

The Good Samaritan: Fighting Food Waste and Food Insecurity by Encouraging Donation in Argentina

By

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Author's declaration

I, the undersigned Estefanía Rubiniak hereby declare that I am the sole author of this thesis. To the best of my knowledge this thesis contains no material previously published by any other person except where proper acknowledgement has been made. This thesis contains no material which has been accepted as part of the requirements of any other academic degree or non-degree program, in English or in any other language.

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Abstract

Every year, 1.3 billion metric tons of food is lost or wasted in the world. In Argentina, it is estimated that 16 million tons of food are wasted each year representing more than 87 million meals per day in a country where almost 32% of the population lives in poverty.

According to the Banco de Alimentos de Buenos Aires (Food Bank), an Argentine non-profit organization, for every kilo of food wasted food, three people that are food insecure could eat. While food donation is one of the most effective initiatives to reduce food waste and food insecurity, liability issues have prevented donors from donating food. Many potential donors believe they will have legal problems for providing food that might affect people's health, even if the food is delivered in perfect conditions and complies with safety standards. This thesis aimed to answer the question of whether limiting liability of food donors encourages food donations, in order to make a case for the reincorporation of article 9 of the *DONAL* law (Law 25.989) in Argentina. Enacted in 2004, the law establishes a Special Regime for the Donation of Foods in good Condition, which aims to help meet the food needs of the economically most vulnerable population. Yet, Article 9 of the law that exempted donors from responsibility for food once delivered to beneficiaries under the conditions required by the Argentine Food Code was vetoed and this decision has discouraged donations in the country.

The data presented in this thesis shows that food donation helps reduce food insecurity and food waste by rescuing tons of food each year and delivering meals to millions in need, hence the *DONAL* law should be amended to encourage donations.

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Table of Contents

| | |
|-----------------------------------------------------------------|-----------------|
| Table of Contents | <i>i</i> |
| Introduction | 1 |
| 1. Literature review | 5 |
| 1.1 Food loss and waste | 5 |
| 1.2 Food waste and food insecurity in Argentina | 7 |
| 1.3 Food donation as a mean to reduce hunger | 13 |
| 2. Methodology..... | 16 |
| 2.1 Research Method..... | 16 |
| 2.2 Case selection..... | 17 |
| 2.3 Data collection | 17 |
| 3. Analysis | 19 |
| 3.1 Legal Frameworks | 19 |
| 3.1.1 DONAL Law in Argentina..... | 19 |
| 3.1.2 USA case study: The Bill Emerson Good Samaritan Act | 21 |
| 3.2 Congress Debate | 23 |
| 3.3 Interviews | 30 |
| Conclusion..... | 37 |
| Appendix 1..... | 39 |
| Reference list..... | 47 |

List of figures and tables

Figure 1: Per capita food losses and waste, at consumption and pre-consumptions stages, in different regions (Source: FAO, 2017).

Table 1: Arguments made in favor and against the law by Argentine Congressman (Source: Parlamentario, 2018).

Table 2: Benefits from recovery solutions to food waste/ Donations (Source: ReFED).

Table 3: Meals recovered (in billions) and food rescued (in billions of pounds) in the United States (Source: Feeding America).

Figure 2: Kilograms of food received by Banco de Alimentos de Buenos Aires from 2013 and 2017 (Source: Banco de Alimentos de Buenos Aires).

Table 4: Donors' interviews.

List of Abbreviations

| | |
|-------|-----------------------------------------------------------------------|
| BdA | Banco de Alimentos |
| EPA | U.S. Environmental Protection Agency |
| EU | European Union |
| FAO | Food and Agriculture Organization of the United Nations |
| G20 | Group of 20 |
| GHG | Green House Gas |
| IICA | Inter-American Institute for Cooperation on Agriculture |
| PDA | Programa Nacional de Reducción de Pérdidas y Desperdicio de Alimentos |
| RedBA | Red Argentina de Bancos de Alimentos |
| SDG | Sustainable Development Goal |
| UN | United Nations |
| WTO | World Trade Organization |

Introduction

Food loss and waste management is an important issue with the potential to save millions from going hungry. “Food that gets spilled or spoilt before it reaches its final product or retail stage is called food loss”, while “food that is fit for human consumption but is not consumed because it is left to spoil or discarded by retailers or consumers is called food waste”(FAO 2014).

Every year, 1.3 billion metric tons of food is lost or wasted in the world (FAO 2017). This food is never consumed because it is discarded, degraded, or consumed by pests. Indeed, food loss and waste management is currently being addressed as a part of the 2030 Agenda for Sustainable Development, under the Sustainable Development Goal 12 (SDG) “responsible consumption and production”. Target 12.3 of SDG 12 aims to reduce food loss and waste per capita in the world by half by 2030. Moreover, reaching this target would have a spillover effect and contribute to achieve SDG number 2 “End hunger”, by channeling the food that would have gone wasted to the food insecure fraction of the population (UNDP 2015).

Agriculture has reached high productivity gains in many parts of the world. However, one in seven people lack access to food or is chronically malnourished (Foley, J.A. et al. 2011). Lack of access to food is one of the problems causing food insecurity, population growth and the need to feed many more people in the future (expected 9 billion people by 2050) will require to roughly double the current rates of food production to keep up with food demand as well as diet changes, especially meat consumption (Foley, J.A. et

al. 2011). At the same time, many agricultural practices represent a threat to environmental issues such as climate change, biodiversity loss, and degradation of land and freshwater. Hence, increasing agricultural production will impose a tremendous pressure on the environment. Meeting society's growing need for food and reducing agriculture's environmental impact is one of the greatest challenges faced by the world today. This makes it imperative to avoid wasting the food that has already been produced.

While food security is a global issue, local solutions are required to reduce food loss and manage waste as many such problems are context dependent and can be best tackled by using local knowledge and resources. This thesis will analyze the case of Argentina to understand whether creating a more appropriate legal framework would help reduce food loss and waste as well as food insecurity by encouraging food donations. In particular, the thesis will assess whether limiting liability of food donors in Argentina increases food donations thereby reducing food waste and food insecurity in the country.

According to the *Ministerio de Agroindustria* of Argentina (Ministry of Agro-industry), it is estimated that each year 16 million tons of food are wasted in the country, representing more than 87 million meals per day (TELAM 2018) in a country with a population of more than 40 million. In order to achieve the goal of halving food waste per capita in retail and consumer markets by 2030, the *Programa Nacional de Reducción de Pérdidas y Desperdicio de Alimentos* (National Program of Reduction of Loss and Waste of Food, (PDA) by its acronym in Spanish) was implemented in Argentina in October 2017. Created in 2015, the program carries out actions that contribute to reducing food loss and

waste, fundamentally through awareness campaigns about the causes of these problems in the different stages of the food chain, and how to mitigate them (Ministerio de Agroindustria 2017).

In a country where almost 32% of the population lives in poverty, social organizations, such as food banks, work to rescue food suitable for consumption before it is wasted, to distribute it those facing food insecurity. *Banco de Alimentos de Buenos Aires* (Food Bank of Buenos Aires) estimates that every kilo of wasted food could feed three people that are food insecure (Banco de Alimentos de Buenos Aires 2017). In order to convince more donors to donate food, *Red Argentina de Bancos de Alimentos* (Argentine Network of Food Banks, RedBA by its acronym in Spanish) is promoting the reform of the *DONAL* Law (Law 25.989). Enacted in 2004, the law establishes a Special Regime for the Donation of Food in good condition, which will aim to help meet the food needs of the most economically vulnerable population. Article 9 of the law that exempted donors from responsibility for the quality and safety of the food once delivered to beneficiaries under the conditions required by the Argentine Food Code was vetoed in 2004, a decision that discourages donations (Congreso de la República Argentina 2004).

This thesis is a first attempt to understand the impact that the incorporation of article 9 in the *DONAL* law would have in the donation of food in the Argentina. To do so, it will look into the evolution of food donation activities in Argentina by collecting data from interviews with food banks personnel, supermarkets, restaurants and statistical data when available on the amount of donations from 2013 until 2017.

As a benchmark and to deepen the analysis, the successful US case on the Bill Emerson Good Samaritan Food Donation act will be included as a case study. This case will be used to draw key conclusions and lessons as to the extent to which donations may be affected by food donation laws, and to see if limiting liability of food donors encourages donations that not only help reducing food waste, but also help hungry people get a meal.

1. Literature review

1.1 Food loss and waste

According to the Food and Agriculture Organization (FAO), food loss and waste indicates a reduction of food intended for human consumption in every stage of the supply chain, from production to consumption. Food loss and waste are two sides of the same coin. Gustavsson, Cederberg, and Sonesson (2011) define both terms. On the one hand, the term food loss refers to the first and middle stages of the supply chain (production, processing and logistics), which takes place when the products have not yet reached consumers. On the other hand, the term food waste is used to describe what happens at the consumption stage, when food is discarded because people choose to, or because it was left to degenerate carelessly, or because it does not comply with food safety standards to be sold.

Low-income countries experience higher food loss, mostly because of the lack of investment in infrastructure, technology, and the absence of storage facilities; medium- and high-income countries experience higher food waste, given the amount of quality, aesthetics and labelling standards they need to comply with, the lack of awareness campaigns and an appropriate legal framework to ban food waste and encourage food donation. Moreover, food loss and waste affect the sustainability of food systems by reducing availability of food, distorting prices, and affecting the environment due to the indiscriminate use of natural resources (Gustavsson, Cederberg, and Sonesson 2011).

Figure 1 shows the amount of food loss and waste at the different stages, in different regions, by kilograms per year. Translated into U.S. dollars, it represents approximately US\$ 680 billion in medium- and high-income countries and US\$ 310 billion in developing countries (FAO 2017).

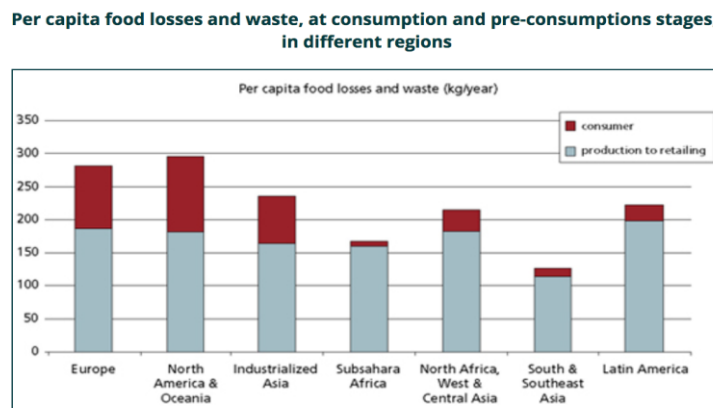


Figure 1: Per capita food losses and waste, at consumption and pre- consumptions stages, in different regions. (Source: FAO, 2017)

Currently, 1.3 billion tons of food are lost or wasted worldwide, which represents one-third of the food produced globally for human consumption. Estimations show that if just one-fourth of that food is saved, it would be enough to feed the 870 million that suffer from hunger nowadays (FAO 2017).

Even though there have been many initiatives for reducing food loss and waste throughout the years, it is only recently that the matter has raised global attention. The importance of this issue is reflected on the United Nations 2030 Agenda for Sustainable Development under Sustainable Development Goal (SDG) number 12 “responsible

consumption and production”, target 12.3 that aims to reduce food loss and waste per capita in the world by half by 2030 (UNDP 2015).

1.2 Food waste and food insecurity in Argentina

Current estimations by the Ministry of Agro-Industry show that Argentina wastes 16 million tons of food per year, which equals 38 kilograms per capita or more than 87 million meals per day (TELAM 2018).

In order to tackle the problem, and as a commitment to achieve target 12.3, the PDA was implemented in October 2017. Launched in 2015 by the Ministry of Agro-Industry, the PDA’s central objective is to coordinate, propose and implement public policies that address the causes and effects of food loss and waste, in partnership with representatives of the public and private sector, civil society and international organizations (Ministerio de Agricultura, Ganadería y Pesca- 2015).

The partnership coordinated for the implementation of the PDA resulted in a new nationwide network composed of 64 members from different sectors of the agri-food system all over the country. Its main objectives include: 1) to achieve more efficient agri-food systems; 2) to make information available about which policies, programs and projects to reduce food loss and waste are being carried out; 3) and to generate spaces for dialogue and exchange of proposals among the different actors involved. Moreover, this national network is working to introduce an annual work plan to establish priority actions deemed necessary for each sector and to provide assistance in the analysis and

evaluation of projects. In this context, the first meeting of the Network was held in October 2017 with the participation of the Ministry of Agro-Industry, the Inter-American Institute for Cooperation on Agriculture (IICA) and the Permanent Representation of Argentina to the FAO (Ministerio de Agroindustria 2017).

Moreover, the *Consejo Nacional de Coordinación de Políticas Sociales* (National Council for the Coordination of Social Policies) designated the Ministry of Agro-Industry to coordinate actions to achieve the SDG target 12.3, and for being responsible for generating reports on progress and compliance. In order to be able to create and promote policies for the reduction in loss and waste of food, and given the lack of data on the issue, the Ministry attempted to establish the main causes of the problem by analyzing each stage of the food system. This complex exercise revealed that the country's biggest problem along the food cycle is that of food loss occurring in the first stages of the system which include primary production, post-harvest and storage, processing, packaging and distribution (Ministerio de Agroindustria 2016).

In order to be able to calculate food loss and waste in the country, the first step of the exercise was to define a universe of sectors and products of vegetable and animal origin that were representative of the agri-food activity of the country. The products and sectors selected were Bovine, Avian and Porcine meats; Cereals: Wheat and Corn; Fruits: Pears and Apples, Stone Fruits and Citrus Fruits; Dairy: Milk; Oilseeds: Soybean and Sunflower; Roots and tubers: Potato. The exercise estimated a total volume of 16 million tons of food loss and waste, equivalent to 12.5% of the agri-food production. That total represents

approximately 14.5 million tons of losses (11.3%) and 1.5 million tons of waste (1.2%). The losses explain 90% of the total estimated food loss and waste in the country (Rivas, Alejandro et al. 2016).

By the end of the year, the Ministry of Agro-Industry published its 2017 Management Report, to show the progress made in the PDA during 2017. Its findings include:

- In terms of coordination, 8 new members joined the National Network;
- 2,117 municipalities received a comprehensive guide with the best practices for cities to reduce food loss and waste: *¿Qué pueden hacer las ciudades argentinas para reducir la pérdida y el desperdicio de alimentos?* (What can Argentine cities do to reduce food loss and waste?). Developed by the World Bank Buenos Aires for the Ministry of Agro-industry, the guide is a proposal for local actions on food security and environmental and waste management, drawing from the experience on decreasing food waste in the cities of *Mar del Plata*, *Salta* and *Rosario*. This publication is a proposal for local action building on local experiences in order to promote food security and environmental and waste management in the context of a global problem;
- The Ministry carried out Capacity Building Workshop in the *Metodologías de Evaluación de Cadenas Agro alimentarias* (Methodology of Evaluation of Agri-Food Chains, MECA, by its acronyms in Spanish). The workshop was aimed at identifying problems and elaborating projects to decrease food loss, and it included

the participation of professionals and technicians from different government agencies;

- Two bills were drafted and presented in Congress. Both bills obtained half a sanction (in Argentina, the passing of a law requires the sanction of both lower and upper chambers of Congress) and are expected to be approved during 2018. The first bill proposes to institute September 29 as the "National Day of Food Loss and Waste Reduction". Its objective is to raise awareness about the problem and the actions and policies that can be taken to address it. The second bill, drafted in cooperation with the *Red Argentina de Bancos de Alimentos*, was presented for the incorporation of article 9 to Law 25.989, *DONAL* Law, in order to boost the amount of food donation by companies, producers and other social actors linked to the food chain. The food products contemplated are the ones that have lost commercial value but are fit for human consumption and comply with the Argentine Food Code (Subsecretaría de Alimentos y Bebidas, Secretaría de Alimentos y Bioeconomía 2017).

Argentina's commitment to tackling food loss and waste is not limited to the national level. The country is also addressing this issue at a regional level. In this context, Argentina is working with its partners at MERCOSUR, a regional trade bloc including Brazil, Paraguay, Venezuela and Uruguay, on policies to reduce food loss and waste, especially on awareness campaigns for the general public (Ministerio de Producción 2017). At the international level, and in addition to its commitment to the SDGs, Argentina made food security one of its priorities for its 2018 presidency of the Group of 20 (G20)

(G20 Argentina 2017). Because of economic structure, its leadership as a food producer, and its policy history in relation to food security matters, Argentina is uniquely positioned to address this problem.

According to the Food and Agriculture Organization (FAO), “food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food which meets their dietary needs and food preferences for an active and healthy life” (FAO 2003). There are three key elements to food security: food availability, food access and food utilization. In other words, food has to be available, people must be able to obtain the necessary quantities and the food has to be nutritious.

Chronic hunger or prevalence of undernourishment, “is an estimate of the proportion of the population whose habitual food consumption is insufficient to provide the dietary energy levels that are required to maintain a normal active and healthy life”(FAO 2015).

The latest estimations show that world hunger is on the rise, affecting 11 percent of the world population. After declining for more than 10 years, chronic hunger increased from 777 million people in 2015, to 815 million in 2016. Moreover, global population is projected to increase to approximately 9 billion people by 2050 (FAO et al. 2017).

Argentina is one of the main producers of food in the world. In 2016, Argentina was the 6th world exporter of food (WTO 2017), yet there are 6 million people suffering from hunger in the country (Salvia, Agustín editor 2016). In Argentina, food security is met in almost

all its requirements: food sufficiency, stability in production and sustainability (Sanchís et al. 2017). Even though Argentina has the capacity to produce enough food to feed its entire population, the main problem is that people cannot afford it. Without the economic ability to access these resources, hunger will continue to be a defining feature of extreme poverty in Argentina (Fiszbein and Giovagnoli 2004).

In addition, Argentina has adequately identified and tried to address food insecurity with targeted policies for almost a century. Throughout history governments have implemented a variety of public policies to try to solve the food security issue. At the end of the 1930s, for example, the State undertook the responsibility for designing and implementing food programs. To do so, it created the *Instituto Nacional de Nutrición* (National Institute of Nutrition). The Institute worked as an advisory body for municipal and national food authorities on how to plan hospitals' food and children's dining rooms supplies, among other tasks (López and Poy 2012).

Likewise, Argentina was the first country in Latin America to have a National Program of Food Nutrition created by law. In this context and after the 2001 crisis in which more than half the population was left below the poverty line, and thus lacked adequate access to food, the government launched the *Plan Nacional de Seguridad Alimentaria y Nutricional* (National Plan of Food and Nutritional Security in Argentina, PNSA) in 2003 (Gonzalez 2013). The Plan was created to comply with the non-transferable duty of the State to guarantee the right to food for all its citizens, and covering the nutritional requirements of those most vulnerable: children up to 14 years of age, pregnant women, the disabled and the elderly from 70 years of age living in poverty (Congreso de la Nación Argentina 2002).

Within this program, some of the actions currently in place include:

- Distribution of food packages to households: 1.8 million food meals are delivered each year to households under food insecurity, benefiting 3.8 million people.
- Food kitchens in schools and local communities: Almost 15,000 kitchens receive subsidies to feed four million children's breakfast and lunch every day.
- The Maternal Infant Plan: Benefiting more than four million people by delivering 17,000 tons of fortified milk (Aulicina, Carolina and Díaz Langou, Gala 2012).

One interesting feature of the plan is that it also provides financial assistance for food programs that are designed and implemented at the subnational level (provinces), some of which were already working when the plan was launched. This reinforces the view that food insecurity is an issue that must be tackled at every level and that policy design must always consider local contexts. In the case of Argentina, the validation of sub-national programs is also a reflection of the regional inequities in terms of wealth, food production and distribution, food access and food costs, incidence of food insecurity and malnutrition, among others.

1.3 Food donation as a mean to reduce hunger

Throughout history, people have been donating food to those in need. According to Felicitas Schneider's 2013 historical overview on food donation, there are documents from the 13th century on that show the different ways by which food was donated.

If the purpose of food is to nourish people, food donation appears to be the best way to help those in need. Channeled through organizations like food banks, food that is fit for

human consumption but has been discarded due to labeling or other problems can be used to fight hunger. In spite of that, food donation is not very common because of the fear of the legal problems companies might face once they have donated the food (Richter and Bokelmann 2016).

Food donation reduces food waste by decreasing the amount of food that goes into landfill. It also generates economic benefits for donors, however often actual or potential donors lack information (Giuseppe, Mario, and Cinzia 2014). This is why the work carried out by food banks is also focused on convincing potential donors by informing them about the different incentives that already exist and about the existence (or lack thereof) of a legal framework that encourages donations and protects both donors and receivers. Legislation on food product safety and hygiene is one of the main challenges when it comes to food donation (Schneider and Lebersorger 2012).

In order to incentivize donations, there are numerous initiatives that governments can implement including tax exemption for donors and awareness campaigns for the general public (Mejia, Gonzalo et al. 2015).

Organizations such as food banks contribute to the process by collecting, selecting and distributing the food donated, among other things.

Food banks are non- profit organizations working towards reducing hunger through food donation. They recover food that was wasted but is still fit for human consumption and they distribute it to different organizations to feed those in need. The Global Food Banking Network connects over 500 food banks in the world, with the purpose of helping them by

expanding their operations to reach to more people (The Global FoodBanking Network 2017).

Food banks in Argentina were first created in the early 2000s as a direct consequence of the financial crisis that erupted in the country in 2001 and that more than doubled poverty rates. These organizations work towards reducing hunger, malnutrition and food waste in the country, by rescuing food fit for human consumption that has been discarded and can no longer be commercialized for different reasons such as: packaging problems, short expiration date, etc. Food banks store the products, classify them and distribute them among communal organizations, to help those in need (Banco de Alimentos de Buenos Aires 2016). There are currently 15 food banks throughout the country and three more being developed.

Created in 2003, the *Red Argentina de Bancos de Alimentos* (Argentine Network of Food Banks) is a non-profit civil association, that groups 15 Food banks, 3 Food banks in formation, 2 adherent organizations and 2 Food banks initiatives, with the aim of working together towards reducing hunger, malnutrition and promoting nutritional education in the country (Red Argentina de Bancos de Alimentos 2005). RedBA is a member of the Global Food Banking Network.

According to RedBA, during 2017, 9.4 million kilograms of food were rescued, 28.2 million meals were distributed, and 332.619 people were benefited by it.

2. Methodology

2.1 Research Method

This thesis aimed to answer the question of whether limiting liability of food donors encourages food donations.

Qualitative research was conducted in the form of three semi-structured interviews to different stakeholders: donors and food bank. Semi-structured interview format was chosen to allow the interviewees to elaborate on their answers, and most importantly to add any information that they considered relevant to the topic.

The interview questions (Appendix 1) for the donors focused on the incentives for donating, their procedures, and their awareness and understanding of the law and its implications. The donors interviewed included a representative from Carrefour Argentina, a leading supermarket chain in the country, and a representative from Tinto y Soda, a restaurant in the province of Buenos Aires.

The interview questions (Appendix 1) for the food bank focused on its donation registry, its procedures and whether they are in favor of the modifying the law and why. The interviewee was a representative from *Banco de Alimentos de Buenos Aires* (Buenos Aires Food Bank). The number of interviews was limited due to the lack of response from the organizations contacted.

2.2 Case selection

United States was chosen as a case study because it was the first country to enact a Good Samaritan Donation law. Good Samaritan donation laws aim to encourage donations by limiting the liability of the donors. In every case, the food donated must comply with each country's food code and must be donated in good faith. In addition, I used literature review on the Good Samaritan law history, the many debates on the law during the years, and especially the lawmakers' arguments in favor and against the law. The latter was also used to compare them with Argentina's lawmakers' arguments.

2.3 Data collection

In order to evaluate the impact that food donation has on reducing food waste, data collected from ReFED was used. ReFED is a multi-stakeholder nonprofit, working in partnership with those committed to reducing food waste in the United States. Using a data-driven approach, ReFED works to come up with the most cost-effective methods to reduce food waste ("ReFED |" n.d.).

To evaluate the impact that food donation has on reducing food insecurity and the impact that it has on reducing food waste, annual reports from Feeding America in the United States, and data gathered from an interview with a representative of *Banco de Alimentos de Buenos Aires*, were used to show how kilograms of food were rescued and donated and how many meals it represented in the period 2013-2017.

2.3 Limitations

The fact that there are no proven effects of the Bill Emerson Good Samaritan Act in the amount of food donations since its enactment, and that it remains uncontested in court, makes it difficult to argue in support of food donation.

It is also not possible to evaluate whether there is a difference between the amount of food donated when there is a law that limits the liability of the donor and when there is not one by comparing the numbers on the amount of food donated in Argentina and the numbers in the United States. There are many variables (including food prices, productivity, tax laws, economic growth, awareness campaigns about social responsibility, etc.) that are not included here and that have an impact on food donation in both countries. Moreover, both countries have differences in the amount of population, in the size of their economies, etc.

Data showing how donations have changed over time in the United States could help make the case. However, even in the United States where there are more advanced systems for data collection and historical information on food donations is not that simple as shown by the Environmental Protection Agency (EPA 2013).

3. Analysis

3.1 Legal Frameworks

3.1.1 DONAL Law in Argentina

Law 25.989, known as DONAL Law, was enacted in 2004. The law created a Special Regime for the Donation of Foods in good Condition, aiming to encourage donations to help the economically most vulnerable population. It established that the food products subject to donation should comply with the bromatological and safety requirements in the Argentine Food Code,¹ that any person may donate food products in good conditions to public or private institutions of public good, legally constituted in the country or to human groups or individuals, to be equally distributed among families or population sectors in need; that the donated products must be distributed with the necessary speed in order to prevent the decomposition or expiration of the food and to alleviate the urgent needs of the recipients in the shortest possible time (Congreso de la República Argentina 2004).

Article 9 of the law, which exempts donors from liability after they have donated the food, became a point of controversy. This article reads: **“Once the donated items are donated under the conditions required by article 2, the donor is released from liability for any damages that may occur with them or the risk thereof, unless otherwise because of facts or omissions that degenerate into crimes of criminal law”** (Congreso de la República Argentina 2004).

¹ Código Alimentario Argentino: http://www.anmat.gov.ar/alimentos/normativas_alimentos_caa.asp

Even though, the law establishes that the food must be donated under the conditions required by the Argentine Food Code (article 2), article 9 was vetoed.

In 2016, *Red Argentina de Banco de Alimentos* (Argentine Network of Food Banks, RedBA by its acronym in Spanish) decided to get involved on the issue and promoted the modification of the current law in order to achieve a regulatory framework that will encourage donation and ensure legal protection for the donors. Its first step was promoting the reincorporation of art. 9. Through lobbying, they received the support from the Ministry of Agro-Industry and the Ministry of Social Development. Moreover, they launched a campaign to collect signatures from the general public to be able to modify the law (at least 1,5% of the citizens listed in the voter registry, approximately 500,000 signatures). The new version of the article aims to limit the responsibility of the donor once the food is delivered and establishes that it will only be responsible if:

- (i) it has not observed the conditions of apparent safety and health legally required for the donation of food;**
- (ii) had not acted in good faith;**
- (iii) has not prevented the foreseeable damage.** According to RedBA, the incorporation of the article will allow to rescue at least 15% of all the food that is thrown away (Red Argentina de Bancos de Alimentos 2017a).

As a result of the above-mentioned efforts, during the year 2017, there were two attempts to debate the law in Congress. The first one was a bill introduced in the Chamber of

Deputies by Representative Patricia Giménez, but it did not reach consensus. The second one was presented in the Chamber of Senators by Senator Miguel Ángel Pichetto, and this time it obtained a half sanction. Nevertheless, it could not be approved due to the lack of political agreement in the Chamber of Deputies (Parlamentario 2017).

In April 2018, the law was debated again in a joint session meeting of the *Comisión de Legislación General y Comisión de Presupuesto y Tesoro de la Cámara de Diputados* (General Legislation and Budget and Treasury Commissions of the Chamber of Deputies). This time the bill discussed was the one drafted by the Ministry of Agro-Industry and the RedBA, with the incorporation of article 9. Currently, these two commissions are working on a proposal to improve the wording of the text by incorporating aspects that are not contemplated, such as what happens with products with an expiration date, or faulty products that do not affect the safety requirements such as defects in labeling, etc.

3.1.2 USA case study: The Bill Emerson Good Samaritan Act

The need to have a regulatory framework for food donation in the United States dates back to the 1970s, and so does the discussion on the liability of the donors. In 1977, California state Senator John A. Nejedly while inquiring grocery stores about donating spare food, found out that given the fear of being exposed to liability after the food was donated, stores preferred to dump it. That same year the First Good Samaritan Donation law was enacted in California (Morenoff 2002).

Every debate on food donation revolved around two main issues, the fact that food donation could help hunger relief efforts and the concern of the potential donors because

of the lack of a legal framework to protect them. Throughout the many debates and hearings in every state of the country where the law was discussed, witnesses and Food banks studies on potential donors were presented as evidence of the fear of liability as the main reason for refusing to donate (Morenoff 2002).

Every state had their own Good Samaritan food donation law by 1990. As Morenoff calls it, it was a “fifty-state patchwork”, and that meant that the 50 state laws had many differences, mainly on the extent of the protection of the law. However, “each state concluded that the social benefits of feeding the hungry people did indeed outweigh the ability of people to sue for any injury incurred in consuming food donated to charity” (Morenoff 2002).

Nevertheless, it was not until 1996 when the Bill Emerson Good Samaritan Act was enacted that the effort to combat hunger by food donation became a federal reality. The fact that every state protected donors in different ways, discourage food donations from companies that had a national presence in the country. The new federal law “established a national liability floor of gross negligence that protected both donors and receivers against civil and criminal liability” (Morenoff 2002). “The term ‘gross negligence’ means a voluntary and conscious conduct (including a failure to act) by a person who, at the time of the conduct, knew that the conduct was likely to be harmful to the health or well-being of another person” (United States Congress 1996).

Following the United States, many other countries such as Australia, Canada and the European Union (EU) have enacted Good Samaritan laws.

In 2017, twenty-one years after the enactment of the Bill Emerson Good Samaritan Food Donation Act, Congresswoman Marcia L. Fudge introduced in the House of Representatives a bipartisan bill to amend it in order to increase food donation by limiting more the liability of the donors (Center for Health Law and Policy Innovation, Harvard Law School 2017).

The new bill adds liability protections to donations including food:

- “that is mislabeled in a manner that is not related to safety and safety-related labeling standards and regulations;
- meets safety and safety-related labeling standards and regulations but is past the date label;
- for which the recipient is charged a "good Samaritan reduced" price that is no greater than the cost of handling, administering, and distributing the product; or
- that is donated directly to a needy individual by a retail grocer, wholesaler, agricultural producer, restaurant, caterer, school food authority, or institution of higher education” (Fudge 2017).

These new amendments are expected to encourage and increase donations in order to reduce food waste and food insecurity.

3.2 Congress Debate

One of the arguments in favor of the Good Samaritan Law is based on the fact that there are countries that have already implemented the law such as Australia, Canada, the EU

and the United States. These countries have enacted laws that limit the liability of the donors that donate in good faith, excepts for acts of gross negligence or intentional misconduct, which justifies the argument that it does not take away all the responsibility of the donor with certain limitations.

Table 2 summarizes the arguments made in favor and against the amendment of law 25.989, *DONAL* law, that were exposed by Argentine Representatives, in April 2018, during a debate in a joint session meeting of the *Comisión de Legislación General y Comisión de Presupuesto y Tesoro de la Cámara de Diputados* (General Legislation and Budget and Treasury Commissions of the Chamber of Deputies). The information was recorded by *Parlamentario*, a digital newspaper containing information on congressional activities, such as legislation, debates and key topics under analysis.

| In favor | Against |
|-------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| It is in line with international standards in the matter; | What is the meaning of loss and waste in the law? What about the expiration date on the products? |
| It does not take away all the responsibility of the donor; | Food can only be donated to organizations, not to private people; |
| The products donated are always suitable products that comply with the bromatological and safety requirements in the Argentine Food Code; | There are doubts about the bromatological assistance; |
| The law encourages donation, reduces food waste and helps vulnerable people. | Logistical problems. |

Table 2: Arguments made in favor and against the law by Argentine Congressman

(Source: Parlamentario 2018)

The donated products have to comply with the quality and safety standards contemplated in Argentine Food Code and are reinforced by the law. This fact rejects the arguments against the law that put in doubt the bromatological assistance that Food banks receive. Instead, in the case of the United States, the country is trying to expand the liability protection, proof that the law should go further on limiting liability, not backwards.

One of the drawbacks of such evaluations is that there is no robust statistical evidence that can be used to prove unequivocally the law encourages donation. In the case of Argentina, no survey or study has been conducted to show how many donors would

donate, or how many current donors would increase their donations in case the law would be amended and article 9 would be incorporated.

In the case of the United States, most of the hearings during the bill's debate included presentations by witnesses and surveys that showed that donors would rather throw food away than donate it because of the threat of liability (Morenoff 2002). There is a general misinformation on liability issues when donating.

Another argument against the incorporation of article 9 is that the law could further harm those in need and that food donations are made in good faith and need to comply with quality standards. In the case of the United States, there is no record of the Good Samaritan food donation law being contested in court for a problem with donated food (Morenoff 2002).

From a logistical perspective, Food banks have the infrastructure and necessary means to ensure the safety conditions of the food donations. Food banks have warehouses where store the food, refrigerators and freezers to maintain the cold chain, experts that receive the food and check it, and ISO certifications² which demonstrates that there are no logistical problems.

² (International Organization for Standardization 2014)

In the United States, some people believe that with the Good Samaritan Law the government does not assume the responsibility of feeding its hungry population. Furthermore, some argue that this limits the amount of hunger relief programs which also has a negative effect on the financial stability of those in need. “As a result, food insecure individuals must rely on non-governmental assistance, such as emergency food donation centers” (Cohen 2006).

3.3 Data collection

Table 3 shows the benefits from recovery solutions to food waste in the United States. The information was collected from ReFED dataset and filtered by donation solutions such as: donation tax incentives, standardized donation regulation, donation machine software, donation transportation, donation storage and handling, and donation liability education. It estimates the financial benefit for society, the diversion potential (waste averted), the amount of Green House Gas (GHG)³ emissions reduced, the amount of water saved, the amount of jobs created, and the amount of meals recovered, that each of these solutions can have.

³ GHG are gases that trap heat in the atmosphere, create a global warming effect and produce climate change (EPA, 2017)

| Type | Solution | Diversion Potential (K tons / year) | Economic Value per ton diverted | Economic Value (\$M / year) | Benefit (\$M / year) | Cost (\$M / year) | Total Capital Cost (\$M) | GHGs (K tons / year) | Meals Recovered (M meals / yr) | Water Conservation (B gals / yr) | Jobs Created |
|---------|----------------------------------|-------------------------------------------|---------------------------------------|-----------------------------------|-------------------------|----------------------|-----------------------------|----------------------------|--------------------------------------|----------------------------------------|-----------------|
| Recover | Donation Tax Incentives | 383 | \$1,230 | \$470 | \$1,103 | (\$633) | \$7,179 | 874 | 638 | 110 | |
| Recover | Standardized Donation Regulation | 193 | \$2,863 | \$553 | \$557 | (\$4) | \$48 | 714 | 322 | 93 | |
| Recover | Donation Matching Software | 150 | \$2,879 | \$432 | \$433 | (\$1) | \$10 | 555 | 250 | 72 | |
| Recover | Donation Transportation | 110 | \$2,294 | \$252 | \$317 | (\$65) | \$729 | 407 | 183 | 53 | 1604 |
| Recover | Donation Storage & Handling | 103 | \$2,366 | \$244 | \$297 | (\$53) | \$580 | 381 | 172 | 50 | 2145 |
| Recover | Donation Liability Education | 57 | \$2,810 | \$159 | \$164 | (\$4) | \$48 | 210 | 95 | 27 | |
| | Totals | 995 | | 2,110 | 2,871 | (\$761) | 8,593 | 3,140 | 1,659 | 406 | 3,749 |

Table 3: Benefits from recovery solutions to food waste/ Amount of benefit received per ton of reduction. (Source: ReFED)

As observed in table 3 the benefits that each donation solution could bring to the society are enormous. In every case the financial benefits outweigh the costs. Every solution helps reduce food waste by diverting thousands of tons per year and helps reduce food insecurity by recovering millions of meals per year. Each solution contributes to reduce the impact that GHG have in the environment. Moreover, some of them even have the potential to create jobs.

Focusing in Donation Liability Education, which is the most relevant solution for the purpose of this thesis, we can observe that while it does not have the highest impact in terms of annual economic value or diversion potential, it has one of the lowest costs and is therefore a simple solution that would result in significant improvements.

Table 4 shows the impact that food donation has on reducing food waste and food insecurity in the United States. The information was collected from Feeding America annual reports from 2013 to 2017.

Feeding America is the US largest domestic hunger-relief organization, comprised by a network of 200 Food banks across the country (Feeding America 2014).

| | 2017 | 2016 | 2015 | 2014 | 2013 |
|---------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Meals | 4.2 billion | 4 billion | 3.6 billion | 3.3 billion | 3.2 billion |
| Food rescued | 3.3 billion pounds | 2.8 billion pounds | 2.6 billion pounds | 2.5 billion pounds | 2.5 billion pounds |

Table 4: Meals recovered (in billions) and food rescued (in billions of pounds) in the United States
(Source: Feeding America)

As shown in Table 4, the amount of food rescued that translates into meals for those in need has increased every year, which also means that every year the amount of food that is prevented for being waste has also increased. The meals were provided to 46 million people across the country (Feeding America 2017), a clear proof that food donation help reduce food insecurity, as well as reduce food waste.

Figure 2 shows the amount of food received (in kilograms) by *Banco de Alimentos de Buenos Aires* from 2013 to 2017. The information was gathered from the interview conducted with a representative of the organization.

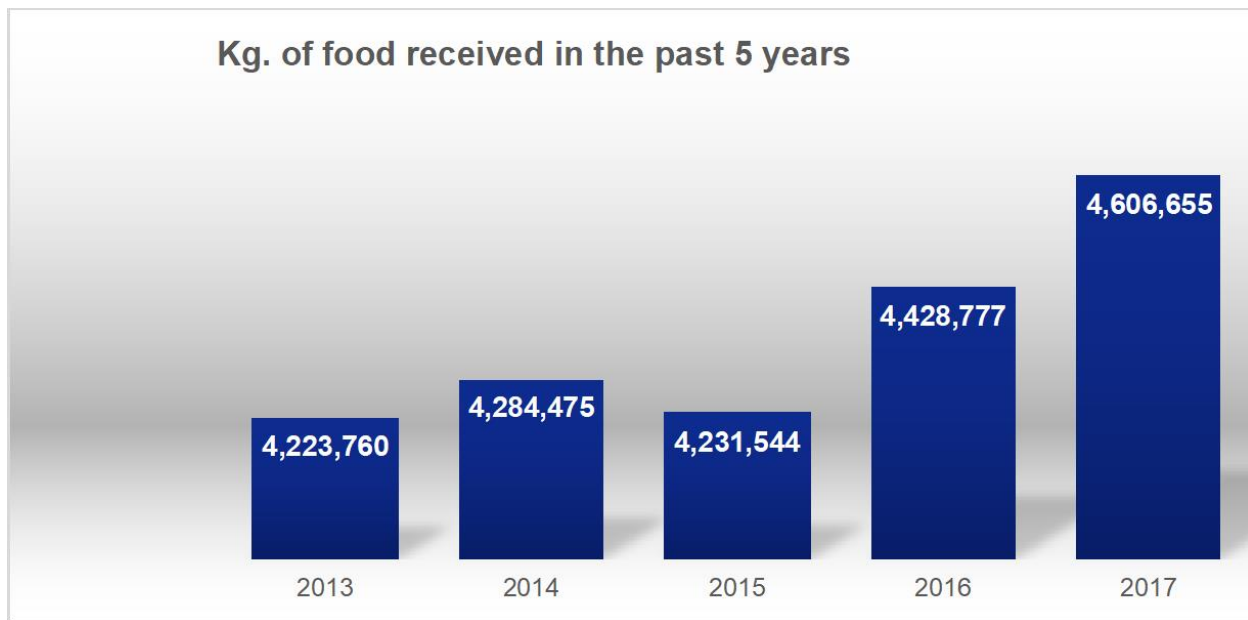


Figure 2: Kilograms of food received by Banco de Alimentos de Buenos Aires from 2013 and 2017
(Source: Banco de Alimentos de Buenos Aires)

In 2017, 4 million kilograms of food received translated into 4 million meals and 120 thousand people fed (Red Argentina de Bancos de Alimentos 2017b). These numbers give an important perspective on how much food donation help reduce food insecurity and food waste in the country. Moreover, the data presented here is from just one food bank in the country. Argentina has more than 15 Food banks.

3.3 Interviews

Donors are the main stakeholders of the law. This law regulates how, what, and to whom their donations go. Moreover, this thesis aims to understand whether the law, as it is now, discourages donations, and if the incorporation of article 9 would reverse this situation.

In order to have information on the donor's perspective, two interviews were conducted:

- 1) Carrefour Argentina, Christian Pazos, Chief Corporate Social Responsibility,
Fundación Carrefour.
- 2) Restaurant *Tinto y Soda*, Rodrigo Dib, Account Manager.

Carrefour has been donating food since its arrival in Argentina in 1982. Restaurant *Tinto y Soda* was founded in 2000 in Pilar, province of Buenos Aires, and has been donating food since then. Restaurant *Tinto y Soda* donates food to help those in need in the Pilar community. “They do not have a donation protocol and they work with community kitchens nearby.”

In the case of Restaurant *Tinto y Soda*, they were not aware of the law and the debate on the incorporation of article 9, meaning that they donate food without being aware of the fact that they are liable in case the food might cause any harm after being donated, but they expressed that it is quicker and “safer” to throw away the food instead of donating it (Rodrigo Dib, Account Manager 2018).

In the case of Carrefour, as an international company, it follows many standards to be able to comply not only with Argentina’s law, but also with its headquarters’ requirements. “Carrefour, a leading company within the food sale retail sector, assumes significant economic, social and environmental responsibilities”(Christian Pazos, Jefe RSE, Fundación Carrefour 2018). Moreover, Carrefour has a donation protocol and one of its points is that in order to be able to receive food from it the social organization must be

legally registered. They are aware of the law, they comply with it and support the incorporation of article 9, because they believe that it will encourage more companies to donate. Regarding the financial costs for the supermarket, they expressed that discarding food is higher, but they believe that it is not about how much it costs to donate food, but about their commitment to reduce food waste.

In both cases, the fact that there is not a legal framework that protects them, does not seem to affect their donations. Even in the case of Carrefour, that supports the incorporation of article 9, that is not going to translate in an increase in the amount of food donated.

Restaurant Tinto y Soda interview showed that there is a lack of awareness and information about the law. Given that Carrefour interview provided evidence of the company's knowledge of the law, the question is whether it is possible that leading businesses are aware of the law because they have stronger Corporate Social Responsibilities strategies.

This shows that there is a need for information campaigns about the law, how it would be amended, and its economic, environmental and social impact. Furthermore, and inferring that the case of *Restaurant Tinto y Soda* is similar to that of other small establishments in Argentina, it reflects a clear lack of control and enforcement of the law as it is right now.

Table 4 summarizes the amount and type of food donated by Carrefour and Restaurant Tinto y Soda and the recipients, obtained from the interviews with representatives from both establishments.

| Donor | Amount of food donated/recipient | Type of food |
|---------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|
| Carrefour Argentina *During 2017 | - <i>Fundación Margarita Barrientos</i> : 650.000 meals equivalent to 216.667 kilos of food -Food banks: 20.000 kilos of food - <i>Red Solidaria</i> : 6.000 kilos of food -Others: more than 400.000 meals: 133.333 kilos of food * | Non-perishable food Fresh food: only in the case of the Food banks |
| Restaurant Tinto y Soda | -Daily deliveries of fruits and vegetables to a community kitchen in Villa Astolfi. -Monthly deliveries of 4 boxes of chickens and 2 bags of noodles (approx 60 packages) to community kitchen in the area. | Non-perishable food Fresh food |

Table 4: Donors' interviews (Appendix 1)

As shown in Table 4, both donors donate perishable food, which are products that many donors do not want to donate to avoid safety issues. In the case of Carrefour they only donate fresh food to Food banks because they have refrigerators and freezers to maintain the cold chain.

Interview with *Banco de Alimentos de Buenos Aires*

Food banks play a very important role in the donation process. They receive the donations and ensure the safety conditions of the food. As already stated, Food banks have deposits where they keep the food, refrigerators and freezers to maintain the cold chain, experts that receive the food and check it, and ISO certifications⁴ (María González Crende, Institutional Communication 2018).

In order to have information on their perspective, an interview was conducted with María González Crende, Institutional Communication, from *Banco de Alimentos de Buenos Aires*.

Founded in 2000, *Banco de Alimentos de Buenos Aires*, is non-profit organization that helps reduce hunger, improve nutrition and avoid food waste. It made its first delivery in April 2001, becoming the first Food Bank of Argentina (Banco de Alimentos de Buenos Aires 2016).

As per the food that they received, perishable products predominate, but they also receive dairy, frozen, and some fruits and vegetables. The food is stored, classified and distributed to social organizations.

⁴ (International Organization for Standardization 2014)

In the case of *Banco de Alimentos de Buenos Aires* they are keeping record of each donation that they received, who are the donors and what type of products they donate. Moreover, in order to guarantee trust and transparency, they send a traceability report to their donors every three months showing them what has been done with the food they have donated. Which shows the importance of keeping up to date information in order to be able to produce statistics that will help increase the donations.

Regarding the *DONAL* law, they support the efforts of *Red de Bancos de Alimentos* about the incorporation of article 9, but they are not the ones working specifically on it. Additionally, they support it given that they believe that it will encourage donations.

When it comes to donating, tax deductions and social commitment are among the main incentives that motivates donors to become involved in food donation. For María “the greatest benefit [that they have] is to give a social value to food that would otherwise be discarded.”

Conclusion

While governments work on ways to reduce food waste and food insecurity by designing public policies that tackle these problems, one of the most effective initiatives is food donation. The data presented in this thesis shows that food donation helps reduce food insecurity and food waste by rescuing tons of food each year and delivering meals to millions in need. One of the main reasons for the lack of food donation was (and still is) liability. Many potential donors foresee they will have legal problems for providing food that might affect people's health, even if the food is delivered in perfect conditions and complies with safety standards. Ultimately, throwing food is less risky than donating it for them.

In the United States it is considered that the existence of the law limiting liability of donors in food donation helps and promotes them. Even though statistical data available is insufficient to isolate the effect of the law because it is not the only variable that impacts donations, there are many factors already stated in this thesis that show that the law works.

Even though there is no robust statistical data in the United States, most donors and anecdotal evidence show that by limiting liability donations have increased, meaning that the enactment of the law contributed to encouraging donations. There are other factors that have also contributed to increasing donations which are beyond the scope of this thesis but could be analyzed in a subsequent study.

If the *DONAL* law is amended, it would be effective. But to be as effective as it seems to be in the United States there is a need of a much more massive campaign to raise awareness about the problem, the importance of donating, the impact that donations have on food waste reduction and food insecurity and the benefits for donors, among others. And this can be supported by conducting a research on the benefits of donation such as ReFED ran.

Moreover, to make a compelling case for the incorporation of article 9 to the law, it is necessary to conduct a survey about the number of donors who do not donate because of how the law is at the moment and would be willing to donate if article 9 is included. Not only as a lobbying effort for the law, but for raising awareness campaign, etc.

While food donation alone cannot solve food insecurity and food waste, it is unquestionably a step in the right direction.

If you are reading this thesis and you are interested in helping to reduce food waste and food insecurity by encouraging donation in Argentina, please sign: www.redbda.org.ar/leydonal (you have to be registered to vote in the country)

Appendix 1

Interview with Christian Pazos, Corporate Social Responsibility Chief, *Fundación Carrefour*

1) What is Carrefour's donation protocol?

Carrefour Argentina and Carrefour Foundation work on three core aspects: Diet, Social and Professional Inclusion, and Environment. Each of the requests for donations that we receive daily are channeled through these points. And within each of these core points we have made alliances with different leading NGOs working on these issues to carry out actions and programs at the local and national level. An important requirement when donating is that social organizations must be legally registered.

2) What are the incentives to donate?

Carrefour, a leading company within the food sale retail sector, assumes significant economic, social and environmental responsibilities. In this way, it collaborates by feeding those in need, carrying out actions and programs in partnership with leading food NGOs within our area of influence.

These are some of the NGOs that work with us:

- Food banks: donating them products that come out of our sales channel but are suitable for consumption. Funds for equipment purchasing to improve its operations. Food collection campaigns.

-*Fundación Huerta Niño*: building gardens in rural schools to improve children's malnourishment and undernutrition in those communities.

-*Conin*, providing a grant program for families suffering from malnutrition, workshops on healthy eating in public schools throughout the country, and equipment for the care of children suffering from malnutrition.

- *Red Solidaria*: donating food that is used to prepare meals delivered to homeless people.

- *Fundación Margarita Barrientos*: donating meals for people living in vulnerable situations.

3) How long has Carrefour been donating food?

Carrefour assumed that responsibility since its arrival in the country in the year 1982.

4) How much food is donated per year? What type of food?

Food donations vary according to the year and the actions we take forward. We mostly donate non-perishable food to avoid safety issues related to the cold chain. Only in the case of the Food banks we have just started to donate fresh food.

During 2017:

Fundación Margarita Barrientos: 650.000 meals: 216.667 kilos of food

Bancos de Alimentos: 20.000 kilos of food

Red Solidaria: 6.000 kilos of food

Others: more than 400.000 meals: 133.333 kilos of food

3) Does Carrefour agree on the incorporation of article 9 in the Donal law?

Why?

This law would give a regulatory framework for the donation of food and, in some way, the donor would have some protection when donating, assuming that the donor acts in good faith and delivers food that is not expired and that is suitable for human consumption. We believe that this way more companies would be willing to donate food.

4) Will the incorporation of article 9 entail a change in the amount of food donated by Carrefour?

Carrefour is already working in a responsible manner to reduce food waste, so all the food that comes out of the sales channel, whether by proximity to the expiration date or breakage of its secondary packaging or its labeling which cannot be sold but which are suitable for human consumption and are delivered to the Food banks, an important ally in the rescue of food, as they guarantee the traceability of the products to be delivered to third parties (canteens, associations, etc.)

5) Is it cheaper for supermarkets to discard food rather than donate it?

The cost of discarding food is very high. Not only the value of the product and the cost of the service due to confiscation, but also the environmental impact that it generates when going to landfills ends up being very high.

Besides that, we believe that it is not about what is more or less expensive, but about our commitment to not waste food in Argentina and in the world. In fact, the goal is to reduce food waste by 50% in 2025. A commitment we have and by which all the countries where Carrefour is present work to avoid food waste. One of the ways to avoid waste is to donate it, but it is not the only one.

Interview with Rodrigo Dib, Account Manager Tinto y Soda Restaurant

1) What is Tinto y Soda donation protocol?

We do not have a protocol in place.

2) What are the incentives to donate?

To help those in need within the Pilar community.

3) How long has Tinto y Soda been donating food?

Since it was founded.

4) How much food is donated per year? What kind of food? Who are the receivers?

Tinto y soda donates food in two ways.

By coordinating monthly deliveries of four boxes of chickens and two bags of noodles (approximately 60 packages).

By coordination daily deliveries of fruits and vegetables which are in good condition yet cannot be used in the restaurant.

The monthly delivery is received by community kitchen in the area. The daily delivery goes to a community kitchen in Villa Astolfi, whose volunteers pick up from the restaurant every afternoon.

5) Are you aware of the existence of the Donal Law?

No, we were not aware of such law.

6) Is it cheaper for restaurants to discard the food rather than donate it?

Yes, for restaurants it is more convenient, safe and quick to throw it away.

Interview with María González Crende, Institutional Communication, *Banco de Alimentos de Buenos Aires*

1) Do you have any type of historical statistical record on the amount and trend of donated food? What type of food?

Yes, we have a record of each donation entered into our organization. Every year we work harder to increase the amount of Kg received and eventually delivered. Last year we received 4,606,655 Kg. of food.

Regarding the food received, several perishable products predominate, although we also receive dairy products, other refrigerated and frozen products, and to a lesser extent, fruits and vegetables.

2) In what way and to whom is it distributed?

The food delivery process has 4 steps:

1- The donation is received or picked up from companies, agricultural producers or supermarkets.

- 2- The food is stored in our warehouse and 30% is classified by volunteers so that it arrives in optimal conditions to the organizations.
- 3- From the Food Bank we contact all the organizations to offer them the available food.
- 4- This food is picked up by the organizations in our warehouse

3) Do you have a donor registry? Individuals, supermarkets, others.

We have a record of the food donors and every three months they are sent a traceability report of the donated food and products, in which they can see where each Kg. of their food or donated products was sent. In this way, and through different actions carried out by the *Donantes de Alimentos Area* (Food Donors Section) it guarantees trust and transparency to the donor.

4) To your understanding, which are the incentives for donors to donate?

These benefits allow them to channel their social commitment to the country and as an incentive with their employees as well as having the benefit of a tax deduction by donation. Personally, I believe that the greatest benefit is to give a social value to foods that would otherwise be discarded.

5) In case Article 9 is incorporated in the Donal law, do you consider that this will imply a change in the amount of donated food?

Yes, we believe that the reincorporation of Article 9 would encourage many companies to donate. Today, beyond all the internal work to promote the donation that goes from

having the ISO 9001 quality system to sending traceability reports of each donated food, the fact of not having a legal safeguard, discourages companies from donating.

6) In terms of costs and incentives, does the donation of food by supermarkets imply an additional cost to dispose of them? Is there any estimate about that cost?

Not necessarily and it depends a lot on the company. Regarding the mobilization of donated food, some companies take it to our deposit and in other cases, we pick up the food with our own truck.

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