# Urban sprawl and citizen participation. A case study in the municipality of La Pobla de Vallbona (Valencia)

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**Abstract**. The accelerated urban growth of the last decades in Europe has caused, especially in the Spanish Mediterranean coast, a paradigm shift in much cities, moving from a mostly compact urban form to a more diffuse one. The concept of city has changed so much that even in a lot of dispersed municipalities, it becomes difficult to define its limits. This change implies not only ecological and economic impacts, but also, social effects. Urban sprawl makes difficult social interaction and reduces the community feeling, and therefore, social cohesion and identity. This produces also changes in the relations of citizens between them and with the city council. The research propounds a discussion about the challenges that the urban sprawl causes for the application of participative models in the decision making, understanding them as basic criterion of good government. We analyze a case study to extract the complexity of articulating processes of citizen participation in territory with high dispersion based on a project carried out in the municipality of La Pobla de Vallbona (Valencia) on participatory budgets. It analyzes the results of the process carried out in relation to the urban model, the morphology of their urban pieces and spatial structure, and the demographic and social characteristics of the municipality. The question is identifying the problematic for the articulation of participative processes in territories with this idiosyncrasy. Finally, the article suggests a series of strategic lines as starting points to achieve participatory processes in the city characterized by urban sprawl.

Keywords: Urban sprawl, citizen participation, municipality, La Pobla de Vallbona.

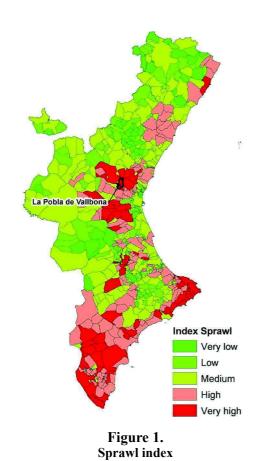
#### Introduction

Historically, the city was the spatial expression of urban fact. It was characterized mainly by size and density, but also certain social characteristics, such as heterogeneity, "urban culture" and degree of social interaction (Capel, 1975). The city, as opposed to the rural one, was a space of interrelations occurring in the public space. This approach to the city was valid for the tradicional city before, when mobility was less and most urban functions were produced intramural. Now, although there are some exceptions, it is difficult to establish the limits of the cities. In many case,

in actually city, it is very difficult to answer to questions such as where urban ends and where rural begins.

For several decades in Europe, in Spain and the Mediterranean basin, there has been a paradigm shift in the city model. In much of the territory, it passed from a traditionally compact city to a dispersed one. The growth of the dispersed city has been particularly important in Europe (EEA, 2006, EEA, 2016) as well as in Spain where there has been an intense process of land consumption, accompanied by a growing dispersion. This process is known as urban sprawl. Artificial areas has increased between 1987 and 2006 of 52%. This trend,

in spite of the end of the housing bubble, continued until 2010, as a consequence of the inertia of some artificial processes initiated during the last phase of upward cycle. In the case of the Valencian Community, the period 1987-2005 also shows a strong expansion of urban land, especially in the coastal zone (Zornoza, 2013). Evidently this growth has not been homogeneous and has resulted in a strong space specialization giving different urban models, from more sprawled to more compact city models. There are broadly two types of urban dispersion, located in very different areas (Gielen et al., 2017): first, municipalities, operating as dormitory-city, in the metropolitan areas of the three provincial capitals (Valencia , Alicante and Castellón de la Plana); second, large tourist areas, associated with sun and beach tourism, very seasonal and formed by detached houses, mainly in the coastal zone of Alicante and North of Castellón, as well as the south of the province of Alicante (Figure 1).



Source: Gielen et al., 2017

These sprawled municipalities have specifics demographic and social characteristics. Urban sprawl correlates with high population growth (Figure 2) and positive migration rates (Figure 3). Many of them have doubled their population in 20 years attracting new residents from other municipalities, regions or countries, as the migration rates indicate. They have a relatively young population. The citizen usually has little identification and connection with his municipality of residence. This is due to two factors: first, many of them were born in another municipality (the relation "place of residence"-"place of birth" has important effects in municipalities with urban sprawl); second, there is usually a separation between the place of residence, work, leisure, studies, etc., so that the mobility increases considerably. In fact, most of the actual cities are now difficult to understand without using the functional areas concept, understood as the interaction space of people in the territory.

The urban sprawl is a great challenge for a new public management where the coordination of social actors and institutions is an essential part to establish and fulfill objectives collectively discussed. It presupposes "building in a participatory way and collectively reflecting in order to be more operative and transformative" (Montañés, 2009: 14). Thus, participatory processes for decision making, together with transparency and accountability, become one of the fundamental axes of a Good Government. Indeed, in the area of the Valencian Community, the Law 2/2015, of April 2, of the Generalitat, of Transparency, Good Government and Citizen Participation, advances towards the participative democracy, assuming the society as co-producer of knowledge and of public policies and as a generator of public value; and citizenship as the subject of public action, and not only the Government and its administrations. The law 2/2015 also calls, in his article 44.2, to the creation of regulated mechanisms for citizen participation in budgets.

With these basic principles and taking into account that in the processes of participation it is necesarry "a strategy so that all the group realities, present in a locality, can formulate problems and provide solutions to them"

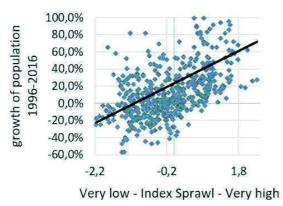


Figure 2. Population growth versus Index Sprawl

(Montañes, 2009: 44), the central question is: how to generate those processes in a physical and social space characterized with urban sprawl. In this king of city, the interaction between its inhabitants is very limited due to the dispersion of settlements, conditions of accessibility and physical connectivity have led to socio-spatial segregation and their population lacks feelings of belonging and identity with the municipality where they reside.

Undoubtedly, participatory processes are strongly conditioned by the developed territorial model. Thus, the urban form is surely an important first variable to take into account in the methodology for citizen participation. So the goal of this research is see how it can be articulated a process of citizen participation in a territory with high dispersion. To do that we analyze a case study to extract the complexity of articulating processes of citizen participation in municipality with urban sprawl based on a project carried out in the municipality of La Pobla de Vallbona (Valencia) on participatory budgets.

#### **Territorial** socio-demographic and characteristics of La Pobla de Vallbona

La Pobla de Vallbona is a municipality in the Valencian Community, located at 19 km from Valencia within its metropolitan area. It has an area of 33.10 km<sup>2</sup> and a population of 23,403 inhabitants, according to the Continuous Municipal Register for the year 2016 (Source: National Statistics Institute, INE). The

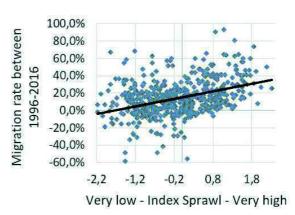


Figure 3. Migration rate versus Index Sprawl

population density is about 700 hab./Km<sup>2</sup>. The municipality counts with numerous settlements of population since there are 43 nuclei of population according to the INE. Population age is low with a high proportion of young people and active population greater than other municipality at provincial and autonomic level. The territorial model of the Pobla de Vallbona has a very dispersed urban form, characteristics of sprawled city (Gielen et al., 2017). The discontinuous urban area (urbanization of single-family dwellings) is much superior to the surface of the main nucleus, corresponding to the sum of the historical and enlargement area. The area of discontinuous urban land represents 84.40% of total residential urban area and single family dwellings more than 75% of total housing. The housing density is relatively low: 0.80 m2 of residential roof per m2 of residential urban surface. In addition, 77% of the residential zone is further away from 500 meters from the center, which is a significant proportion (Figure 4).

The distribution of the population between the urban parts shows something similar. 50% of the population resides outside the main core of municipality, in discontinuous urban areas (Table 1)

This situation can be explained by the internal migratory balances, which are positive from a long time and whose main contribution is made by the population coming from the Valencian Community (between 94% in 2000 and 77% in 2015), forming a demographic profile without socio-cultural linkage to the municipality.

With these basic characteristics, municipal government undertakes, in 2017, the preparation of budgets, as a local participatory initiative, where the protagonists are the population, who will be able to make investment proposals and decide on the destination of a part budget reserved for this purpose.

# Methodology

The methodological design to articulate the participatory process has been made ad hoc, taking into account the territorial and population characteristics of La Pobla de Vallbona. Traditionally, the factors considered in the methodological design are: population size, sociodemographic profile, access to the internet and the degree of digital knowledge. In addition, in this case, the dispersion of the population on the territory has been included. Here, it is important including a variable as the territorial dispersion because of the effects this variable causes in the social cohesion, the identity and the feeling of belonging of the citizenship with the municipality. These social and cultural elements can condition the typology and the degree of citizen participation. The distance and physical disconnection of the houses in dispersed territories can become a symbolic, social and cultural disconnection of the citizens.

The citizen consultation of investments in urban centers, hereinafter referred to as "participatory investments", is a participatory mechanism that allows the citizens registered in La Pobla de Vallbona to be involved in decision-making on the execution of a part of the municipal budget destined to make investments and increase the democratic quality of public institutions. In 2017, the budget for participatory investments is 132,000 euros, which it is around 25% of the municipal budgets allocated to investments.

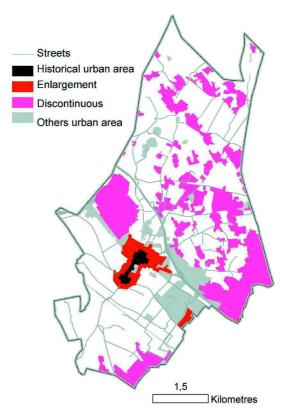


Figure 4. Territorial Model according to SIOSE land use data for the year 2011. Source: Instituto Cartográfico Valenciano

Then, this budget has been distributed in 7 municipal areas in which the municipality has been sectorized: 3 zones in the urban area (South zone, Northeast zone and Northwest zone) and 4 zones composed by urbanizations (North zone, South zone, zone East and West). As shown in Figure 5, the division comprises different scattered settlements which do not form a compact unit.

Each zones has a quota economic for the participatory investments. This amount is established according to the catastral tax provided by each zones and a fixed one calculated according to the number of urbanization or urban settlements involved

Table 1: Distribution of the population. La Pobla de Vallbona, 2016

Total	Central core	Rest of settlements
23,218 hab.	11,596 hab. (49.94%)	11,622 hab. (50.06%)

Source: Nomenclator: Continuous Population by Urban Unit. INE

Table 2. Migratory balances. La Pobla de Vallbona, 2000-2015

	Year			
Geographical area	2000	2005	2010	2015
Valencian Community	422	650	389	345
Other Spanish Regions	27	45	8	-7
Foreign	-	156	-27	109
TOTAL	449	851	370	447

Source: Residential Variations. Migratory balances by geographical area. Valencian Institute of Statistics (IVE).

(537 euros per urbanization). This fixed amount acts as a correction factor to have account the effects of territorial dispersion.

To articulate citizen participation has chosen to offer two channels of participation: the virtual channel and the channel face. Both channels are offered in parallel and inclusive manner (a face-to-face participant can participate virtually and vice versa). The decision to offer these two channels of participation is taken in order to adapt the participatory process to demographic, social, cultural and occupational

characteristics of the population registered in the municipality and provide facilities to citizens. The goal is of course to encourage participation in participatory investments.

This participatory process is structured in six consecutive phases containing: information and submission process, preparation of investment proposals, feasibility study proposals, public debate and prioritization of the proposals, voting and monitoring and evaluation process.

-Phase 1. Information and submission process.



Figure 5.
Sector division of La Pobla de Vallbona.
Source: https://participacio.lapobladevallbona.es/inversions-en-2-minuts/

In this first phase the participatory process is presented to the public in different channels. First, the process is presented in a local channel "TelePobla" through an interview with the councilor for Citizen Participation. Second, a participation website is activated with a complete participatory investment information. Third, information leaflets (presentation, calendar, etc.) are distributed in public buildings and municipal schools. Finally, on January 25 2017, the process, its phases and its scheduling are publicly presented to the general citizens.

-Phase 2. Preparation of investment proposals The objective of this second phase is to think about problems and needs of the municipality and start with the development of investment proposals, either made individually by the web, or carried out in face-to-face workshops. This phase has been organized in face-to-face sessions, in each sectors described. There were five participatory workshops, one of them in the urban area (joining the three sectors in one) and the others four in sectors corresponding to urbanizations (sector North, South, East and West).

The implicative technique, called nominal groups, used in this workshop, look to define the problems and needs of each sector to guide the design of proposals, accorded by participants. The result has been the development of a set of investment proposals, with his estimation and location in space. In parallel, in the participation website designed ad hoc, a similar process was opened, where the same information has been requested as in the face-to-face workshops.

-Phase 3. Feasibility study of proposals.

In this third phase, the economic, legal and technical feasibility of the proposals submitted by the public is analyzed. A commission was created, composed by the Municipal Auditor, the Secretary of the Council, the Councilor for Citizen Participation, as well as Urban Planning, Information Technology Citizen Participation Technicians. Finally, the feasibility study results are presented on the website of participation and in a new session of workshops.

-Phase 4. Fase de debate y priorización de las propuestas viables.

The goal of this phase is to present, discuss, prioritize and adjust the proposals resulted of the previous phase. Newly, 5 workshops located in the different sectors were organized, in the same spaces as those in phase 2. On one hand, it were presented, debated, prioritized and adjusted viable proposals. On other hand, it was discussed too the non-viable proposals and the reasons for their rejection. As in previous phase, a same process is included on the website, although also opening here a virtual discussion forum.

-Phase 5. Vote process

At the end of the discussion phase, 4 days of voting (face-to-face and virtual) are established, from March 21 to 24, 2017. In order to vote, it is essential to be registered in the municipality and 16 or more years old. Each voter has 10 points that he can distribute to different proposals or concentrate in a single proposal, whether in his sector or in another sector. The results was published on the website and in a face-to-face session on March 29, 2017.

-Phase 6. Monitoring and evaluation process To facilitate monitoring of the zone selected proposals, a new website was created where the state of the works are presented on real time. Once the investments are completed, the evaluation of the participatory process and the result of the investment is carried out. The objective of monitoring is to know the weaknesses, strengths, threats opportunities of the process as well as to propose improvements for future participatory processes. To do this, three discussion groups with different profiles were created. The selected profiles has been designed according to the degree of participation in the process (a group with participants, another with voters and a third with no-participant people).

## Measurement and analysis

The results of participation are presented in the first edition of participatory investments in La Pobla de Vallbona.

The budget for this participatory investments was 132,000€, which represents a 25% of the investments budgets of municipality. This quantity have been distributed in 7 municipal zones as appears in Table 3.

The workshops have been carried out

Table 3. Number of proposals

Sector	Number of proposals	Budget
Urbanization North	10	18,150€
Urbanization Western	4	16,500€
Urbanization Eastern	9	25,300€
<b>Urbanization South</b>	8	16.300€
Central urban area Western	4	11,950€
Central urban area Eastern	8	18,000€
Central urban area South	10	25,800€

Source: Participatory investments in La Pobla de Vallbona

Table 4. Number of proposals

Number of votes	438
Number of virtual votes	181
Number of personal votes	257
Total population	19,704
Percentage participation	2,22%

Source: Participatory investments in La Pobla de Vallbona

Table 5. Participation according to age group

Percentage of participation	Age group
8.4%	less than 26
10.7%	between 26 and 35
35.4%	between 35 and 50
26.7%	between 51 and 65
18.7%	over 65

Source: Participatory investments in La Pobla de Vallbona

in each of the sectors, looking for a better approximation of the local administration to the citizens. 84 persons participated in the workshops, 21% in the workshop of the urban center and 79% in the different workshops done in the urbanizations.

The number of proposals made, virtual or in person, have been 104, although only 54 of these proposals have passed the feasibility study and to the fourth phase. These proposals are distributed as in the Table 3.

In the voting phase, as shown in Table 4, the number of voters was 438, which meaning a little participation rate of 2.22% of the population: 41.3% have voted virtually and 58.7% have done so in person.

The voter profile was 55% of women and 45% of men. In Table 5, it can be seen the percentage of participation according to age group of persons who has voted. The participation of young people in the process is low

Analyzing the distribution of the vote, 54% of voters are registered in the central urban area, while 46% are registered in some urbanization. Participation in the workshops in urbanization areas is much higher than participation in the urban center area. The greater participation registered in the workshops in urbanization areas is due to two possible causes: the existence of more urban problems and the perception of the citizen of the disaffection of the municipal politicians and technicians over a long time. At the time of voting, informal coordination has been observed to guide the vote of neighbors. Indeed, participation was increased when it is the citizen who moves his neighbors.

Anyway, the communication of the process

does not seem to have been effective: Much of the population was not aware of the participatory process. From the workshops realized, it can be deduced that:

- 1. There is a lack knowledge of the citizen about the cost of the public urban space and of the times and deadline of the municipal administration.
- 2. It exists a constant search of culprits and little co-responsibility in the existing problems of the municipal reality.
- 3. There is a low participatory culture and distrust of politicians and municipal technicians.

As result of fifth phase, seven proposals were selected. In each sector, one proposal wins and is selected. The number of proposals issued of the fourth phase is different according to sector, as shown in Table 3, as well as the obtained results in the vote phase (Table 6). Total points given to sector are bigger in western and south urban central areas, although some urbanization as the south sector one obtain a very high vote. The amount points for the selected proposals present big differences. The selected proposal in the urbanization north win with 52 points, while the central urban area south one have obtained 895 points, a difference of almost 20 times more.

#### Conclusion

Participatory investments are an opportunity to define the way how the municipality should be developed. In turn, it is an opportunity for the processes of citizen participation in itself, since being present in the decision making on the municipal investments is a motivating element. In addition, the participatory process is a pedagogical element: it helps citizens to reflect on their reality, problems and possible solutions. It approaches the citizen to the reality of the municipality and to municipal management.

In the specific case of the dispersed city, citizen participation presents also an opportunity for the resolution of problems caused by sprawl, both at the urban and social levels. At the urban level, it allows a reflection and analysis of the costs of the territorial model as well as the search of agreed and shared solutions between managers and citizens who's living in the urbanization. And at the social level, participation can serve as a tool to foster social cohesion and integration, create collective identity and a sense of belonging to La Pobla de Vallbona.

As the process carried out on La Pobla Vallbona demonstrates, it is necessary a specific

Table 6. Result of vote

Sector	Selected proposal	Points to Selected proposal	Percentage to Selected proposal	Total points of sector			
Urbaniza	Urbanization						
North	Concrete works in "Rincons" streets	52	25,6%	203			
Western	Multifunctional track in the park area	197	61,7%	319			
Eastern	Improvement of the signaling of the curve road between San Luis and "La Sima" civic center	204	52,4%	389			
South	Building of a dog recreation area	328	45,6%	720			
Central u	Central urban area						
Western	Tree plantation to create shade in the roundabout of the "Bàscula"	81	50,6%	160			
Eastern	Canine park	291	51,6%	564			
South	Improvement of sidewalks and paved of "Pilar" Street	895	45,8%	1,953			

Source: Participatory investments in La Pobla de Vallbona

design of public participation in a dispersed city, because his peculiar territorial and social characteristics.

First, urban sprawl can be associated often to younger and immigrant people. This is the case in La Pobla de Vallbona, where the population predominated is relatively young and in age of forming families (La Pobla de Vallbona, 2017: 64). The presence of young people can be an interesting opportunity for the implementation of processes participatory to use digital channels, but with less interest in a face-to-face interaction. In addition, this kind of population, living in a municipality as La Pobla de Vallbona in the metropolitan area of Valencia, has a little linkage with his territory. Most are immigrants, coming from others municipalities or a different region of the Valencian Community, while the foreign contribution is significant low and very oscillating, with emigration in last years. In addition, the residents in La Pobla de Vallbona, usually, are persons who move a lot, working, buying and enjoying leisure outside, having a more intense functional relationship with other municipalities.

Second, dispersed model increase distance between urban patches, given a disconnected model. Urban sprawl responds to a set of factors: a lack of urban planning and control by the municipal politicians and technicians, the devastating effect of the real estate bubble and lack of co-responsibility of the citizenship, among others. As a result, the dispersed city developed creates an antithesis model for which the city was conceived. In short, urban sprawl is an aberration as urban model: city loses sense according to its first essence as a supplier of services and public interaction space. It is necessary a new model of participation in this kind of space.

The proposed model of participation has allowed a satisfactory solution to the problems of urban sprawl in order to carry out participatory budgets in the municipality of La Pobla de Vallbona. The proposal divides urban area into different sectors to reflect as better as possible distribution of the population in the territory, allocate a budget to each area, with a fixed amount, and finally, choose a winning proposal in each sector, regardless of population, to make sure that all of the sectors obtains its return of the participatory budgets. Even though urban sprawl, the proposed model has achieved the participation and involvement of the population by organizing the workshops to urbanizations and dividing the budget according to the different sectors.

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