

THE CHALLENGES OF ESTABLISHING FOOD DONATION SYSTEM¹⁹²

Deni Lovrenčić¹⁹³

Nenad Vretenar¹⁹⁴

Zoran Ježić¹⁹⁵

Abstract

Food donation system is a process usually led by food donation organizations that are collecting food from businesses and individuals or from the ones with excess of goods, storage it, distribute it to the food banks and finally redirect it towards people in community that have a deficit of particular goods. Food donation system is, therefore, a part of charitable activities usually organized by civil society organizations sometimes supported by state or local governments. Although arguments in favor of creating food donation system are very clear and acceptable to most, those included in an attempt to organize it are usually coping with many obstacles and resistance like the need to: lobby governments for change tax and other legislation connected to food donation, convince possible donators that donated food want create negative outcomes to them like black markets, contractions in demand etc. Other set of challenges is in creating efficient donation organization and logistics. As charity organizations are often connected in networks, form organizational point-of-view, food donation systems usually emerged in a hybrid organizational form somewhere between firm hierarchies and pure market organization of transactions.

The creation of food donation system in Croatia is in its very beginnings of making a food waste management program and food donation organizations. Therefore, the main aim of this paper is to address some organizational issues that stand in the way of the creation of sustainable food donation system. We analyzed best practice in European countries such as Italy and France who have set the effective laws to enhance food donation. Based on their experience and recommendations from organization theory, we aim to contribute to the present and the future efforts to create efficient and sustainable system that would fit the needs of the Republic of Croatia, and other CEE countries with similar social and institutional context.

Key words: *Food donation organizations, food waste, food donation, hybrid organization structure*

INTRODUCTION

Charity organizations are being analyzed and discussed in economic science for more than a century but the need to understand economic aspects of charity and to develop charity organizations is still very much alive. When defining what charity organizations are, we used Pervey's [1] explanation that charity organizations societies are not associations for purpose of giving relief, but organizations principally formed for the purpose of bringing the existing

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¹⁹³ University of Rijeka, Faculty of Economics, Ivana Filipovica 4, Rijeka, Croatia

¹⁹⁴ University of Rijeka, Faculty of Economics, Ivana Filipovica 4, Rijeka, Croatia

¹⁹⁵ University of Rijeka, Faculty of Economics, Ivana Filipovica 4, Rijeka, Croatia

relief societies and churches in cooperation. That means that the need for organizations who will work as intermediates between those willing to donate and organizations that are giving the actual help to needed people has been known and understood at least since the 19th century. There are at least few reasons explaining the need for mediation. First, charity organizations can in some degree unite forces made by different charitable organizations in certain city, area, state etc. Not only that by cooperating they can achieve more, but they can lower the degree of competition between themselves i.e., they can come to the conclusion that their joint effort could perhaps be beneficiary to all of them and their purposes. Furthermore, by cooperation, they can widen the knowledge about people who need help the most and therefore they can increase effectiveness of their efforts.

1. THEORETICAL FRAMEWORK

In his famous paper published 80 years ago, Roland Coase [2] was contemplating the advantages of organizing a transaction within a hierarchy versus using the market mechanism to obtain it. Although charity logistics are typically not something that one would see as a market transaction, we can use some of Coase's argumentation to clarify the need to engage civil sector (NGOs) in charity. Coase argues that hierarchies should be used as long as organizing a transaction within the hierarchy is more efficient then by using the market. However, due to the difficulties to manage big organization, after certain size (and scale) is reached, adding additional transactions to a hierarchy becomes more and more costly. This argumentation can be used to explain why are civil organizations in charity necessary even in countries that are on the government level very sensitive towards the needs of its' vulnerable members. Therefore, even if institutionally organized help towards those who need it is at a very high level, there is still a need for private charity initiatives. What actually intrigues researchers is relationship between private and public charity and the effect that public charity and public policies towards charity has on efforts to attract private donations. [3][4][5]

Coase's argumentation that in a large scope of activities a single hierarchy will become more costly and less efficient than market alternatives also enhances views that there is an actual need for the existence of many different NGOs that attempt to procure resources to provide help to certain groups of people in need, as the allocation of totally available resources will be more efficient than it would be if it would be centrally administrated. Moreover the previously explained need for charity organization to mediate between those NGOs leads to conclusion that charity organizations, charity NGOs and donors are or should be engaged in hybrid organizational form. A hybrid form of organization is suitably described by Douma and Scheuder [6]: "Hybrid form is a set of organizations such that coordination between those organizations takes place by means of the price mechanism and various other coordination mechanisms simultaneously". Other authors offer similar definitions. Menard [7][8] explains hybrids as a various solutions and arrangements between legally independent entities that are mutually adjusting and coordinating their business needs by sharing technologies, products, services and capital without joint ownership and with some help of price mechanism. Hybrid organizations are expected to show their efficiency when there is a need for the economy of scope. Also, network of relations in these forms can provide good supervising system based on mutual adjustment and horizontal supervision, which can lead towards diminishment of an adverse behavior.

As pointed by Menard [8] for involved parties it could be convenient to engage into a hybrid form when they facing complexity. Firstly, hybrid form enhances the ability to handle a multiple connected and intertwined transactions more easily. Moreover, when there are

changes in environment, hybrids can handle its organizations to abandon some rights in an attempt to remove particular uncertainties that are endangering project or a relationship between partners. Hybrids are, therefore, enabling higher level of operational flexibility that can be defined as the known response for short-term changes in the environment with the goal to protect the organization.[9] One of the reasons that hybrids enhance operational flexibility is that they aren't necessary always consisted with the same organizations within, as legally independent organizations are working temporarily on joint projects with mutual controls established through contract relations. [10] Alternative models of food donating system are shown on Figure 1.

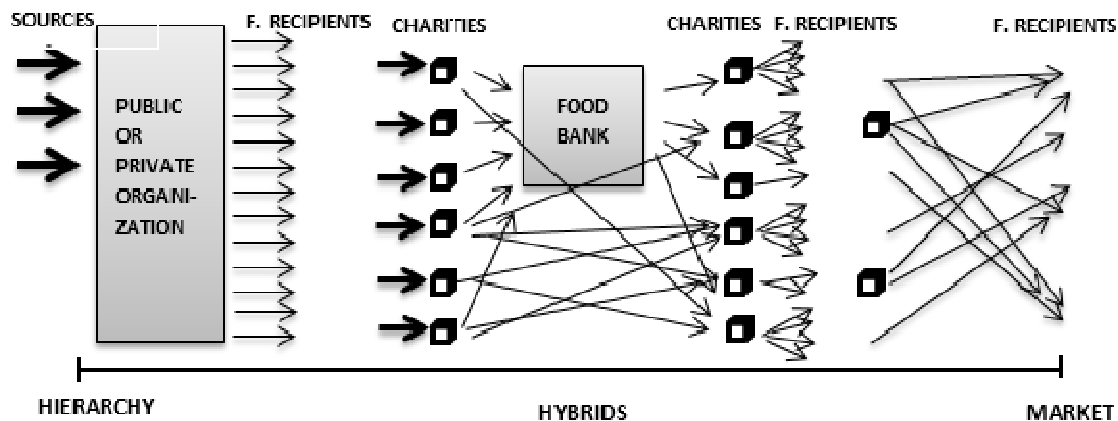


Figure 1: Hierarchical, market based and hybrid solutions for food donation systems, authors creation

However, entering into a hybrid form also involves potential danger of opportunism between involved parties. One of the problem occurs in business with unpredictable demands, such as technological changes. Despite all of the inconveniences stated above, organizations decide to be a part of hybrid organizations. Their decision is based on the flexible rules in hybrid forms, gaining revenues and sharing expenses. In order to prevent insecurities and unpredictable behavior they also use techniques such as joint governance, shared knowledge, buffer strategies, and common standards. The high level of free riding can tried to be solved with more contracts specified in more details, and better communication and information sharing. However, Lovrencic [11] noticed that since detailed contracts are in conflict with the endeavoring greater independence, which is one of the motives for organization to connected through hybrid instead through hierarchy, solution to reduce free riding and opportunisms should be accomplished through the communication between partners and environments and through connecting with organizations that are sharing the same goals.

2. THE NEED FOR FOOD DONATION ORGANIZATIONS

There are many reasons why inhabitants of o certain country or region could benefit from having operational food donation charity organization, or a food bank. As mentioned above, even in rich countries with high sensitivity towards people in need, governmental measures are not able to fulfill all needs. One could argue that the best and the cheapest solution to patch the holes left by formal state institutions is in enabling peer-to-peer relationships between local donors, and local recipients, or local charity organizations that is dispatching

donations directly to recipients. However, during our field research that included series of interviews with voluntaries and activists in Croatian hybrid platform called Food network, and in charity shop in the city of Rijeka, we obtained a knowledge that small local organization are, without cooperation on wider level, in constant misbalance between goods needed and goods that they have in inventories. Furthermore, they are in constant time misbalance as donors are more willing to donate in certain time of the year. The problems of uncoordinated local (and even not local) charity organizations were best seen during 2014 severe floods in several municipalities in Eastern Croatia. During that crisis, some, but not all, charity shops were making a big extra effort to collect and dispatch food, clothes and shoes to the areas hit by natural disaster. In the same time the Croatian Red Cross collected more than 60 million HRK (around 8 million EUR) in donations but failed to distribute it to the ones that were forced out of their homes by the flood and keeping the funds on Red Cross bank account. That was latter poorly explained by inability to identify and locate people in need.[12] Another issue and limitation of peer-to-peer donation system is that Croatia is financially highly centralized country with most financial power in the city of Zagreb (Figure 2 and 3). This creates further misbalance between “wealthy” charities in Zagreb and not so fortunate charities in less developed areas. To address this and other problems of uncoordinated food donation, many countries opted to organize food banks, as intermediates.

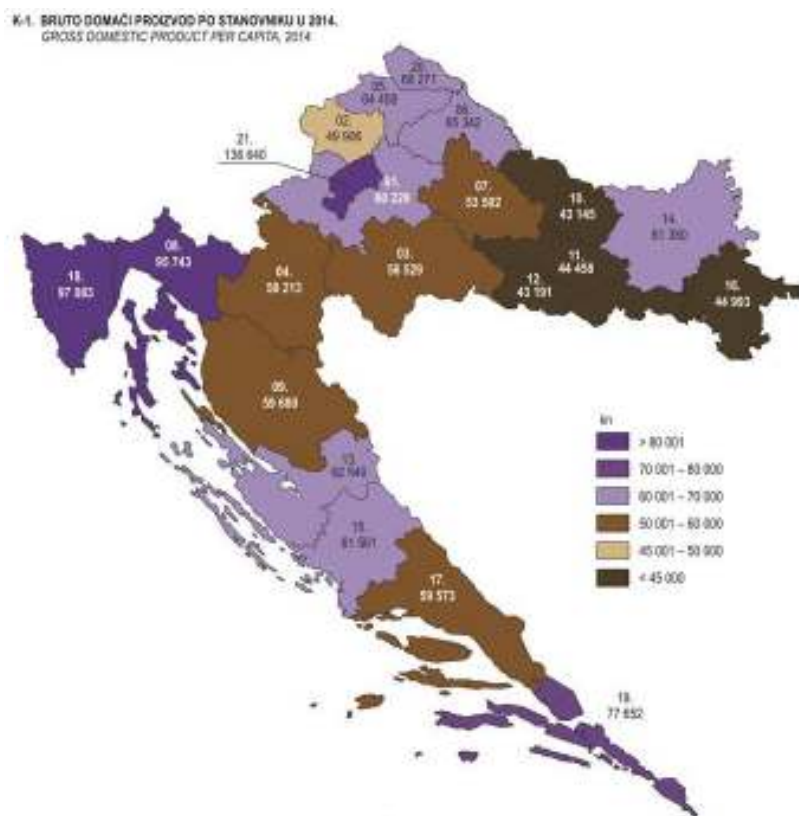


Figure 2: Croatian GDP per capita on county level in 2014 [13]

County	2017			2017		Total of Croatia
	M	F	2017 - total	% M	% F	
Zagreb	4109	5180	9288	44	56	4,76
Krapina-Zagorje	1657	2091	3747	44	56	1,92
Sisak-Moslavina	5797	7829	13626	43	57	6,98
Karlovačka	2517	3512	6029	42	58	3,09
Varaždinska	2010	2220	4230	48	52	2,17
Koprivnica-Krizevci	1652	2031	3683	45	55	1,89
Bjelovar-Bilogora	3586	3927	7513	48	52	3,85
Primorje-Gorski Kotar	4000	5764	9763	41	59	5,00

Lika-Senj	1265	1394	2659	48	52	1,36
Virovitičko-podavska	2841	3784	6625	43	57	3,39
Pozega-Slavonia	1531	2126	3657	42	58	1,87
Brod Posavina	3353	5208	8561	39	61	4,39
Zadarska	2489	3214	5703	44	56	2,92
Osijek-Baranja	9443	14132	23575	40	60	12,08
Sibenik-Knin	2610	2796	5406	48	52	2,77
Vukovar-Srijem	4662	6959	11621	40	60	5,95
Split-Dalmatia	12520	17764	30285	41	59	15,51
Istarska	1773	2229	4002	44	56	2,05
Dubrovnik-Neretva	2497	3217	5714	44	56	2,93
Međimurje	1675	1978	3654	46	54	1,87
City of Zagreb	11695	14183	25878	45	55	13,26
TOTAL	83683	111536	195219	43	57	100,00

Figure 3: Registered unemployed persons, by counties, end of october 2017, authors calculation [14]

3. THE BEST EU PRACTICES

Italy and France are first countries in Europe to enforce the law that bans supermarkets to throw away unsold food.[15][16] Both countries are successful in conducting the law but they distinguish in a way of delivering the law to the people. In an attempt to change trends, Italian government started educating people that donations and prevention of food waste should be a way of life and not an obligation. Italian laws [17] and incentives are made to support donations and make them more convenient. Companies have a tax reduction on garbage that is proportional to donated food. Furthermore, there are mitigate circumstances to encourage donations such as the law that allows donations of food that is past sell by date or even if it is mislabeled, if, of course does not impose any safety risks. Farmers can donate unsold products to charitable organization without engaging into any extra cost. One of the new trends in to prevents waste of food is popularization of “doggy bags”. The name is changed into “family bags” in order to remove a negative connotation and to stimulate people to take leftovers home, instead that are thrown away. One of the promoters of food donation and prevention of food waste is one of the greatest world chefs Massimo Bottura. [18] During the Milan expo he made a collaboration with Catholic charity and open a soup kitchen that served food that has not been eaten on Milan expo show. They fed homeless people and recovered around fifteen tons of food that would end up in the trash. This was made with a thought to raise an awareness how much food would end up as a waste, just from one event. At the moment Italy is recovering 550 million of tons of food per year, that would end up as a waste and they want to accomplish 1 million tons of food recovered per year. Efforts needed to reduce food waste are shown on Figure 4.

While Italian policy is based on incentives, motivation and changing lifestyle, French policy is based on payment fees. France is the first country in the world that banned destruction of unsold food. Supermarkets that are bigger than 4,304 square feet are obligated to sign a contract with Food banks or charitable organizations which obligates both sides to pass and to collect food that has not been sold.[19] If large retailers do not donate the food they will face a fine of 3,750 euros. End users of donated food will benefit from this law, not just because of the larger amount, but also because of the wider diversification of donated food, which leads to nutritional balance among end users. As Italy, France also concentrated on education of the individuals and not just companies. They introduced a program in schools for the children to teach them how to prevent waste, preserve and utilize products and point out on the problem of food waste.

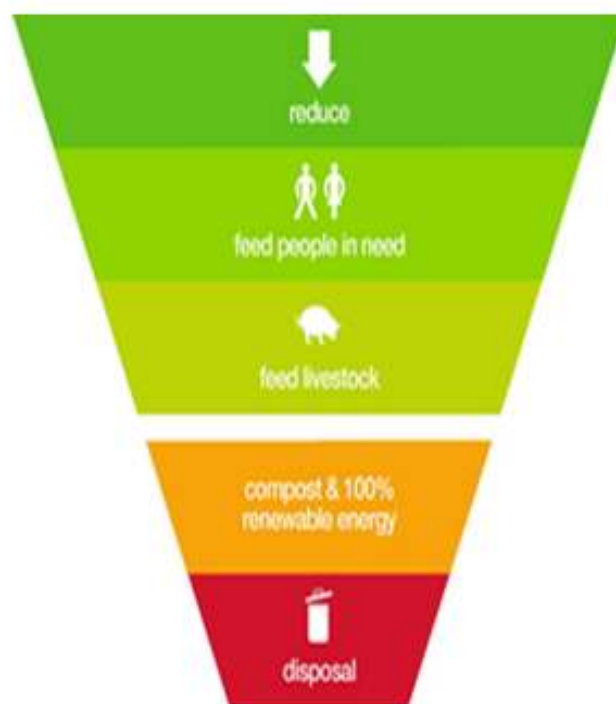


Figure 4: Pyramid of food waste [20]

They are also concentrating on problem of fruits and vegetables with irregular shape and size that is thrown away.[21] Up to 40% of the French agricultural production was destroyed, because fruits and vegetables were not conforming norms. They made market campaign that promotes fruits and vegetables of irregular shapes and sizes, because their nutritional worth is not lower. One of the biggest roles in this campaign had French retail store that put on 30% discount all of the food that had an irregular shape and size or that it did not meet the appearance standard. Moreover they made soups and juices to show that all of these products are equal in taste and nutritional value. In just first two days approximately 2.1 tons of fruit and vegetables was sold in every store. To make easier for people to reach food and vegetables that is on discount, they made a mobile application which showed which stores have discounts.

4. FOOD DONATION SYSTEM IN CROATIA

Main problem with food donation in Croatia is that in Croatia organized food donation system does not exist. There are charitable nonprofit organizations such as soup kitchens, Red Cross or Caritas, but there is no functioning food donation system. In 2015 a nonprofit association Food Network [22] made an effort and pushed towards the removing taxes for donated food. The main goal was to make donation easier to retail stores, bakeries, restaurants, hotels. Although success of this campaign was a big victory and a necessary step towards the ultimate goal, people still do not know how to donate, to whom, there are no incentives, nor rules, laws and regulations. The most important factor is the organization, such as Food bank which will organize donations of food, educate people, cooperate with retail stores, rise an awareness of pollution that comes from food waste, accentuate the benefits of food donations and to make them as easier and convenient for people to encourage food donation. In Croatia food must be donated between 90 and 7 days before expiration date, but it is not determined who takes the responsibility when food is donated.

Problems with food donations system in the rest of the Europe are based on better education of people and utilization of food. According to Eurostat [23] the biggest waste producers are households, so it is important to educate individuals how to prevent waste and utilize food. It is divided in three strategies. Labeling, storage and portion sizes. It is important to educate people on difference in terms such as: “best before“, “use by“, “sell by“, “display by“. By mixing these terms, people can throw away edible food. Adequate storage techniques can significantly prolong expiration date. Portion sizes in households refer to the size of packaging. Although smaller packaging are more convenient, bigger packaging, with adequate storage techniques minimizes the waste induced with packaging materials.

CONCLUSION

Croatia has yet to build sustainable food donation system. The need for establishing and running food bank is recognized among charity organization and on the government level. However, although future food bank is likely to be nongovernmental charity organization, aid and support of the national and local authorities is crucial. As we can see from countries that are much more advanced in this area, challenges in food donations system are the education of people, motivation of retail stores and farmers to donate food and to label doggy bags as something good and make it a part of the culture. State involvement is necessary as NGOs do not have the resources to run this kind of campaign on the national level. After the establishing of food bank, another big step could be the ban on the destruction of unsold food. Considering that food must not become a waste, every bigger retail store should than have a contract with food bank or other non-profit organizations that will obligated to take the excess of food from the retail stores, storage it and redistribute it. To enable that in an efficient manner, connected entities should create a hybrid organization that would enable communication, cooperation and that would enhance better allocation of donated food.

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