ABSTRACT

The elimination of poverty and the fight against social exclusion became one of the main challenges of the development and human rights since end of 20th century and beginning of the 21st.

In the last decades we have observed how evolution has brought new social events to the world, introducing new realities in modern societies and giving them very peculiar characteristics, typical of the days we are living on.

The increase of internationalization and globalization of several economies, the world markets and great regional markets trends, the evolutions in the employment market and the very recent migratory flows have brought to the world new social events, each time more complex and more demanding, concerning the appeal they set up to international community action.

Finding new answers, which are also dependent on the efficacy of new approaches, becomes a very urgent matter, and promotion of social inclusion and reducing social asymmetries depends not only on the State but also on civil society initiatives.

The Portuguese Food Banks are important organizations with relevant contribution to a more social and environmental economy, developing a very effective action in a pro-sustainable way, linking the constant increase of social responsibility of economic agents to public commitment and to the promotion of human solidarity. Simultaneously they are contributing to the reduction of waste of food and level of garbage. The aim of this paper is to analyse social and economic impacts of these organizations all over the country.

KEY WORDS: social economy, social responsibility, waste, solidarity, social exclusion, local development.
1. INTRODUCTION

The global economy, world markets trends, the observed job market evolutions and recent migratory flows have brought new social events to the world, with more complex characteristics. The search for new and more efficient answers and approaches become increasingly important, fighting against poverty and social exclusion.

Organizations know that their success depends, among other factors, on the acceptance they win near the community where they work and develop their activities. Nowadays, trying to forget or ignore social problems is a self-destructive perspective, because the risk of losing approval by the markets in the medium and long term is really high. The conscience of this social dimension obviously implies that organizations use their power in a responsible way, otherwise they risk losing power, market and face.

The number of social responsible organizations is increasing, and it clearly contributes to a more social economy, where people are worried, not only with economic growth but also with social cohesion and environment protection. Portuguese Food Banks are non-profit, community-based organizations with relevant contribution to a more social and environmental economy, developing a very effective action, linking the constant increase of social responsibility of economic agents to public commitment and to the promotion of human solidarity, and simultaneously contributing to the reduction of food waste.

2. RESEARCH GOALS AND MOTIVATIONS

The general goal of the present work consists on understanding and analysing the role of social private organizations, namely Food Banks, aiming to achieve the answers for local development mechanisms and to fight poverty and waste,
considering that several times public and governmental action is not enough to answer citizens’ needs. We aim, specifically, to write about the successful case of Portuguese Food Banks, which fits well in those goals; meaning an effective action of pro-sustainability.

As economic agents they are more and more involved with public commitment and human solidarity promotion. On the other hand the increasing existence of organizations that represent a bridge between the former and the real practice of the social economy is important, giving an additional important contribution, in this particular case, to the reduction of food waste and the production of garbage.

3. METHODOLOGY

This approach follows a case study methodology. According to Bell (1997), this methodology allows the investigator to concentrate on a specific situation in order to identify the concerned interactive process. A case study involve the empiric investigation, strong component of fieldwork appealing using many sources and documents, interviews, direct observations and physics artefacts, (Yin, 1994).

The present study aims to get preliminary information concerning the economic and social conditions that justify the existence of organizations as Portuguese Food Banks, describing main guidelines of their activity, and operational characteristics, simultaneously trying to analyze and explain the nature of the event linked with poverty and waste, studying correlation between social and economic data.

4. CONCEPTUAL MATTERS ABOUT THE OBJECT STUDIED

4.1. Social Dimension of the Development – The Role of the Organizations and of the State

The elimination of poverty and the fight against social exclusion became one of the main challenges of the development and human rights since, at least, the beginning of the 21st century.

The world scenario is untenable:

- almost 800 million people are starving to death and are excluded from any food security system and almost 1,2 billion are living with less then a daily dollar (dollars PPC, 1993);
- about 8 million people, in the OCDE countries, are undernourished and, speaking only about United States, almost 40 million people are not included in any health security system, and we still know that one in each five adults is functionally illiterate.

In the last decades we have observed how evolution has brought new social events to the world, introducing in modern societies new realities and giving them very peculiar characteristics, typical of the days we are living on.

The increase of internationalization and globalization of several economies, the world markets and great regional markets trends, evolutions in the employment
market and the very recent migratory flows have brought new social events to
the world, each time more complex and more demanding concerning the appeal
they set up to international community action.
Finding new answers, which are also dependent on the efficacy of new
approaches, becomes a very urgent matter, and the promotion of social
inclusion and reducing social asymmetries depends not only on the State but
also on civil society initiatives.
Knowing where social responsibility of civil organizations and State begins
and ends or knowing where both of them intercept themselves are questions
that lead to several discussions and careful considerations not only among civil
society but also among the many public institutions.

4.2. Social Responsibility Concept

The social responsibility concept had suffered several interpretations and
changes along last decades. The phrase Corporate Social Responsibility was
coined in 1953 with the publication of Bowen's "Social Responsibility of
Businessmen" where the following question was made "what responsibilities
to society can business people be reasonably expected to assume?". Writing on
the subject, in the 1960s, he expanded the definition suggesting that beyond
legal obligations companies had certain responsibilities to society. In 1984
Peter Drucker wrote about the imperative to turn social problems into
economic opportunities.
In the late 70's both the Organisation for Economic Cooperation and
Development (OECD), and the United Nations Centre on Transnational
Corporations (UNCTC) began developing codes of conduct trying to control
different aspects of corporate globalisation. In 1976 the OECD, a group of 30
powerful industrialised countries, recognising complications associated with
companies operating across borders, established a set of guidelines to ease the
workings of globalization. They set the 'rules of the game' for foreign direct
investment and created an atmosphere of confidence and predictability in
overseas corporations.
Even multinationals impose to themselves responsibilities of environment
preservation, respect for human rights, children rights, enhancement of human
resources and fighting against fraud and corruption. These organizations
understood that all the direct and indirect collaborators, the non-governmental
organizations and many other entities, including public institutions,
governments and public opinion, have easy access to information that can
develop social conscience, obliging the organizations to be responsible for their
acts.
The real awareness on the social dimension of these matters naturally links to
the feeling that companies have to use their power in a more responsible sense,
because in other case they risk losing it.
Throughout 80s until now academic discussion of Corporate Social
Responsibility concept considerably grew. Freeman (1984), wrote about the
stakeholder theory considering companies responsible before several social
groups beyond workers and shareholders. Wartick and Cochran (1985), wrote
about social responsibility principles referring programs and policies facing
society in a responsible way. Carroll (1999), goes on with the some issues, but Borger (2001), wrote about business ethic and entrepreneurs citizenship.

4.3. A More Social Economy

The more responsible behaviours in social sense of an increasing number of organizations are contributing to a more social economy where we can point out not only the worries with growth but also with social cohesion and environmental protection.

Associations, social solidarity private institutions and non-governmental organizations have achieved till now to get an answer to many of those with more difficulties. Many of them are networking, trying to answer it from a local perspective, promoting alliances and partnerships based on cooperative agreements.

The activity growth trend of this kind of organizations occurs because of the inability of the States, this means, Governments and Public Institutions, to give an effective and efficient answer to all situations, requests and needs of the societies they run. This happens because there are no sufficient human resources and financial resources, and also because there are great difficulties running these processes. We can also find too much bureaucracy implementing some of the social support programs.

4.4. Factors and Causes of Poverty and Social Exclusion

Considering the multidimensional and systemic character of this phenomenon, as also the several ways we public find it, we know that is very difficult to explain all the base reasons for poverty and social exclusion. Although the frequency of this relation is normally found in a base of cause/effect between the two factors the existence of one of them can happen without the other, this means, we can have social exclusion having no poverty. However it seems to be right that both are the result of a combination of several social negative situations that create a chain reaction of a significant number of events.

In this context it is very important to understand the factors potentially associated with these situations and each other possible combinations. The STEP program (Strategies and Tools against Social Exclusion and Poverty) joins these factors in three dimensions:

1ª Macro Dimension (global);
2ª Meso dimension (local or sectorial);
3ª Micro dimension (personal and familiar).

1ª Macro Dimension (global)

The macro factors potentially associated to poverty concern with the developing, organizing and functioning models of the world economic and financial systems in a precise time lag.

As an example of the referred factors we can point:

- economic and financial globalisation, leading to the increase of competitiveness and commercial aggressively including environmental and social costs;
• the consuming economics development models, where there is frequent excess of production and waste;
• unstable employment and unemployment leading to the reduction or absence of resources and revenue and creating social instability;
• missing proper answers from the Providence/State and the trend towards economic liberalization, leaving social and economic regulation depending on the market;
• environmental conditions degradation, as the natural resources exhaust, animal or vegetal, resulting consequently in life conditions fragility;
• breakdown of solidarity family systems, social or shared by the community, as a consequence of increasing interhuman isolation;
• public policies of national level leading to discriminative situations, in a conscious or unconscious way.

According to Costa (1998), a great part of these factors are generic to most countries and are related with structural characteristics of developing models prevailing in European industrial societies, in last two hundred years. He also suggests that these models vary between two paradigms:
• the one of liberal capitalism, encouraging competitiveness and individualism, deteriorating solidarity and collective sense;
• the one of bureaucratic socialism granting collectivism and imposing solidarity, forgetting individual freedom and efficiency, leading to less respect of individual human rights.

Both of them pay no attention to ecological interactions and their conditions, allowing risks to humankind future.

2ª Meso dimension (local or sectorial)
These factors begin with macro policies or dominating cultural elements, having important effects in most weak areas, namely sectorial or geographical ones. At this level we can consider some factors as the following:
• cultural attitudes, prejudices and social behaviour based on local discrimination, as it can happen with the attitude of a community against immigration, drug addicts or HIV infected;
• local or regional policies that generate or blockade social exclusion or poverty situations, as the example of:
  lodging policies leading to social exclusion islands;
  decisions discriminating ethnnical minorities;
  lack of decisions that prevent inaccessibility to public services, namely to the older or disabled ones;
• existence of local cultures very closed accentuating ghettos;
• social restructuring eventually leading to produce systems changing of some activity sectors, as happened on last century seventies and eighties, with iron and steel industries, naval building and repairing or car industry.

3ª Micro dimension (personal and familiar)
These factors include a group of variables, namely family dimension and statute, health, age, education, life history and course, life projects, personal options, lost and won opportunities, accumulate experience. It means a group
of elements resulting from familiar and personal developed interactions. We can refer to some of them as the following examples:

- **family dimension and statute**: poverty passing from generation to generation is a cause of the phenomenon perpetuation; family life conditions determine very soon children’s future of those borne in very poor families, because of very few available material resources and because of social and cultural features that determine opportunities and options of these children;
- **health**: productivity and expenditures are frequent effects of a precarious health situation, and it may lead to social exclusion and impoverishment; nevertheless we must notice that these two effects relation is a circular causality one, it means, that each of them can be cause or effect;
- **age**: the older ones, particularly those living with Social Security income, became more often vulnerable to poverty and social exclusion, mainly because the increasing in health care needs, family isolation and even family abandonment or rejection;
- **education**: the relationship between education and poverty seems to build a vicious circle; people are poor because they couldn’t invest on themselves, or they did it on very low levels, but poor people have no enough resources to invest on education; at this level we can also notice a circular causality.

We can also extend that events resulting from imposed or assumed options, or resulting from unexpected casualties may lead to social exclusion or poverty situations.

We can conclude that poverty and social exclusion are a result of following factors:

- related to local or global society, therefore with a macro or meso dimension, because of inexistent opportunities and answers that were expected from society in general;
- related to real personal or family stories, included in a micro dimension, due to weak or wasted individual capacities and skills, provoking deficient society participation.

The reality in Europe is that without social welfare more than a quarter of the population of the European Union would today be living below the poverty line.

**5. CASE STUDY**

5.1. *Characterization and Activities of Food Banks*

Surpluses of agricultural products either in production or in retail trade, as well as overproduction in food processing industry, drive to a large amount of food being withdrawn from sale, instead of which could be driven to consumption.

Food Banks of Europe fight waste, not only by picking up food provided free of charge by farmers, processing facilities, wholesalers, importers and retailers, but also through national and European public authorities, as well from civic institutions which organize local voluntary food collecting.

The Food Banks of Europe are logistics specialists. These Banks organize the transportation, sorting and storage of collected food and at same time assure
the quality control. An important activity of these organizations is the monitoring of the cold chain and the inventory management. The food distribution is carried out by voluntary associations which fight hunger in the field. The Food Banks sign agreements with local humanitarian or charity organizations and distribute the collected food to them. In 2005 the results of European Federation of Food Banks were significant, as we can see in the figures below.

**Figure 1 - Collected Quantities Evolution (Tons)**

![Figure 1](image1.png)

Source: European Federation of Food Banks

**Figure 2 - Supply Sources**

![Figure 2](image2.png)

Source: European Federation of Food Banks

**Figure 3 – Human Resources**

![Figure 3](image3.png)

Source: European Federation of Food Banks
In Portugal the Food Banks are institutions created for helping reducing hunger of less fortunate. Their goal is trying preventing food to be thrown away and to give it to those who need social aid.

The donations of unprepared food are welcome for these organizations and several firms contribute regularly to them. All the donated food is carefully stored and its quality is strictly controlled. The products are distributed to like-minded organizations.

Two food-collecting campaigns are annually organized inside supermarkets. In 2004, 116 stores, 3500 volunteers and 130 cars were involved in these activities. The whole action enable collecting 790.638 kilos of food, with supermarkets Pingo Doce e Feira Nova having a proportion weight of 45,74%, Modelo-Bonjour-Continente 18,40%, Lidl 12,55%, Carrefour 8,73% and group Auchan 7,11%. The remaining 7,47% are the result of collecting food from other supermarkets, namely Intermarché (2,17%), Plus (1,99%), Corte Inglês (0,97%), and other ones.

Through their action Portuguese Food Banks collected and distributed 17.704 tons and assisted 216.409 persons on the year of 2005. This activity was supported by 1.173 institutions that distribute prepared meals and food baskets. These results were achieved with 10 regional banks, working in a local logic, meaning that the territory where it develops its activities is well known and defined. Food distribution is made at the same geographic zone where the gifts are obtained.

During the last year some of the results from collecting campaigns are shown in Table 1.

Table 1- Results from Collecting Campaign - November 2006 (tons)

<table>
<thead>
<tr>
<th></th>
<th>Oil</th>
<th>Olive-oil</th>
<th>Sausages</th>
<th>Tune</th>
<th>Milk</th>
<th>Food Basket</th>
<th>Spaghetti</th>
<th>Cookies</th>
</tr>
</thead>
<tbody>
<tr>
<td>FEIRA NOVA</td>
<td>2.741</td>
<td>1.151</td>
<td>3.663</td>
<td>2.771</td>
<td>10.150</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JUMBO</td>
<td>2.074</td>
<td>893</td>
<td>4.511</td>
<td>3.067</td>
<td>9.927</td>
<td>2.081</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LIDL</td>
<td>1.395</td>
<td>678</td>
<td>2.644</td>
<td>8.417</td>
<td>9.569</td>
<td></td>
<td>2.728</td>
<td>1.831</td>
</tr>
<tr>
<td>MINIPREÇO/DIA</td>
<td>2.750</td>
<td>1.294</td>
<td>4.035</td>
<td>3.453</td>
<td>25.895</td>
<td>77.265</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PINGO DOCE</td>
<td>23.202</td>
<td>11.228</td>
<td>33.460</td>
<td>115.328</td>
<td>2.081</td>
<td>2.728</td>
<td>1.831</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>32.162</td>
<td>15.244</td>
<td>48.313</td>
<td>35.186</td>
<td>115.328</td>
<td>2.081</td>
<td>2.728</td>
<td>1.831</td>
</tr>
</tbody>
</table>

5.2. Social and Economic Issues and Data Analysis on Portuguese Food Banks

Portugal has ten Food Banks, one of them in Azores, which is not included in our study. The other Food Banks remain at Lisbon, Porto, Coimbra, Aveiro, Setúbal, Évora, Abrantes, Leiria/Fátima e Cova da Beira.

Considering the existing data published in Food Banks Reports and statistics data published by Statistics National Institute we chose a set of variables that we considered could explain the activity evolution of those institutions related with social and economic local development.
The first relation we tried was between collected food tons and the number of pensioners, trying to know if their evolution has some parallelism. This relation was studied for four regions, those ones with a Food Bank since, at least, eight years ago. The results are presented in Figures 4 to 7.

**Figure 4 - Grande Lisboa**

\[ r = \frac{\sum (x-\bar{x})(y-\bar{y})}{\sqrt{\sum (x-\bar{x})^2 \sum (y-\bar{y})^2}} = 0.938163 \]

\[ R^2 = 0.880149 \]

**Figure 5 - Grande Porto**

\[ r = \frac{\sum (x-\bar{x})(y-\bar{y})}{\sqrt{\sum (x-\bar{x})^2 \sum (y-\bar{y})^2}} = 0.891546 \]

\[ R^2 = 0.794855 \]
As we can see in the regions of Grande Lisboa and Grande Porto the correlation is real high, and at Coimbra/Baixo-Mondego is still significant, but at Évora/Alentejo Central the relation has any significance. Interesting is the fact that the last one is the only one, of the four regions, remaining at inner country, and the formers are near the coast. The third one is not at littoral but
doesn’t remain too far. On the other hand results can be scheduled according to inhabitants’ number, being the most populous regions those ones presenting higher correlations.

Then we tried the relation between pensioners and aided people, being this one the variable to be explained, and we reached the results in Figures 8 to 10, because were not able to get information to Coimbra/Baixo-Mondego.

Figure 8 - Grande Lisboa

\[ r = \frac{\sum (x - \bar{x})(y - \bar{y})}{\sqrt{\sum (x - \bar{x})^2 \sum (y - \bar{y})^2}} = 0.947203 \]

\[ R^2 = 0.897194 \]

Figure 9 - Grande Porto

\[ r = \frac{\sum (x - \bar{x})(y - \bar{y})}{\sqrt{\sum (x - \bar{x})^2 \sum (y - \bar{y})^2}} = 0.832474 \]

\[ R^2 = 0.693012 \]
The correlation is again significant, but once more is losing strength from the most crowded region to the less one and from littoral to inner country.

The third step studied the relation between collected tons and aided people, and here we expected a high correlation, which was confirmed by results at littoral regions, but not at inner country, as presented in Figures 11 to 13.
As we can see the Food Bank at inner country has not a level of activity, concerning the number of aided people, significantly related to the number of collected tons, situation deserving further analysis. After these three kinds of statistics analysis we tried the study of correlations in a national transversal perspective.

\[ r = \frac{\sum (x - \bar{x})(y - \bar{y})}{\sqrt{\sum (x - \bar{x})^2 \sum (y - \bar{y})^2}} = 0.8671 \]

\[ R^2 = 0.751862 \]

\[ r = \frac{\sum (x - \bar{x})(y - \bar{y})}{\sqrt{\sum (x - \bar{x})^2 \sum (y - \bar{y})^2}} = 0.207473 \]

\[ R^2 = 0.043045 \]
We just could make the study since 2002, because we wanted to have all the Portuguese Food Banks included in this analysis. The relation between pensioners and collected tons, in this transversal point of view, was not really strong in 2002, but the result is still acceptable. But in 2003 and 2004 we have an almost perfect relation, meaning that growth of pensioners leads to more social conscience and more aid. The results are presented in Figures 14 to 16.

**Figure 14 - Portugal 2002**

\[
R^2 = \frac{\sum (x - \bar{x})(y - \bar{y})}{\sqrt{\sum (x - \bar{x})^2 \sum (y - \bar{y})^2}} = 0.717095
\]

\[
R^2 = 0.514225
\]

**Figure 15 - Portugal 2003**

\[
R^2 = \frac{\sum (x - \bar{x})(y - \bar{y})}{\sqrt{\sum (x - \bar{x})^2 \sum (y - \bar{y})^2}} = 0.990699
\]

\[
R^2 = 0.981485
\]
Then, and as we had already done for those regions with food banks since eight years ago, we also studied the relation between pensioners and aided people, and we achieved the results presented in Figures 17 to 19. The correlations are significant, and again increasing their significance when we come from 2002 to 2004.
We also tried to study the relation between regional GDP per capita and collected tons, and we were able to get enough information in order to achieve good correlations, but, this time, decreasing from 2002 to 2004. Anyhow we must emphasise that the regional GDP per capita for 2004 is still provisional. The results are presented in Figures 20 to 22.
Figure 20 - Portugal 2002

$r = \frac{\sum (x - \bar{x})(y - \bar{y})}{\sqrt{\sum (x - \bar{x})^2 \sum (y - \bar{y})^2}} = 0.946093$

$R^2 = 0.895092$

Figure 21 - Portugal 2003

$r = \frac{\sum (x - \bar{x})(y - \bar{y})}{\sqrt{\sum (x - \bar{x})^2 \sum (y - \bar{y})^2}} = 0.906841$

$R^2 = 0.822361$
Finally we tried the relation between population in the region and collected tons, expecting a high correlation. This study was possible just for the years of 2003 and 2004 and the results are presented in Figures 23 and 24.
As we can notice we have achieved the expected results because the correlation between collected tons and population is very significant.

6. CONCLUSIONS

First of all we must emphasize the success of Portuguese Food Banks, as a result of social conscience increase, a positive aspect, and as a result of impoverishment and aging of population, the negative aspect. Anyhow we were able to confirm these hypotheses through the study we made. The relation between pensioners and aided people shows a high correlation and is connected with population aging and Food Banks activity level, either in a regional or a national perspective. The relation between pensioners and collected tons shows a high correlation both in national and regional perspective except in inner country. We can assume that lower regional GDP in inner country explains this result. But the increase of pensioners implies the increase of collected tons, as a result of increasing social conscience of all population facing aging matter. This statement is confirmed by the correlation between collected tons and aided people, because it has been possible, through analysed period, to collect more food in order to aid more people, except, once again, in inner country. The relation between regional GDP per capita and collected tons was studied in a national perspective showing a significant relation and pointing to social conscience increase, namely because people improving their level of live are more available for helping the needed ones. Finally the relation between collected tons and population is very high, because it is understandable getting more contribution where we have more people. The results of our work are consistent with Portuguese nowadays reality and with the important role of Portuguese Food Banks.
References

BELL, Judit (1997), Como realizar um projecto de investigação, Lisboa, Gradiva.