EXPANDED ABSTRACT

Transparency and circular economy: analysis and assessment of municipal management solid waste

Objetives

Transparency in public management is particularly important in local governments because they represent the first level of citizen participation in public affairs. Law 7/1985 Article 1, April 2sd, "Reguladora de las Bases del Régimen Local (LRBRL)", defines the municipalities as: "Basic entities of the territorial organization of the State and immediate channels for citizen participation in public affairs .. ".

This rule includes in its articles 25th and 26th the powers of the municipalities, being the collection of waste one of them, and for those municipalities with a population of more than 5,000 inhabitants, its treatment too. It is precisely those competences which will constitute the central objective of this research, from the perspective of evaluating transparency through the information municipalities provide to citizens on their transparency websites and portals.

The specific area of municipal management has been chosen due to the great importance that currently has to count on an efficient management of the treatment and disposal of urban waste to safeguard the environment, the selective collection of the urban solid waste, the restriction of uncontrolled discharges, the implementation of specific measures to reduce the hole in the ozone layer, global warming, the pollution of our rivers and oceans, to ultimately achieve sustainable growth while respecting and caring for our environment.

Although environmental problems require global solutions under the responsibility of national governments, we understand that cities play a fundamental role in the change from the traditional linear production model (manufacturing-consume-throw away) to which the new Circular Economy promotes, based on reincorporation waste to the production process as raw materials, promoting recycling, recovery and reuse.

The proper management of the collection and treatment of solid urban waste (SUW) and its impact on the environment by Spanish municipalities is a key factor when the proposal is to move forward towards a new model of circular economy, which generates interest and concern in citizens and Public Administrations (AAPP).

The main purpose of this study will be to alleviate this deficit, trying to verify if citizens can value municipal transparency regarding waste management.

To achieve this central aim, two specific objectives have been established:

Firstly, we have drawn up a transparency index through which the degree of transparency compliance of Spanish municipalities can be evaluated, in the specific area of waste management, which we will call the MTIMW (Municipal Transparency Index in the Management of Waste), consisting of 64 indicators.

Secondly, we have applied the ITMGR to the information published on the websites of the municipalities, in everything related to waste management and treatment, and prepared a ranking with the weights obtained by each of the 96 selected municipalities, for the year 2017.

Design and Methodology

To draw up this index, a total of 64 indicators have been selected, for the year 2017, distributed in 7 evaluation areas.

A. Legal indicators: In this area we have opted for a total of 9 legal indicators that we will show below:
- Indicators related with Law 22/2011, July 28th, on waste and polluted soil: 5 indicators.
- Indicators related with Law 27/2006, July 18th, which regulates the rights of access to information, public participation and to administration of law in environmental matters: 4 indicators.

B. Indicators based on the Transparency Index of the Town Halls (TIT) of the year 2017: In this area we have selected a total of 10 indicators, which we have adapted to the management of the USW, from the index released by the non-governmental and non-profit organization, Transparency International Spain[1], set up in 2006 and which is a delegation of Transparency International in our country.

C. Indicators related to waste collection. In this area and in the following two, the group of selected indicators has been taken from the SICIAL-RSU Project of the FEMP[2]. Specifically, in this section, we have considered a total of 18 indicators.

D. Indicators related to the infrastructures necessary for the provision of the waste collection service. In this section, we have considered a total of 10 indicators.

E. Indicators related to waste treatment (WT). In this section, we have considered 4 management indicators related to the waste treatment activity.

1.- Available in: https://transparencia.org.es/ita-2017.
2.- Available in: http://www.costes-indicadores.com/metodologia.htm.

F. Budgetary indicators. In this area, a total of 8 indicators related to the management, collection and treatment of SUW have been selected, based on the Statement of Settlement of the Income and Expense Budget.

G. Indicators on the quality of the web. In this last area, we have used 5 indicators, based on the Technical Manual of Effective Communication on waste for Local Entities, published by the FEMP[3], understanding that it is essential to seek citizen involvement in an increasingly efficient management of household waste, not only the transmission of information but also how it is transmitted.

Regarding the method used to score the level of transparency related to municipal waste management, we have decided to give the same importance to the indicators within each area and ,in the same way, each block of indicators will also have the same relative weight, despite that the number of indicators per area does not coincide. For each one of the items we have considered two alternatives: "yes", to which we assign the digit 1, for those cases in which the indicator is collected on the municipal website and "no", to which we assign the digit 0 if the municipal entity does not publish the information about such indicator. This scoring method allows us to assess objectively the level of municipal transparency and has been used in numerous empirical works of a similar nature [Garrido and Zafra, (2017); García et al., (2016); Nevado-Gil et al. (2016); Frías-Aceituno et al., (2014); Alcaraz-Quiles, (2014); Alonso and García-García, (2014); Albalate, (2013); Lizcano (2009); Martín and García, (2011); Bastida and Benito, (2007); Rodríguez et al., (2007); and Huang and Chao, (2001)].

We have evaluated through the MTIMW each of the municipalities in the chosen sample, made up of 96 Spanish municipalities, including all the provincial capitals in addition to the Autonomous Cities of Ceuta and Melilla, which represent the largest municipalities by population level in each Autonomous Community, and representing 20,416,034 people, 43.87% of the total Spanish population, 46,527,039 inhabitants, according to data from the National Institute of Statistics as of January 1st, 2017.

Finally, the analysis and evaluation of the website´s data was carried out between the months of August 2018 and June 2019.

Results, limitations to the investigation and implications

The most surprising outcome of the research states that the average level of transparency is only 42.6%, and that only 35 municipalities, which represent 36.4% of the total sample, offer values above 50%. The first five places are the municipalities of Vitoria (79.69%), San Sebastián (76.56%), Ciudad Real (75%), Madrid (73.44%) and Gijón (71.88 %). On the other hand, in the lower part of the rank we find the municipalities of Camargo (17.19%), Cádiz (15.63%), Mérida (14.06%) Jaén (10.94%) and Torrelavega (7.81%).

3.- Available in: http://femp.femp.es/files/3580-1333-fichero/manual%20comunicacion%20final.pdf.

If we compare our results with the TIT 2017, we observe that the general average of this index is practically more than double (89.7%) than that obtained in our research, where 61 of the 96 municipalities (63.5%) fail to reach an passed minimum, a circumstance that contrasts with the results of the TIT, where, of the 110 municipalities evaluated, only 3 municipalities (2.72%) present values below 50%.

The analysis by Autonomous Cities and Communities indicates that only five of them have averages above 50%, specifically, País Vasco (68.36%), the Autonomous City of Melilla (53.97%), Islas Baleares (53.13%), Cataluña (52.5%) and Principado de Asturias (51.95%).

Another noteworthy aspect is that only three areas have values above 50%, specifically, A. Quality Indicators (55.73%), F. Budgetary Indicators (54.83%), and B Indicators TIT which is the one with the highest weight with 75.95%. On the other hand, if we analyze the areas with the lowest mean values, these are specifically E. Treatment Indicators (10.94%), C. Collection Indicators (28.18%) and A. Legal indicators (30.29%).

Conclusions and added value

There have been many studies of an economic nature on the collection, treatment and disposal of waste, and there is an extensive bibliography that includes numerous works on the level of municipal transparency in Spain. Nevertheless, there is little research on evaluating the level of municipal transparency in the environment area, and more specifically on the collection, treatment and disposal of solid urban waste (SUW).

As main conclusions:
• It is worth noting the low average level of transparency in the management of SUW, based on the information published on municipal transparency websites and portals. Only 35 of the 96 municipalities analyzed, 36.4% of the total sample, have MTIMW values above 50%.

• Previous data is very far from the results offered by the TIT 2017 in which only 2.72% of the town councils offered values below 50%, so the Garrido and Zafra (2017), Villoria (2015) and Alonso and García-García (2014) hypothesis is confirmed, in the sense that the municipal managers would tend to focus their efforts on those contents that are the object of evaluation by the TIT, since they are previously known.

• Municipalities with a population of more than 500,000 inhabitants are those that present higher levels of transparency, on the contrary, the municipalities of less than 50,000 inhabitants present average levels of transparency close to 30%.

• Two of the seven areas of the ITMGR show disappointing results, specifically those related to information on the collection and treatment of SUW, with average levels of transparency of 28.18% and 10, 94% respectively.

• Three of the four Autonomous Communities that have transparency levels above 50%, Cataluña, País Vasco and the Principado de Asturias are the ones that present (apart from the Autonomous Community of Navarra) curiously better data on selective collection and recycled, well above the national average.

KEYWORDS: Transparency, Corruption, Indicators, Local governments websites; Circular Economy, Sustainability.

1. Introducción

La crisis de confianza que viven las instituciones españolas se ha agudizado en los últimos años. El estudio anual de la confianza, "Trust Barometer", publicado por la consultora Adelman[1], reflejaba ya en el año 2014, que el índice de confianza en el gobierno de España se situaba en 18 puntos (intervalo de 0-90, siendo este último el que representa una mayor confianza), siendo la media de 45 puntos. En el año 2017 la media del índice baja 4 puntos, y lo que es más grave, de los 27 países analizados, en 20 de ellos sus ciudadanos desconfiaban de sus gobiernos, y España reflejaba una desconfianza en su ejecutivo, solamente superada por Sudáfrica, Polonia, Méjico y Brasil.

Según el estudio del Banco Mundial[2] sobre los indicadores mundiales de buen gobierno (Worlwide Governance Indicators), y analizando el indicador de control de la corrupción (de 0 a 100), comparando los datos de España, con la media de los países con mayor renta per cápita de la OCDE (Organización para la Cooperación y el Desarrollo Económicos), apreciamos un diferencial preocupante, llegando en el año 2017 a 18 puntos, (Media de la OCDE: 86 puntos frente a los 68 de España).

Todo ello indica que España tiene una situación de corrupción alta entre los países de la zona euro, siendo ésta junto con la clase política, las principales preocupaciones de los españoles, solamente por debajo del desempleo, tal como queda recogido en el barómetro del Centro de Investigaciones Sociológicas publicado en septiembre de 2019[3].

Ante esta situación las políticas basadas en la transparencia, la Gestión Pública Responsable, la apertura y el acceso de los ciudadanos a la información pública, se convierten en una opción de políticas públicas esenciales para paliar la desafección ciudadana. Este problema es el que ha dado