# **Master Thesis**

## SOCIAL ENTERPRISES AND FOOD WASTE MITIGATION IN PAKISTAN

Written by: Salman Shahzad (2030179)

1<sup>st</sup> Supervisor: Victoria Daskalova

2<sup>nd</sup> Supervisor: Yoram Krozer

2018

**UNIVERSITY OF TWENTE** 

١

## Abstract:

Pakistan which has the seventh largest population in the world, faces serious issues of food insecurity and malnourishment. The food security risk index suggests that 61 million Pakistanis suffer from food insecurity. In this research, the workings of the social enterprise "Rizq" is explored. The social enterprise prides itself in reducing food waste and alleviating hunger from impoverished communites of Lahore, Pakistan. Their operations will be assessed using the social business model framework allowing for a clear working picture to be developed. The findings suggest that the main success factor in the running of Rizq's operations is the collaborative efforts established amongst various players. Concerns still lay in Rizq's long-term sustainability along with a lack of legal structure present for social enterprises and policy structure for mitigation of food waste.

## Index:

Abstract:				
Chapter 1: Introduction				
Chapter 2: Literature Review				
2.1 Social Entrepreneurship and Social Entrepreneurs				
2.1.1 Ashoka				
2.1.2 Grameen Bank				
2.2 Social Enterprises				
2.3 Social Enterprises and Sustainability:1				
2.4 Food Waste, Social Enterprises and Pakistan1				
2.4.1 Food Waste and Pakistan1				
2.5 Food Waste Mitigation Examples1				
2.5.1 Netherlands19				
2.5.2 France				
Chapter 3: Methodology2				
3.1 Research Framework2				
3.2. Research Questions				
3.3. Defining Concepts2				
3.4. Research Strategy2				
3.4.1. Research Unit2				
3.4.2. Selection of Research Unit28				
3.4.3. Research Boundary28				
Chapter 4: Findings				
4.1 Background on Rizq29				
4.1.1 Findings and Workings of Rizq29				
4.2 Rizq and Social Business Model Framework:				
4.2.1 Social Profit Equation				
4.2.2 Economic Profit Equation				
4.2.3 Value Proposition				
4.2.4 Value Constellation				
4.3 Main Research Questions and Sub-Questions:				
Chapter 5: Discussion4				
Chapter 6: Conclusion				
6.1 Limitations and Further Research4				
References:4				

## List of Figures:

Figuur 1: Taken from the Social Enterprise Journal	9
Figuur 2: Ashoka's global presence (taken from ashoka.org)	11
Figuur 3: Ancher, J. (2017)	13
Figuur 4: Growth Plans and Barrier breakdown for Social Enterprises in Pakistan (British Council,	
2016)	16
Figuur 5: Social Enterprises highest influence based on sector (British Council, 2016)	17
Figuur 6: Conventional Business Elements (Yunus, Moingeon and Ortega, 2010)	22
Figuur 7: The Social Business Model Framework (Yunus, Moingeon and Ortega, 2010)	23
Figuur 8: Potential Partnership Circle of a Social Enterprise (PWC, 2016)	39

## Chapter 1: Introduction

Pakistan is a lower-middle income country in South-East Asia with an estimated population of 189 million people, the 7<sup>th</sup> most populated country in the world (World Bank Data). The country relies heavily on its agriculture produce with a fifth of the country's GDP being raised from this sector (Government of Pakistan, 2015). The country's economic climate however has to contend with political instability, inadequate regulatory action and energy shortages on a consistent basis (World Bank, 2014). Despite these general insecurities being the standard of life, the most pressing concern is the high rate of food insecurity in the country which directly affects human survival. According to the World Food Programme, 43% of the country's population remains food insecure, with 18% facing a severe shortage. Pakistan has been ranked as a country with "serious" hunger level (Global Hunger Index, 2016). Surprisingly though, the country produces enough food to feed all of its population. The problem however is food waste.

Food waste has gained traction for being a major societal issue in recent years. It is an issue plaguing the developed and the developing world. Food waste is defined as food that is intended for human consumption but is not used as such. According to the Food and Agricultural Organization of the United Nation, roughly one third of the food that is produced for human consumption is wasted (FAO, 2013). This is a significant statistic for a country like Pakistan whose population suffers from food insecurity on a daily basis. According to the World Food Program, 60% of the Pakistani population suffers from food insecurity on increase food supply in order to feed the increasing global population (Godfray, Beddington, Crute, Haddad, Lawrence, Muir, et al., 2010; Godfray, Crute, Haddad, Lawrence, Muir, Nisbett, et al., 2010). With this in mind, wasting food has a negative societal impact as it contributes to the shortage of food and as such to an increased challenge of feeding the population.

Apart from food being used to feed the local population, food waste has embedded links in enhancing climate change and wasting valuable resources. Valuable resources such as investment on labour, water, cropland or fossil fuel used for the generation and preservation of the intended food collectively for which the consumer pays (Hall, Guo, Dore, & Chow, 2009; Kummu et al., 2012) are lost with wastage. Furthermore, food waste is associated with large emissions of greenhouse gases which does not aid the fight against climate change (Bio Intelligence Service, 2010; WRAP, 2009). This is significant especially for a country like Pakistan which has suffered in recent times from heatwaves, the deadliest one being in 2015 resulting in 1260 casualties (ARY News, 2015)

Prevention of food waste has been deemed the best alternative to cut down environmental impact as well as to improve food security for the growing population (Godfray, Crute, et al., 2010; Kummu et al., 2012). Moreover, stopping food waste carries a lot of potential especially at consumption level which benefits in reducing social and environmental impact. The mantle of tackling social issues has been taken up by a niche, developing sector in Pakistan. Social Enterprises are slowly emerging in the country to put a marker by solving societal problems either ignored or overlooked by public institutions. Problems ranging from fighting for equal rights for women to creating a cleaner environment, such social causes have changed the world (Salamon & Anheier, 1992). Since social enterprises are frequently non-monetary in nature, their core function is to retain economic and social cohesion within a society (Oatley, 1999). In the case of this research, the social enterprise selected will focus on mitigating food waste.

Currently in Pakistan, research on social enterprises is either limited or non-existent. None of the research quantifies the activities conducted by social enterprises. (British Council, 2016). This gives the researcher incentive and motivation to delve into the working of a social enterprise to see their effectiveness in handling a recently established issue in the country of food waste.

## **Problem Statement:**

The aim of the research is to analyze the workings of an operational social enterprise in Pakistan. The social enterprise selected aims to reduce food waste and alleviate hunger in Pakistan.

## **Research Objective:**

The aim of the study is to see the effectiveness of a social enterprise in reducing food waste in Pakistan. The study will comprise of assessing the working model of Rizq, a social enterprise located in Lahore, Pakistan. With there being a gap in academic research based on the topic of social enterprises and food waste, particularly in Pakistan, the researcher aims to add to this new field of study.

## Chapter 2: Literature Review

This chapter comprises of the key concepts needed to understand the background of the research question. The first section will be an overview of social entrepreneurship and social entrepreneurs as a concept. The second section will explore the idea of social enterprises as a concept. The third portion of the section will discuss the role of social enterprises in Pakistan. The following section will discuss social enterprises and food waste in Pakistan. The final section will discuss international examples of food waste mitigation measures.

## 2.1 Social Entrepreneurship and Social Entrepreneurs

Before establishing what "social entrepreneurship" is, it is important to understand what the term "entrepreneurship" truly stands for. From Carlos Jarillo and Howard Stevenson economic article of 1990, entrepreneurship is defined as "a process by which individuals-either on their own or inside organizations- pursue opportunities without regard to the resources they currently control." Even though research on entrepreneurship as a field of social science dates back to the 80s, historians like to argue that the first definition arrived between the 30s and 40s. They agree on Schumpeter's vision on entrepreneurship as simply being innovation. Schumpeter considered entrepreneurs to be individuals who lead innovation within an existing economic system (Schumpeter, 1934). The traditional notion of entrepreneurship comprises of maximizing profits as this was seen as the key to success within a market driven context.

Considering that theories on entrepreneurship focus on risk-oriented, profit driven individual looking to plug market gaps through innovation, it mostly ignores the entrepreneurs who focus on creating social change in favor of generating profits (Hibbert et al.; 2002; Prabhu, 1999). Social Entrepreneurship in a general context is centered on the idea to develop an innovative service to fulfill a clearly defined societal cause. For this research, I'll be using the most widely accepted definition which states "the creation of organizations that address

societal problems using innovative business methods" (Dees, 1998; Lepoutre, Justo, Terjesen, & Bosma, 2013; Miller, Grimes, McMullen & Vogus, 2012; Thompson & Doherty, 2006; Trivedi, 2010a; Waldron, Fisher, & Pfarrer, 2016). Social Entrepreneurship over the past few decades has been growing in all sectors: public, private and non-profit (Johnson, 2000) The strategic focus to attaining its social goal with entrepreneurial creativity makes it distinct from any activity offered from the established sectors (Nicholls, 2006). For some, social entrepreneurship is seen as a formidable tool to alleviate and remedy environmental and social concerns.

With the concept of social entrepreneurship embedded in the current society, social entrepreneurs have been on the rise. These are individuals that tackle "some of the toughest and most intractable challenges around" (Boschee, 1995). They are considered similar to traditional entrepreneurs focusing on using innovation to create new organizations with the key difference being their practices are based on yielding sustained social benefit (Fowler, 2000). A popular definition for social entrepreneurs was given by Dees (1998) who defined social entrepreneurs as; change agents in the social sector by adopting a mission to sustain social value, recognizing and pursuing new opportunities to serve the social goal, continuous innovation and adaptation to change, exhibiting a heightened sense of accountability for the outcomes created.

Figure 1 below defines clearly certain distinctions between traditional and social entrepreneurs.



Figuur 1: Taken from the Social Enterprise Journal.

Practical relevance of social entrepreneurs came into public viewing through successful examples of working businesses which have left a sustained impact on society and to this day, exists to resolve societal issues. Two of the most prominent figures in the world, synonymous with social entrepreneurship, are Bill Drayton and Muhammad Yunus.

## 2.1.1 Ashoka

Bill Drayton has been credited by many as the epitome of social entrepreneurs. It was in 1980 when Bill Drayton decided to establish his organization "Ashoka" with the aim to connect, help and create a network among social entrepreneurs to pursue creative solutions. Drayton's philosophy of social entrepreneurship is well rounded by this quote:

"Social entrepreneurs are not content just to give a fish or teach how to fish. They will not rest until they have revolutionized the fishing industry."-Bill Drayton

The organization operates by searching for like-minded individuals motivated and determined by solving societal issues over their personal gain. Each selected individual is granted financial stipend to take care of their personal expenses to enable full focus and dedication to their social idea. Ashoka connects its fellows with successful social entrepreneurs to help out in implementing their ideas, ultimately reaching a point where an innovative solution is converted to a self-sustained organization. Ashoka fellows with ventures more than 5-yearold have 80% of their solutions implemented with 59% directly affecting the national policy; each fellow helps out to an estimate of 174,000 people (Daytona Beach News-Journal, 2007). Ashoka's influence was as such as it became the main reason why social enterprises started establishing themselves in Pakistan.



Figuur 2: Ashoka's global presence (taken from ashoka.org)

#### 2.1.2 Grameen Bank

Social entrepreneur Muhammad Yunus carried the belief that the poor should have access to banking services and carried a desire to see his vision through. He established the now renowned Grameen Bank in his native land of Bangladesh. Operationally, the bank set out to provide miniscule loans to people living in poverty to enable them to become financially self-sufficient, the difference being that the bank required no collateral from their client. This to many seemed like a flawed business idea however as seen now, the bank is thriving with net incomes of over \$10 million and serving 7.5 million people (Yunus, Moingeon, Ortega, 2010) from poverty. The opportunity for people to drag themselves out of poverty has resulted in many successful businesses only established via loans from Grameen Bank. 68% of the families of Grameen Bank borrowers have crossed the poverty line. Motivation towards repayment is high, with rates currently running at 98.4 percent, and the bank has been profitable in every year of its existence except 1983, 1991 and 1992 (Yunus, Moingeon, Ortega, 2010). For his efforts, Muhammad Yunus won a Nobel peace prize in 2006.

The success of Muhammad Yunus and the aforementioned Bill Drayton prove that innovation bred with a view of societal change, can work in accomplishing a societal goal and generating revenue for self-sustenance.

## 2.2 Social Enterprises

The concept of social enterprises is a renewed concept. It has been mistakenly considered to be part of the non-profit circle however the standout feature of it is its use of business as an instrument for social development (Dart, 2004). Hence, a social enterprise is an organization that exists with a social purpose and engages in business practices to fulfill its goals using market based techniques (Talbot et al.,2002). Norms emerging from the social enterprise sector include market and cliental focus, commercial focus, revenue generation and sometimes self-funding operations (Dart, 2004). This is reflective of applying business models compared with non-profit reliance on grants and donations. At an organizational level, not every social enterprise is innovative but in terms of the activities they carry out, it is distinct.

For this research, the description from the European Commission attributed towards social enterprises are considered. Brief examples are mentioned later to highlight how a legal body can play an effective role in aiding social enterprises to better self-sustain. In 2011, the European Commission picked up on social entrepreneurship and launched the social business initiative with a view to "create an ecosystem conducive to developing social businesses and facilitating their access to funding" (European Commission Social Business Initiative, 2011). Over time, more recognition has been given to social enterprises in Europe and hence action has been taken to aide their development. As of 2017, the European Commission describes social enterprises with these 3 listed points:

- 1. Social Enterprises use their commercial activity to reach a societal objective
- 2. Businesses reinvest their profits in order to achieve social objective
- 3. Organization of the firm reflects on the enterprise's mission.

Figure 2 explains the variations between a social enterprise to charities and commercial entrepreneurs.





An example of favorable treatment of social enterprises is reflected on Belgium's decision to offer fiscal advantages, by offering a 6% lower sales tax on products and services from social enterprises, helping them to sustain their operations. Currently, in Europe, the UK has been the front-runner within the social enterprise sector primarily due to the recognition and dedication given by the government and private sector. In the case of Pakistan, their situation will be discussed in depth at a later section.

## 2.3 Social Enterprises and Sustainability:

Even though strides have been made within the social enterprise sector, there are concerns over their long term sustainability to remain operational. For example in the Netherlands, around 20% of the social enterprises, having started between 2011-2016, have ceased to exist. (McKinsey and Company, 2016). This number is highly favorable to the 38% of small medium businesses which have faltered over the same period (McKinsey and Company, 2016). The access to funding through donations is believed to be the reason for a higher survival rate for social enterprises than small medium businesses. If social enterprises are thought to be pioneering towards a blend of achieving social and economic goals, then they need to be sustainable long term. The potential for social enterprises is there as a study found out that social enterprises created more jobs on average and had a higher turnover per employee than mainstream enterprises (Harding, 2004). The problem usually is when a social enterprise starts to grow. Many cannot get past the gestation period and become sustainable (Poutziouris, 2003). The following factors are the main challenges for social enterprises to sustain themselves:

- Developing complex business models due to either lack of motivation (Walker and Brown, 2004) or lack of skillset (Poutziouris, 2003)
- 2. Management Development Issues (Poutziouris, 2003)
- 3. Limited Capital (McKinsey and Company, 2016)
- 4. Legislation Issues (Poutziouris, 2003)

Growth for a social enterprise is key for its survival as Ryan(1999) points out that size of a firm leads to benefit and survival for firms increase with size (Geroski, 1995). Little research has been conducted on the failings of social enterprises but Brown's (2002) work on social enterprises from the 70s and 80s led to the verdict of these enterprises being too small to be self-supporting. Borzaga and Defourny (2001) have added to this belief as they consider it a weakness in handling with environmental challenges.

#### 2.4 Food Waste, Social Enterprises and Pakistan

The term social enterprise is relatively new in Pakistan however the concept of social entrepreneurship and social enterprises is not. The concept has existed in a variety of format within the Pakistani economy in the form of Social Businesses or Community based Initiatives. The current market based approach to social enterprises however came into existence partly due to the opening of Ashoka's office in the city of Karachi in 1997 (SEED, 2015). With the support from Ashoka, an influx of successful social enterprises began. The Asoka foundation aided 47 fellows and led to the opening of the first micro-finance institution in Pakistan, similar to Grameen Bank, called the KASHF Foundation. Building on this success, the Acumen Fund was established in 2002 which specifically helped in providing funding to social enterprises. Since its inception, Acumen has supported 11 social enterprises with a total investment of \$14.6 million and has created 3,500 jobs locally (Acumen Fund Pakistan, 2018).

Currently, there have been limited studies about social enterprises and their activities in Pakistan. To date, there is no legislation directly mentioning or supporting social enterprises. However, there are wider legislations that directly affect social enterprises in the country. The Centre for Social Entrepreneurship established by the Planning Commission of Pakistan in 2015, is a first step taken up by the government to promote innovation and develop enterprises aiming to deal with social issues. The center is currently in its early stages of development but this is the first distinct sign of social entrepreneurship being promoted by the government.

Even though, there has been a lack of support from public institutions, this has not deterred the country from growing in the social sector. According to a survey conducted by the British Council (2016), there might well be around 446,000 social enterprises currently operating in Pakistan. With a median turnover of £34,000, social enterprises are set to grow with more employment opportunities in the coming years. 50% of the social enterprises, from the survey, expect to grow by offering different products and services whereas two-thirds of them plan to reinvest in the team and build the enterprise for the coming years. (British Council, 2016).

Some of the barriers mentioned in the diagram above resonate with the academic literature. Similar to Poutziouris (2003), social enterprises in Pakistan suffer from shortage of skillset, lack of legal and financial support to sustain themselves long term. The diagram below gives a detailed description on the growth plans and barriers faced by social enterprises in Pakistan:



Figuur 4: Growth Plans and Barrier breakdown for Social Enterprises in Pakistan (British Council, 2016)

Based off from the statistics above, the most popular growth plan is investing in team and capacity, followed by attracting new clients and developing new products and services. From the report of the British Council (2016), young leaders were more likely to target new customers compared to old leaders this is interesting as the average age of leaders is less than 35 for social enterprises in Pakistan (British Council, 2016). Meaning, young leaders are more willing to expand on their operations to attract more clients.

The biggest problem faced by social enterprises in Pakistan is to obtain funding and finance. According to the British Council report (2016), there are three main financing constraints. More than a third of the social enterprises stated that limited supply of capital is their main financing constraint, followed by access to investor due to limited connections. The final problem relates to the business model not being refined enough to receive funding which is a general problem for social enterprises, especially once expansion begins as the limitations of the company gets exposed.

#### 2.4.1 Food Waste and Pakistan

Social Enterprises in Pakistan target various sectors with the majority focus being on education and health. More than half of the social enterprises want to better the literacy rate of the country which has dropped by 2% in 2016 to 58% (Economic Survey of Pakistan, 2016). The second most majority of social enterprises operate in providing health and social care. This is due to the high percentage of food insecurity among the local population which leads into medical issues such as chronic malnutrition or stunting. Around 45% of Children show chronic malnutrition and 11% are acutely malnourished requiring urgent treatment (Pakistan Demographic and Health Survey, 2012). Considering that most health issues are linked directly with a lack of available food, it damning to see that the Global Food Security Index has labelled food loss as Pakistan's greatest strength.



Figuur 5: Social Enterprises highest influence based on sector (British Council, 2016)

Food waste has been an issue plaguing Pakistan for a while. Food waste is an environmental concern specially for a country like Pakistan that suffers from floods, heatwaves and earthquakes on a rather consistent basis. Food waste directly adds to methane emissions and climate change. As an agricultural country, the potential harm carried by climate change can lead to a possible reduction in crop yield by 50% by 2030 (German Watch's Global Climate Risk Index, 2012). Considering the insecurity for food faced by many in the country, it is unimaginable to think about wastage of any sorts. Pakistan is ranked 11th on the food security risk index with 61 Million Pakistanis lacking food security. According to a report published by

Oxfam (2016), Pakistan produces enough food to cater to every individual however 40% of food is wasted during the supply chain. Research has shown that more is being produced in the country than what is needed to wipe out extreme hunger, yet sadly hunger seems to be only growing (Dawn, 2016). Whereas on one hand the state's indifference on the issue of food waste and donations is unfortunate, it is heartening to note that various civil society organizations have taken lead and are meaningfully contributing to the solutions. Still though, the question remains as to why food waste is a problem to begin with in a country like Pakistan.

Currently, there is a lack of extensive academic literature available for Pakistan and it's issues related to food waste so it was hard to find legitimate sources for information. Luckily, a recent publication sheds light on the aspect of wastage in the country. According to Musa et.al (June, 2018), the team conducted research among various restaurants in the culinary capital of Pakistan, Lahore and found results indicating that a lack of awareness on wastage in the food industry is the main problem. Furthermore, all restaurants lacked an internal mechanism to quantify their food waste meaning there was no way to measure loss of food on a regular basis. Additionally, reason for food waste varied depending on demand of excessive servings on customer's plates to overproduction of food in the buffet style restaurants. For restaurants, who are willing to donate their excess food, barriers such as liability concerns and cost constraints hinder the process resulting in wastage which could have been avoided. Excess food needs to be easily channelized and for this, the social enterprise" Rizq" was established in the city of Lahore aiming to mitigate wastage by co-operating with the restaurant industry.

## 2.5 Food Waste Mitigation Examples

Since the case of Rizq is the first social enterprise in mitigating food waste in Pakistan, this section covers 2 international examples. Both the examples are different in their execution in reducing food waste. The first example is based in the Netherlands, covering the working of Instock, a restaurant based on reducing food waste. The second example is based in France that is based around the government's role in raising awareness to cut down on food waste.

#### 2.5.1 Netherlands

One of the most recent innovations in the fight against food waste in the Netherlands has been the start of the restaurant chain "InStock". It prides itself on the principles of reducing food waste by utilizing food which otherwise would have been thrown away (InStock, 2018). The neglected food is used as part of their cuisine to be served to the customers, thus prolonging the life of the food and ensuring that it is not wasted. This working business model has been achieved through the co-operation with a major retailer in Albert Heijn, who separates the food items which would have gone to waste, and donates it to InStock, allowing them to reutilize the food in creative ways (InStock, 2018). InStock restaurants aim to create meals containing at least 80% to 100% of surplus food (InStock, 2018). This example can lead into the generation of several restaurants with a similar ideology, working in tandem with the retail industry to produce a decline in food waste.

#### 2.5.2 France

Food should not be regarded as commodity like other products and services in society, but as a right for each individual human being. Therefore, ensuring that it is consumed or utilized with minimal or zero-waste if possible, should be at the forefront of every economy. The minimization of waste is central to sustainable economic development and the French law against food waste is a bold first step to set an example for countries to follow suit globally. France has recently become the world's first country to strictly ban supermarket food waste, forcing the development of innovative solutions for the prevention, recovery, and reuse of food on a national level. Under a law passed by the French senate in February 2016 (The Guardian, 2016), all large supermarkets in the country are required to donate unsold food to charities and food banks.

The law was proposed by policymakers in April of 2015 after thorough study of the total food supply chain, carried out within the Ministries of Agriculture and Environment to draw attention to the concerning issue of waste. The proposal document indicates the estimated level of food waste to be 300 pounds per person annually (Mourad, 2015) underlining an existent crisis in national food production and consumption systems. The document consists of the responsibilities to be held by various stakeholders (i.e. producers, retailers, restaurants) in the fight to prevent the wastage of food, functions of possible public policies concerning the matter, and formulation of a new model of development regarding the overall food supply chain. Under this motivating law, large supermarkets measuring over 400 sq. meters are required to sign agreements with charities or organizations to reutilize their unsold and unused food, with any establishments failing to follow such measures facing fines ranging from  $\xi$ 3,750 up to  $\xi$ 75,000 or even two years of imprisonment (Gore-Langton, 2017). Although the law predominantly tackles retailer food waste, it is a step in the right direction towards eliminating wastage overall, as it has indirectly influenced consumption habits of the people and changed the way society now looks at food.

## Chapter 3: Methodology

In this chapter, the first section will comprise of the research framework. The research framework allows for a systematic step by step guide to be developed in order to achieve the designated research objective.

## 3.1 Research Framework

Research framework means a schematic presentation of the research objective (Vershuren and Doorewaard, 2010). It includes step by step activities to achieve the research objective. Research framework consists of seven steps and they are followed:

Step 1: Characterizing briefly the objective of the research project

The aim of this paper is to see the effectiveness of a social enterprise based on reducing food waste in Pakistan.

Step 2: Determining the research object

The research objects in this research is the social enterprise "Rizq" based in Pakistan.

Step 3: Establishing the nature of research perspective

The research perspective will predominantly be based around the social context of operations conducted by Rizq. Assessment will be made using the Social Business Model Framework (Yunus, Moingeon, Ortega, 2010) explained later in this chapter. The effectiveness of

operations will be judged by the assigned elements within the social business model framework with preference given to the social aspect since social enterprises value societal goals over economic gain.

Step 4: Determining the sources of the research perspective.

The research uses the framework provided by Yunus, Moingeon and Ortega in their 2010 publication of Building Social Business Models. The social business model framework was developed through extensive research conducted on the Grameen Group by Muhammad Yunus (owner of Grameen) himself along with Bertrand Moingeon and Laurence Ortega. The Grameen Network has gone on to develop nearly 30 running businesses encapsulated with innovation while spearheading in achieving social objectives. The Social Business Model Framework has been derived from the Grameen experience which incorporates both conventional business model elements and social elements which aids to the working of a social enterprise. Below are the conventional business model and the derived social business model framework:



Figuur 6: Conventional Business Elements (Yunus, Moingeon and Ortega, 2010)



Figuur 7: The Social Business Model Framework (Yunus, Moingeon and Ortega, 2010)

The major difference between the conventional business model to the social business model is the inclusion of the social profit equation and the tweaking of the profit equation from the conventional model. The social profit equation considers all the ways that the enterprise impacts society. Additionally, the element can comprise of tackling environmental issues by using social measures. The tweak with the profit equation converts the business from a forprofit to a social enterprise. Instead of solely focusing on profit generation, it focuses on balancing costs and making recovery on costs without emphasizing on making profit.

The elements of the social business model can be defined as followed:

**Value Proposition**: Value proposition considers who the customers are and what the business can offer to them (Yunus, Moingeon and Ortega, 2010). It refers to the social needs of the society and how they will be addressed by the social enterprise. Along with this, the focus is on the customer base meaning who will the service or product will be offered to.

**Value Constellation:** Value Constellation comprises of how the company offers its valued product to its customers. A network of the supply chain and partners are described (Yunus, Moingeon and Ortega, 2010). This focuses on the key activities that is performed by the company, the key material sources provided by the company, the key partners involved and the role of the key partners.

**Economic Profit Equation:** Both the above points need to complement each other in order to create a profit. The revenue generated through the services/products along with the costs

employed make up the profit equation (Yunus, Moingeon and Ortega, 2010). The purpose of the economic profit equation is to note whether the company is economically sustainable on their own. It focuses on balancing costs with revenue without emphasizing on making profit.

The aforementioned framework will be utilized in this paper as an assessment tool to judge the social enterprise's working based on their merits within each element. Each element will be studied to find areas of improvements. The enterprises' success will be determined through their compliance with the above model. However, since this model is relatively new, the lack of utilization in the academic world for the selected social business model framework deprives it from establishing a benchmark. This forces the researcher to use the findings and match it within the requirements of the elements in the Social Business Model Framework to develop his own analysis ultimately. Step 5: Schematic presentation of the Research Framework



The overall blueprint of the research framework is as followed:

The literature studied will be the basis of understanding the academic concept behind social enterprises and their working models. This in turn will help in understanding the nature of work being conducted by Rizq, the research object in this research. The findings will be put up against the Social Business Model Framework. Subsequently, evaluations will be made in the discussion section based on economic, social and legal perspective to derive a formidable conclusion.

Step 6: Formulating the research framework in the form of arguments which are elaborated

(a) An analysis of the gathered data

- (b) Assessing the gathered data to find success factors and weaknesses
- (c) Confronting the result of the analysis as the basis for recommendation

## 3.2. Research Questions

This section will comprise of the research question and the sub questions that are aimed to be answered in this paper.

The main research question:

How effective is the role of a social enterprise based on mitigating food in Pakistan?

The term "effective" relates to the operations conducted by the social enterprise in attaining its aim and objective of mitigating food waste.

Sub-research questions:

1. How is food waste being mitigated by the social enterprise?

2. What are the factors adding to the effectiveness of operations of the social enterprise?

3. What is the potential of social enterprises based on reducing food waste in Pakistan?

## 3.3. Defining Concepts

For the purpose of this research, the following key concepts are defined:

Food Waste: Food waste refer to the decrease of food in subsequent stages of the food supply chain intended for human consumption. (Food and Agricultural Organization, 2013)

Social Entrepreneurship: The creation of organizations that address societal problems using innovative business methods. (Dees, 1998)

Social Enterprise: An organization that exists with a social purpose and engages in business practices to fulfill its goals using market based techniques (Talbot et al., 2002).

## 3.4. Research Strategy

The research strategy is to focus on a current and working model of a food waste reducing social enterprise. The workings and operations of the social enterprise are gathered with analysis done through the social business model. Based on the findings, assessment will be made on possible failures and the likelihood of sustenance of such an enterprise with literary references.

## 3.4.1. Research Unit

The research unit of this research is Rizq, a food waste reducing social enterprise. The research will focus on their business model, operations, success factors and potential failures against sustaining operations.

## 3.4.2. Selection of Research Unit

As a general consensus, Social Enterprises are transparent with their workings and operations. The data of Rizq will be collected from interviews across various media outlets present online and their own website which speaks of their working model extensively. Findings will be verified from an employee of the enterprise. The reason to select them is the underdeveloped nature of social enterprises aiming to mitigate food waste in Pakistan. For Pakistan, this is a new type of social enterprise.

#### 3.4.3. Research Boundary

The research boundary is the limitation of the study and its consistency. For this research, time and geographical distance can be considered an issue since the locality of the social enterprise is in Pakistan while the research was gathered in the Netherlands. With regards to the framework adopted for assessment, the Social Business Framework lacks a strategic outline for every element to judge an enterprise. Additionally, the social enterprise's unwillingness to produce financial data makes it necessary to oversee the economic profit equation from a general viewpoint.

## Chapter 4: Findings

The following section comprises of information gathered from different media outlets, online interviews and websites pertaining to the operations conducted by Rizq. The document was sent in, checked for factual information and then approved by Rizq. The information featured has been verified by Musa Amir, who overlooks strategy and research for Rizq.

## 4.1 Background on Rizq

Rizq is a social enterprise that has created waves in Pakistan by combating food waste. This social enterprise carries the vision to reduce food waste, eradicate hunger and end malnutrition in Pakistan. The Rizq foundation was conceived at the Social Innovation Lab (SIL) of the Lahore University of Management (LUMS). The Social Innovation Lab is a platform to harness innovation within the world of social enterprises. The founders of Rizq are graduates of LUMS and believed in developing a sustainable business model that first and foremost focused on achieving societal goals and was self-sustainable in the long-term hence creating a social enterprise in Rizq. The owners aim to make food philanthropy smarter in Pakistan.

After tinkering and tweaking on their business model while incubated at SIL, operations for Rizq officially began in 2015, in the city of Lahore. Rizq started off operations by initially providing 250 meals to impoverished sites of Lahore. As of 2017, Rizq has managed to attract over 720 volunteers As of yet, an amount of 30,000 kg worth of food has been rescued and re-directed to more than 200 families resulting in 150,000 meals created, amounting to an estimated saving of 850,000\$.

#### 4.1.1 Findings and Workings of Rizq

In Pakistan, a lot of waste is generated from restaurants and eateries as earlier covered in the literature section. The owners of Rizq realized the avoidable food waste generated by many eateries across the city of Lahore. Subsequently, Rizq developed a business model with the social objective to cut down hunger amongst the Pakistani public. Consequently, Rizq has now developed a unique model for providing a "marketplace" for food donor and food insecure segments of society. Rizq's operational model relies on collaborative efforts among various players from the food industry such

as restaurants, bakeries, caterers, who end up acting as their supplier by providing excess food. The enterprise charges food based establishments a fee to take away their excess food hence acting essentially as a "waste disposal" service provider. This service acts as one of their source of revenue. Alongside removing food being wasted from establishments, the excess food becomes a resource for Rizq's operations. This is smart since the Pakistani culture carries many events with food presented for the masses such as caterers offering lavish buffets during weddings. This is also an opportunity for Rizq to gather and spread excess food amongst the needy. Rizq only partners with restaurants and caterers that have been certified successfully by the PFA (Punjab Food Authority). The PFA is a regional governmental body for checking food safety in the province of Punjab where Rizq operates. Every certified restaurant is given standard instructions to pack the food. All vehicles used have chillers to prolong life of the packed food. Expiry dates are checked with strict adherence. Plus, the personnel involved are trained by safety officers of PFA.

The vision and the mission objective of Rizq is to end poverty in Pakistan through a focused approach in cutting down food waste since Pakistan produces enough to feed its population. The food gathered by Rizq is distributed among the poor community of Lahore. The customer base is purely of people in low-income households. The company has a self-developed verification system that assess the poverty levels of families and then accordingly registers them to their database. Rizq charges a minimum fee of Rs 10 (estimated 10 cents) for the food, adding a minor source of revenue for themselves. The main reason attributed to charging the public is to remove the idea of dependency and to respect the dignity of the people buying food from Rizq. For families who cannot afford to pay, the food is served for free. To make sure food is distributed among many families, restrictions are in place on how many meals a family can purchase at one time.

Rizq has been smart with its collaborative links in order to reduce operational costs. As mentioned earlier, supply of food is gathered from various PFA approved partners but the cost of transportation of taking the excess food and bringing it back to their center would have been extreme. However, partnerships will local food logistics companies allows them to outsource some of their excess food pickups. This helps them in saving transportation costs and allows them to focus using their funds towards finding and verifying food insecure people.

Rizq not only distributes food among the needy, they also cater to empower individuals to help themselves out of poverty. In this regard, Rizq serves as a community center as well. Rizq personnel study on the reasoning behind a family's food insecurity. A training program complements this by helping and training individuals into finding jobs in order to support themselves. The on-site training is complemented by free meals offered to the trainees as long as they are a part of the program. This relationship only lasts till an individual gets a job.

An impressive aspect of Rizq's operation is their self-developed monitoring and evaluation system which calculates data on food saved, meals fed and calories of food that would have been wasted. This allows them to keep a tab on their social outreach within their work space. Furthermore, regular surveys are carried out throughout local communal networks under the supervision of Rizq's verification officers. Since one of the aims of the establishment is to eradicate malnourishment, these surveys provide feedback of different regions along with their nutritional reports which enables Rizq's team to prepare meals based on nutritional requirement.

Based off the workings of the surveys conducted, Rizq developed a specialized program for school children to curb rising malnourishment. Called the "School Lunch Program", meals are provided according to the nutritional requirements based off from the survey results. This aide the under-privileged communities of Lahore. To date, 3 schools have adopted the School Lunch Program.

Even though most of operations are based on solving societal needs, Rizq realizes the need to intertwine social and environmental issues in their workings. Rizq aims in the future to have their community kitchen being run on solar energy, an alternative energy source which is slowly gaining traction in Pakistan. Furthermore, the enterprise plans to use bio-degradable packaging for their meals however costs of using such items remain relatively high making it a difficult barrier to overcome while balancing costs. In terms of excess food gathered, food which is not fit for human consumption, it is either used as animal feed or converted to compost equating to zero-waste. The realization for the social enterprise to value and address environmental concerns bodes well for a country like Pakistan that is overly exposed to climate change.

Since Rizq is a relatively new social enterprise and one of the very first's in Pakistan with the objective to mitigate food waste and tackle malnourishment, there are certain challenges that they face. According to the owner's, from a legal perspective, there is a definitive need to address liability concerns of various stakeholders on the issue of sharing food. Eateries are hesitant to share food since they carry a fear of being held accountable for liability charge. Furthermore, from a social perspective, the question of food waste is still mind-numbing since in Pakistan, \$2 billion dollars are given for philanthropy annually. The owner's question why there is still an abundance of hunger when an abundance of resources is available. Rizq does however invites more players in this field to help grow the social sector and generate awareness amongst the public since collaboration, according to them, is the key in solving the problem of hunger.

## 4.2 Rizq and Social Business Model Framework:

The social business model framework allows for businesses to operate in being self-sustaining while achieving their social goals. The workings of Rizq will be analyzed using the 4 elements of the social business model framework. Since the social enterprise did not wish to discuss their finances, the economic profit equation will be covered from a social perspective.

#### 4.2.1 Social Profit Equation

When it comes to achieving societal goals, Rizq has managed to achieve multiple social goals by targeting different aspects of the Pakistani community. They have focused on firstly using excess food to diminish wastage of food from businesses hence cutting down on food waste and furthered their commendable approach by targeting the poorer communities who may not have the wealth to purchase good, nutritious meals. Additionally, since malnourishment is a major health issue in the under-privileged communities of Pakistan, medical input is taken from reputable community centers to create specific meals for specific localities, helping the locals to better health.

From a moral and humane approach, Rizq allows the poorer communities to have the choice to pay for their food, a minimized rate, but one which protects their dignity. Plus, advisory and consultancy services are offered to remove the insecurity of food which plights some families.

As the social profit equation also comprises of environmental influences, the best achievement from Rizq is the direct result of stopping food waste. This helps to directly cut down carbon emissions helping to mitigate climate change, a necessity in a country like Pakistan which has taken the brunt of climate change with spells of heatwaves leading to fatalities. More can be done for the sake of environment for example when it comes to transportation, they can use electric vehicles as it's a cleaner mode for transportation. For deliveries of surplus food to other businesses, they can utilize bikes as an alternative measure to fossil fuel based cars and for their packaging, biodegradable products could be used instead of plastic.

#### 4.2.2 Economic Profit Equation

Rizq have created a business model that allows them to earn revenue through various means. They act as "waste disposers" for restaurants and similar businesses, meaning it is a charged service and in return they gather surplus food supply for free. Even though, this is a charged service, businesses are willing to help in Rizq's goal to serve the poor and end hunger. Apart from this, they provide the option for families to pay for their meals but since this is more of a choice, the earned amount is believed to be inconsistent.

A lot of Rizq's operational costs come from logistical sources since transportation is a daily routine. To minimize costs, pick-up of food is outsourced helping cut down costs. Also, costs are subsided by the amount of volunteers willing to help out resulting in a low overall cost towards employees. The rest of the bill is mainly coming from the work station. Any profit generated goes towards making operations environmentally friendly and the expansion of the Rizq brand in other cities.

## 4.2.3 Value Proposition

In terms of offering value, Rizq's business model is focused on helping the poor regions of Pakistan. The main service of Rizq is to minimize loss of food by providing it to impoverished communities. This helps to provide food for nourishment in poverty-stricken areas of Pakistan. This social cause appeals mostly to supporters and sponsors of Rizq who share the same common goal of aiding the Pakistani community in relieving hunger and poverty through minimizing food waste.

## 4.2.4 Value Constellation

The supply chain of Rizq is simple. They have partnered with various restaurants from where the excess food left over, is collected by to Rizq. Rizq collects, assorts and creates packages of meals at their workstation. Consumers can then buy or take the meals depending on their own status. The overview of Rizq's operations is covered in the following table based on the social business framework:

Social Business Profit	Economic Profit	Value Proposition
Provide Free or	Revenue generated by	Consumers targeted are the under-
Inexpensive Food for the	suppliers paying for collection	privileged and the poor
Poor; Ending Hunger	of excess food	
Reducing Food waste by	Revenue generated by selling	Hunger and Poverty being
utilizing surplus food	food	minimized with this service
Providing Health Care	Savings garnered through	Nutritional deficiencies are
Ration	willing volunteers helping	considered; meals created
Training the poor to	operations and 3 <sup>rd</sup> party food	accordingly
become empowered and	logistical services	
less dependent		
Advisory aide to remove	Main costs are work station	
food insecurity among	and employees	
families		
Indirectly fighting climate		
change		

The table below mentions the role of stakeholders in the supply chain that make up the value constellation in the social business model framework.
Manufacturing and Distribution	Customer
Collection, Separation and Sorting of	Meals ready to be purchased or
gathered supplies at Rizq.	taken for free, depending on
	status of customer.
Meal Packs manufactured and	
distributed from Rizq's work station	
	Collection, Separation and Sorting of gathered supplies at Rizq. Meal Packs manufactured and

## 4.3 Main Research Questions and Sub-Questions:

This section will cover the sub-research questions and the main research question answered through the findings gathered. The sub-questions will be answered first and in conclusion, the final research question will be answered.

### How is food waste being mitigated by the social enterprise?

The initial realization of food waste being a problem is key since food waste as a phenomenon is rarely a topic of discussion in Pakistan. The realization of change is what triggers social entrepreneurs to take action for the benefit of society which was the case in the formation of Rizq.

Rizq is a social enterprise defined by its business based strategy to become self-sustaining while complementing its aims of relieving hunger from society by mitigating food waste. For Rizq to be effective and to growth, it needs a successful business model firstly. From the findings, it can be noted that the business operations of Rizq are successfully operational since its inception in 2015. The main aspect to note is its heavy reliance on partnerships. For a social enterprise, partnerships allow them to co-create a valued proposition for their customer base allowing them to capture value together (PWC, 2016). Rizq has done this by partnering with various eateries for their supply of excess food. This provides a solution for the eatery as they are easily disposing their excess food which is a major problem for eateries in Pakistan. The problem is so pressing that the eateries agree to pay Rizq for their disposal services. The enterprise takes the excess supply from the supplier, gathers it at its own center, packages it within its own facility to be further distributed among the poor communities. Importantly, if excess food is not taken away, alternative measures have been put in place. The left-overs are used for either compositing or given away as animal feed. This results in zero-waste being produced.

This working model is similar to a successful social enterprise currently operating in Europe. As mentioned as an example in the literature review, Instock from the Netherlands, has a similar setup. Focusing primarily on operation, Instock and Rizq rely on similar strategies of mitigating food waste. Both social enterprises rely heavily on supplies from their collaborative partners for their excess supply. The working model becomes different when the relationship among partners is considered as Rizq charges for disposal of food whereas Instock gets excess supply out of free will; giving Rizq another avenue for revenue. Another difference is the utilization of the excess food. Rizq gathers and redistributes the food directly by targeting impoverished regions where malnourishment among the population is high whereas Instock sells their excess food by converting the gathered supplies into meaningful dishes for customers in their restaurant. Even though the target audience is different for both social enterprises, their values remain the same, to raise awareness on food waste. The differences in their business models can be attributed to the difference of demand from society. For Pakistan, food is being rescued to fight hunger amongst the growing population whereas in the Netherlands, food waste is primarily an environmental concern.

## What are the factors adding to the effectiveness of operations of the social enterprise?

As evidenced from the literature section, one of the core elements aiding to the success of a social enterprise is its collaboration with different partners. For social enterprises, economic gain is secondary to societal gain. Economically, limited capital (McKinsey and Company, 2016) is a hurdle for social enterprises, Rizq has managed to subdue its expenses by developing partnerships with various restaurants where they act as" waste disposers". Restaurants are paying Rizq for their service and in doing so, Rizq gains financial stability with daily supplies on offer.

Another major cost bearing operation is transportation of goods from restaurants to Rizq's center however partnerships with food logistic companies have subsided those concerns resulting in cheaper operational costs. The definitive partnerships established by Rizq aides them in saving capital to sustain their working business model. As illustrated by the diagram below, collaboration is key for social enterprises to sustain their operations. As it starts to grow, more key players will join in support to provide services while acting indirectly as partners which is a case seen with Rizq as community centers and NGOs have aided in providing information about malnourished communities to be targeted with relevant supplies.



Figuur 8: Potential Partnership Circle of a Social Enterprise (PWC, 2016)

The Social Business Model Framework signifies and more importantly, clarifies the impact that Rizq carries on a social front. It is important to remember that social enterprises themselves value social objectives more than financial gain. Hence, unsurprisingly, Rizq's operations carry additional benefits

along with mitigating food waste as the company focuses towards adopting environmentally friendly approach and provides consulting services to aide people in breaking away from their food insecure lifestyle. This results in firstly, the realization of fighting climate change to better safeguard the country from climate-based disasters and secondly, the necessary measure of empowering people to become less dependent towards charitable causes. Indirectly, this results in Rizq gaining traction amongst the local community leading to more publicity which will result in more opportunities for the social enterprise to grow, expand and attract talent. As seen by the participation of more than 720 volunteers over the course of 3 years, the social enterprise is making waves amongst the local community. As growth is important for social enterprises to be sustainable (Ryan, 1999) more publicity and traction is only good for their long-term success.

#### What is the potential of social enterprises based on reducing food waste in Pakistan?

Considering the statistics on food waste mentioned in the literature section, a lot of opportunities can be explored in mitigating food waste and ridding the population of hunger. The stats signify the scope relevant for social enterprises to first further develop as a sector and second, for the Pakistani public to start considering food waste as a social and environmental concern. A lot of potential remains to be harnessed.

For social enterprises in general, trends in job creation suggests that the sector has a key role to play in developing the Pakistani economy (British Council, 2016). Social enterprises are expected to grow in turnover and staff (British Council, 2016). In Pakistan, on average, young people are running newly established ventures with products and services carrying impetus for innovation (British Council, 2016). With regards to food waste, the climate for social enterprises to succeed cannot be determined by one operational model as noted in this research. As Rizq has opened the gateway for social enterprises to target food waste, more social entrepreneurs will be keen to delve into diminishing food waste through establishing a working social business. It remains to be seen how successful they will be. However based on the workings of Rizq, the potential exists.

#### How effective is the role of a social enterprise based on mitigating food waste in Pakistan?

The effective role of a social enterprise based on mitigating food waste can be looked at from 2 different perspectives. The first perspective is from the business side where finance and economics come into play. Even though financial details of operations were lacking for this research, the growth noted in terms of food provided for families, regular meals supplied to schools and increasing volunteer participation suggests that the business model of Rizq is promising. Rizq's business model is an encouraging sign for anyone who wishes to implement a similar model as it can be utilized across various major cities of Pakistan. The key element which enables the business model to work though is the collaboration of different businesses with Rizq. With these partnerships, two fundamental issues are being solved. For the eateries, management of waste is taken care of as it removes waste being dumped on a landfill site where more environmental concerns would have been raised. Whereas for Rizq, supplies are gathered to run their business. This partnership becomes a source of revenue for Rizq. Additionally, food logistics companies have made agreements with Rizq to take care of transference of supplies from eateries to Rizq. This outsourcing results in a low-cost for transportation of goods.

The second perspective for which social enterprises are judged upon is their social outreach amongst the society. This perspective is crucial for social enterprises since their development is solely based on serving social and societal causes. The vision of Rizq was to focus on mitigating food waste and subsequently cutting down on hunger in Pakistan. They have managed to achieve this by the way they have developed their working model. However, instead of focusing primarily on relieving society of hunger, which they did aptly based on the numbers obtained in the findings section, a scientific approach has been established internally to locate communities with the most pressing nutritional concerns and to address them. As stated in the literature review section, malnutrition is a major issue amongst children in Pakistan, Rizq has managed to modify their own vision by handling hunger along with treating health concerns presented amongst the community. The effort and resources put in to gather data for this information is where Rizq spends most of its finances which is a calculated approach to slowly solve malnutrition by expanding on their social outreach within a singular location over expanding operations to other cities immediately. The activities of Rizq has raised awareness on a topic currently under-developed amongst the Pakistani public which is of food waste. Rizg is the first social enterprise in Pakistan trying to mitigate food waste and their efforts have led to the development of an up and coming concept that is currently in its preliminary stage. Similar to

41

Rizq,"Trashit" is an up and coming social enterprise in the city of Karachi that focuses on combating food waste. Even though the working strategy is different between both, the idea of basing the objective on food waste leads to the belief that the topic of food waste is slowly growing which can be attributed to Rizq.

Since social enterprises are an evolving field in Pakistan, there is a realization amongst the public that the government cannot do everything for the sake of its people. Hence to have a source of inspiration provided by motivated social entrepreneurs in aiding social development and solving under-valued social concern, is commendable and indeed necessary.

# Chapter 5: Discussion

In this section, concrete analysis will be made on the findings gathered. Different perspectives will be taken ranging from economic, social and legal viewpoint with respect to Rizq's operations in Pakistan.

## Economic:

Social enterprises have a checkered history when it comes to attaining financial sustainability. It took Muhammad Yunus' Grameen Bank 10 years just to be profitable. Even though Rizq themselves claim to be financially sustainable, questions still remain on their long-term status since they have been in operation since 2016. As alluded to by Poutziouris (2003), the gestation period is the toughest period for social enterprises to grow and establish themselves making it difficult to envision Rizq growing outside of their current community reach. A lack of information on finances makes things difficult to judge. According to McKinsey and Company (2016), fewer than 1 in 3 social enterprises are profitable. However, the role of collaborators economically cannot be under-estimated. Rizq's reliance on partners for excess food can only exist to a certain point. An end-point might come where suppliers might end up finding alternate routes for their excess food. For eateries to pay Rizq to get rid of the excess food means that if a better public waste management system gets established, operations of Rizq will be compromised.

For Rizq, charging certain impoverished families is done to preserve their dignity which is a noble act however the financial benefit that Rizq gets in earning revenue cannot be overlooked. The current price of Rs 10 may cease to exist depending on the country's economic climate making it difficult to predict whether Rizq's target audience might evolve over time. This could be a needed step just to keep themselves sustainable and operational.

#### <u>Social:</u>

From a social perspective, Rizq has kept its focus on serving the Pakistani community through rescuing food which would have otherwise been wasted. The strategy implemented is a positive point since their operation focuses on relieving food from being thrown into landfill sites. Pakistan has a severe problem as they lack a steady infrastructure for waste management. The country has to contend with 30 million tons of waste with an annual increase of 2% expected (UNEP, 2016). Within this, food waste amounts to nearly 30% (UNEP,2016). Since most waste ends up at landfill sites, the slow degradation of food leads to the release of carbon emissions resulting in direct environmental harm. From this perspective, Rizq as a social enterprise has played a role in decreasing food waste, raising awareness about food waste amongst the Pakistani public and aiding the malnourished communities within the region of Lahore. They have taken the first step to bring the concept of food waste to the mass public. Their success is subjective however, as seen by the numbers presented in the findings, they have played a role in counter-acting wastage of food. Alongside this, they have developed methods to empower individuals from poor communities in order to remove their food insecurity by offering consultancy services which is important for a nation whose literacy rate stands at just 58% (Economic Survey of Pakistan, 2016).

A factor going in favour of Rizq in terms of developing strategy for the future is their own monitoring and evaluation database system which allows them to judge their own outreach and impact. This is a positive move since many social enterprises fail to develop a methodology to assess their own impact (McKinsey and Company, 2016). The problem however with this is the lack of a standardized measurement tool that acts as a benchmark for social enterprises. A benchmark to base success or failure for a social enterprise would make things easy to judge since this can help in attaining funding, public and government support (McKinsey and Company, 2016).

The scale of Rizq's reach can be considered to be limited since it has been operational for nearly 3 years. Certain issues might arise when the enterprise starts to grow. Since social enterprises are developed with the aim of achieving a social cause, the focus on generating profit or keeping financial balance might be overlooked. But for an enterprise to expand on its impact, it needs to scale up and in doing so, will require top management talent to take part. As suggested by Poutziouris (2003) and Geroski (1995), the survival of social enterprises depend on them scaling up an adjusting to operational challenges linked to it. Resulting in an organization requiring operational and financial experts who will be difficult to attract since traditionally, social enterprises offer less wages than a commercial enterprise (McKinsey and Company, 2016). For Rizq, this phase is yet to come and only time will tell how effectively they will handle this situation.

44

### <u>Legal:</u>

As referred to in the literature section, Pakistan lacks a clear definitive legislation with respect to social enterprises. This leaves current social enterprises in a precarious position whereby they cannot rely on government action favoring their work. The example of France mentioned in the literature section highlights the role the government can play in raising awareness amongst its civilians. An active participation within the public domain could spark further action with regards to mitigating food waste. In France, food waste was recognized as a critical issue by the government and was addressed at a national level. Although the overall effectiveness of the penalties from the law is yet to be assessed, it has successfully sparked public awareness regarding food waste at different scales of society, and has also laid down a solid foundation for further adjustments and changes for a transition for a zero-waste future. A public recognition of social enterprises and their work on food waste would go along well to address this issue locally in Pakistan.

A concern raised by Rizq's officials was of liability. Since there is no definitive law with regards to liability claims, it causes potential suppliers to be hesitant in donating their excess food resulting in food being sent to landfill sites. The fast food industry is growing rapidly, becoming the second largest industry in Pakistan (Memon, 2016). This gives impetus to the idea of establishing an authority in Pakistan which regulates and checks restaurants on their food waste. Inspiration can be taken from negative sanctions implemented around the globe which can be useful in Pakistan as suggested by Musa et al (June, 2018) where fines and taxes need to be imposed for those who are responsible for food waste. Pakistani authorities can benefit from adopting the international standards for measuring food waste (WRI, 2016) as this could promote reduction of waste amongst the food industry.

## Chapter 6: Conclusion

Social Enterprises have played a pivotal role in society historically. At times they have existed for causes based off an individual's perception whereas other times, they have been setup to provide relief from issues overlooked by the powers at be. Their role in society however cannot be underestimated instead it needs to be recognized to further promote innovation in order to solve pressing social and environmental concerns.

Food waste is a fresh social and environmental concern in a world with increasing population and depleting resources. Even though social enterprises are a relatively new concept in Pakistan, the existence and sustenance of social enterprises in fighting food waste can be seen as a strategy to mitigate waste in an effective manner. In Pakistan, social enterprises are slowly gained a foothold (British Council, 2016. As seen by Rizq's operation, Collaborative measures are essential for social enterprises in order to reduce their financial load and subsequently have a better chance of sustenance. For battling food waste, collaborative efforts must be established among stakeholders within the food industry. Since the food industry of Pakistan is the second biggest within the country (Memon, 2016) there should be an urgency to become efficient along the supply chain. The governments can play a role by recognizing social enterprises as a tool to battle public and environmental concerns. However, lack of legal recognition has left a lot to be desired. Additionally, clear policies need to be developed to address liability concerns for Pakistani eateries. With these measures, the social sector will attain publicity and a resolution can be made to the concern of liability that caused eateries to be hesitant in making donations.

There is potential with the role played by Rizq as a food waste reducing social enterprise in the Pakistani community. However to make a legitimate case, more research and time needs to be given in order to note the effectiveness on the Pakistani public.

## 6.1 Limitations and Further Research

Since work on social enterprises based on mitigating food waste is new in Pakistan, the first factor to consider is the lack of research data available with regards to food waste in Pakistan (Musa et al, 2018). The only recent and the only publication found with respect to food waste was published during the research of this very paper in June 2018 (Musa et al, 2018). More content and research needs to be developed in the field of social enterprises and food waste in Pakistan.

The second factor to consider is the social business model framework used in this research. The social business model framework was used to assess the workings of the social enterprise. The purpose of it was to get a clearer picture of the operations being conducted by the selected social enterprise. Another reason to select the social business model framework was the endorsement directly from Muhammad Yunus, who is considered a pioneer of social businesses. With that said, there are issues with the framework as to the researcher's best knowledge, no research has been done using the framework itself. As this was the first time it was utilized, the problems with the framework were evident. Firstly, It lacks expansion on how to assess the different elements of the framework itself. This leaves the researcher with no specific benchmark to judge the workings of the social enterprise in question resulting in a subjective viewpoint that will vary from reader to reader.

# References:

- 1. Acumen Fund Pakistan, Retrieved from https://acumen.org/pakistan/
- 2. Ali, B. and Darko, E. (2015) Grants, incubators and innovation: a snapshot of social enterprise activity in Pakistan, London: Overseas Development Institute
- 3. Ancher, J. (2017). Social enterprises, the effect of the institutional framework on the prevalence of social enterprises, at country level.
- 4. Ashoka (2018) Ashoka Website, retrieved from www.ashoka.org,
- Borzaga, C., and Defourny, J. (2001), 'Social enterprises in Europe: a diversity of initiatives and prospects', in Borzaga, C., and Defourny, J., eds, The Emergence of Social Enterprise, Routledge, London, pp 350–369
- 6. Boschee, J. (1995), 'Social entrepreneurs', Across the Board, Vol 32, No 3, p 20
- 7. Brown, J. (2002), 'Social enterprise so what's new?' Regeneration & Renewal
- 8. CREM (Van Westerhoven, 2013) and food expenditure by households (Statistics Netherlands, Statline, n.d.)
- Dart R (2004) The legitimacy of social enterprise. Nonprofit Management & Leadership 14(4): 411–424.
- 10. Dees, J. G. (1998). The meaning of social entrepreneurship. Durham, NC: Center for the Advancement of Social Entrepreneurship, Fuqua School of Business, Duke University.
- 11. European Commission Social Business Initiative, 2011.
- 12. FAO, Food Wastage Footprint; Impacts on Natural Resources, 2013, FAO: Rome.
- Food Waste is the World's Dumbest Problem. (2017, May 14). Retrieved March 21, 2018, from https://www.fairobserver.com/region/north\_america/food-waste-global-warming-climatechange-news-64001/
- 14. Food Waste: An Economic and Environmental Problem. (n.d.). Retrieved March 21, 2018, from https://www.wastewiseproductsinc.com/blog/food-waste/food-waste-an-economic-andenvironmental-problem/
- 15. Fowler, A. (2000), "NGDO's as a Moment in History: Beyond Aid to Social Entrepreneurship of Civic Innovation?", Third World Quarterly,Vol.21 (4), pp. 637-654
- 16. Geroski, P. A. (1995), 'What do we know about entry?' Inter-national Journal of Industrial Organisation, Vol 13, No 4, pp 421–440.
- 17. Global Climate Risk Index (2012), Who suffers most from extreme weather events in 2010 and 1991-2010.
- 18. GlobalFoodSecurityIndex,2017,https://foodsecurityindex.eiu.com/Country/Details#Pakistan Retrieved on 25<sup>th</sup> July 2018.

- 19. Harding, R. (2004), 'Social enterprise: the new economic engine', Business Strategy Review, winter, pp 40–43.
- 20. Heatwave death toll in Karachi reaches 1260, ARY News. 30 June 2015. Retrieved 19 August 2018.
- Hibbert, S. A., Hogg, G. and Quinn, T. (2002), "Consumer Response to Social Entrepreneurship: The Case of the Big Issue in Scotland", International Journal of Nonprofit & Voluntary Sector Marketing, Vol. 7 (3), pp. 288 – 301
- 22. http://www.seedventures.org/Opportunity Pakistan.pdf
- 23. InStock. (2018). InStock Website. Retrieved from https://www.instock.nl/en/
- 24. Johnson, S. (2000). Literature review on social entrepreneurship.
- Lepoutre, J., Justo, R., Terjesen, S., Bosma, N. (2013). Designing a global standardized methodology for measuring social entrepreneurship activity: The global entrepreneurship monitor social entrepreneurship study. Small Business Economics, 40(3), 693–714
- 26. McKinsey and Company (2016), Scaling the impact of the social enterprise sector.
- 27. Memon, N. A. (2016). Fast food: 2nd largest industry in Pakistan. Pakistan Food Journal.
- Miller, T. L., Grimes, M. G., McMullen, J. S., Vogus, T. J. (2012). Venturing for others with heart and head: How compassion encourages social entrepreneurship. Academy of Management Review, 37(4), 616–640
- 29. Mourad, M., NRDC (2015). "France Moves Toward a National Policy Against Food Waste". Available at: https://www.nrdc.org/sites/default/files/france-food-waste-policy-report.pdf
- 30. Muhammad Yunus, Bertrand Moingeon, Laurence Lehmann-Ortega, Building Social Business Models: Lessons from the Grameen Experience, Long Range Planning,
- Musa Aamir, Huzaifa Ahmad, Qasim Javaid & Syed M. Hasan (2018) Waste Not, Want Not: A Case Study on Food Waste in Restaurants of Lahore, Pakistan, Journal of Food Products Marketing, 24:5, 591-610
- 32. Netherlands' food waste still too high at 2 billion kg per year. (2016, October 25). Retrieved March 21, 2018, from https://nltimes.nl/2016/08/30/netherlands-food-waste-still-high-2-billion-kg-per-year
- 33. Nicholls, A. (2006) Introduction In A., Nicholls, Social entrepreneurship: New models of sustainable change (pp.1-35). New York: Oxford University Press.
- 34. Oatley, N. (1999). Developing the social economy. Local Economy, 13(4), 489–99.
- 35. Pakistan Demographic and Health Survey 2012-13
- 36. Pakistan Economic Survey, 2016-17.
- 37. Poutziouris, P. (2003), 'The strategic orientation of owner-managers of small ventures: evidence from the UK small business economy', International Journal of Entrepreneurial Behaviour & Research, Vol 9, No 5, pp 185–214.

- Ryan, W. P. (1999), 'The new landscape for nonprofits', Harvard Business Review, January– February, pp 127–136
- 39. Salamon, L.M., & Anheier, H.K. (1992). In search of the non-profit sector. I: The question of definitions. International Journal of Voluntary and Nonprofit Organizations, 3(2), 125–51.
- 40. Schumpeter, Joseph A. (1934). The theory of Economic Development. Cambridge: Harvard University Press
- 41. SEED Ventures and i-genius. (2013) 'Opportunity Pakistan: Exploring Untapped Potential'. Retrieved from
- 42. Social Entrepreneurs: Who Are They? Daytona Beach News-Journal (Daytona Beach, Florida). May 20, 2007.
- 43. Soethoudt, H. and H. Bos-Brouwers, Monitor Voedselverspilling; Update 2009-2012, 2014, Wageningen UR.
- 44. Stevenson, Howard and Jarillo, J. Carlos, A Paradigm of Entrepreneurship: Entrepreneurial Management (1990). Strategic Management Journal, Vol. 11, p. 17-27 1990.
- 45. Successful enterprise navigates the complexity of collaboration, PWC, 2016.
- 46. Talbot C, Tregilga P and Harrison K (2002) Social Enterprise in Australia: An Introductory Handbook. Adelaide: Adelaide City Mission.
- 47. The Guardian (2016). "French law forbids food waste by supermarkets". Available at: https://www.theguardian.com/world/2016/feb/04/french-law-forbids-foodwaste-by-supermarkets
- 48. The problem of food waste. (n.d.). Retrieved March 21, 2018, from https://olioex.com/foodwaste/the-problem-of-food-waste/
- 49. Thompson, J., Doherty, B. (2006). The diverse world of social enterprise: A collection of social enterprise stories. International Journal of Social Economics, 33(5–6), 361–375
- 50. Trivedi, C. (2010a). Towards a social ecological framework for social entrepreneurship. The Journal of Entrepreneurship, 19(1), 63–80.
- 51. United Nations Environment Programme, Report on waste management in Pakistan, June 2016
- 52. Waldron, T. L., Fisher, G., Pfarrer, M. (2016). How social entrepreneurs facilitate the adoption of new industry practices. Journal of Management Studies, 53(5), 821–845.
- 53. Walker, E., and Brown, A. (2004), 'What success factors are important to small business owners?' International Small Business Journal, Vol 22, No 6, pp 577–594
- 54. World Resources Institute. (2016). Food lost & waste protocol accounting and reporting standard (FLW standard).