutritious food that they desire and also which caters to their dietary needs for an active and healthy lifestyle (IFPRI, 2020). This is directly linked to hunger as many people are starving and suffer from malnutrition. Food wastage also results in money being wasted and contributes to the pollution of groundwater resources through the generation of methane and leachate when it decomposes at landfill sites (Environmental Affairs, 2020). Thus, further contributes negatively to economic recession, which affects the livelihoods of people and limits access to clean water, which is a basic human need for survival. Furthermore, resources used to grow, manufacture, transport and sell food are also wasted when food gets ruined (Environmental Affairs, 2020).

According to Environmental Affairs (2020), there are numerous ways in which retailers can avoid food wastage. Firstly, practicing the "first-in, first-out" (FIFO) rule whereby older products should be used or sold first, before new ones. Then, retailers should constantly check sell-by dates when packing their shelves. Retailers should make sure that food is stored correctly, ensuring that food stays fresher for longer. They should also make sure that their fridges and freezers are in good working condition (Environmental Affairs, 2020). They must ensure that food is prepared and served correctly, in the correct portions for consumption. Surplus food and excess stock should be donated to charity organizations and the needy to avoid food reaching landfill sites. Retailing companies should execute preventative measures to ensure food is not contaminated and infected by micro-organisms. Leftovers can also be fed to animals. Compost can be made from kitchen scraps and this will save landfill airspace. Lastly, food waste should be separated from other recyclables such as paper, plastic, glass, and cans (Environmental Affairs, 2020). These are essential preventative measures that retailing companies can stress to employees in the way they manage their business and ultimately it will result in the reduction of food wastage.

Spar as a meaningful brand can then through its core philosophy 'Independent wholesalers and retailers can achieve more by working together than working alone' (Spar International, 2020) - make sure that all retailers locally and internationally emphasise the importance of practicing the above mentioned preventative measures to ensure food does not get wasted. They can also ensure that through their Spar Academics programme employees and youth are equipped with the necessary skills and knowledge on how to avoid wasting food as per the above-mentioned methods. Furthermore, the Spar Rewards initiative can find ways of ensuring that they offer discounts on food that have passed their sell by dates. The Spar pressroom can ensure that customers are made aware of the latest news regarding this. The pressroom can also go on to give consumers effective tips on how they can avoid wasting food in their homes, as well as provide a list of charity homes, soup kitchens, underprivileged areas or communities and orphanages who are in need of any food that is not going to be consumed as opposed to food being thrown away.

It is vital that all retailing companies educate their employees on the causes, impacts, and preventative measures pertaining to food wastage. They also have the responsibility of making sure that the relevant measures and practices are enabled within these businesses. This knowledge and implementation of these causes, impacts, and preventative measures relating to food wastage can save businesses a lot of money; contribute to the alleviation of hunger in society and reduce pollution.

2.3 World Hunger

The world produces 1.3 billion tons of food every year and a third of this food which is produced for consumption gets wasted (CSIR, 2019). Therefore, food wastage is not to be taken lightly as people go to bed hungry and are faced with undernourishment (Depta, 2018).

We live in a world where enough food is produced to feed everyone as the World Food Programme illustrated in a world hunger map (Figure 1.1), however, 821 million people - one in nine - still go to bed hungry every night (Food Aid Foundation, 2019). Additionally, one in three suffer from some form of

malnutrition, globally (Food Aid Foundation, 2019), whilst almost one in seven people in South Africa are undernourished (CSIR, 2019).

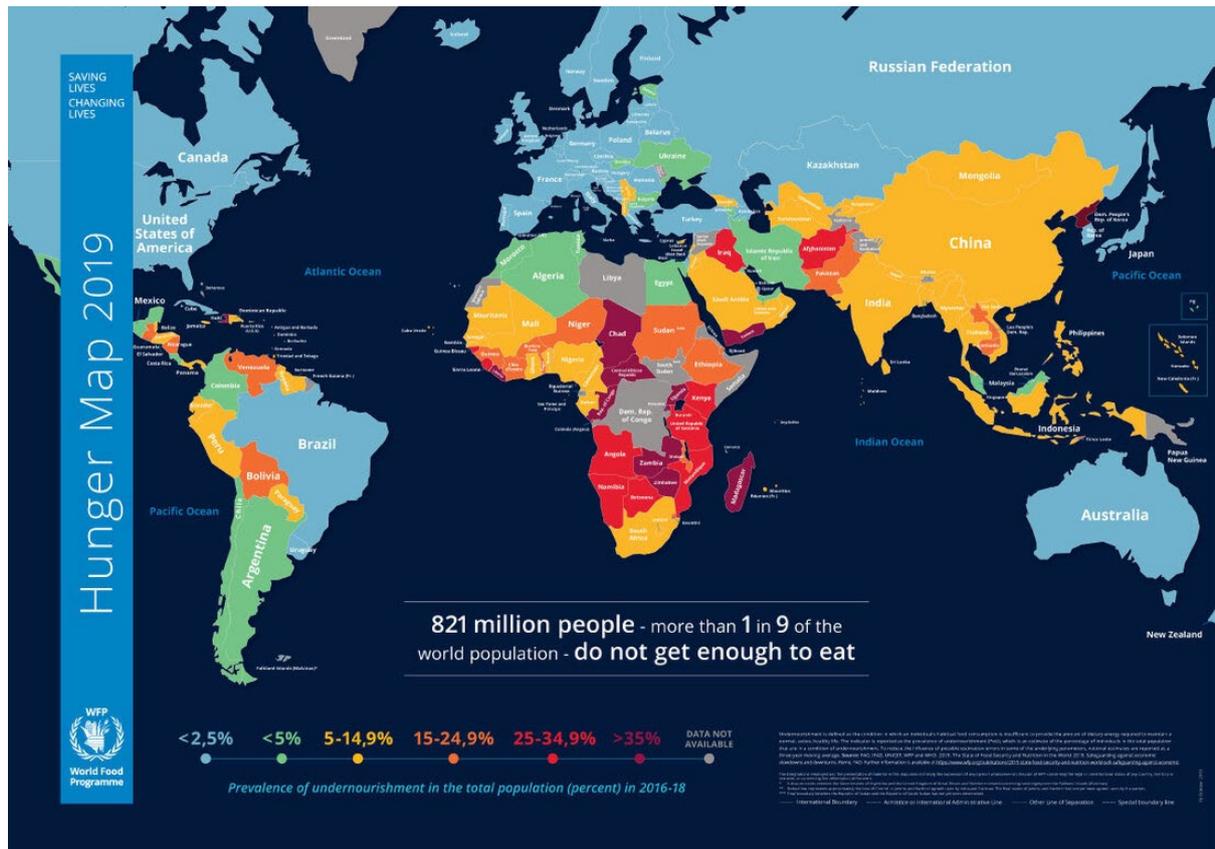


Figure 1: Hunger Map 2019. (Food Aid Foundation, 2020).

One of the most significant modern-day challenges is the elimination of hunger and malnutrition. The consequences of not having enough food and also consumption of the wrong food results in suffering and poor health (Food Aid Foundation, 2020). This also causes moderate development in education and employment. The global community adopted 17 goals in 2015 that it set out to achieve for Sustainable Development, aiming to better the lives of people globally by the year 2030. The second goal - Zero Hunger - is committed to ending hunger, attain food security, enhance nutrition, and encourage sustainable agriculture and is the main concern of the World Food Programme (Food Aid Foundation, 2019).

Therefore, it is equally important for meaningful retailers such as Spar, who are trusted in their communities to provide fresh food and produce, to also ensure that food is not wasted and that they do not contribute to the problems of hunger and malnutrition. Spar has the capacity and resources to contribute to the alleviation of hunger and malnutrition in the communities that they function in and they should strive to do their bid, which will contribute to being a meaningful brand.

2.4 Spar Policies on Food Wastage in the International context

Spar is an international company which conducts business in 45 countries on four different continents worldwide, it is noteworthy to also consider and analyse waste management policies that the company practices in other countries.

In Lincolnshire, UK, AF Blackmore (a food retail, wholesale, and distribution company) includes 15 Spar convenience stores to their food waste fighting app - Too Good to Go. This platform allows customers to purchase short-dated food for a reduced price. When the app was launched in 2016, the intention of the platform was to address the issue of tonnes of food that gets wasted annually, by saving food that is still fresh and short dated that often gets discarded by retailers and restaurants. Bags are made with surplus fresh food and groceries on the day of expiry from retailers involved in the trial, called 'Magic Bags'. Users of the app can purchase these online for low prices and are allocated a time to collect their Magic Bags. This initiative allows customers to save money, retailers to reduce their food waste and is beneficial for the environment (Sillitoe, 2020).

In 2016, France banned food waste in their supermarkets, proclaiming that throwing away unsought food is illegal. Food that is not wanted should be given to charities or food banks and if this is not done then supermarkets will be charged with fines of up to £75 000 (R1 708 500) (McGreever, 2016). Food banks are non-profit organisations that distribute food to people who are not financially able to put food on the table. These banks are like 'wholesalers' that give out food to the government or non-profit organisations such as soup-kitchens, homeless shelters, etc (McGreever, 2016). In the UK these are very successful in the work that they do. In 2009, South Africa opened its first food bank in Cape Town, and there are now more of these all around the country who

get unsold food from supermarkets and farms (McGreever, 2016). These benefit the poor immensely, as they are kept fed. Although such laws have not been implemented in South Africa, this can be beneficial to implement and should be considered by the government (McGreever, 2016).

2.5 Spar Policies on Food Wastage in the South African context

South Africa is a third world country, yet the food waste behaviour of local households imitates households of developed countries. Therefore, the food waste issue cannot be compared to that of the rest of sub-Saharan Africa (CSIR, 2019). This stresses the importance that all sectors of business who deal with food have to be equally committed to alleviating and reducing the problem of food wastage. More specifically and with regards to this study giant retailers such as Spar have a responsibility to create and follow policies which are committed to tackling this issue.

Furthermore, leading South African retailers have in fact come forward and shown interest in implementing initiatives focused on reducing food waste in their stores, which is aligned to the United Nations Sustainable Development Goal to halve global food waste by 2030 (Food Focus, 2019). The retailers came together for the workshop held in Cape Town, which was coordinated by Green Cape (a green economy sector development agency), to measure their food waste in accordance with the globally recognised World Resource Institute's Food Loss and Waste Reporting Protocol. The Consumer Goods Council of South Africa (CGCSA), the City of Cape Town and retailers such as Food Lovers Market, Pick n Pay, Shoprite, Checkers, Spar and Woolworths were all present at this workshop. During this time the CGCSA was in the process of developing a homegrown South African Food Waste Voluntary agreement - a partnership with the Department of Trade and Industry, co-funded by the European Union through the SA-EU Dialogue facility (Food Focus, 2019).

South African retailers are responsible for selling 80% of consumable food in the country, making them of significant importance in contributing to the reduction of some of the 10 million tonnes of waste that South Africa generates every year. All signatories of this proposed voluntary agreement will be obligated to report their food waste savings and achievements - this will showcase the

progress that South Africa is making in relation to the collective UN goal to halve food waste by 2030. During this workshop, the importance of implementing initiatives to reduce food waste in stores and donating food surplus to charities was recognised as one of the most noteworthy practices to combat this issue. More workshops are being planned by the CGCSG for food manufacturers and the agricultural sector, where minimising food wastage is to be addressed and discussed in South Africa where more than 14 million people go hungry daily (Food Focus, 2019).

In Cape Town at the Spar on Kloof Street, they too practice giving sell-by items and food to local charities, like the way this is conducted in the UK. They take their sell-by items off their shelves the following morning and donate this to a local shelter called the Haven Night Shelter. Despite different Spar stores being under different ownership, all Spar's have the policy that says food that is still fresh, and edible cannot be discarded or tossed in the bin. It should be donated to different charities; however, this is dependent on the location and discretion of the owner of the store (McGeever, 2016).

3. Research Paradigm

Each individual sees and experiences phenomena in the world differently, similarly, when conducting research, it is important for a researcher to select a lens or paradigm that will be suitable for the phenomena that is being investigated or researched (du Plooy-Cilliers, Davis and Bezuidenhout, 2014).

Therefore, the paradigm that this research study will make use of would be the critical realist paradigm. This sphere of philosophy differentiates between the 'real' world and the 'observable' world. The belief within this paradigm is that what is 'real' cannot be observed and exists independent from human perceptions, theories, and constructions. The 'observable', on the other hand is, when we construct what we know and understand, this is constructed from our perspectives and experiences. Therefore, this paradigm suggests that structures that are unobserved result in observable events and also the social world can only be understood if people understand structures which create events (Warwick, 2020).

The main aim of the critical realist paradigm is to expose myths, transform society and free people from oppression, and empower people and in the process build a better world for themselves (du Plooy-Cilliers, 2014). Therefore, as an international retail giant Spar has the responsibility to not contribute to the crisis of food waste but rather work towards alleviating this problem, but at the same time it is their duty to give back to the communities in which they function, and at the same time they should not harm the environment (Spar, 2020). This place a lot of focus on the policies that they have in place to manage the food waste problem. Also new and innovative initiatives should be welcomed and established by the brand so they cannot only build on being a meaningful brand but also educate, inspire, and help people in different communities. Together, Spar and all its stakeholders can stop or reduce food wastage and at the same time stop or reduce world hunger, as well as protect the environment.

According to Maslow's hierarchy of needs, that illustrates a five-level model of human needs that is presented in a hierarchical pyramid. Each level represents a different category of human needs, whereby he explains that the most basic needs at the lowest level need to be satisfied before a person can address their needs on the higher levels. The needs ranging from the bottom of the hierarchy up include physiological; safety; love and belonging; esteem; and self-

actualization. For this research study, the first level, physiological needs, in this hierarchy is of crucial importance as it focuses on food, water, warmth, and rest (McLeod, 2020). Therefore, food and water are essential needs for the survival of any human being and therefore it is vital that we understand the importance of effective food waste management as it leads directly to other major issues of hunger and inaccessibility to clean water.

Social topics such as hunger, undernourishment, food wastage and meaningful brand are all aligned with the critical realist perspective and therefore this paradigm is very much suited when conducting such a study. If we understand these topics and the impact they have on the lives of our communities and the world at large then we can eliminate social issues which cripple people and stagnate their development. Therefore, the research that is conducted through the usage of this perspective will add value to society in the sense that new ways of eliminating issues like food waste, world hunger, undernourishment, etc. Furthermore, Spar as a brand can add to being meaningful to its consumers and within its community.

4. Research Rationale

Food waste contributes to problems like hunger, malnutrition, pollution of the groundwater table resources (Environmental Affairs, 2020). Therefore there are two reasons for this study. The first one is the problem of food waste. The second problem is that if food waste is not managed effectively then it also ties back to many other problems that society faces. Thus, the study will focus on hunger, malnutrition, and the environmental harm of ineffective food waste management - pollution of groundwater table resources.

These particular problems are prominent in the South African context and it is the responsibility of all businesses and stakeholders in all sectors who work with food, to work in a manner that strives to contribute positively to the alleviation of these problems. It is ethically correct and just for these businesses and stakeholders who work with food to ensure that their practices and procedures inspire, educate, and help the societies in which they function. This is the criteria of a meaningful brand and it proves how purposeful a brand can be deemed (Havas Group, 2017). Retail stores play an essential role in communities as they ensure that people have access to buying fresh food products for daily consumption. Food and water are basic human needs for survival and therefore no human being can do without it (Mc Leod, 2020).

Furthermore, Spar is one of the most popular retailers in communities all across South Africa, they can be found in both affluent, middle class, and poorer communities. The retailer also has businesses in other African countries and in different cities around the world. They have been in existence for over 80 years and therefore have become one of the most trusted brands in many different communities all over the world (Spar International, 2020).

5. Problem Statement

The study has identified that more than 14 million people go hungry daily (Food Focus, 2019), yet 1.3 billion tonnes of food goes to waste worldwide, annually (CSIR, 2019). Also, food waste contributes to pollution of the groundwater table, thus affecting access to clean water (Environmental Affairs, 2020). South African retailers are responsible for selling 80% of consumable food in the country (Food Focus, 2019). Spar is one of the leading retailers which has proven to be a meaningful brand, making them of significant importance in contributing to the reduction of some of the 10 million tonnes of waste that South Africa generates every year (WWF, 2017). This research therefore aims to prove that effective waste management policies and procedures can make a positive contribution to the fight against world hunger and environmental harm such as pollution of the groundwater table.

Furthermore, based on the critical realist perspective which is inclined to always striving to expose the truth in the hope that it might change society for the better to make society and people stronger. This perspective has its focus on emancipation and so when we consider social issues like millions of people going hungry daily or pollution of the groundwater table which has an impact on people's access to clean water, and how this stems from ineffective food wastage management- this particular study can then be deemed as very significant. The significance comes from the realisation that if retailers like Spar, do not manage their food waste effectively then they are simply contributing to these life-threatening problems (i.e. hunger and groundwater resource pollution) which is crippling people and societies.

In addition, from the critical realist perspective, we need to hold successful brands such as Spar accountable for the way in which they conduct business as they have to do their business in a manner that does not harm communities and environments in which they function and exist but rather help, inspire and educate these communities (Havas, 2017). Their contribution should be more beneficial than just the services and products that they offer. Their success would not be possible without the support that they receive from the communities in which they exist and function. So therefore, they owe it to those

same communities to help with the fight against world hunger and environmental harm, more specifically the pollution of groundwater resources.

6. Research Goal & Research Questions

This study aims to assess whether Spar policies and procedures regarding food waste management are done responsibly and effectively in ways that do not contribute to existing problems of hunger and pollution of groundwater resources. Also, it further aims to suggest what can be done by the retailer and relevant stakeholders to improve procedures and policies in ways that alleviate hunger and harm to the environment in ways directly linking to the pollution of the groundwater resources. By effective management of food waste management, two other crucial aspects of human existence; hunger and access to clean water can be addressed and positive contributions can be made towards these problems.

Maslow's Hierarchy of needs, explains different levels of human needs whereby the lowest level of needs must be satisfied before an individual can address their needs at higher levels (McLeod, 2020). The first level of physiological needs is the most basic and one of great importance as it refers to the need for food, water, warmth, and rest (McLeod, 2020). Based on this theory, also in relation to this study, to survive as a human being, we need food and water and thus it is vital for us to understand the importance of how effective food waste management can assist in curbing the relevant issues of hunger and inaccessibility to clean water.

The World Food Program USA (2019) states that "Global hunger is not about a lack of food as the world produces enough food to nourish every man, woman, and child on the planet". However, the issue here is that food is mismanaged and gets spoiled prior to consumption (World Food Program USA, 2019). It is estimated by the United Nations' Food and Agricultural Organization (FAO), that the world generates about 1.4 billion tons of food waste, which is ample food waste to feed about 2 billion people every year - accounting for an estimated one-third of the global food supply (Huber, 2017). Furthermore, according to the World Food Programme, almost 25% of individuals suffer from undernourishment in developing countries. Achim Steiner (U.N. undersecretary-general and U.N. environment program executive director) said that "In a world

of 7 billion people, set to grow to 9 billion by 2050, wasting food makes no sense — economically, environmentally, and ethically” (Huber, 2017).

The purpose of this research paper takes on a pragmatic approach as it not only assesses the policies and procedures that Spar has in place with regards to food waste management, but it aims to suggest new and innovative policies and methods which will not only improve food waste management of the business but also contribute to alleviating secondary problems emanating from ineffective food waste management such as hunger and groundwater resource pollution specifically in the South African context. This is as per a critical realist perspective which focuses on the transformation of our society (du Plooy-Cilliers, 2014), by improving the livelihoods of our people in ensuring that their basic needs, being access to food and clean water is met.

Therefore, the questions that this study might seek to answer include the following:

- Do all Spar retailers share the same sentiment regarding food waste management?
- Are Spar retailers demonstrating uniformity in effectively implementing policies and practices when it comes to their responsibility regarding effective food waste management?
- How effective is the compliance of Spar retailers and its employees in terms of policies and practices relating to food waste management?

7. Research Methodology

The research conducted will use both quantitative and qualitative methods - mixed-methods research. This will give the study the relevant depth in findings or results which is in direct relation to the eminent social issues that have been highlighted and discussed above. The use of these methods will also supplement one another, and it increases the validity and reliability of a study (Du Plooy-Cilliers et al, 2014). Also, the research approach will take on an applied research approach, which means that the study will investigate practical problems to find practical solutions (Du Plooy-Cilliers et al, 2014).

Mixed methods research is a methodology of doing research that includes collecting, analysing, and integrating both quantitative and qualitative research. The mixed methods research approach can be used when the researcher wants to gain a broader and in-depth perspective on a topic or when a researcher wants to offset any possible weaknesses which are immanent to the predominant method (Food Risc, 2016). The strengths of this method are that two types of data are collected simultaneously, and this reduces time and resources (e.g. number of participants); and also, it will provide the study with the advantages of quantitative and qualitative data. Whereas, the weaknesses include that data might have to be transformed in some way to enquire that both types of data can be blended during the study, which could be strenuous; and inequality between different methods may result in dissimilarity proof within the study, this can be disadvantageous when analysing the findings (Food Risc, 2016).

From a qualitative perspective the research study will conduct one-on-one in-depth interviews with Spar and their staff who deal directly with food either in the kitchen, butcher, or bakery area of the retailing store, with one person at a time. This will be a conversational method that allows for the opportunity to get details in depth from the respondent (Bhat, 2020). The conversation will be recorded with a cell phone. The advantages of this method are that it creates the opportunity for the collection of precise data about people's beliefs or motivations, and follow up questions can be asked, which will assist with more information being gathered. Therefore, if answers are not clear, further probing will be done to obtain clarity on an answer. Also, if the participant does not understand a question, then questions will be rephrased or simplified for better

clarity. These face to face interviews will also allow for body language to be assessed (Bhat, 2020). The sample size of this study will focus on five Spar stores in the South of Johannesburg. From the sample selected a variety of the type of Spar stores were selected (i.e Kwikspar, Superspar) in both suburban areas and township areas. This study will therefore make use of non-probability sampling as it is nearly impossible to reach all Spar stores nationwide (Pascoe, 2014). These specific stores are accessible. This will allow for a fair representation of the different types of communities in which Spar operates. Therefore, the data obtained will reflect perspectives of different Spar stores in terms of their compliance and practices with regards to Spar's policy on food waste management.

From a quantitative perspective the study will make use of an online survey, which will be directed at customers who shop at Spar in the specific areas where these Spar retailers are situated. This will allow for relevant and necessary data to be collected on the study being conducted. The data collected and analysed from these surveys will mainly generate numerical results. The surveys will be sent via WhatsApp and respondents will be required to access a link to answer the survey. It will be a quick survey with only six questions. The reason for this is because a long survey might bore the participant and because of this they might resort to just selecting any option or just giving any answer and not necessarily the most accurate answer (Bhat, 2020). This will be a cross-sectional survey as it will be sent out only to target a sample of the population at a given point in time (Bhat, 2020). The sample size for the survey will be a minimum of 10 people and a maximum of 20 people. Both the survey and questionnaire will be attached as an annexure in the proposal. The exploratory research design used for this study will collect qualitative data, building up to quantitative data collection, in order to analyse and interpret the processes of Spar, its food waste management and how it relates to world hunger and pollution of the groundwater table (SMStudy, 2016).

All managers from the Spar stores will be required to participate and at least two to three employees dealing directly with food, either from the kitchen, butchery, or bakery, will be required to participate in the one on one questionnaires. These are the people who can give accurate feedback on food supply and wastage, as

this is relevant for the study. Each one on one interview will take up to 10 to 15 minutes. Interviews will be conducted in a private space where all participants can freely without any fear or prejudice express themselves and therefore allow for them to provide valuable information to the study. Management will be advised on the specific day that the interview is going to be conducted, to ensure that the interviews are conducted at a convenient time for all participants and the business. However, questionnaires will not be sent to management ahead of time to prepare, this will be done to ensure reliability and validity of findings within the study. Also, this will allow for a true reflection of the stores processes and policies, also it will avoid any window dressing.

8. Analysis of Data and Findings

The first part of the study involved an online survey that was sent out to customers via Whatsapp. The customer survey was sent out to find out who shops at Spar, so questions about age and highest level of education were asked. Participants were aged between 18 to 55 years old. Also when it came to the highest level of education that participants had, 47.06% had grade 12, 17.65% had a 3 or 4 year Undergraduate Degree or a 4 year Diploma, 11.76% had less than grade 12 and 11.76% had a Postgraduate qualification. The rest of the survey was focused on customer satisfaction with food and freshness. The assumption was that the fresher the food the less food gets wasted, therefore the fresher the food, the higher the sales. So, the more customers purchase food, the less food is wasted.

The customer survey found that only 23.53% of customers had to return items that were passed its sell-by date while 76.46% have never had to return items that were passed their sell-by date. The survey revealed that 47.06% of respondents agreed that their local Spar store was doing a good job when it came to selling food that is fresh and good for consumption. Customers were asked to rate the freshness of the food sold at their local Spar by using a 5-star rating and the average rating that customers gave was 3.1 stars. When it came to freshness, customers were most satisfied with the fruit and vegetables and bakery department of their local Spar store. Whereas, when it came to the department that customers were least satisfied with regarding freshness at their local Spar store was the department that provides readily prepared meals.

Although the survey was sent out respectively to a total of 17 participants it is noteworthy to remember that the sample does not represent all customers who shop at Spar nationwide. Also, if more people take this survey, the results are subject to change based on more data that is collected.

Then for the second part of the study interviews were conducted including 4 Spar stores and 11 staff members who participated. The study found that all Spar stores have food waste management policies. Some of the food waste management policies included: giving food to staff members; giving food to

charity i.e. less fortunate; soup kitchens, shelters and churches; reducing prices and then selling items at discounted prices; reusing food items in the kitchen for preparation of something else. Food items are never just thrown away and all staff members in different departments are familiar with the processes in place and they comply with these.

Smaller stores like Kwikspar that are in the middle class and underprivileged communities have informal food waste processes in place. Larger Spar stores like Superspar which are in affluent neighbourhoods have a more detailed and precise process whereby record is kept of all food, as all food waste gets weighed and this is recorded in a journal. 25% of Spar stores from the sample deliver food parcels to underprivileged households who are nominated by community members through word of mouth. 25% of the Spar stores from the sample give food to their own staff members. 25% of the Spar stores in the sample just take whatever is left over and hand it to the car guards and beggars who are outside the store daily. 25% of Spar stores reduce the prices of items that are not as fresh as before in order to match the pockets of customers and avoid food waste.

When employees were asked how often the store stocked up on fresh food items, it was found that larger Spar stores (i.e Superspar) needed to restock food items more times in a week than smaller Spar stores (i.e Kwikspar). So, 50% of Spar stores from the sample stocked up on food items once a week, 25% mentioned twice a week, while 25% said 4 times a week. Also, the study found that avoiding food waste is extremely important to all staff members at Spar. The study also found that 90.91% of employees feel that we all have a responsibility to work towards combating this problem. While 81.82% of employees feel that effective food waste management is extremely important.

Then when it came to world hunger, the study revealed that 82.81% of Spar employees feel that world hunger can be alleviated. While 75% of Spar stores from the sample give food to charity to avoid wastage. When employees were asked if they think that retailers can make a difference in the contribution to combating world hunger, all participants responded by agreeing that retailers can in fact help fight against world hunger. Their responses of why they thought so included the following:

- “If we all do the right thing then a difference can be made, because all retailers know the importance of not wasting food.”
- “Only if all governments, the public sector, and the private sector all work together. By working together, we can conquer this challenge.”
- “If all governments and businesses work together.”
- “This Spar is already making a difference by donating food parcels to the needy and giving to soup kitchens. The little bit that we do can make a difference.”
- “As it is, we are already making a difference by helping people in the community.”
- “Retailers can use a percentage of their profit and then donate it to organizations that specialize in feeding the poor. There is so much corruption going on in the country right now, but there are still people who would like to see that all people have food on their tables.”
- “We are a big retail company and so we are able to help the poor, by giving.
- Yes, if we work together on it then we can help deal with it.”
- When employees were asked within any specific month, how often they dispose of food items that have reached their sell-by date or are no longer fresh enough to be sold to customers or have to be thrown away or food that has gone bad; the responses included the following:
- “Most of the time, it happens every day. It just depends on how many customers we have in a day” - Daily.

- "Every Monday" - Weekly.
- "Normally there is about a three-day shelf life on food items, but with anything that goes off and gets spoiled, we would throw those items away. It depends on what food it is and how spoiled it is."
- "On a daily basis and weekly basis, we throw it away or give it away."
- "We hardly dispose of food because whatever does not sell, we make sure that we give to those in need. But every second day we decide what is no longer fresh enough to be sold."
- "It's tough to say because in a week we have quite a bit when considering perishables like yogurt and milk which some of the companies do take back. Then with some items like cheese, some companies won't take it back, so you have to control what you use and what you are going to dispose of."
- "When it comes to cooked food - every day. Then some other items have a 3-day shelf life. So, when it is going to expire, we then discard it. It depends on the product."
- "We throw food away after two days. "

This therefore varies from store to store and it also depends on the food type.

The study found that only 18,18% of Spar employees feel that world hunger can be alleviated, while the majority of 81.82% of Spar employees feel that world hunger cannot be alleviated. Some of the reasons included the following:

- "We can't deal with it, but we can manage food effectively and try to sort out the problem as best as possible."

- “Yes, if we all work together then everyone can be fed and have food to eat.”
- “Yes, as I said earlier on, retailers can use a percentage of their profit and then donate it to organizations that specialize in feeding the poor. There is so much corruption going on in the country right now, but there are still people who would like to see that all people have food on their tables.”
- “No, we can’t, because to me, it looks like we are going deeper and deeper into starvation because you will find that in one family there is only one breadwinner. Also, matriculants finish their schooling and end up sitting at home and they cannot afford to go to varsity because there is no money at home. So, we cannot conquer this hunger because things are getting worse and worse.”
- “No, we can’t because as it is the government is giving people grant money, unemployment allowance, and so on. People can then use that money and try to buy basic foods. But people do not know how to manage their money and that is also contributing to the problem. They would rather use that money to buy alcohol and that money gets wasted.”
- “Yes, it can, if all governments and businesses work together.”
- “Yes, we can, but only if all governments, the public sector, and the private sector all work together. By working together, we can conquer this challenge.”
- “Yes, it can be if we all do our part towards helping those in need.”

The study found that 90.91% of Spar employees feel that it is important to help the needy. Also, when participants were asked whether they think that the implementation of strict laws and regulations on effective food waste management should be implemented for all sectors dealing with food, 63.63% said no, while 36.36% said yes. Participants were also asked whether they think that the implementation of laws for food waste management would have a

positive or negative effect on how food is managed, so 72.73% of participants felt that it would have a negative effect while 27.27% felt that it would have a positive effect.

Although employees do not welcome the implementation of strict laws by the government on food waste management on all industries who deal with food, Spar and its employees are keen on helping those in need. Also despite the notion that majority of Spar employees do not feel that world hunger can be alleviated due to feelings of it being out of their control or that it be much bigger than them and the business, which is quite understandable - Spar and its employees still feel that the business can do its part in helping combat the problem (being world hunger).

The study found that different Spar stores have different percentages of food that ends up on the food wastage list, from the three categories namely prepared food, food on the shelf and fresh food produce these were the estimated totals that end up being wasted:

- 75% of Spar stores said that 0-20% of prepared food ends up on the wastage list.
- 25% of Spar stores said that 41-60% of prepared food ends up on the wastage list.
- 75% of Spar stores said that 0-20% of the food on the shelf ends up on the wastage list.
- 25% of Spar stores said that 21-40% of the food on the shelf ends up on the wastage list.
- 75% of Spar stores said that 0-20% of fresh food produce ends up on the wastage list.

- 25% of Spar stores said that 21-41% of fresh food produce ends up on the wastage list.

Management from the sample of Spar stores confirmed the estimated cost for stocking up on fresh food items. The study found that 75% of Spar stores from the sample spend between R10 000 - R50 000 when stocking up on fresh food items. Whereas 25% of Spar stores from the sample spend R200 000 or more when stocking up on fresh food items. However, this is greatly dependent on the size of the store, as larger stores have a bigger budget and therefore, they obviously spend more than smaller Spar stores do. All stores unanimously confirmed that fruit and vegetables have an estimated shelf life of 2-5 days.

Then when it comes to the average weekly losses for the Spar stores in the sample, it was found that 50% of Spar stores lose between 0-20% of food every week. Whereas 25% of Spar stores advised that their weekly loss in food is between 21-40% and then 25% of Spar stores advised that their weekly loss in food is between 41-60%. This obviously varies from store to store. The study also found that these were the food items which regularly end up on the wastage food list: peaches, bananas, strawberries, watermelon, mushrooms, and lettuce. Participants also revealed that the most popular sold foods included: chips, biltong, full chicken, pies and bread. Whereas the least popular food items sold were lamb stew, vegetables, beef stew, carrot cake and icebina.

When participants were asked whether the pricing of products affected food wastage, these were some of the responses that the participants gave:

- "The price mostly affects the business of the store, because most of the time people won't buy something that they cannot afford."
- "Not really because we make sure that our prices match the pockets of the client. Our products always sell because they are not overly expensive."

- “We are in a low-income area so the cheaper the food the better it sells. If the food is too expensive than it does not really sell, it will just stay on the shelf.”
- “No, because we usually decrease prices to make sure that it sells.”
- “If something does not get sold, we usually lower the price so we can be able to sell it.”
- “You have to make sure that you still make a profit, but we are not working on a high profit, we work on a 20% profit. As long as the staff gets paid then it works out fine.”
- “It affects us because we can’t get our profit, we can't get money to buy more stock so the more the waste, the more we lose.”
- “If customers complain that the price is too high then we lower the price to suit the customer’s pocket.”

The study found that 75% of Spar stores make contributions to feeding schemes in their communities, whereas 25% did not.

Based on the above data that was gathered from different Spar stores in the sample, employees and management, several findings can be summed up. Spar does manage their food waste effectively through various processes that management have put in place at each store. Employees of Spar understand the importance of effective food waste management and they are compliant with the policies that their employers have in place. However, the amount of food wasted at some stores can be reduced and food waste management processes can be re-evaluated and improved on at certain stores more than others. Every Spar store has its own policies in place because each store is situated in a different area. For example, stores that are situated in the township might be more involved in charity and giving to the needy because more people in the area are in need of food and are starving.

Some Spar stores have effective food waste management policies in place, which is something that other Spar stores can also practice alleviating food waste. Like for instance the reduction in prices of food items that are not as fresh anymore, to accommodate the pockets of customers, is definitely a great way to avoid food waste and this is equally beneficial to customers. Giving food to either the needy or staff members is also definitely something that can be practiced at all Spar stores as it alleviates food waste, world hunger and reduces the amount of food waste that lands up at landfill sites which contributes to the pollution of groundwater table resources.

Furthermore, the one on one interviews that were conducted at the selected Spar stores from the sample are not representative of all Spar stores nationwide as the sample size was very small. Also, in the event that more one on one interviews are conducted at more Spar stores all across the country, the results are subject to change based on more data that is collected. This study is only representative of the sample stores that were used for this research paper.

9. Ethical considerations

One of the ethical considerations for this study would be that all participants remain anonymous and that all data obtained throughout the study remains confidential. It is also essential that consent is given by all participants, such as the employees, including management from the five different Spar stores of the sample as well as, the random customers who shop at these different Spar stores that were selected. The results and data obtained from the study should not be tampered with to portray any desired outcomes, as it needs to be an accurate and ethical representation of what the study finds. This study will therefore comply with these ethical considerations.

If a participant does not provide consent then they will not be obligated to participate in the research, as it is essential for all individuals' wishes to be respected and honoured. All consent forms are to be completed and signed as reference of consent given by participants and relevant Spar stores. These will also be found as annexures of the proposal. The data will not be leaked or made public or be mismanaged in any malicious way.

10. Limitations of the study

The study will involve feedback from employees of the Spar retailers that were selected for the sample as well as feedback from customers who shop at these Spar stores. Therefore, limitations could stem from participants who do not respond truthfully thus the data will not be accurate, causing problems with the validity and reliability of the findings.

Another possible limitation on the study could be the fact that the data and findings will be obtained from only the opinions and study of the Spar stores and customers who were selected for the sample, therefore the greater community and other Spar stores, their opinions, the data and findings might not represent the larger populations views, opinions, procedures and policies, etc. A bigger sample could possibly present different outcomes in the study.

The limitations of the study could have an impact on the findings of the research, as it could impact the validity and reliability of the data. Therefore, the findings should not be generalised of being the overall representation of all Spar stores nationwide, and their food waste management policies and procedures.

Possible limitations of the study include the fact that interviews were rushed with some participants at the different stores because they were on duty and needed to get back to work. This could have influenced the way in which they responded to the questions. Also, because interviews were conducted during working hours, only a few employees could participate in the interviews. Another limitation on the study was that not all Spar stores that were approached were willing to participate.

11. Conclusion

In conclusion Spar is a meaningful brand who has been in business for over 80 years, they have been able to establish and conduct business in many different communities all across South Africa and the world. Based on this study their stores have food waste management policies that their staff are compliant with. They are charitable in the way that they conduct business and they do make it a point to avoid food waste, however they can still improve their food waste management policies and procedures. As there is always room for improvement when it comes to food waste management. If all businesses in all sectors dealing with food can work towards combating the issue of food waste, other problems such as world hunger and pollution of the groundwater table can be combated too. Also if we all work together as people social issues like food waste, world hunger as well as pollution of groundwater table resources can be minimised and avoided entirely. This will indefinitely make the world a better place for each and every one of us.

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Annexures

Spar Food Waste Management - Questionnaire (Interview

1. Does your store have food waste management policies in place?
2. What policies and processes does this store have in place? Please explain the processes in detail.
3. How often do you stock up on fresh food produce?
 - Daily
 - Weekly
 - Twice a week
 - Other, please specify
4. On a scale of 1 to 10 how important is avoiding food wastage to you? (10 being extremely important and 1 being not important at all.)
5. What is your opinion on world hunger?
 - It is serious and needs to be combatted.
 - It is not that serious.
 - There is nothing we can do about it; the government needs to deal with resolving this issue.
 - We all have a responsibility to work towards combating this problem.
6. Do you think that retailers can make a difference in the contribution of combating world hunger? Why do you say so?
7. Within any specific month, how often do you dispose of food items that have either reached their sell-by date/ are no longer fresh enough to be sold to customers/ have to throw away leftovers/ food that has gone bad?
8. On a scale of 1 to 10, how important is effective food waste management to you? (10 is extremely important and 1 is not important at all.)
9. Do you think that world hunger can be alleviated? Why?

10. On a scale of 1 to 10, how important is helping the needy? (10 is extremely important and 1 is not important at all.)

11. Do you think that the implementation of strict laws and regulations on effective food waste management should be implemented for all sectors dealing with food? Yes or No

12. Would this have a positive or negative effect on how food waste is managed?

13. Can you give us a percentage of different food types that end up on the wastage list? (Prepares food, food on the shelf, fresh food produce, etc.)

Prepared food	0-20%	21-40%	41-60%	61-79%	80-100%
Food on the shelf	0-20%	21-40%	41-60%	61-79%	80-100%
Fresh food produce	0-20%	21-40%	41-60%	61-79%	80-100%

14. What is the estimated cost of stocking on fresh food items?

R10 000 – R50 000

R50 000 – R100 000

R100 000 – R150 000

R150 000 – R200 000

R200 000 or more

15. What is the shelf life of fresh vegetables and fruit?

2-5 days

5-7 days

7-10 days

1-2 weeks

2-4 weeks

16. On average, what is the store's weekly losses on food items?

0-20%

21-40%

41-60%

61-79%

80-100%

17. Which food items end up regularly on a food wastage list?

Apples Onions

Avocados Oranges

Bananas Peaches

Broccoli Potatoes

Carrots Strawberries

Lettuce String Beans

Lemons Tomatoes

Garlic Watermelon

Mushrooms Zucchini

Other

18. What is the most popular food item sold?

19. What is the least popular food item sold?

20. How does the pricing of your product affect your food wastage?

21. Do you make any contributions to feeding schemes in your community? If yes, please substantiate.

Spar Food Waste Management - Online survey Questions

1. What is your age?
 - 18-25 years old
 - 25-35 years old
 - 36-45 years old
 - 46-55 years old
 - 56-65 years old
 - 66 and older

2. What is your highest level of education?
 - Less than matric/ grade 12
 - Matric/ grade 12
 - 3-year Diploma
 - 3 or 4 - Year Undergraduate Degree / 4 – year Diploma
 - Postgraduate

3. Do you shop at your local Spar store? Yes or No

4. Have you ever had to return items that were passed its sell by date? Yes or No

5. Do you think that your local Spar is doing a good job when it comes to selling food that is fresh and still good for consumption?
 - Strongly agree
 - Agree
 - Undecided
 - Disagree
 - Strongly Agree

6. Using a 5-star rating, how fresh do you find your local Spar's food? 1 is the worst and 5 is the best.

7. With which of the below categories are you most satisfied with regarding freshness?

- Bakery
- Butchery
- Fruit and Vegetables
- Readily prepared meals

8. With which of the below categories are you least satisfied with regarding freshness?

- Bakery
- Butchery
- Fruit and Vegetables
- Readily prepared meals



HONOURS RESE, RESM and RMET ETHICS CHECKLIST

Dear student

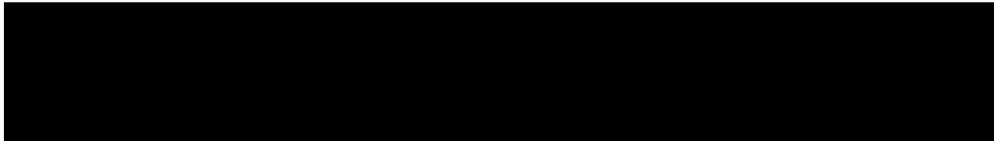
Please complete this checklist and include this in your proposals as an appendix:

Student name: Sine` Kylie Titus

Title of the research: Exploring Spar's food waste management processes in relation to alleviating groundwater pollution and world hunger

	Yes	No	Comment: Supervisor/ Navigator/Lecturer
Are you using human subjects in your research?	X		
<p>I intend to use human subjects</p> <ul style="list-style-type: none"> · 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. 			

<p>Interviews/ Focus groups</p> <p>An example of the <i>written consent form</i> I intend to use is attached.</p>	X		
<p>I will record the interview/focus groups and the sample of the letter where I ask for permission to do so is attached.</p>	X		
<p>I plan to use an interview schedule: The example of my research instrument is attached.</p>	X		
<p>I plan to use a questionnaire: The example of my research instrument is attached.</p>	X		
<p>I plan to use a gate-keepers letter: The example of my letter is attached.</p>	X		
<p>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.</p>		X	



Gatekeepers letter/ Request to conduct research

Dear Sir/Madam

I am writing to ask your permission to conduct research at your Spar Store.

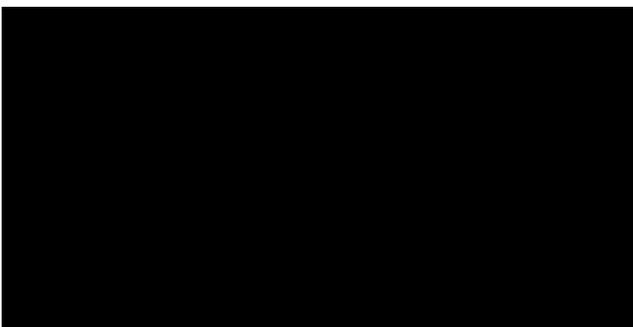
My name is Sine` Kylie Titus, a Brand Contact Management student at the Vega School a brand of the Independent Institute of Education (IIE). The research I wish to conduct for my Research Paper, Post Graduate Diploma; titled Exploring Spar's food waste management processes in relation to alleviating groundwater pollution and world hunger.

The aim of this study is to investigate the relationship between food wastage, world hunger and pollution of groundwater table resources. The project consists of an interview in the form of a questionnaire and a survey. The nature of your firm's participation will be to grant consent to conduct interviews with employees at the store, this will take roughly 10-15minutes with each individual, the data collected will be used to draw conclusions. All data collected will be treated as confidential and the identities of the participants will be anonymous

Yours sincerely

Student: Sine` Kylie Titus,

Supervisor: Mbali Rametse



The contact details of my supervisor/navigator/lecturer are as follows:

Mbali Rametse



CONSENT FORM TEMPLATE

Explanatory information sheet and consent form for participants

To whom it may concern,

My name is **Sine` Kylie Titus** and I am a student at Vega School. I am currently conducting research under the supervision of Mbali Ramtse about Exploring Spar's food waste management processes in relation to the environment, and world hunger. I hope that this research will enhance our understanding of food waste management in the retail sector.

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 (insert reason). If you decide to participate in this research, I would like to (explain exactly what participation will involve).

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 interview 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 (insert what you are examining). 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 Spar, 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.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]