



Integrating informal urban settlements? Learning from Madrid and Montevideo

Felipe Suárez Giri

Erasmus Mundus Master's Course in Urban Studies [4Cities]

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Cover image: (Miller, 2018)

Table of contents

1. Abstract.....	1
2. Introduction and problem statement.....	2
3. Research questions.....	3
4. Methodology.....	3
5. Methods.....	3
6. Sampling.....	5
7. Coding and categorizing.....	6
8. Literature review.....	7
9. Case study selection.....	20
10. Discussion and findings.....	29
10.1 Case 1 – Cañada Real Galiana.....	29
10.2 Case 2 – Isla de Gaspar.....	40
10.3 Case 3 – Asociación Civil Esperanza.....	45
11. Conclusions.....	55
12. Abbreviations.....	58
13. References.....	59
14. Annexes.....	69
14.1 Annex 1 – Document corpus.....	69
14.2 Annex 2- Experts interviewed.....	69
14.3 Annex 3- Aerial images Cañada Real Galiana.....	71
14.5 Annex 4- Regional agreement organizational structure.....	74
14.6 Annex 5 – General questionnaire structure.....	75

Table of figures

<i>Figure 1- Key features of framework analysis.....</i>	<i>4</i>
<i>Figure 2- Step model of inductive category development.....</i>	<i>6</i>
<i>Figure 3- Informal settlement conceptualization.....</i>	<i>7</i>
<i>Figure 4 – Arenas and elements of social exclusion.....</i>	<i>14</i>
<i>Figure 5 – Informal settlements in Montevideo’s metropolitan area.....</i>	<i>17</i>
<i>Figure 6 – Evolution of the number of dwellings in informal settlements in Montevideo..</i>	<i>18</i>
<i>Figure 7- Cañada Real in Madrid’s metropolitan area.....</i>	<i>21</i>
<i>Figure 8- Examples of housing units of Cañada Real.....</i>	<i>22</i>
<i>Figure 9- Map of the housing estates built for Isla de Gaspar’s resettlement.....</i>	<i>24</i>
<i>Figure 10- Examples of housing units of Isla de Gaspar.....</i>	<i>24</i>
<i>Figures 11 and 12 - Satellite images of Isla de Gaspar 2010-2019.....</i>	<i>25</i>
<i>Figure 13–Examples of housing units in the ACE settlement.....</i>	<i>27</i>
<i>Figures 14 and 15 – Satellite images of Asociación Civil Esperanza -2010-2019.....</i>	<i>28</i>
<i>Figure 16- Sectors of Cañada Real Galiana.....</i>	<i>30</i>
<i>Figure 17 – Satellite Image of Sector five.....</i>	<i>34</i>
<i>Figure 18 –Passages between Rivas-Vaciamadrid and Cañada in sector 5.....</i>	<i>34</i>
<i>Figure 19 - Planned border exchange between Madrid and Rivas-Vaciamadrid.....</i>	<i>39</i>
<i>Figure 20 –Examples of resettlement housing units of the Isla de Gaspar settlement.....</i>	<i>44</i>
<i>Figures 21-22- Aerial view of Asociación Civil Esperanza in 2015</i>	<i>49</i>
<i>Figures 23-24- Aerial view of Asociación Civil Esperanza in 2019.....</i>	<i>50</i>
<i>Figure 25 –Examples of resettlement housing units in ACE</i>	<i>53</i>

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1.Abstract

Informal urban settlements constitute one of the most daunting challenges currently faced by cities. It is estimated that over a third of the world's urban population currently resides in informal areas. Over the last five decades, enormous efforts have been undertaken by local and national governments, and international institutions to tackle this issue. Lately, the idea of integrating these areas to the rest of their cities has become increasingly popular in the planning discourse. However, 'integration' has been typically defined very loosely by policymakers, and academic research about it virtually nonexistent. On the other hand, in spite of the highly heterogeneous nature of the phenomenon of urban informality across different countries, regions, and cities, most of the research regarding planning approaches to informal urban areas has focused in relatively similar contexts –developing world cities with a very high prevalence of urban informality-. This study takes the cases of Madrid, a high-income capital city, with a low prevalence of informal settlements; and Montevideo, a medium-income capital city, moderately affected by informality, in order to understand to what extent the planning interventions have contributed to 'integrate' informal settlements and their residents to the rest of their cities. In addition, this study explores the main factors challenging planning efforts for integrating informal settlements, and those facilitating these interventions. This is a qualitative study, which relies on the combination of qualitative content analysis of policy documents and expert interviews. A strong emphasis is set in the comparison of the experience of these two cities, in order to understand how local contexts influence the feasibility and desirability of different policy instruments.

2. Introduction and problem statement

Informal settlements are widely acknowledged as one of the biggest challenges currently faced by cities (Mehta & Dastur, 2008). By the turn of the millennium, one-third of the world's urban population – around one billion persons – was living in such places (UN, 2003). This number is constantly rising¹ since informal settlements are the fastest growing form of urban development in the global south (Dovey and King, 2011). The issue of urban informality is not only alarming for its magnitude, but also for the numerous negative implications that living in such places has to their residents. Informal settlement dwellers are exposed to a variety of health and disaster risks, and economic, social and physical exclusion (Watson, 2009; Roy, 2005; UN, 2003). In addition, they have to cope with very precarious housing situations, which often include: tenure insecurity, location in hazardous lands, overcrowding, and unsafe building structures (UN-Habitat, 2014; Mehta & Dastur, 2008).

A great deal of attention has been given by the urban planning discipline and practice to the amelioration of the situation of informal settlements in the last five decades. Over this period there has been a significant evolution in the nature of policy interventions, and their theoretical underpinning. Numerous cities all over the world have undertaken enormous efforts to improve the situation of their informal areas. However, as Beardsley and Werthmann (2008) and Abbott (2002) acknowledge, there is still not a clear set of best practices for interventions aimed at tackling urban informality. Given the high monetary cost of these and the limited resources of city administrations, the production of policy-oriented research in this area is of paramount importance.

Currently, most planning interventions in informal settlements claim to be aimed at 'integrating' these areas and their residents to the formal city. However, 'integration' is typically defined very loosely by policymakers. Furthermore, academic research about the 'integration' of informal settlements has been at best scarce. Besides, there is also a considerable gap in the academic literature regarding the challenges that practitioners face when designing and implementing policies with that purpose. For these reasons, developing a deeper understanding of the phenomenon of informal settlements and interrogating the current planning practices in this field, is essential for informing future policymaking (Jaitman & Brakarz, 2014; Acioly, 2007; Pawson & Tilley, 1997).

On the other hand, since the locus of urban informality is in the global south, most of the academic literature addressing planning approaches to informal settlements has concentrated on developing countries, and especially in a handful of cities where this issue is especially extended. Although at a lower scale, urban informality is also a persistent issue in many middle and high-income countries² (UN, 2003). However, planning approaches to informality in more developed regions have -logically- received considerably less attention from academia. While some of the lessons learned from cities with a high prevalence of informal settlements may be useful for more developed contexts, the lower scale of the problem in the latter case allows for a wider range of policy interventions (Abbott, 2002). As Watson (2008) acknowledges, there is a need for more academic research about how planning instruments for dealing with informal urban areas work in different local contexts. It is therefore essential to look into how cities with a medium and low incidence of urban informality are addressing this issue, and with what results.

In the light of the above, this study will look at the cases of Madrid, a high-income city, with a low incidence of informal settlements; and Montevideo, a middle-income city, moderately affected by urban

¹ It is estimated that the world's slum population grows by six million a year (UN-Habitat, 2016).

² It is estimated that there are 54 million slum-dwellers in developed countries, what represents a 6% of the world's total population (UN, 2003).

informality³. This research aims to gain insights about the extent to which urban policies in these cities are 'integrating' informal settlements and their residents, the influence of their local contexts over the feasibility and desirability of diverse policy instruments, the factors that hindered or facilitated their policy interventions, and to learn lessons from the experiences of these cities that could potentially inform policy-making in the future.

3. Research questions

1. What are the underlying causes for the emergence and consolidation of informal settlements in Madrid and Montevideo?
2. How is urban planning addressing informal urban areas in Madrid and Montevideo?
3. To what extent do planning interventions contribute to 'integrate' informal settlements and their residents?
4. Which factors, and to what extent, act as challenges for the design and implementation of interventions for integrating informal urban areas? How can these be overcome?
5. Which factors, and to what extent, act as facilitators for the design and implementation of interventions for integrating informal urban areas? How can these be promoted?
6. What lessons can be learned from the experience of these cities?

4. Methodology

This work is a policy-oriented study that focuses on planning responses to informal urban settlements. It follows a multiple case study design since it usually acknowledged that the results from these are more robust than those of single case studies (Mills, 2010). However, due to time limitations this work limits to just three cases.

Qualitative methods have been chosen for undertaking this study, since these are particularly suitable for understanding systems, behaviors, and needs, what is fundamental when doing policy-oriented research (Ritchie & Spencer, 1994). Moreover, qualitative methods are especially appropriate for this study since the nature of the research questions involves the collection of large amounts of textual data (Flick, 2009; Bernard, 2000).

5. Methods

This study combines the analysis of policy documents and semi-structured interviews using qualitative content analysis⁴. According to Krippendorff (2013, p.24) content analysis is "a research technique for making replicable and valid inferences from texts [...] to the context of their use". This method offers a number of advantages that make it especially appropriate for the aims of this study. Firstly, content

³ While Uruguay is classified as a high income country by the World Bank -since 2012- its GDP per capita and its Adjusted Net Income per capita are roughly half of the Spanish ones (World Bank, 2019a,b)

⁴ Fieldnotes from visits to the settlements are also occasionally used.

analysis suitable for studies that involve large amounts of textual data (Flick,2014;Krippendorff, 2013). In addition,unlike other approaches to textual analysis, content analysis gives special importance to the context in which the data was produced (Mayring, 2014; Krippendorff, 2013; Robson, 2011). This is particularly important for this study, since it deals with a variety of actors, with different interests and perspectives. Finally, content analysis can be applied to textual data in different formats, what will facilitate the comparison of the results from the analysis of policy documents and interviews (Krippendorff, 2013; Bryman, 2004).

Qualitative content analysis will be supported with the use of framework analysis. The *Social and Community Planning Research Institute* (UK) developed this method in the 1980s for managing and analyzing the large amounts of textual data usually involved in social policy research (Srivastava & Thomson, 2009). As Gale et al (2013) acknowledge, framework analysis is an excellent tool for supporting qualitative framework analysis when analyzing public policies. This method provides a systematic way to structure, organize, and interpret the data collected. Framework analysis is particularly useful when trying to answer evaluative⁵ and strategic⁶ questions about public policies (Ritchie & Spencer, 2011), what is precisely what this study aims to. The key features of framework analysis are summarized in Figure 1.

Figure 1- Key features of framework analysis

Grounded or generative: it is heavily based in, and driven by, the original accounts and observations of the people it is about.
Dynamic: it is open to change, addition and amendment throughout the analytic process.
Systematic: it allows methodical treatment of all similar units of analysis.
Comprehensive: it allows a full, and not partial or selective, review of the material collected.
Enables easy retrieval: it allows access to, and retrieval of, the original textual material.
Allows between- and within-case analysis: it enables comparisons between, and associations within, cases to be made.
Accessible to others: the analytic process, and the interpretations derived from it, can be viewed and judged by people other than the primary analyst.

Source: Ritchie & Spencer (2011)

Framework analysis consists of the following five steps: familiarization, theme identification, indexing, mapping, charting, and interpretation. The familiarization step consists essentially in the immersion in the data: reading documents, listening to interview records, studying field notes, etc. (Ritchie & Spencer, 2011). The theme identification can be done either deductively or inductively in framework analysis (Gale et al, 2013). Indexing refers to “the process whereby the thematic framework or index is systematically applied to the data in their textual form” (Ritchie & Spencer, 2011, p.11). The charting step serves to make a picture of the data as a whole (ibid). In that step “Data are ‘lifted’ from their original context and rearranged according to the appropriate thematic reference.” (Ritchie &

⁵ Evaluative questions refer to those evaluating the nature of what already exists. These could be for instance: How are objectives achieved?, What affects the successful delivery of programmes or services?, What barriers exist to systems operating? (Ritchie & Spencer, 2011).

⁶ Strategic questions are those that refer to new theories, plans, policies, or actions. These could be for instance: What types of services are required to meet needs? What actions are needed to make programmes or services more effective? How can systems be improved? What strategies are required to overcome newly defined problems? (Ritchie & Spencer,2011).

Spencer, 2011, p.12). Lastly, the mapping step consists of ‘lifting’ ideas from the rearranged data, and mapping and interpreting these (ibid).

6. Sampling

6.1. Policy Documents

Official documents are a fundamental source of information when analyzing public policies (Patton, 1990). For the present study, a document corpus⁷ was created using purposeful sampling. This is a non-probability sampling technique whose purpose is “to select information-rich cases whose study will illuminate the research questions” (Patton, 1990. p.169). In particular, the critical case sampling was the strategy chosen for this research. This sampling technique consists in selecting those cases which are “particularly important in the scheme of things” (Patton, 1990. p.174). While generalization is more restricted when deploying this sampling technique (Flick, 1990), it allows an in-depth study of the texts that contribute the most to answering the research questions (Patton, 1990). Whereas all the analyzed documents are in Spanish, relevant sections have been translated to English, paraphrased and quoted in the discussion and findings section. A description of the documents analyzed is presented in *Annex 1*.

6.2. Interviews

Semi-structured interviews⁸ with experts were conducted for complementing the document analysis. Expert interviews are used mostly when information is needed from “Staff members of an organization with a specific function or specific experience and knowledge” (Flick, 2009, p. 166). Therefore, this method is particularly fruitful when the matter under study involves public policies (Abels & Behrens, 2009; Meuser & Nagel, 2009). For the present study, expert interviews were of paramount importance in order to gain a deeper understanding of the planning interventions implemented in Madrid and Montevideo. The selection of the interviewees was done purposively⁹, seeking for those persons that offered the richest insights into the matter of the research (Flick, 2009). The researcher defined the characteristics of the experts to be included in the sample, which are: to have worked in the design and implementation of the planning interventions¹⁰; to have worked in NGOs in the settlements during the interventions; or, to have been a community representative at the time of the interventions¹¹. These criteria for selecting experts were deployed in order to bring different perspectives into the research (Wroblewski & Leitner, 2009). All the interviews¹² except one were conducted individually, and they all were between 45 minutes and an hour long. For a description of the experts Interviewed see *Annex 2*.

Semi-structured interviews were deemed the most suitable interviewing technique for the case of this study. These are flexible enough for allowing the addition and modification of questions during the course of the interview (Robson, 2011), but allowing also to make an efficient use of time, what is

⁷ Reference to the documents in the text will be made as D1,D2,D3..following their order in Annex 1.

⁸ Reference to the interviews in the texts will be made as E1,E2,E3... following their order in Annex 2.

⁹ The planners and NGO experts were contacted by email, since public addresses were available. In the case of Madrid, community representatives' phone numbers were provided by one of the NGO experts. In Montevideo, these were contacted by Facebook, since public community groups were found in this social network.

¹⁰ While not all the experts interviewed involved in the design and implementation of the interventions are planners by profession, they will all be referred as such for the sake of simplicity.

¹¹ Despite the fact that a statistically representative sample of neighbors would have been more desirable, this was not possible due to time restrictions. The researcher chose to interview elected neighborhood representatives, since it can be assumed that they are aware of the different opinions within the settlement from their role in their communities.

¹² The planners' and NGO workers' interviews were conducted in their offices. The community representatives were interviewed at their homes, except in the case of ACE, for which a group interview was conducted in its community center.

essential when interviewing experts (Flick, 2009; Littig, 2009). Slightly different questionnaires were prepared for each individual interview, depending on whether the experts inquired were planners, NGO workers, or community representatives. A sample one can be found in Annex 5.

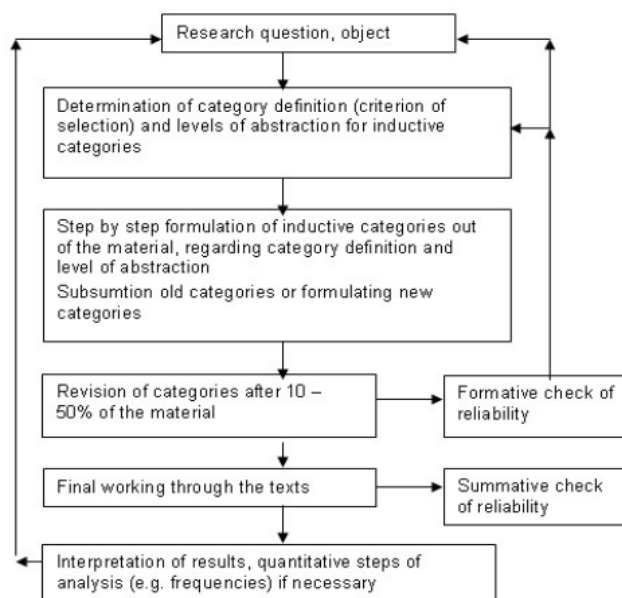
7. Coding and Categorizing

In structuring content analysis the dimensions to be extracted from the texts are typically defined deductively (Mayring, 2014; Kohlbacher, 2006). For this study, the categories and themes were developed based on the six dimensions of urban fragmentation/integration that emerged from the academic literature (Mayring, 2014). Successively, the textual data was run-through for identifying the different categories and extracting them (Ibid). No significant ambiguous situations were faced when assigning the categories, and therefore it was not necessary to develop coding rules (Ibid). Finally, the material extracted from the texts was summarized and analyzed (Ibid). This process was applied separately to the documents and the interviews, and the results were later contrasted.

Despite structuring content analysis typically relies just on deductive category assignment, when reading the documents, particular attention was given to the possible presence of relevant dimensions that were not incorporated in the categories and themes extracted from the literature (Mayring, 2007). However, no new relevant dimensions were found.

The only exception to deductive category assignment in this study was in the analysis of the interviews fragments dealing with factors hindering or facilitating the planning interventions. For this part of the analysis inductive category development was deemed more appropriate, since possible categories did not emerge with clarity from the literature, and basing these in previous assumptions and could have had a restrictive effect (Thomas, 2006). As Thomas (2006) acknowledges, "The primary purpose of the inductive approach is to allow research findings to emerge from the frequent, dominant, or significant themes inherent in raw data, without the restraints imposed by structured methodologies"(p.238). The development of categories was undertaken following Mayring (2004) "Step model of inductive category development".

Figure 2- Step model of inductive category development



Source: Mayring (2004)

Mayring's model for inductive category development departs from an initial criterion for the definition of categories derived from the research questions¹³. Successively, the textual material is run through and to tentatively identify categories, which are then repeatedly revised until the researcher deems them reliable (Mayring 2004).

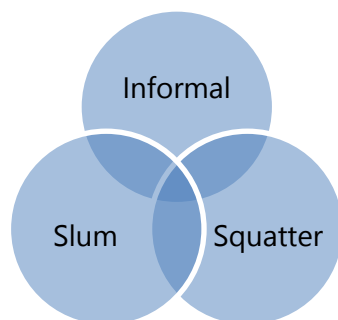
8. Literature review

8.1. Slums, squatters, and Informal settlements

The terms slum, squatter, and informal settlement are often used interchangeably for referring to substandard and neglected urban areas. While there is a high degree of congruence between the three concepts, it is important to define these and understand their differences (Dovey & King, 2011). The term *informal settlement* refers to those unplanned areas of cities, which have been built without consideration to the state regulation and bureaucracy, typically with no legal ownership of land (Alsayyad, 2004; UN, 2003). While the vast majority of informal settlements are poor, there can also be well-off informal settlements, as for instance gated communities built without consideration to zoning regulations (Tsenkova et al, 2008; Roy, 2005). The term *squatter*, on the other hand, refers simply to the lack of legal tenure over the land or buildings occupied (Kamalipour, 2016; Roy, 2005). The definition of *slums* is less straightforward than those of the previous terms. The most widely accepted definition is undoubtedly the one provided by the UN in the groundbreaking report *Global Report on Human Settlements: The Challenge of Slums* (2003), according to which slums are those urban areas characterized by their: insufficient provision of basic services, poor structural quality of housing, insecure housing tenure, unhealthy living conditions, hazardous locations, overcrowding, poverty, and social exclusion (UN, 2003; Cities alliance, 1999).

The present study will focus on the intersection of these three concepts. The center of attention will be set in those urban settlements built without legal tenure over the land in which they are located, with no regard to planning regulations, and that are characterized –in part of their extension, or in their totality- by some, or all of the features that define slums. For the sake of simplicity the term *informal settlement* will be adopted to refer to these areas in this work. It should be noted, however, that the term will be used exclusively to refer to deprived areas, excluding therefore the well-off informal settlements from its definition.

Figure 3



Source: Own elaboration

¹³ For the present study, the initial criterion was simply to identify the different factors hindering or facilitating the interventions. Successively, by grouping them by similarity, initial categories were developed.

8.2. Driving forces behind the emergence and consolidation of informal settlements

The emergence and consolidation of informal settlements is a complex and multifaceted phenomenon. Traditionally, these settlements have been conceived as a transitional problem, associated with the rapid urbanization¹⁴ and modernization underwent by many developing world countries over the second half of the XX century (Fox, 2014). In this view, informal settlements emerged for providing temporary and cheap accommodation to rural immigrants, until they could integrate themselves to the urban economy (Turner, 1968; Frankenhoff, 1967). It was expected that once immigrants found a job in the city they would enter the formal housing market (Ibid). However, the consolidation and growth of informal settlements over time made evident that these were far from being a transitory issue. There is now abundant evidence that residential mobility is very low for people residing in these settlements, even at the inter-generational level (Buckley & Kalarickal, 2005) and that residing in these areas is not necessarily a cheap alternative (Smolka & Biderman, 2011; Fernandes, 2002). Hence, it became obvious that the causes behind the emergence and consolidation of informal settlements were more complex than initially thought.

Over the last few decades, it has been accepted that the phenomenon of informal settlements is a multi-causal one. While it is still accepted that rapid urbanization plays an important role in it, it is now considered that rural immigration is “is neither a necessary nor sufficient condition for slum formation and growth” (Fox, 2014, p7.). Demographic explanations have to be necessarily accompanied by economic ones (ibid). It is widely accepted today that urban poverty is one of the most determinant reasons for the emergence and persistence of informal settlements (Cavalcanti et al, 2019; Fox, 2014; UN, 2003). The logic behind this argument is simple. As Mosha (1988) argues, income determines the effective demand for housing. In other words, income determines the quality of the dwellings that households can afford to build, buy, or rent (ibid). Therefore, where incomes are low, housing quality will be deficient for: (a) the inability of households to finance the building, upgrading, and maintenance of their dwellings, and (b) for the lack of economic incentives for private actors to provide housing units that meet the minimum standards for the formal sector (Fox, 2014). However, as Smolka and Biderman (2011) demonstrate, the relationship between income level and informal settlements is not a straightforward one. As these authors acknowledge, there are numerous cases of diminution of poverty, paralleled by growth of slums. In addition, households living in slums are not necessarily the poorest ones in a city (Ibid).

A third group of authors points at institutional factors and urban land markets imperfections as determinants for the emergence and consolidation of informal settlements. For instance “excessively rigid land use regulations, zoning laws, and building codes are usually seen as inhibiting or discouraging private investment [in affordable housing]” (Fox, 2014, p.8). Alternatively, the Economist Fernando De Soto, whose ideas have had a huge influence in the policies of international institutions such as the World Bank (WB), argues that the poor definition and enforcement of property rights among the urban poor acts as a deterrent for them to invest in their dwellings (De Soto, 2000). In this view, the legal recognition of slum dwellers property rights would lead them to invest more in their dwellings, which would result in the improvement of their living conditions (Field, 2005). Lastly, it is often argued that the lack of legal recognition of informal settlements leads to public under-investment in services and infrastructure, either because these sites are ineligible for investment, or because investing in these areas would imply their recognition by the state (WB, 2009).

¹⁴ Global urbanization is considered one of the most radical changes ever experienced by humanity (Birch and Wachter, 2011). According to UN (2015), in 2007 the world's urban population outnumbered the rural for the first time in history. While in the 1950s only around 30% of the population resided in cities, this figure is estimated to be currently 54 % (ibid).

Finally, urban planning –or rather insufficient planning- is often pointed as one of the determinants factors behind the emergence and persistence of informal settlements (Smolka & Biderman, 2011; Acioly, 2007). As stated above, informal settlements have long been seen as a transitory problem that economic growth would solve. According to Smolka & Biderman (2011) “This perception has affected urban planning approaches because attributing informality to poverty essentially exempts local managers from responsibility for the problem.” (p.2). As a consequence, there has been a widespread and severe under-provision of serviced urban land and housing, affordable to the low-income population of developing world cities (Ibid). Lastly, some authors such as Fernandes (2008) accuse urban planning in the developing world of being overly elitist and technocratic. The main argument behind this view is that, while the standards set by planners for urban development might be the most desirable, these often do not adjust to the local social and economic conditions.

8.3. Planning approaches to informal settlements

The nature of policy interventions for dealing with informal settlements has varied considerably over the years. However, their evolution has not been always straightforward, and it is not uncommon to find cases of outdated policies being applied today (Cronin, 2012; UN, 2003). The main policy approaches to slums and informal settlements are introduced below.

8.3.1. Negligence

This was one of the earliest approaches to informal settlements, and it consisted in simply ignoring the existence of the problem (UN, 2003). This was the predominant attitude towards urban informality in the developing world until the 1970s (Ibid). The underlying ideas of this perspective were that (a) informal settlements were illegal and beyond planners responsibility, and (b) that they were a temporary problem, that economic growth would gradually solve (UN, 2003).

8.3.2 Eradication

The eviction of informal settlements’ dwellers was a popular strategy during the 70s and 80s, particularly in those countries governed by non-democratic regimes (Brakarz & Jaitman, 2013; Abbott, 2002), like most Latin American countries at the time (Fernandes, 2002). As Abbott (2002) acknowledges, this highly interventionist approach was directly transplanted from developed countries, where it had been successfully applied in the post-war period, to the developing world. Eradication interventions typically consisted of the dismantling of informal settlements, and –in most cases- the resettlement of the urban poor in the peripheries of cities (WB, 2000). The implementation of this type of policies ceased almost completely by the end of the 80s since it became evident that they destructed the peoples’ social ties and means of livelihood (Brakarz & Jaitman, 2013). Besides, these policies had a very high monetary cost (Brakarz et al, 2002). Despite the existent consensus about the disruptive nature of this approach, it is not rare to find current examples of eradication interventions in many regions of the world. In the case of Europe, various countries, such as Italy, France, and Romania, have been accused of forcefully evicting Roma informal settlements over the last decade (Bennett, 2011; O’Nions, 2011).

8.3.3. Self-help policies: site and services and in situ upgrading

The “twin” approaches emerged in the 70s, as a result of the increasing recognition of informal settlements as a durable and structural phenomenon (UN, 2003; Benton, 1994). The *sites and services* approach consisted basically in the provision of serviced plots of land for the families relocated from informal settlements, so they could build their homes progressively (Brakarz & Jaitman, 2013). The WB was its main promoter, influenced by Turner’s idea that, if the right incentives were given, slum dwellers would be more efficient than the state in providing housing for themselves (Ehebrecht, 2015; Ward, 2012; Abbott, 2002). Site and services interventions were extensively promoted until the 90s, since

these were considered cheaper than other alternatives (Cronin, 2011). This approach has been often criticized for leaving the families in a worse-off situation than they were in the informal settlements (Ibid). To begin, it was often the case that families could not mobilize the resources needed to build their new dwellings (Brakarz et al, 2002). Moreover, when relocated to new plots, households lost the investments already made in their former dwellings (ibid). In addition, “most programs required households to be relocated to areas far from the working and service centers -where land is less expensive- what severely worsened the living conditions of the beneficiaries” (Brakarz et al, 2002, p.19).

The *in situ upgrading* approach, on the other hand, was primarily focused on providing settlements with infrastructure and services, enhancing their hygiene, and regularizing land tenure (Brakarz et al, 2002). This approach has been widely criticized for focusing excessively in “hard” service and infrastructure delivery, and for approaching informal settlements in the same way as the planned city (Abbott, 2002). Besides, upgrading interventions typically ignored many of the structural factors driving urban informality, such as the lack of income generation opportunities of local residents, their deficient educational level, and their social isolation (Ibid). Finally, the twin approaches were often criticized for being excessively top-down (UN,2003; Abbott, 2002).

8.3.4 Enabling policies

From the second half of the 1980s, it was increasingly recognized by policy-makers and the academia that local residents should be the definition of the policy priorities (Cronin, 2011; UN, 2003). Enabling policies were based on the principle of subsidiarity. The underlying idea was that decisions concerning economic, social, and physical development are more efficient if they are taken at the lowest effective level (Ibid). For most of the activities related to the improvement of the conditions of informal settlements, the lowest effective level would be the neighborhood and the community. Besides, it was recognized under this approach that for enabling communities to take decisions responsibly and effectively training and organizational support is needed (Ibid). On the other hand, central to the enabling approach was the idea of unhampered markets as the basis for allowing the private sector to successfully provide urbanized land, housing, and housing finance, to all sectors of society, including the most deprived ones (Brakarz et al, 2002). While the emphasis given to participation under the enabling perspective continues to be a cornerstone of current approaches for tackling urban informality, this approach has been often criticized for acting as a “smokescreen” of neoliberalism for the withdrawal of the state from its commitments to improve the situation of the urban poor (Davis, 2006).

8.3.5. Current best practice

Participatory upgrading is commonly referred to in the literature as the current best practice for policy interventions in informal urban areas (Cronin, 2011, UN, 2003). According to Cronin (2011) “participatory upgrading consists of physical, social, economic, organizational and environmental improvements undertaken cooperatively and locally among citizens, community groups, businesses, and local authorities”(p.29). Under participatory upgrading, communities are given a pivotal role in the amelioration processes from the very beginning, often through formal mechanisms (UN, 2003). As Brakarz and Jaitman (2013) acknowledge, one of the main advantages of this holistic approach is that “it keeps the social networks of the dwellers and the cohesiveness of the community intact while improving their living standards”(p.4). In addition, a further positive factor of *in situ* upgrading policies is that the investments already made by the informal settlement-dwellers are capitalized (ibid). Finally, it is often argued that participatory upgrading has a huge potential to strengthen the community’s voice and ability to transform their condition (Imparato & Ruster, 2003).

Participatory upgrading interventions typically include: the development or improvement of basic infrastructure, such as, sanitation, drainage, electricity, footpaths and streets; the mitigation of

environmental hazards; the development of community facilities such as health clinics, nurseries, and community centers; the regularization of land tenure; housing improvements; job training activities; actions aimed at improving security; and efforts to build social capital (Cronin, 2011).

8.4. International recognition of the problem

The issue of informal settlements has gained increasing recognition among international institutions over the last few decades (UN Habitat, 2016; Tsenkova, 2009; Acioly, 2007). This is clearly reflected in the targets of the successive global development agendas. To begin, the *Millennium Development Goals* set specific goals for the improvement of slum dwellers living conditions. For instance, the MDG 7 target 11 aimed to “improve substantially the lives of at least 100 million slum dwellers, while providing adequate alternatives to new slum formation [by 2020]” (Garau et al, 2005, p.109). According to UN Habitat (2016) this goal has been widely surpassed. This institution estimates that over 320 million persons have been lifted out of slum conditions between 2000 and 2014. However, while a reduction in the proportion of slum dwellers in relation to the total urban population has been achieved, the absolute number of slum dwellers has been steadily growing (UN Habitat, 2016). The need for further progress in improving slum dwellers living conditions has been also recognized in the Sustainable Development Goals (SDGs) (Ibid). SDG target 11.1 aims to “ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums” by 2030 (UN Habitat, 2016). Finally, the *New Urban Agenda* gives a considerable attention to slums, highlighting the necessity to support slum upgrading and slum preventing measures, to develop systems to monitor the evolution of these settlements, and to devise policies to integrate them economically, socially, culturally, and politically to the rest of their cities (UN-Habitat, 2016).

8.5. From urban fragmentation to informal settlement integration

There is a wealth of academic production and terminology dedicated to the socio-economic and spatial transformations occurred in metropolises of the western world since the crisis of the fordism. Some of the most prominent approaches are Sassen’s (2013) idea of the ‘polarized city’, according to which the transition to the service economy is paralleled by a multiplication of high-salary professional and managerial jobs on the one side, and of low-skilled and low-paid jobs on the other, at the expense of the traditional working-class industrial positions; Mollenkopf and Castell’s (1991) notion of the ‘dual city’, who, as Sassen, identify a trend towards an ‘hourglass’ society, which has its spatial correlation in increasing levels of spatial segregation; Marcuse (1993) proposition of quartered cities, in contrast to the idea of dual ones, consisting in an ensemble of highly differentiated but internally homogeneous residential, commercial, and productive quarters; and Fainstein and Harole (1992) an their idea of “divided cities”, which offer substantially differentiated quality of lives and opportunities to their residents. While these ideas were developed for describing the changes experienced by metropolises in the industrialized world, -mainly in the US- from the 70s onwards, they have been widely adopted to describe the transformations experienced by Latin American, and European cities in this same period¹⁵ (Janoschka, 2002;Prévot, 2000).

For the present study, we will focus on the notion of urban fragmentation, since it encompasses many of the ideas mentioned above, and its multidimensionality enables us to grasp the complexity of the phenomenon of informal urbanization. Urban fragmentation has become a popular term in the urban planning discourse over the last couple of decades, both in the developed and developing world

¹⁵ It is worth reminding that the crisis of fordism in the developed world was paralleled by the crisis of the model of industrialization by substitution of imports in many Latin American countries, which was once enabled the ascent of large sector of the urban population to the middle class (Prévot Schapira, 2000).

(Michelutti, 2010). It has its origins in the *Los Angeles School of Urbanism*, whose authors' coined the term for describing the nature of the postmodern city. In their view, Los Angeles could be interpreted as a set of interrelated, but highly heterogeneous, fragments –ethnoburbs, control and command centers, corporate citadels, gated communities, etc. - (McGuirk & O'Neill, 2007). The concept was later adopted and further developed by several disciplines, such as geography, economics, sociology, and urban studies, for understanding the transformations taking place in metropolises around the world (Michelutti, 2010).

In the case of Latin America, urban fragmentation has become a popular concept for understanding the deep transformations experienced by cities in the region over the last five decades. One of the most widely cited examples is the model of the Latin American city, developed by Janoschka (2002), which conceives the city as a set of interrelated islands – of wealth, of poverty, of production, of consumption-linked by highways. Although the concept of urban fragmentation has been considerably less popular in European urban studies, authors such as Pfirsch and Semmi (2016) and Semmoud et al (2014) adopted this perspective to describe the changes underwent by Mediterranean metropolises over the last decades. In particular, these authors identify the proliferation of gated communities, tourist enclaves, informal settlements, refugee camps, ethnoburbs, and corporate citadels as signs of increasing fragmentation of urban centers in southern Europe.

Balbo (2006) provides valuable insights for understanding the explanatory power of the concept of urban fragmentation in the context of urban informality. According to this author, western urban planning traditionally followed the idea of achieving a certain degree of homogeneity and order across the various areas of a city. Consequently, despite the quality of housing, infrastructure, and services varied across different areas of a city, the disparities did not imply the exclusion of a certain group and the inclusion of another (Balbo, 2006). Therefore, the different parts of the city functioned as a single 'whole' (Ibid). However, Balbo claims that many cities, particularly in the developing world, are made up of planned and unplanned fragments that do not constitute a single organism, but rather two distinct, but physically juxtaposed cities (Balbo & Navez,1995).

There are six main domains in the rupture between the formal and informal fragments of the city¹⁶ usually identified in the literature, namely, the physical, service, social, economic, legal, and environmental dimensions¹⁷. The physical dimension of fragmentation is the most visible one. It refers to the huge discrepancies in the built environment between the planned and the unplanned parts of cities. While in the former case buildings typically comply with zoning regulations and construction normative, in the latter one buildings are usually constructed in an organic manner, often with substandard materials, and with no regard to the urban normative. As Balbo (2006) states, the formal city is made up of 'finished products' that comply with the 'modern' housing standards, while the informal city is a city in progress, where little is complete (p.29). Additionally, there are huge discrepancies between formal and informal fragments' built environment if we consider their infrastructure provision (Ibid). While formal areas logically have paved streets, drainage, sewage, and well-maintained public spaces, these are typically absent in informal settlements. In addition, the

¹⁶ These dimensions of fragmentation should not be taken as clear cut distinctions between formal and informal areas, but rather as general lines that characterize these. It is not uncommon to find areas in the formal city facing some of the problems that characterize informal settlements, such as overcrowding, substandard quality constructions, poverty, stigmatization, etc. (Prévot , 2000). On the other hand, informal settlements are more often than not, characterized by their precarious integration to the institutions upon which social inclusion is based, than by their total exclusion (Álvarez, 2007).

¹⁷ Some authors also identify a cultural divide between the informal and the informal fragments (Bayón & Saravi, 2013; Balbo, 2006). In the present study this dimension will not be analyzed separately, but will rather be treated transversally, integrating its insights into the other dimensions examined.

connections to access to basic services such as running water and electricity are either non-existent or irregular in informal fragments.

The second dimension of fragmentation consists of the major discrepancies in service provision that exist between the different fragments of the city. Whereas residents from formal areas typically have satisfactory access to basic services such as health, education, and public transport, their access is often much more restricted to residents of informal settlements (Balbo, 2006). The economic dimension refers to the huge discrepancies in household's income that exist between formal and informal urban areas, derived from their different capacities to access the labor market (Michelutti, 2010). The legal dimension concerns the different tenure status that the residents of the planned and the unplanned city have over their dwellings, and the different levels of security these grant (Balbo, 2006). As regards to the environmental dimension, while even the formal fragments of a city often suffer from detrimental environmental conditions, as for instance poor air quality, informal settlements are often subject to all kind of environmental hazards, such as ground pollution, industrial fumes, wastewater, constant noise, and other sources of pollution (Parker et al, 1995).

The social, lastly, is the most complex of the dimensions of urban fragmentation, and arguably the less self-evident. It refers to the increasing social exclusion faced by residents of the informal fragments of the city (Balbo, 2006). While there is no consensus on the definition of social exclusion, we will adopt the one provided by de Haan & Maxwell (1998) who describe it as "the process through which individuals or groups are wholly or partially excluded from full participation in the society in which they live" (p.4). The exclusion of informal settlement's dwellers from participating in the economic, social, educational, cultural, recreational, and political spheres of their cities has been well documented in the literature (Saglio 2013; Arimah & Branch, 2011; Begum & Moinuddin, 2010). So have been the various negative consequences of their increasing isolation, which include issues such as the erosion of their social capital ¹⁸(Bolt et al, 2010; Rodríguez & Arriagada, 2004), the increase in their stigmatization (Wacquant, 2007), the reduction in their chances of social mobility (Bayón & Saravi, 2013), and the fracture in common social norms (Katzman, 2003; Janoschka, 2002).

To operationalize the concept of social exclusion it is necessary to contemplate its different dimensions. For doing so, it is particularly insightful to consider the conceptualization of the different arenas and elements of social exclusion suggested by de Haan (1998) which are summarized in *figure 4*. Since the categories are rather self-explanatory, their description is not provided in this study.

Over the last couple of decades, the 'integration' of informal settlements and their residents to the formal city started being explicitly recognized as a core objective of urban policies directed to these areas (Magalhães, 2012; Clichevsky, 2000). This has been reflected in the increasing integrality of planning interventions, which have gradually become more concerned with the economic, social, and environmental, deficits of informal urban areas, (Vargas & Jiménez, 2013). Despite the above, the idea of 'integrating' informal settlements has been loosely defined, both in the academic and the policy-making spheres. In addition, in spite of the popularity of the idea, research on whether such policies are working is still virtually non-existent. In an attempt to overcome this gap, this study proposes to use the notion of urban fragmentation, and its different dimensions, as a theoretical backdrop for assessing whether and to what extent urban policies in Madrid and Montevideo are contributing to the 'integration' of informal settlements.

¹⁸ The concept of social capital can be understood as the formal or informal norms of reciprocity and trust embedded in communities (Putnam, 1993). Two related concepts that are worth mentioning for the present study are bonds and bridging ties. The former term refers to the social links existing within a specific group, while the later to those social links with people from other groups (Narayan, 2002). Both kinds of links play a fundamental role in social capital. While bonds are important as a safety net, bridging ties are fundamental for accessing to information and economic opportunities (Ibid).

Figure 4 – Arenas and elements of social exclusion

Key arenas	Elements
Rights	human legal/civic democratic
Resources	human and social capital labour markets product markets state provision common property resources
Relationships	family networks wider support networks voluntary organisations

Source: de Haan 1998

8.6 Informal settlements in Madrid

8.6.1. Background

Madrid is Spain's capital and largest city. Its metropolitan area has a population of 7.3 million, which makes it the fifth largest in Europe (Ayuntamiento de Madrid, 2014). With a GDP per capita of 33.000 € its metropolitan area is the wealthiest one in Spain, well above the national GDP per capita, of 25.000 €¹⁹ (EuroStat, 2019a). The economy of the Spanish capital has shown an impressive growth over the last decades –with the exception of the years following 2008's world financial crisis–, shifting from being merely the country's administrative center to its economic powerhouse (Maldonado & Pérez, 2008). Despite the above, the city still could not completely solve the situation of its informal settlements, which once characterized its peripheries (Lago, 2014).

While there are no official estimations on the number of irregular settlements and its population, the sources available point to the existence of 10 to 130 of these settlements scattered around the metropolitan area's periphery (Álvarez, 2018; Barroso, 2015). Regarding its population, the estimations vary from around 10.000 persons to well over 20.000 (Ibid). What is certain however is that in parallel to its strong economic growth, Madrid experienced an increasing inequality, and a rollback of those policies directed to the most vulnerable sectors of the population, what hindered the chances of the city's most disadvantaged groups to improve their situation (Monreal, 2014).

8.6.2 The surge and decline of *barrios de chabolas*

Over the first three decades of the 20th century, a tendency towards urbanization started consolidating in Spain (Rodríguez, 2002). The migratory flows were principally directed to large urban centers, namely, Madrid and Barcelona, and Seville and Bilbao to a lesser extent, having their main origin in the neighboring provinces of these cities (Silvestre, 2001). While the Spanish civil war (1936-1939) momentarily halted this phenomenon, rural emigration started growing again in the 50s, and reached unprecedented levels in the 60s and 70s –what is commonly referred as the rural exodus– (Rodríguez, 2002).

¹⁹ Both figures are current prices estimations

In this context, Madrid, which had been particularly hit by the civil war and faced a harsh economic crisis, starts receiving an increasing number of immigrants, coming mainly from rural areas of south and central Spain (Franco, 2005; Valenzuela, 1983). While the dictatorial government of the time was aware of the housing crisis and the pressing need to provide new housing units for the city's growing population, and took some actions in this regard²⁰ in practice, public policies failed to reach the vast majority of the newly arrived migrants (Ibid). As a result, a large number of them settled in illegally subdivided rural land in Madrid's surroundings, where they built shacks –*chabolas*, as they are called in Spain- , with no reference to any urban normative, and no access to basic services and infrastructure (Valenzuela, 2010). The combination of the strong migratory inflow and the inadequate planning response resulted in such a severe situation that by the year 1957 there were over 60.000 *chabolas* in the Spanish capital, grouped in various settlements scattered around the city's periphery (Franco, 2005).

The turning point in Madrid's informality situation came at the end of the 70s. Over the last years of the Spanish dictatorship, neighborhood associations claiming for an improvement in their housing conditions and in their access to urban services and infrastructure started to gain visibility (Franco, 2005). With the democratic restoration, in 1978, the demands of these groups were finally addressed by the state and incorporated into the groundbreaking *Programa de Barrios en Remodelación -Program of neighborhood remodeling-(PNR)*. The PNR had as its main objectives the improvement in the living conditions of the "misery belt" that surrounded Madrid (Valenzuela, 1983). The scale of this operation was massive. It involved the construction of 38.540 housing units across 28 neighborhoods of the Spanish capital, and the relocation of over 149.000 persons, between 1978 and 1986 (Lago, 2014; Valenzuela, 2010).

The PNR is regarded as a resounding success in the academic literature. According to Franco (2005) the importance of the program was crucial "not only because it managed to eradicate the problem of informal settlements that Madrid was suffering, but also because it succeeded in transforming vast areas of the city, once characterized for their sub-standard housing conditions, into new neighborhoods of optimal quality, and to integrate to the city large urban sections that were before left behind"(p.62). Once this program concluded, *chabolismo* ceased to be an extended problem in Madrid, and started to be associated almost exclusively with socially, ethnically, and economically marginalized groups (Lago,2014).

8.6.3. The new *chabolismo*

From the second half of the 80s onwards, there has been a substantial transformation in the ethnic, social, economic, and physical characteristics of Madrid's informal settlements (Valenzuela, 2010; Lago, 2014). To begin, these experienced an extraordinary process of concentration of ethnic Roma people. While the Gypsy community in Madrid already had a predominant presence in the city's *barrios de chabolas* before the implementation of the PNR, accounting for a 52% of the settlements' population in 1979, this share rose to a staggering 93% by 1984 (Lago ,2014). One of the fundamental reasons for the increase in the concentration of ethnic Roma people in Madrid's informal settlements was that families from this group were severely underrepresented among the beneficiaries of the PNR, accounting for just 1,8% of the relocated families (Lago,2014). Gypsy people were systematically relegated in this program as a consequence of their conflictive relationship with other social groups being relocated (Ibid). Moreover, as a result of the stigmatization of this group, subsequent plans to resettle Roma families were met with strong opposition from local communities, what further complicated efforts to improve their situation (Ibid). On the other hand, the *barrios de chabolas* started receiving new migrants from the 80s onwards, but this time from foreign countries –mainly from Morocco, Romania, Portugal, and

²⁰ For instance Franco's regime founded the National Housing Institute, and introduced '*poblados dirigidos*'(Franco Alonso, 2005; Valenzuela Rubio, 1983).

some Latin-American countries²¹-, what added to the social complexity of these areas (Monreal, 2018; Lago, 2014).

Another important change in Madrid's *barrios de chabolas* is to be found in the work profile of their inhabitants. While the majority of the Spanish rural migrants that settled in these areas progressively integrated to the formal economy, a large portion of the residents of the modern informal settlements has long relied in informal subsistence activities, such as peddling, begging, and scrapping (Valenzuela, 2010). Besides, as a result of the lack of economic opportunities, some residents of informal settlements have turned to illegal activities for making a living, what has reinforced the stigmatization of these areas (Franco, 2005). Finally, the current *barrios de chabolas* are characterized by the lower quality of their dwellings – in terms of construction quality and size- as compared to their predecessors, and are typically located in more peripheral areas (ibid). As a result of the above-described transformations, some authors argue that the *new barrios de chabolas* are not substantially different in their living conditions, level of marginalization, and economic characteristics of their population, to the slums of developing world cities (Valenzuela, 2010; Franco, 2005).

8.7. Informal settlements in Montevideo

8.7.1. Background

Montevideo is Uruguay's capital and largest city. According to the data of the last available census (2011), it's metropolitan area²² has a population of 1.947.604 inhabitants, concentrating 59% of the country's total (IMM, 2013). Uruguay is one of Latin America's wealthiest countries, having currently the second highest GDP per capita in the region –14.617 USD constant prices of 2010- after Chile²³ (WB, 2018). In addition, it is by far the Latin American country with the lowest poverty rate²⁴ (ECLAC, 2019). Despite the above, according to the 2011 census, 165.271 persons live in the 589 existing informal settlements in Uruguay²⁵ (PISU-PIIS, 2012). Over 80% of these settlements are located in Montevideo and its metropolitan area, representing around 7% of its total population (Ibid). Informal settlements in Montevideo are mainly located in its periphery, and along the main highways entering the city -See figure 5-(Álvarez, 2007; Couriel, 2010). However, in some cases these settlements are located as 'enclaves' in relatively central areas, close to wealthy neighborhoods, since these provide work opportunities (Katzman et al, 2004). The population of informal settlements in Montevideo is significantly different from that of the formal city in terms of their socio-demographic characteristics. To begin, informal settlement's residents are considerably younger²⁶ (INE, 2008). Likewise, the educational level of the informal settlement population is much lower than that of the formal city residents²⁷ (Ibid).

²¹ Many of the Portuguese and Romanian immigrants are of Roma background (Lago Ávila, 2014).

²² 68% of the residents of Montevideo's metropolitan area live in the province of Montevideo, 27% in the province of Canelones, and 5% in the province of San José (IMM, 2013).

²³ However, if we look at the Adjusted Net National Income per capita, Uruguay's is by far the wealthiest Latin American Country (World Bank, 2019b).

²⁴ Uruguay poverty rate is 7,9% according to the National Institute of Statistics (NIS) estimation, and 2,7 according to the ECLAC estimation (ECLAC, 2019).

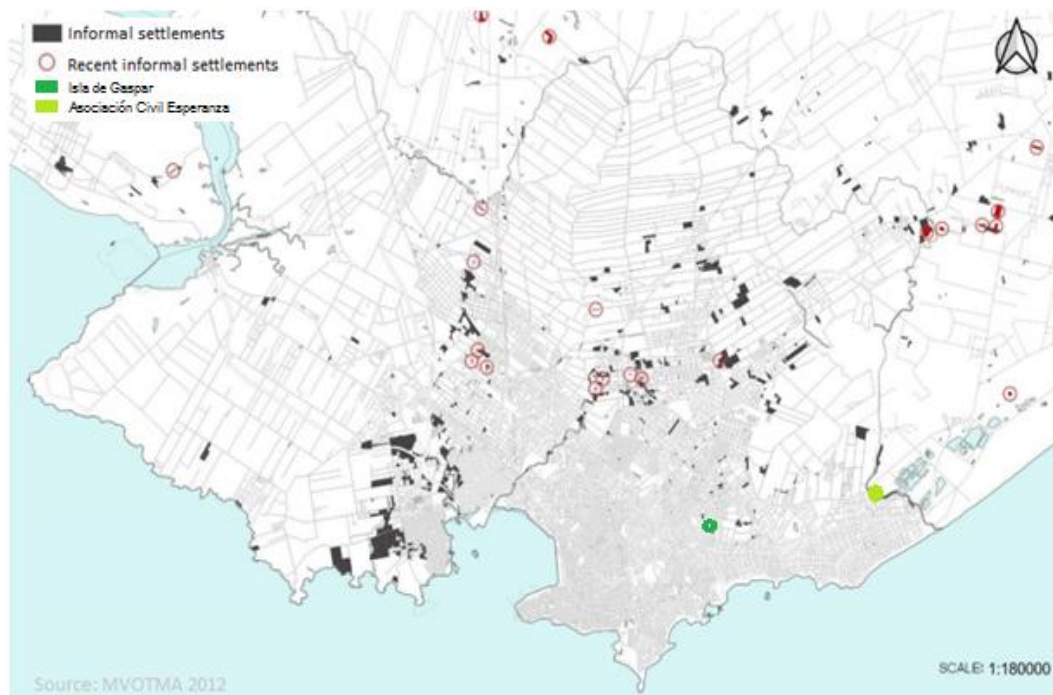
²⁵ The National Institute of Statistics (NIS) adopted the following definition of informal settlement: "Group of 10 or more dwellings, located in public or private land, built without the consent of the landlord, and with no respect to urban planning norms. In addition, informal settlements are characterized in most cases by the lack of urban infrastructure and difficulties in the access to social services "(PISU-PNU, 2012 p.2).

²⁶ While the average age in the formal city is 39 years, this figure is only 26 in informal settlements (INE, 2008)

²⁷ . Whereas over 60% of the households' heads in informal settlements have received less than six years of formal education, this figure is only 27% in the formal city (INE, 2008). On the other hand, while 26% of the household's heads in the formal city received some kind of tertiary education, this figure is only 2% in informal settlements (Ibid).

Besides, residents of informal settlements are on average much poorer²⁸ than those of the formal city, and they are much more affected by unemployment²⁹ (Ibid).

Figure 5 – *Informal settlements in Montevideo's metropolitan area*



8.7.2. Forces driving informality in Montevideo

The emergence of informal settlements in the Uruguayan capital is different from most cases in Latin America for a number of reasons. As in most of the region, the first informal settlements in Montevideo emerged in the 1940s due to the incapacity of the economic model of industrialization by import substitution to completely absorb the flow of labor coming from rural areas (Bolaña, 2017; Álvarez, 2007). These were ironically called *cantegriles*, making reference to a wealthy area of the city of Punta del Este. However, unlike most major Latin American cities, Montevideo was able to accommodate in the “formal city” the vast majority of rural immigrants (Álvarez, 2014). The surge in the city’s informal settlements occurred much later than in most Latin American Metropolises (Katzman et al 2004). It was not until the late 80s and 90s that its number soared -See figure 6-. Besides, in contrast with most other cities in the region, the growth in informality occurred in a context of population stagnation (Álvarez, 2014). Finally, that growth was not primarily fuelled by rural migrants or foreigners. On the contrary, the majority of new informal settlement dwellers were expelled from the formal city, for a number of reasons that will be later exposed.

²⁸ While the income of 70% of households in informal settlements is either below or slightly above the poverty line, this figure is only 16% in the formal city (INE, 2008).

²⁹ In 2008 the unemployment level was 6% Montevideo’s formal areas in 2008, and 11% in its informal settlements (INE, 2008)..

Figure 6 – Evolution of the number of dwellings in informal settlements in Montevideo

Year	Number of dwellings ³⁰
1984	2.541
1990	4.853
1994	7.013
2006	39.116
2011	31.921

Source: Own elaboration

There are a number of factors commonly identified in the literature as contributors to the strong growth in informal settlements occurred in the late 80s and 90s in Montevideo. A first one can be found in the decline of the welfare state (Portillo, 2003). Over most of the first half of the 20th century, Uruguay enjoyed a prosperous economy, which enabled the country to develop a relatively strong welfare state, which included public health and education, and a well developed social security system. In addition, the state-financed homeownership, and granted a high level of security to tenants (Ibid). As a result, even the low-skilled sectors of the working classes were able to reside in the formal city, in relatively good conditions, and having access to a broad range of social services (Portillo, 2003). However, in the late 60s, the country entered a period of economic stagnation, which challenged the maintenance of the welfare policies (Ibid). Later, in 1973 the country suffered a *cou d'état* that installed a dictatorship which would remain in power for over a decade. Over the dictatorial period, a series of neoliberal policies aimed at restoring the conditions for capital accumulation were introduced (Olesker, 2001). The reforms reshaped the role of the state drastically, cutting social spending and reducing its role in the provision and financing of housing (Portillo, 2003; González and Nahoum, 2011).

Secondly, in order to understand the rise of informal settlements in Montevideo, it is essential to look at the neoliberally-inspired deregulation of the rental housing market introduced by the dictatorial government (González & Nahoum, 2011). The deregulation involved the liberalization of rent prices, the flexibilization of the normative that protected tenants against evictions, and the increase in the guarantees required to rent (Katzman et al, 2004; Portillo, 2003). These changes lead to a considerable rise in prices, particularly for the lower income sectors of the population (Amarante & Caffera, 2003). While it is estimated that rent prices –in real terms- rose by 22% in average over the decade of the 90s, this figure goes up to 66% if we look at the prices paid by the households on the lowest income quintile (Ibid). As a result, it is estimated that the weight of rent as a proportion of income rose from 19% to 47% for these households (Ibid).

A third factor that contributed to the growth in housing informality is to be found in the changes occurred in the labor market as a consequence of the roll-out of neoliberal policies. To begin, the opening of the economy to the global markets put an end to the industrializing economic model which was based on the state protection of national production (Veiga and Rivoir, 2008). As a consequence, there was a huge destruction of stable working positions in the industrial sector, having a devastating effect over the working classes³¹ (Katzman et al 2004). Another important change in the labor market lies in the decline of the role of the state as an employer. While in the year 1970 the state employed 27.7% of the working population, this figure was only 15.6% by 1990(Ibid). This undoubtedly had an

³⁰ The first three surveys were conducted by *Intec*, a private research institute that no longer exists (Amarante and Caffera, 2003), the fourth figure is the result of a specific survey undertaken by the NIS,(INE, 2006) and the final one was obtained as a result of the last census undertaken in the country, in 2011 (PMB, INE). ¹⁰While the figures of the Intec and the NIS are not totally comparable due to methodological differences, there can be little doubts about the strong growth of informal settlements.

³¹ While the industrial sector employed a 32.3% of the active population in 1970, this figure was reduced to only 15.9% in 2002

important impact over large sectors of the working classes, since public jobs were characterized for their stability and relatively good salary. Finally, the flexibilization occurred in the labor market meant that new working positions were significantly more unstable than those of the past (Álvarez, 2007)

Over the 90s the neoliberal oriented Uruguayan economy enjoyed a relatively satisfactory growth rate. However, this growth was paralleled by a polarization on the income distribution, and a significant decrease in the real salaries of the lower deciles of the income distribution, as a consequence of the further liberalization of the labor market³²(Bucheli & Furtado, 2004). This situation turned particularly grim when in 2002 the country faced its worst economic crisis in its recent history, reaching unprecedented unemployment levels. This had a particularly harsh impact over the low-skilled workers, and young uneducated population (Ibid). As a result the number of people expelled from the formal city into slums soared in this period (Katzman et al, 2004).

Finally, the inadequacy of urban planning policies with the social reality of the country also contributed to the growth of housing informality (González & Nahoum, 2011; Cecilio et al 1999). In particular, there was a lack of state supply of affordable serviced land, and no state incentives for affordable housing production, what only fueled the growth of informal settlements (González & Nahoum, 2011).

The above-described transformations acted as centrifugal forces that expelled a large number of households from the formal and consolidated city to its periphery, and in many cases to informal settlements (González & Nahoum, 2011; Portillo, 2003). Consequently, the city experienced a horizontal expansion³³ fuelled by the displacement of households from well-serviced areas, towards areas with deficient provision of services and infrastructure, or no provision at all (ibid). This process was paralleled by an exodus of high-income household from central areas towards the suburbs in the east of the city (Martínez, 2011). The combination of these two dynamics resulted in an intensification of residential segregation in the Uruguayan capital, which obviously manifested itself in an increasing socio-economic homogeneity within neighborhoods, and heterogeneity between them (Katzman, 2004). These transformations are often conceived in the literature as part of an ongoing process of urban fragmentation (Veiga & Rivoir, 2008), and the growth of informal settlements as its most extreme manifestation (Katzman et al, 2004, p. 388).

8.7.3. From *cantegriles* to irregular settlements

There is a widespread agreement in the academic literature about the different nature of the current informal settlements in Montevideo as compared to the pre-80s *cantegriles* (González & Nahoum, 2011; Álvarez, 2007). To begin, while the population of the old *cantegriles* was predominantly composed of rural immigrants, the residents of the modern informal settlements typically come from formal areas within the capital (Álvarez, 2007). Moreover, there was a considerable shift in the educational and occupational profile of the inhabitants of informal settlements. Whereas the residents of *cantegriles* were mostly informally employed – mostly as peddlers or garbage collectors- or working as laborers, the majority of the residents of irregular settlements have now some kind of paid job (González & Nahoum, 2011; Portillo, 2003). Lastly, the population of informal settlements has a considerably higher educational level than residents of *cantegriles* did (González & Nahoum, 2011).

The new informality is also characterized by being more organized than previous forms. While *cantegriles* were typically formed in a spontaneous manner by the addition of individual households settling in a certain place, the new settlements are often the result of organized ‘squats’ of land

³² For instance, there was a reduction in the minimum salary, and the wage-negotiation councils were disarticulated (Bucheli and Furtado, 2004)

³³ The expansion of the city was totally unnecessary, since it happened in a context of population stagnation (Portillo, 2003).

(Álvarez, 2007). The higher organization of the modern formal settlements is also reflected in its interaction with the public sector. Contrasting with the usual apathy of *cantegriles* towards the state, the residents of the new settlements commonly organize representative commissions to formulate their demands to public entities (Álvarez, 2007).

Finally, the new informal settlements are physically distinct from *cantegriles*. As a result of the 'planned' nature of many squats, these often show a clear grid pattern, well-defined plots, and even spaces destined for public places, making it hard to distinguish them from formal but deprived urban areas in their surroundings (Álvarez, 2007). Besides, most dwellings in the modern irregular settlements are made out of construction blocks and cement, rather than metal sheets and wood planks, as was common in *cantegriles* (Ibid).

9. Case study selection

Three case studies were chosen for the present research –one in Madrid, and two in Montevideo-. The first case is *Cañada Real Galiana* (CRG), in Madrid, which is the largest informal settlement in Spain, and arguably also the largest in Europe (Keller, 2016). The case was regarded as particularly suitable for this study not only for its magnitude, but also because an unprecedented and ambitious agreement was reached in 2017, which established the regularization and upgrading of a part of the settlement, and the relocation of other parts. Since then, large-scale upgrading works have taken place in the settlement, and relocations have started. Additionally, the researcher lived in Madrid from February until June 2019, what was crucial for conducting interviews to the most relevant actors, and for doing several field visits to the settlement.

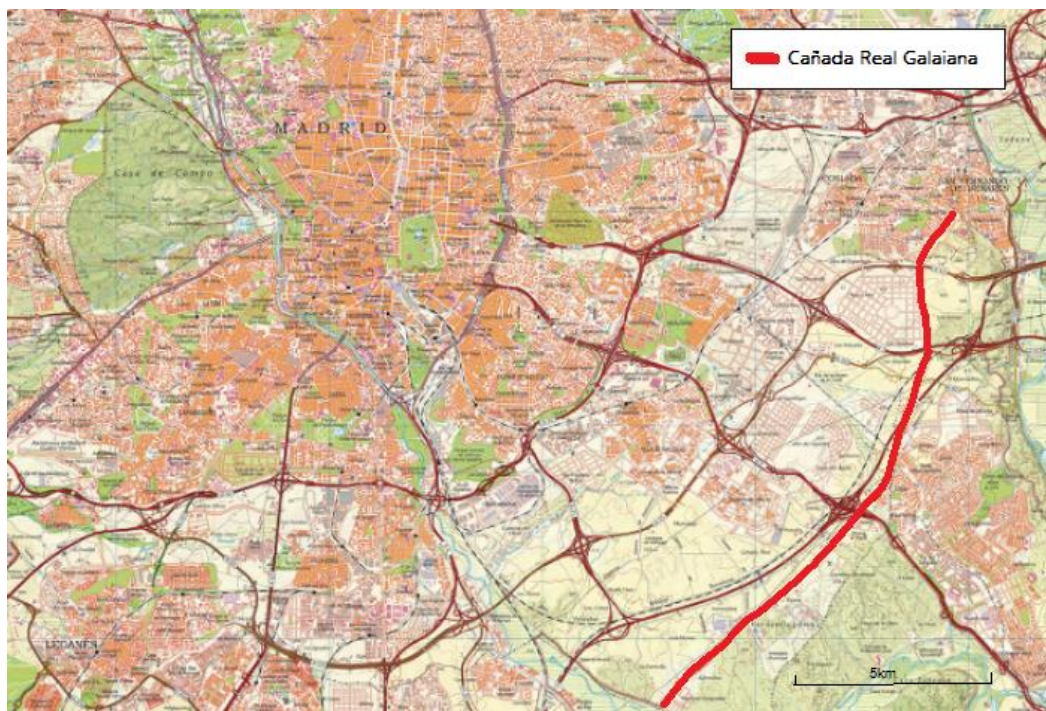
Given the heterogeneous nature of the interventions in CRG, it was not possible to find a single case study in Montevideo which combined both *in situ* upgrading and relocations. Therefore, in order to enhance the comparability of the planning interventions between the two cities, two case studies were chosen in the Uruguayan capital. These are the *Asociación Civil Esperanza* (ACE) settlement, in which upgrading was combined with *in situ* relocations, and the *Isla de Gaspar* settlement (IDG), which was entirely relocated. It is worth mentioning that Montevideo is the researcher's home city, which was particularly convenient for gaining access to the main actors involved in the interventions. A brief introduction to the settlements studied and the interventions they have undergone is provided below.

9.1. Cañada Real Galiana

The CRG is a linear informal settlement that spans for 15 Km. in the South-East of Madrid, along the namesake transhumance³⁴ route –See Figure 7-. It has its origins in the late 1950s, when immigrants from rural areas of Spain –mainly Andalucía and Extremadura- started settling along the route (Monreal, 2018). Later, in the 70s, a decree allowed the agricultural exploitation of the lands adjacent to transhumance routes, what attracted people to cultivate in the area. Many of them later constructed houses next to their orchards and settled there (Agüí, 2017). However, *Cañada's* fastest growth was during the 90s and 2000s, when foreign migrants –mainly Moroccans-, attracted by the abundance of construction jobs in Madrid, settled in the area (Agüí, 2017). In addition, over the 90s many Roma families, evicted from other informal settlements in Madrid, such as *La Celsa* y *Los Barranquines*, moved to the area. Later, in the 2000s, Roma families from Portugal and Romania also settled in *Cañada* (Monreal, 2018).

³⁴ Transhumance routes exist since the Middle Ages in Spain, and are heavily regulated (Monreal Requena, 2018). These routes should have a width of 75 meters (Comunidad de Madrid, 2011), what gave the settlers room to locate their dwellings in public lands.

Figure 7- Cañada Real in Madrid's metropolitan area



Source: Visor Planea (2019)

The settlement is subdivided into six sectors³⁵. The first sector is part of the Municipality of *Coslada*, the second sector is Part of Madrid³⁶, the third, fourth, and fifth, are located both in Madrid³⁷, and *Rivas-Vaciamadrid*, and the Sixth is located in Madrid³⁸. Of its 7.283 residents³⁹ roughly 500 live in the Municipality of *Coslada*, around 1.100 in *Rivas-Vaciamadrid*, and the rest live In Madrid (Monreal, 2018).

For understanding the situation of *Cañada* previous to the intervention, it is worth considering Monreal's (2018) testimony. As the author declared:

The entire Cañada suffers from enormous deficiencies in infrastructure and equipment: the few paved areas have been built by the neighbors, and they are the ones responsible for the installation of public lighting. Not only their homes are illegal, since they were built on a non-residential land, but also their connections to light and running water are illegally made, and are very precarious; most of its sections are beyond the reach of public transport, they are far from schools and health centers, and there are no public spaces where the neighbors can meet (p.140)

The CRG settlement is characterized by its high social, ethnic, and physical heterogeneity. Precarious shacks coexist with middle-class second residences, and a handful of rather luxurious chalets -See Figure 8-, illegal landfills, and commercial and industrial buildings (Agüí, 2017). Moreover, while some areas are well integrated to the surrounding formal city⁴⁰, other parts of *Cañada* are fairly isolated -particularly the sector 6- (Ibid). In addition, CRG's population is ethnically very diverse. It is estimated that 26% of the total population are Spanish Roma, 34% non-Roma Spanish, 22% are Moroccans, and the rest from other nationalities (Monreal, 2018).

³⁵ Aerial images of the six sectors can be found in Annex 3.

³⁶ District of Vicálvaro

³⁷ District of Villa de Vallecas

³⁸ District of Villa de Vallecas

³⁹ Despite repeated requests to the CM to gain access to Cañada's census, it was not possible to do so.

⁴⁰ See figure 8D – the formal (right) and informal (left) city in Coslada .

Figure 8- Examples of housing units of Cañada Real



Source: Author's Photographs

On the 17th of May 2017, the *Regional Agreement for Cañada Real Galiana* was signed by the Spanish Government, the Community of Madrid (CM), the municipalities of *Coslada*, Madrid, and *Rivas-Vaciamadrid*, and by all the political parties with representatives in the Assembly of the CM (CM, 2017). In this agreement, the different actors committed to working towards the integration of the settlement and its residents in the housing, infrastructure, economic, social, environmental, service provision and educational dimensions. The agreement established the regularization and upgrading of sector one, and the relocation of the families living in sector six. As regards to the other sectors, the agreement established the necessity of conducting financial, legal, and urban development studies, to decide whether these are to be relocated or upgraded. Since the signing of the agreement, there has been significant progress in the provision of services and infrastructure to the settlement. For instance, most of the *Cañada's* main road has been paved, sector number two was connected to running water and electricity, a new bus route has been created, a community center has been built, and the mail and school bus services have been enhanced (CM, 2019). Besides the relocation of families from sector six has also begun (Ibid).

9.2. Isla de Gaspar

The IDG settlement was the oldest one of the Uruguayan capital, dating back to the 40s. It was located in the working-class neighborhood of *Malvín Norte* -See figure 5-. The site where the settlement was located was once a quarry, and later it functioned as a landfill for domestic and industrial waste (IMM, 2018). In 2010 the settlement had a population of approximately 1000 persons, half of whom were younger than 18 years old (GEA, 2017). The economic activities performed by the residents included some low-paid jobs, such as housekeeping and private security, and a variety of informal activities such as car-minding, scrapping, peddling, and waste classification (ibid). Some illustrative figures regarding the housing and infrastructure dimensions are that 95% of the settlements' dwellings did not have access to sewage⁴¹, one third did not have access to running water, and the same proportion of dwellings did not have a toilet (ibid).

In 2003 the MM and the MHSP⁴² started to work towards the upgrading and regularization of the settlement (IMM, 2018). However, after conducting studies on the settlement's soil, a high level of lead pollution was discovered (GEA, 2017). These findings led to the decision of relocating the whole settlement, incorporating it to the *National Relocation Plan*⁴³. The relocation was conducted between 2013 and 2017. Of the 255 families living in the settlement, 183 were re-located to newly built housing units in four housing estates. As can be seen in figure 9, most of these are located relatively close to the original site of the settlement. On the other hand, 72 families chose to be relocated to second-hand housing units⁴⁴, bought by the MHSPE and the National Housing Agency (IMM, 2018).

Lastly, it is worth mentioning that unlike *Cañada*, both IDG and ACE were relatively homogenous in their socio-economic and physical features. These settlements were inhabited almost exclusively by very low-income families, and there was no relevant presence of migrant groups living in them. Besides, while the constructive quality of the dwellings varied from household to household, the overwhelming majority of them were of poor or very poor quality -See figures 10 and 13 -. Finally, unlike *Cañada*, almost no economic activities took place in the Uruguayan settlements, with the exception of some minor trade, and waste classification.

⁴¹ While some dwellings counted with septic tanks, other disposed their wastewater to open ditches, what constituted a huge hazard to resident's health (GEA Consultores, 2017).

⁴² It is important to note that while in both of the Uruguayan case studies the MM and the MHSP worked together, the dependencies within these institutions involved in the interventions are different. While in the case of ACE the Program of Informal settlement integration of the MM worked with the Programme of Informal Settlements Upgrading from the MHSP, in In Isla de Gaspar, the MM's office of Urban Land and Housing worked with the MHSP's National Relocation Plan.

⁴³ The National Relocation Plan was created by the Ministry of Housing and Spatial Planning in order to relocate informal settlements located in areas subject to floodings or polluted areas, and collaborate with their social and urban integration. The relocations are undertaken in agreement with local municipalities. The MVOTMA finance the operations and provides technical support, while the local municipalities provide the land for the relocations, and develop the design for sewage, electricity, and running water provision (MVOTMA, 2018).

⁴⁴ Residents could choose between the housing estates and the second hand housing units. However, a certain income stability was required to those families moving to second hand dwellings, since they would need to pay taxes and tributes over them (E8)

Figure 9- Map of the housing estates built for Isla de Gaspar's resettlement



Figure 10- Examples of housing units of Isla de Gaspar



Source: Google streetview 2015

Figures 11 and 12 - Satellite images of Isla de Gaspar 2010-2019



9.3. Asociación Civil Esperanza

The *Asociación Civil Esperanza* settlement –previously known as *Acosta y Lara*- is located on the fringe of the neighborhood of *Carrasco Norte*, bordering the *Carrasco* stream, which separates the provinces of Montevideo and Canelones. It occupies a plot of 7565m², which belonged to the MM, and was planned to function as a public space (IMM-PIIS, 2010). The first residents arrived to the area in the 60s, and despite the fact that many were forcefully evicted in the 70s, in the context of Uruguay's civic-military dictatorship, the settlement continued to grow over the following decades. ACE is home to 1040 persons, who were living in 273 dwellings, prior to the intervention (IMM-PIIS,2010). The settlement has a very high proportion of young residents, as it is usually the norm in informal settlements, which contrasts starkly with the ageing population of Montevideo as a whole⁴⁵ (Ibid).

The location of the ACE settlement plays a fundamental role in the economic insertion of its residents. *Carrasco Norte* is a low-density neighborhood, mostly inhabited by middle and upper-middle-class families, and it is located in close proximity of *Carrasco Sur*, which is one of the wealthiest areas of the city. The proximity to high-income areas provides plenty of livelihood opportunities for the residents, many of whom work in activities such as housekeeping⁴⁶, gardening, or other services (IMM-PIIS,2010).

ACE presented a series of socio-economic, environmental, and infrastructural issues that seriously affected the life quality of its residents, and made the state intervention essential. As is common for virtually all informal settlements in Uruguay, residents from ACE faced high unemployment levels⁴⁷, and have a very low educational attainment. Moreover, most of the issues that characterize informal settlements related to infrastructure and housing were present in ACE. To begin, the settlement had a particularly high density, and the space left for pathways was scarce. As a result, vehicles such as ambulances, or firefighter trucks could not access the inner areas of the settlement –See figure 14 - (IMM-PIIS,2010). In addition, there was no sewage, and polluted water sometimes covered the pathways (ibid). Furthermore, connections to electricity were irregular, and power cuts were often (Ibid). Similarly, the existing connections to running water were irregular, and the risk of contamination very high. Lastly, the housing situation in the settlement was very precarious (Ibid).

In September 2012 the MM and the National Ministry of Housing and Spatial Planning (MHSP) signed an agreement in which the former committed to upgrade the ACE settlement according to the principles of the ministry's Program of Informal Settlements Upgrading (PISU), and the latter to finance the intervention (MHSPE-IMM, 2012). The PISU has an integral approach to informal settlements and gives special emphasis to the integration of these areas in the housing, infrastructure, health, economic, educational, cultural, and gender dimensions (PISU, 2014). By the end of 2017, 137 of the 293 ACE's families were relocated to new dwellings built in adjacent plots, interior roads were built, and sewage, drainage, running water were provided to practically all the remaining dwellings –See figures 15- (PORU,2017; PISU, 2017). In addition, a community center and a health center were built, as well as a well equipped public square (Ibid).

⁴⁵An indicator that clearly reflects this is the Median age. While half of residents of ACE are 22 years old or younger, the median age for Montevideo as a whole is 35 (Own calculations with data from CCU 2011 and INE 2011)

⁴⁶ 30% of the residents of ACE are domestic workers (CCU,2011).

⁴⁷ The unemployment rate in 2010 was 14,8%, more than doubling the national average for the same year (CCU, 2011).

Figure 13–Examples of housing units in the ACE settlement



A



B



C



D



A



E

Source: Google streetview 2015

Figures 14 and 15 – Satellite images of Asociación Civil Esperanza -2010-2019



10. Discussion and findings

The results from the analysis of the policy documents, interview transcripts, and the field notes from visits to the settlements are presented in the following sections.

10. 1. Case 1 – Cañada Real Galiana

10.1.1. Introduction

In the following sections, the main implications of interventions undertaken in CRG over the different dimensions of urban fragmentation⁴⁸ are analyzed, and the most relevant factors hindering or facilitating the interventions are presented. For clarity purposes the analysis of the upgrading and resettlement interventions are presented separately.

10.1.2. Upgrading and regularization interventions

This section will focus on those interventions undertaken in the permanent sections of *Cañada* –sectors one and two⁴⁹– and also in those which are in a semi-permanent situation. As some of the planners explained, while it is likely that sections of sectors three, four, and five will be relocated, this will probably not happen within the next ten or fifteen years (E1, E3). Hence, most of the upgrading interventions also cover these sectors. For that reason, it is crucial to include the above-mentioned sectors in the upgrading analysis (Ibid).

10.1.2.a. Economic dimension

The weak integration of a large part of *Cañada*'s residents to the labor market was identified as one of the most pressing issues faced by the local population in the diagnostic report elaborated by *Accem* and RSF (D3). The deficient level of education, the lack to job opportunities in the area, the difficulty of transport to other areas of Madrid, and the stigmatization suffered by the residents are identified in the report as the main barriers for employment. As one would expect, facilitating residents' access to the labor market is presented in the Regional Agreement as one of its central action lines. The agreement conceives access to employment as the "best social policy"(p.35), and urges to conceive new alternatives for enabling residents' insertion to the labor market and to work towards developing local's job-oriented skills. In this direction, the document presents some specific measures to be implemented in CRG, such as the creation of an employment office in *Rivas-Vaciamadrid*, the organization of entrepreneurship courses, and the creation of a group of private companies willing to hire local residents.

Despite the severity of the employment situation in CRG, and the apparent commitment of the authorities to improve it, it was evident from the expert interviews that the integration of the population of *Cañada* to the labor market has only received, at best, a secondary role in practice. As one of the planners denounced "*the CM has left the whole pillar of economic integration to charities, to philanthropies, and to NGOs [...] They do not even finance actions in this area, it is La Caixa*⁵⁰, *who pays the NGOs to work*"(E3). In this regard, one of the NGO workers explained that the bulk of the budget for the interventions in CRG was spent in paving the streets and buying apartments for the re-locations, what left few resources for another kind of interventions (E4). Proof of that is the lack of resources allocated to actions in this field in the regional agreement's budget. Of the 5.705.000 € budget of the

⁴⁸ Since the titling process is still in an incipient state in two of the cases studied, the analysis of the legal dimension was left out of the shortened version of this work. However, it can be found on the extended version of this research.

⁴⁹ The regularization of sector two was recently agreed according to the planners interviewed.

⁵⁰ *La Caixa* is one of the largest Spanish banks.

CM for intervening in *Cañada* in 2019, only 5.000€ -less than 0.1%- were endowed to “economic, educational, and cultural promotion” (CM, 2019a p.9).

Figure 16- Sectors of *Cañada Real Galiana*



A further sign of the lack of attention to the economic dimension in the implementation of the regional agreement is the fact that the creation of the employment office in *Rivas-Vaciamadrid*, one of the few specific measures that the agreement committed to, did not happen yet. Some of the planners accused the CM, the responsible for opening the office, of lacking the will to do it (E1, E3). In particular, one of the respondents denounced: *“the CM is now advocating for the creation of an online employment office, instead of a physical one, because it is obviously cheaper”* (E3). As the expert explained: *“that is clearly not a solution for the structural unemployment that exists in Cañada. People here need a specialized team that supports, motivates, and guides them in finding a job... they don’t need another infojobs!”*⁵¹(E3).

Lastly, a further manifestation of the marginal role of employment in the implementation of the regional agreement policies in CRG is the lack of consideration for the local labor force in the different works undertaken. As one of the NGO professionals declared *“the first step for improving the employment situation would be to hire people from Cañada for the tasks that the regional agreement determines that need to be done, such as cleaning the existing garbage dumps or providing gardening and construction services in the new community center”*(E4). However, as evident from the interviews with the planners, little progress in this direction was done. None of the municipalities hired local population to participate in the upgrading works.

10.1.2.b. Social dimension

For analyzing the situation of social exclusion that a large proportion of the residents of CRG suffer, and the implications of the planning interventions in this dimension, we will recur to the categorization of the different arenas and elements of social exclusion developed by de Haan (1998), which were presented in the literature review –see figure 4-. In order to not over-extend the analysis, only the most relevant elements for each particular case will be presented.

Concerning the first arena, there is plenty of evidence of infringements to people’s right to adequate housing in *Cañada*. The right to housing is recognized both by the *Universal Declaration of Human Rights*, and the *Spanish Constitution*. It is defined by UN-Habitat (2010, p.3) as “the right to live somewhere in security, peace, and dignity”. Central to this right is the “Protection against forced evictions and the arbitrary destruction and demolition of one’s home” (UN-Habitat 2010 p.3). Unfortunately, evidence of violations to this right can be found going just five years back in time.

As Álvarez (2017) acknowledges, between 2007 and 2013 the municipality of Madrid undertook over 200 forceful evictions in *Cañada*. In many cases, families were evicted without being provided with a housing alternative, which is a *sine qua non* condition for lawful evictions (UN-Habitat, 2010). This resulted in the intervention of the *European Court on Human Rights*, which urged the municipality of Madrid to stop the evictions (Álvarez, 2017). These interventions constitute a striking example of the most backward policy approach to informal settlements. As mentioned in the literature review, this type of evictions was only common in the worse developing word contexts in the 70s and 80s, and was almost exclusively deployed by authoritarian regimes. It is therefore highly surprising to find an example of such a policy in a high-income European city, just half a decade ago. It must be emphasized, however, that since the signing of the regional agreement the approach to relocations has radically changed. As mentioned before, families being relocated are provided with a good quality dwelling elsewhere in the CM.

⁵¹ Infojobs is a website that lists job offers in Spain.

The social exclusion situation of a large part of CRG's population is particularly serious when we look at the second arena. As presented in the literature review, social links – bonds and bridges- are a fundamental part of a person's or a community's social capital. On this subject, the diagnostic study and the NGO experts interviewed coincide that there is a large share of the residents which have very few and rather weak bonds within the settlement. Additionally, they often lack bridging ties with the outside. One of the experts interviewed highlighted, this issue is especially serious among the foreign population of the settlement⁵² (E5).

According to both the experts and the diagnostic study, there are a number of factors, such as the absence of public spaces, the morphology of the settlement, and the prominence of cars as a means of transport, which diminish the possibilities of informal encounters between the residents, undermining their chances to expand their social networks (D3,E4,E5). The planners interviewed believe that the new socio-cultural center will be crucial to tackle this issue, since *"it will be a high-quality space for locals to encounter"*(E2). However, one of the NGO workers warned that the center's effect will probably be restricted to its surroundings. In this regard he expressed: *"only those who live close to the center will use it...People from other sectors –apart from sector five- will not go. It will be too far for them"* (E5).

The exclusion situation in the second arena is also grim if we look at the labor market integration. As discussed previously, a large share of the residents of CRG have difficulties in accessing the labor market as a consequence of their low educational level and lack of working skills, among other reasons. However, there is a further factor that contributes to their exclusion from the labor market: the stigmatization that *Cañada's* residents suffer. Both the planners and NGO experts interviewed agreed that the negative image associated with the settlement represents a huge barrier to their residents for finding jobs. In an attempt to tackle that problem, some of the municipalities that integrate the regional agreement have been supporting initiatives aimed at changing the negative image of the settlement, such as a 10k running race that took place for the first time in March 2019, and an international cinema festival that will have its third edition in September 2019. The planners and NGO workers interviewed agreed that these initiatives are contributing to change the image that people from the formal city have of *Cañada*. In this regard, one of the NGO workers highlighted that these actions *"are being really effective for changing the kind of media coverage of Cañada from drugs, crime, and poverty, to more positive themes"* (E4). However, as one of the residents interviewed declared *"no locals took part in the activities. Almost all the participants were from Madrid"*(E7).

Finally, the last arena of social exclusion does not offer a more optimistic picture. Given the scope of this study, it is not possible to provide a reliable assessment of the strength and extent of family bonds and other support networks. However, a very low level of engagement with the different NGOs working in *Cañada* emerged from the expert interviews -with the only exception of the school-aged population- (E4, E5).

10.1.2.c. Physical dimension

In this sub-section, the most relevant dimensions of the physical divide between the formal and the informal city will be analyzed. The only major dimension of the physical divide that is left out from the analysis is housing⁵³ since the upgrading of CRG does not contemplate the enhancement of existing dwellings.

⁵² In particular, the expert highlighted that the lack of social ties is particularly severe among Moroccan women.

⁵³ The analysis of the public space and utilities dimensions can be found in the extended version of this work.

Paving works

The deficient condition of the main road, derived from its lack of pavement, was mentioned by most of the experts as the main issue in the infrastructure dimension, since it severely undermined the accessibility of the settlement. The irregularity of the road's terrain made transport within *Cañada* slow and difficult, preventing services such as ambulances, school buses, and taxis to serve the settlement (E1, E4). This problem was one of the first to be tackled after the signing of the regional agreement. The paving works, which took place between November 2017 and January 2019, covered almost the whole extension of the settlement (CM, 2019b)

The importance of the paving works over local's quality of life was equally highlighted by the residents, planners, and NGO workers interviewed. One of the NGO workers described the intervention as marking a *"before and after in people's day to day life"* (E5), and the other said it represented a *"milestone Cañada's life"*(E4). In the same line, one of the community representatives declared: *"the paving of the road is the only intervention that has really benefited everyone in Cañada"* (E6). As one of the planners highlighted *"the time necessary to drive through the 15 Km of Cañada was reduced from three hours and a half, to just under thirty minutes"* (E1). Finally, the planners stressed that thanks to this intervention the school bus service could be greatly improved, and that the ambulance service now works with normality.

Physical barriers to access in sector five

A further obstacle for the settlement's accessibility noted in the researcher's field visits to CRG, and confirmed in the interviews with community representatives, is the physical isolation of sector 5 from *Rivas-Vaciamadrid*. As it can be seen in figure 17, the settlement is situated in direct contact with the formal city. Despite the close proximity to *Rivas-Vaciamadrid's* formal grid, *Cañada* is only connected with it by a few narrow pedestrian passages –See figure 18-. When consulted about this issue, one of the community representatives denounced: *"Until two years ago there was car access from this sector – sector five- to Rivas, but the mayor eliminated it under the pretext that a nearby primary school requested its closure...But we know that's not true!"* (E6). The same interviewee added: *"that's the way they –local politicians- treat us. They want to isolate us...They even threatened us with blocking the pedestrian passages 10 or 15 years ago"*. The other community representative interviewed explained that as a result of the closure of the vehicle access, the time necessary for reaching the local hospital for residents of the sector 5 increased from just three or four minutes to over 15 (E7).

When consulted about this issue, a high ranking official of the municipality of *Rivas-Vaciamadrid* said: *"our position about Cañada is simple; the place should be a green area [...]. In our view the settlement should disappear, and people should receive a nice house elsewhere. Therefore we are not going to create or improve any access to it"* (E3). The actions undertaken by the municipality of *Rivas-Vaciamadrid*, clearly aimed at isolating the residents of the informal settlement, are particularly surprising since they are in stark contrast with the *World charter on the right to the city's* principles (UN-Habitat, 2004). These postulates, which are aimed at ensuring that all urban residents live with dignity (Ibid), are presented in the regional agreement as its guiding principles for the interventions in *Cañada*. The charter establishes that *"Cities should guarantee for all persons the right to mobility and circulation in the city"*(p.7). The isolation situation is even more severe if we consider that one of the planners admitted: *"even if was decided that sector 5 should be relocated, this would probably not happen within the next 10 or 15 years"* (E2).

Figure 17 – Satellite Image of Sector five



Source: Visor Planea – CM(2019)

Figure 18 –Passages between Rivas-Vaciamadrid and Cañada in sector 5



A



B

Source: Author's photographs

10.1.2.d. Environmental dimension

The residents of CRG suffer from a variety of issues in the Environmental dimension. To begin, during the field visits to the settlement it could be noticed that many vacant plots of land were highly polluted with plastic refuse -pieces of home appliances, and other unidentifiable objects-. One of the interviewees explained that that issue is the result of informal scrapping activities, and added that since scrappers often burn the plastic cover of wires for extracting copper, toxic fumes are also common in

these areas (E4). Additionally, there is a section⁵⁴ in sector six, where the wastewater of many dwellings could be observed running directly to the street in the field visits to the settlement. This issue was also denounced by one of the community representatives interviewed (E7).

The presence of the *Valdemingomez* industrial park was also pointed as an important threat to resident's health by the planners interviewed, and its potential risk is also warned in the diagnostic study. However, these claims contrast with a study published by the *Health Department* of the *Municipality of Madrid*, which established that "there is no evidence to suggest that the industrial activities of the *Valdemingomez* industrial park have any effect over the health of people living in the surroundings" (Madrid Salud, 2018 p.12). On the other hand, many of the experts interviewed pointed to noise levels in those areas of the settlement which are close to transport infrastructure as another important issue in this dimension (E2,E4,E5) –See figure 16-. Finally, the presence of rats in some areas of *Cañada* –particularly where there are demolished buildings- was also pointed as a threat to residents' health by some of the experts (D3,E4, E6).

When consulted about those actions implemented to improve the environmental conditions of CRG's residents, the planners interviewed pointed to resettlements as the most important one. In this regard, one of the experts explained: "*the residents from sector six, which are the most exposed to the incinerator fumes are already being relocated, and we hope to start the relocations of sector three soon*"⁵⁵. However the planner admitted that no additional measures were taken so far in this dimension (E1).

10.1.2.e. Service provision dimension

In the service dimension, there was a considerable improvement in the school bus and ambulance services, which now cover the whole settlement properly thanks to the paving works (E1, E2). Furthermore, a public bus connecting the intersection of sectors 2 and 3 with the *Puerta de Arganda* train station was established. While this action was evaluated highly positively by the neighbors' representatives interviewed, the planners explained that the transport company is having some financial trouble with the bus line, as a consequence of the very low demand (E1,E2). This represents a clear sign of the challenges that *Cañada's* morphology poses for the provision of services and infrastructure.

10.1.3. Resettlement interventions

As mentioned in this section's introduction, the second core intervention established in the regional agreement consists in the dismantling of the sector six of CRG and the resettlement of its residents, for "lacking minimum conditions of habitability" (p.32). While the agreement's document does not give much detail about the conditions that make the area uninhabitable, one of the planners interviewed explained that the decision to resettle sector six was taken for three main reasons (E1). Firstly, the expert pointed out that the area is the most geographically isolated one, at a considerable distance from any urban center, which would make particularly difficult to provide it with services and infrastructure. Besides, the planner explained that this part of *Cañada* is part of a regional park, which makes it virtually impossible to legally change its zoning categorization from green area into residential use. On the third place, the planner claimed, as it is also argued in the resettlement covenant document, that the presence of a number of polluting industries and waste management facilities, including a waste incinerator, constitutes a threat to the area's population, making the dismantling inevitable.

⁵⁴ This is a section where a high proportion of the dwellings were demolished, and light structures were erected over the debris –See figure 8b-.

⁵⁵ The residents of this sector are the most affected by the transport noise and emissions (E2).

Priority in sector six's resettlement was given to the so-called "non-paved area" since, as the planners explained, this section of *Cañada* is the one with the worse living conditions, and concentrates highly vulnerable households (E1, E3). Families from this area are provided with second-hand housing units, acquired by the CM and the municipality of Madrid. The relocations are done under the principle of "territorial equity", which means that the resettlements are undertaken to try to achieve an even distribution of relocated households among the different municipalities that integrate the CM, and the districts within them (E1, E2).

While the regional agreement establishes as a general principle that all *Cañada*'s residents "will have, provided is possible, the right to a housing unit within the settlement" (p.29), it also envisages that exceptions to this rule apply for households living under extreme conditions of vulnerability. As explained by one of the planners, the severity of the conditions under which many of sector six's residents live make their resettlement especially urgent (E1). Therefore, the option of relocating them to newly built housing units within the settlement was deemed unsuitable, since in situ relocations would take significantly longer.

The following sub-sections will focus in the resettlement of the "non-paved area" of sector six, since it is the only section of *Cañada* where the resettlement interventions have already started. Since the analysis of the physical and service provision⁵⁶ dimensions of urban fragmentation has a lower relevance when households are relocated to the formal city, the focus will be set in the economic and social dimensions.

10.1.3.a Economic dimension

Resettlement interventions can have a disruptive effect over informal settlement resident's sources of income (Parmar et al, 2016; Kapse et al, 2012). This is particularly the case when residents are relocated to distant locations, and when the new dwellings are not compatible with their economic activities (Rahman et al, 2016). According to the diagnostic study, many families in CRG, particularly in sector six, subsist from activities such as carpentry, blacksmithing, metal recycling, mechanical repairing, and a variety of other crafts (D3). This was also evident from the researcher's visits to the site, where a wide range of workshops could be observed.

Evidently, for enabling households involved in crafts to continue performing their activity, it is necessary that their new dwellings are suitable for these. A deep preoccupation about this matter was expressed by the representative of the neighbors of sector six. The interviewee manifested that she had communicated her and her neighbors' concerns about this problem to the authorities, but received no response. Given the paramount importance of the economic dimension when undertaking resettlements, it was surprising to find in the interviews with the planners that resident's economic activities were not contemplated in the resettlement scheme -neither the preferred locations, nor special housing requirements-. On this subject, one of the planners admitted: *"that is a serious issue, but it is still a pending one"* (E1). By contrast, other of the planners minimized the importance of the problem, arguing: *"For most families that's not a big issue...you have to bear in mind that that the subsistence of a large part of the population of sector six is based on the Guaranteed Minimum Income"*⁵⁷(E2).

⁵⁶ It is worth mentioning that resettled families' capacity to pay for formal services is a crucial dimension in resettlements. However, no complications in this area emerged from the interviews.

⁵⁷ The community of Madrid has a guaranteed minimum income system that covers those households that do not have a sufficient income, and that meet a series of formal requirements. The amount of the transfer varies between 400 and 900, depending on the household size (Comunidad de Madrid, 2017)

10.1.3.b. Social dimension

According to the *resettlement covenant* document, the main objective of the relocations is to solve the situation of “social vulnerability and severe exclusion under which families of the unpaved section of sector six live”(p.69). The document conceives housing as the “fundamental pillar” upon which the process of social integration of the families should be based, and highlights the importance of supporting them throughout this process (p.70). While it is still too early to assess the results of sector six resettlements in the social exclusion dimension, some hints can be obtained going back to de Haan’s (1998) categorization. It seems safe to say that the resettlement of sector six’s families contributing to alleviate their exclusion situation of the families in the first arena, since people’s right to adequate housing is now fulfilled. As regards to the second arena, the NGO experts assured that the integration process of the resettled families to their new communities was showing good signs. In this regard, the planners interviewed are optimistic that the modality of the resettlements -residents equally distributed in the CM’s territory, with no more than one resettled family per building block- will also contribute to the expansion of people’s social networks. While it would be overly hasty to arrive to conclusions in this dimension for the case of CRG, the experts highlighted that the results were highly positive in other of Madrid’s informal settlements in which the same resettlement modality was deployed. Besides, resettled families are receiving strong support received from the municipalities’ teams of social workers for the adaptation to their new communities, what can be seen as a positive sign in the direction of integration (E2,E4). Nevertheless, looking at the last arena of social exclusion, it might be the case that households are now worse off since resettlements are being undertaken with no regard to family or kinship ties⁵⁸.

10.1.4. Challenges and facilitators of the interventions in Cañada Real Galiana

A first major challenge for any planning intervention in CRG is, as highlighted by all the planners interviewed, the multiplicity of the actors with decision power over the land use and urban planning of the settlement’s territory. As mentioned in the introduction, CRG spans along a former transhumance route -which currently belongs to the CM-, and it crosses three municipalities, which are the institutions with planning authority in their jurisdictions. In addition, the national government is the one responsible for the infrastructure facilities located in *Cañada*, and for the security of the area (E2). About this situation, one of the planners explained: *“the fact that there are so many municipalities and government levels with authority over Cañada ended up in a situation in which all the actors involved turned a blind eye to what was happening there. It blurred the individual responsibilities... and that went on for decades”*(E2). Furthermore, as informed by other of the experts, an additional difficulty for intervening in CRG comes from the fact that *“all the municipalities involved in Cañada are governed by different political parties”*⁵⁹, and these have radically different views about the future of the settlement” (E1). In this concern, one of the experts explained: *“while some parties want to upgrade the whole settlement, others want to completely dismantle it”* (E5).

It is worth highlighting here, that there was a consensus among the experts interviewed about the importance of the institutional framework laid by the regional agreement and the organizational structure it created, for resolving the aforementioned issues. The agreement was signed by both, representatives of all the administrative levels involved –national state, regional government, and municipalities-, and by representatives of all the political parties with representation at the parliament of the CM or at the municipality level. This fact was highlighted by the planners and NGO workers interviewed as being fundamental for ensuring the long term continuity of the interventions in *Cañada*,

⁵⁸ While determining this is beyond the scope of this study, it would be interesting to investigate this dimension once all the families are resettled.

⁵⁹ At the time this study was conducted Coslada was governed by PSOE, Rivas-Vaciamadrid by Izquierda Unida, the municipality of Madrid by Ahora Madrid, and the community of Madrid by the Partido popular.

since *“it guarantees that future governments will carry on with the interventions, no matter which political party they belong to”*⁶⁰(E5)- It must be noted, however, that the agreement is not binding-. Moreover, the planners and the NGO workers emphasized the importance of the organizational structure set by the plan as an effective way of negotiating, deciding, and coordinating the actions implemented –See Annex 4-. Finally, while the community representatives expressed their disappointment for their lack of leverage in the formal instances created by the agreement, one of them highlighted the importance of *“having clearly defined channels”* to present their demands (E6).

There is an additional layer of complexity to the issue of the multiplicity of actors with planning authority over *Cañada*. Since the transhumance road serves as the border between the municipalities of Madrid and *Rivas-Vaciamadrid*, there are sections of sectors 3,4, and 5, where the two sides of the road belong to different municipalities the agreement-. In order to surpass this obstacle, the two municipalities involved had recently signed an agreement to switch the border between the two, from the transhumance road to the M-50 highway –See figure 19- As the planners interviewed explained, the change in the border is important not only since the *“real geographical border”* (E1) will be now the formal one, but also because the clarification of the areas which are responsibility of each municipality will *“result in a more effective service provision to local residents”* (E3).

The availability of economic resources was considered the main challenge for intervening in *Cañada* by two of the planners interviewed (E1, E3). In this regard, one of them expressed *“we need 18 million Euros just to resettle 150 families of sector six, and we need to resettle three times that number after. It is a lot of money, and it is difficult to secure it”* (E1). Additionally, the other expert stated *“the whole situation of Cañada would be easy to solve if we had the necessary funds [...] the whole problem would be solved building 2200-2300 dwellings. However, if we pretend to buy them in the market it will not happen. It is just too expensive.”* (E3). In the same line, the expert added: *“I know that we cannot build huge flats and put 100 families from Cañada to live there, it just would not work, as it happened in the past. We need to look for mixed solutions, integrating the need to resettle people from Cañada, with other housing needs, such as affordable housing for young people and families.[...] The problem here is that the CM does not have a housing policy”*⁶¹(E3).

It is important to note here that the total budget allocated for CRG’s intervention was of 20.800.000€ (D2, CM, 2019a). While this figure may seem high, especially when overstated in local planners’ discourse⁶², comparing it with the 14.904.168 € invested in the physical rehabilitation of ACE (D7), or the roughly 16.000.000€ spent in the resettlement of IDG is useful to put CRG’s budget into perspective (PORU, 2018). It must be highlighted that the population of each of the Uruguayan cases is roughly 1/7 of that of CRG.

As regards to those factors facilitating the interventions, the planners highlighted the positive effects of allowing participation. On this subject, one of the experts expressed: *“the authorities had never listened to residents of Cañada before. Everything was very top-down. For this reason, the residents are really grateful for having a say in what is happening with their settlement, and that has facilitated the interventions”*(E2). This is something that was confirmed in the interviews with the community representatives. It is worth highlighting here, that even the community leader who was more

⁶⁰ There were municipal and national elections while this study was being undertaken. In the case of Madrid this meant a change in the governing party. It will be interesting to see whether the regional agreement functions to ensure the continuity of the interventions in *Cañada*.

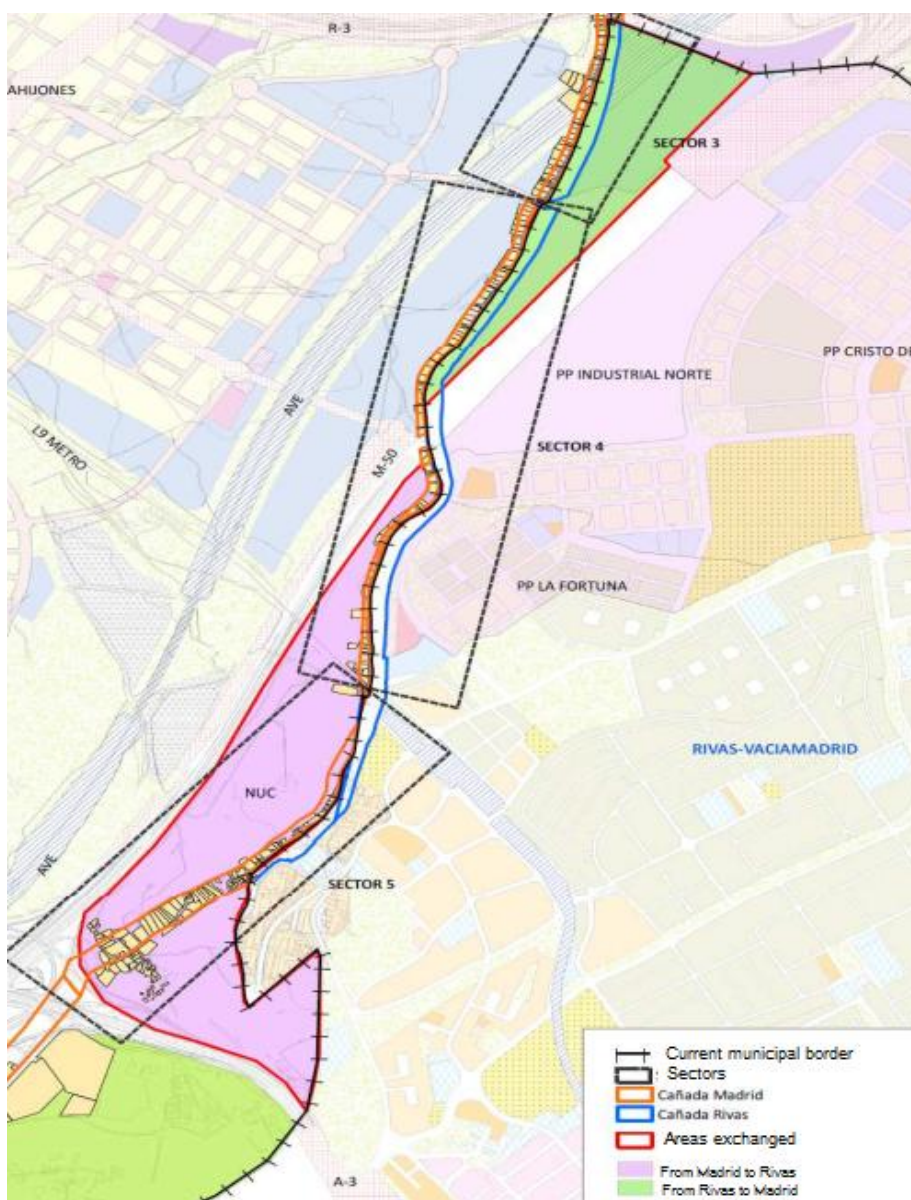
⁶¹ Something highly similar to this planner suggestion has been implemented in *Isla de Gaspar* case, and will be analyzed in the upcoming chapter.

⁶² For instance, one of the documents analyzed states *“the CM has had an absolute commitment to solve the situation of CRG since the beginning of the current governing period. A clear proof of this can be found in the budget allocated since 2017 to interventions in the area”* (CM, 2019b, p.8). Similar remarks were made by the planners in the interviews.

disappointed with the outcomes of the agreement highly valued having had the chance to present their demands to the authorities, and being heard (E7).

Concerning sector six's resettlements, two of the planners highlighted the good predisposition of most neighbors to move from *Cañada*⁶³ as a crucial factor in facilitating the interventions. As one of them explained *"the living conditions in the sector being resettled are terrible. They don't have water, power connections are very unreliable, it is unpaved and when it rains its gets muddy [...] therefore most of the residents are positive about moving out"* (E1). Similarly, one of the NGO experts added: *"there is a feeling of isolation in people of sector six, especially in the southernmost section, and they are tired of it. They live in the remotest part of Cañada, and that generates big difficulties in their daily lives, since it is very complicated to go anywhere from there"* (E5).

Figure 19 - Planned border exchange between Madrid and Rivas-Vaciamadrid



Source:CM (2019)

⁶³ The expert explained that some families are unhappy about having to pay for services when they move, since even if the quality of services is bad, they do not pay for them in *Cañada*

10.2. Case 2 – Isla de Gaspar

10.2.1. Introduction

In the following sub-sections, the main implications of the resettlement of IDG over the different dimensions of urban fragmentation are analyzed. As in the case of CRG, the analysis will focus in the economic and social dimensions, since these are the most challenging ones when relocating informal settlements. Nevertheless, reference to other dimensions of fragmentation will be made, for those areas in which relevant insights emerged from the analysis. The main obstacles and facilitators encountered by the planners when designing and implementing the resettlement will also be exposed throughout the subsequent sub-sections.

10.2.2. Economic dimension

The presence of a high number of families working as informal waste collectors⁶⁴ was identified both by the planners and the community leader interviewed as the most important challenge in the economic dimension in the context of the intervention. There are two main sides to this challenge, as mentioned by the planners. On the one hand, it is always difficult to protect the collector's livelihood source when these are relocated. On the other, it is particularly challenging to improve the economic situation of families working in this activity.

In order to understand the first dimension of the challenge, it must be noted that people working informally in the collection and classification of waste in Montevideo commonly rely in horse-drawn carriages to perform this activity (IMM,2016a). Hence, if collectors were to keep their horses, enough room for the animals to live should be provided in the new housing estates (E8). Besides, as explained by one of the planners: *"collectors do not only need room for the animals but also to store the waste they gather for a week or two, until they have enough to sell it"*, what further complicates the provision of suitable housing solutions (E8).

As the provision of enough room for the horses in the new dwellings was deemed impossible, the Municipality initially established that the animals could not be taken to the new housing estates (E8). Predictably, the impossibility to bring their main work tool to their new dwellings was a big source of discontent for those families involved in waste collection. As the community leader described: *"thanks to the -open- assemblies that took place in the neighborhood, the collectors were able to talk to the planners and transmit them their concerns"*(E10), and were eventually granted permission to bring one horse to their new dwellings. In this regard, one of the planners interviewed expressed *"At some point it became obvious that people would take their horses. They depend on them for earning their living, and they also have an affective relationship with them."* (E9).

Since the IDG settlement was an enclave in the formal city, the few plots available in the surroundings to build new housing units for the resettlements were rather small (E8). For this reason, as one of the planners explained, *"a special housing estate for the families working in waste collection was built in a more peripheral area. [...] There, the plots are large enough to enable them to keep horses and to do the classification"* (ibid). The community representative interviewed highly valued the effort of the municipality to provide a solution to the waste collector's situation. However, she mentioned that as a result of the more peripheral location of the estate where the collectors were resettled, they *"now have*

⁶⁴ Informal waste collectors gather materials, such as cardboard, plastic, and metals, from the containers provided by the municipality for residential waste disposal, and later sell them for recycling.

to travel much more in order to get to Pocitos⁶⁵ and the other neighborhoods where they do the collection... It's like ten extra Km. a day"(E10).

The second main challenge associated with the presence of waste collection as a livelihood source is the difficulty of enhancing the economic situation of families working in this field. As one of the planners interviewed explained: *"most waste collectors from IDG are in their 40s or 50s, and they had been doing this their whole lives [...] it is very hard for them to get any other job... both for their age, and because they don't have other working skills."*(E8). Besides, waste collection is an activity that generates little profits and it is highly unhealthy, what make the households that depend on it highly vulnerable (Ibid).

In an attempt to improve the situation of the waste collectors, the MM has undertaken a series of creative actions⁶⁶ which seem to be having positive results. To begin, many of IDG's collectors have participated in the municipality's *Program for the substitution of blood-traction vehicles and labor reconversion of waste collectors* (E8). Under this program, the informal collectors exchange their horses and chariots for a three-wheeler vehicle, or for a small loan to invest in another venture (IMM, 2017b). Those who chose to receive the three-wheeler have the obligation to take a course on road safety, and they receive technical support for registering as a micro-enterprise (IMM, 2018). After that, they are included in the municipality's registry of waste collectors for non-residential refuse, and they can start to work formally.

Another interesting municipal program, from which some of the residents from IDG benefited, consisted in hiring collectors for the city's waste management facilities (IMM, 2016b). Under this program, collectors are paid a minimum wage, which is complemented with the sale of the refuse they process for recycling (IMM, 2014). Additionally the municipality has launched two programs for the labor retraining of collectors, in collaboration with the *National Institute for Employment and Job Training*. One of them, organized jointly with the *Uruguayan Chamber of Construction*, trained the collectors in different areas of construction. According to the Municipality's data, 80% of the collectors that participated⁶⁷ in the courses could insert themselves successfully into the formal labor market. The second program was organized jointly with the *Uruguayan Chamber of Pasta Factories*, and directed exclusively to women collectors, gave them the possibility to take an applied course on customer management of 240 hours (INEFOP, 2013; IMM 2016b). Finally, one of the experts interviewed mentioned that the municipality supported a group of collectors from IDG in forming a cooperative company, in order to be hired for the maintenance and custody of the area where the settlement used to be –which is currently vacant- (E10).

Both the planners and the community representatives interviewed were very positive about the results of the above-described actions, in terms of the improvement in the workers' income and quality of life. However, as the planners warned, the transition to formality does not come easy. A big challenge in this regard is that most of the waste collectors are either analphabet or have a very low reading comprehension, which generates them difficulties to organize and perform their errands (E8). For instance, one of the experts narrated: *"once one of the collectors came to my office because he could not find the address where he parked the three-wheeler that he had received just some days before[...] many of them have difficulties finding their way in the city, because they can't read the signs"*(E8).

10.2.3. Social Dimension

In the social dimension of urban fragmentation, some signs of severe exclusion emerged from the expert interviews in the IDG case. In particular, the interviewees pointed to the erosion in the

⁶⁵ Pocitos is a high income neighborhood of Montevideo.

⁶⁶ It must be noted that these actions involved a strong coordination between public –municipal and national- and private actors.

⁶⁷ The collectors that participate in the courses receive a viaticum, in order to ensure their financial stability (IMM, 2016b)

community's social capital, and the exclusion from the labor market, state provision, and other of support networks as the most prominent issues in this area – these are elements of the second and third dimension of social exclusion of the De Haan (1998) categorization- (E8,E9). Concerning the first subject, one of the planners interviewed pointed to the scarcity and weakness of social bonds within the community as the most prominent issue (E8). While different activities and actions to improve this situation were mentioned in the interviews, there was one particular initiative that was highlighted both by the planners and the community representative as being particularly effective, namely, the mutual aid manufacturing activities.

The mutual aid activities⁶⁸ consisted of the manufacturing of tiles and concrete panels for being used in the roofs of the new dwellings, and in the footpaths of the new housing estates. About this experience, the community leader interviewed expressed: *"In many cases residents that were going to move together did not know each other. But thanks to the manufacturing experience they all came to work side by side with a common goal. It was truly wonderful"*. In the same line, both of the planners interviewed emphasized the positive bonding effects of this action (E9). Additionally, one of them admitted: *"the participation in the mutual aid manufacturing activities was much higher than we expected. We even had a high participation of rather vulnerable people, such as alcohol and drug addicts"*(E8). Despite the above, the planners interviewed lamented that the mutual aid activities could not be integrated to the construction stage, what could have had more meaningful outcomes from the point of view of the generation of working skills. In this regard, the experts explained that it is difficult to coordinate the cooperation between the private construction companies hired, and residents groups with no construction experience (E8).

As for the exclusion from state provision and other support networks, the planners interviewed pointed that previous to the interventions it affected an important share of the settlement's households, but to varying degrees. In this concern, a particularly severe exclusion situation was presented by one of the planners, who narrated: *"there were some areas of the settlements, particularly in the zone called 'la lomada', where people lived among the bushes, completely isolated from the outside world [...] It was as if they lived in the middle of the Amazonia, even though they were just three blocks away from Avenida Italia"*⁶⁹(E8). In spite of that, the planners interviewed highlighted that state provision to the settlement had improved significantly over the last couple of decades (E8). This was also confirmed by the community leader interviewed, who expressed *"a couple of decades ago you could find many cases of families that did not send their children to school, and some did not even register them when they were born. Fortunately this does not happen anymore"*(E10).

The community leader interviewed highlighted the exclusion that the residents from IDG suffered from the labor market, as a result from the discrimination they faced for living in an informal settlement. In this regard, she expressed *"as soon as you told a prospective employer that you lived in IDG you could be certain that you would not get the job [...] I had to give my mother's address when I was searching for a job"*(E10). By contrast, the former resident added: *"Fortunately this is different now. We have normal addresses that we can use, as anyone else in the city"*(Ibid).

Lastly, the planners explained that in order to promote the interaction of resettled families with people from other backgrounds, they assigned land to middle-class housing cooperatives in the surroundings of the resettlement's housing estates, creating socially mixed areas. In this regard, one of the planners exemplified: *"in the plot of land where the Cochabamba housing estate was built, we allocated land for 250 dwellings. 50 of these were for resettled families, and 200 were cooperative housing units"*(E9). However, as one of the experts admitted *"while socially mixed areas work in theory, it is really difficult*

⁶⁸ The participation in these activities was non-obligatory and non-remunerated.

⁶⁹ Avenida Italia is one of the main avenues of the city.

to make them work in practice. You can put a middle class housing cooperative side by side with a resettlement housing estate, as we do, but this does not mean that people will start to relate”(E9). In this regard, the expert lamented that the relationship of resettled people with their new communities is in most cases still limited.

10.2.4. Challenges and facilitators of the interventions in Isla de Gaspar

A first major facilitator for the intervention in IDG which was highlighted by all the experts interviewed, was the fluent communication achieved between the municipality and the residents. The planners interviewed recognized that the establishment of a permanent office inside the settlement was crucial for this achievement. In this regard, one of them expressed *“the office was the cornerstone of the communication between the municipality and the community [...]. Everything happened there: the information meetings, the monitoring commission sessions, the lottery for the dwellings’ allocation, and even the meetings with the mayor”* (E8). The creation of the office was possible thanks to the conversion of a building⁷⁰ that the municipality owned in the settlement (Ibid). One of planners interviewed emphasized that having this office inside the settlement⁷¹, rather than in a public building in the formal city, *“contributed to the horizontality of the communication”* since it *“was a place where the residents felt at ease”* (E9). Additionally, the community leader highlighted that having a place to gather within the settlement enabled residents to participate in the different meetings and assemblies, without causing major disruptions in their daily routines. The strong commitment of the residents to participate in the resettlement process was also highlighted by the planners as an important facilitator. The experts attributed the high level of attendance to the different participatory instances to the existence of strong local leaders who mobilized the community.

The “lottery” modality employed for the allocation of the new dwellings was pointed as an important tool for facilitating the resettlement by the planners. As one of the experts explained, families could sign up for the different housing estates when this were close to be finished, and a public draw to determine the dwellings’ allocation was later organized in the municipality’s office in the settlement. On this subject, the community representative declared that no problems with the dwellings’ allocation emerged, since *“the whole process was perceived as fair and transparent by everyone”*. However, the planners informed that an important downside of this allocation method was that *“it was impossible to predict and organize the way in which the settlement was going to be emptied”* (E9). As one of the experts explained, *“the dwellings that people left were randomly distributed in the settlement, rather than concentrated in a specific zone[...]it was very complicated to organize their custody, demolition, and the cleaning of the area”* (E9).

The planners interviewed agreed that the main difficulty for undertaking the relocations was to acquire suitable plots of land in the settlement’s area. The main challenge in this regard was that the IDG settlement was an enclave in the formal city, and therefore there were very few vacant plots in its surroundings. Besides, as one of the experts explained, *“the legal procedures for buying or expropriating land usually take a considerable time, and delays are frequent”*(E8). In the case of IDG some legal complications in these processes resulted in significant delays in the intervention. As a consequence, there was a gap of three years between the first group of relocations, and all the other groups. Concerning this issue, both the planners and the community representative interviewed confessed that the delays resulted in a general feeling of anxiety in the community. A further issue derived from the delays was that the composition of many households changed over this period, what complicated the

⁷⁰ The building was constructed around three decades ago to function as a waste classification facility, but was vacant at the moment of the intervention.

⁷¹ It must be noted here that no similar facility existed in the case of CRG.

dwelling's allocation. In particular, one of the experts explained: *"many of the residents that were teenagers when we started to plan the resettlement had children, and many couples separated"* (E8). Finally, a further challenge in the transition to formality mentioned by the planners was the high cost of electricity, which they deemed disproportionate in relation to resettled households' income⁷². One of the experts informed that a special reduced fee is charged to the resettled household, but only for a few months after they move to their new house (E8). Despite of that, the planners highlighted that the so far only 10% of the resettled families have ceased their payments. However, in the *Cochabamba* estate, where waste collectors were resettled, this percentage goes up to 30%.

Figure 20 –Examples of resettlement housing units of the Isla de Gaspar settlement



Source: MHSP (2018)

⁷² The bad electricity use habits of IDG's residents, derived from years of being irregularly connected to the electric grid, further worsened this issue (E11,E12)

10.3. Case 3 – Asociación Civil Esperanza

10.3.1. Introduction

The following sections will expose the main implications of the planning interventions undertaken in ACE over the different dimensions of urban fragmentation, and present the most prominent factors facilitating and hindering planning efforts in this settlement.

10.3.2. Social dimension

A rather complex picture emerged in the social dimension from the analysis of ACE's participatory diagnostic study and expert interview transcripts. On the one hand, the diagnostic study identifies a high social homogeneity within the settlement, and a severe lack of bridging ties with its surroundings⁷³. The main factors behind ACE's isolation are found in the segregation in the educational and recreational spheres⁷⁴, and the negative image of the settlement in *Carrasco Norte* (D6). On the other hand, the planners interviewed highlighted the high degree of organization the neighbors' association⁷⁵ previous to the intervention, which according to one of them is *"hardly found in other informal settlements in Montevideo"* (E11). However, when the interventions started the association was almost exclusively integrated by a small group of rather old residents with a long history within the institution (D7). Furthermore, there was a *"climate of confrontation between the organization and a large part of the community"*, as explained by one of the planners (E11). Lastly, contrasting with ACE's level of community organization, the diagnostic study informs that *"most residents manifested not having any significant relationship with other neighbors, and often even not knowing the neighbors living nearby their houses"* (D6. p.98).

The social dimension received considerable attention in ACE's upgrading and regularization interventions. This comes to no surprise, since 'contributing to revert the processes of social exclusion and spatial fragmentation' is one of the core objectives of the PISU (D5 p.6). Furthermore, the PISU's projects are conceived following the 'principle of integrality', which determines that the physical and social integration of informal settlements should not be conceived separately, but rather as two sides of the same coin (D5, p.4).

For analyzing the implications of the planning interventions undertaken in ACE in terms of reverting social exclusion, de Haan's (1998) categorization will be employed anew. Starting with the first arena identified by de Haan, a remarkable progress was found in the protection of people's rights in ACE's case. The right to decent, hygienic, and affordable housing is guaranteed in the Uruguayan constitution for all the residents of the country (Constitution of the ORU, Art 45, 1967). As recognized by one of the community representatives interviewed, the interventions *"meant a radical improvement in the living conditions both for the neighbors that move to a new house, and for those that stayed in their original one"* (E15). In this regard, access to sanitation and the capacity of the new and refurbished dwellings to withstand the weather were mentioned by the community representatives as the factors that contributed the most to improving their quality of life (E15, E18).

An optimistic picture in the social dimension also emerges when we look at the second arena of exclusion. To begin, as explained by the planners, the intervention in ACE had a strong impact in

⁷³ In spite of this, the fact that 55% of the settlements workers are employed outside of the settlement is identified in the diagnostic study as an important source of bridging ties (D5)

⁷⁴ The predominantly middle and upper middle class families attend private education institutions, sport clubs, and have different sociability spaces (D5)

⁷⁵ The neighbors association is called *Asociación Civil Esperanza*, and it gives name to the whole settlement. It was founded in 1979, and has been fighting for the improvement of the settlement's living conditions and for the property of the land since then (D5).

strengthening the community's organization (E11,E13). In spite of the settlement's long history of organization, when the interventions started the neighbors' association showed some signs of exhaustion (E15). For instance, elections of representatives had not taken place for a long time, the association did not meet with regularity, and a large part of the settlement's population felt not represented by it (E11,E13). A factor that was highlighted by the planners as important for improving this situation was the experience generated by the creation of the *Works Monitoring Commission*⁷⁶ (WMC).

The WMC was integrated by representatives of the community⁷⁷, the construction companies, and the PISU and PIIS. Its main function was to serve as a horizontal communication space between the aforementioned actors (D5). A poll for electing representatives of the different areas of the settlement for the WMC was conducted in March 2015. ACE's residents had the chance to elect their representatives among the 52 candidates participating (D7). After the ballot, a series of workshops with the elected representatives were organized, in order to familiarize them with their new roles, with the upgrading and resettlement interventions, and for strengthening their communication skills (D7).

The planners interviewed highlighted that the generation of a democratic process for electing the members of the WMC had a huge impact in the promotion of new generation of community leaders. In this regard, one of them pointed: *"the WMC served as a sort of leadership training experience for a lot of residents that were not involved in the neighbors' association"* (E12). Proof of this is the fact that a large number of former WMC representatives have been recently elected to be representatives in the neighbor's association (E11,E13). This is a considerable achievement since the lack of interest in of young people in the community affairs was an important concern of the older residents of the settlement (D7). Lastly, one of the planners pointed: *"the working modality of the commission (WMC) had an important impact over the functioning of the neighbors' association. [...] They used to meet only occasionally when some issue arose. Now they do it every Friday"*⁷⁸ (E11).

Several actions were undertaken to generate and strengthen social bonds within the settlement. One project which had particularly positive results was the painting of a mural depicting ACE's history by the settlement's children, in a wall next to the newly built square (D7). This project had a very high participation from neighbors –over sixty persons-, serving as a trigger for the appropriation of ACE's new public space (D7). In addition, a project for reconstructing ACE's history with the eldest residents was organized, which resulted in the writing of an anecdotes book. Furthermore, three *hip-hop* and *capoeira* workshops were organized, targeted at ACE's younger residents, in collaboration with the Municipality's Department of Culture (D7). All these initiatives were evaluated very positively by the neighborhood representatives interviewed in terms of their effect in bringing ACE's people together. Additionally, the newly built public spaces and community center were considered crucial for improving ACE's sociability, both by the residents and the planners interviewed.

Some actions to improve the relationship of ACE's residents and their neighbors from the 'formal city' were also undertaken. The most prominent one was the project of environmental upgrading. As one of the planners explained: *"the presence of garbage dumps in ACE's surroundings [...] was identified as the main shared concern between the settlement's residents and their neighbors"* (E11). For this reason, a joint project for the environmental enhancement of the area with the participation of ACEs neighborhood associations, and the middle-class cooperatives of its surroundings was promoted by the PISU/PIIS. However, no significant improvements in the relationship between the two groups resulted from this project (D7,E15,E17). ACE's residents perceive a lack of interest of the residents from the

⁷⁶ The PISU establishes the creation of such commissions in all the projects it finances (D4).

⁷⁷ It must be noted that the commission meetings were open to the whole neighborhood (D7).

⁷⁸ The researcher had the possibility to attend to one of these meetings on the 26th July 2019.

housing cooperatives to have any kind of relationship with them, and they feel they have some discriminatory attitudes from towards them (D7,E18).

Finally, positive results are evident when we look at the third arena of exclusion. Family ties were particularly important in ACE, since a large share of the population had other members of their family living within the settlement (D6). As explained by one of the planners: *“one of the main demands from ACE’s neighbors from the beginning was that all the relocations were done in the surroundings, and this was in part because many have family in the settlement”* (E11). While this was a challenge from the financial perspective, since the settlement is located in an area of expensive land, the municipality agreed to meet this demand, and acquired vacant plots adjacent to the settlement to build the new housing units –See figures 14 and 15-. As a result, the family and kinship ties could be maintained intact, as highlighted by both the neighbors and the planners interviewed.

10.3.3. Economic dimension

The ‘economic-productive-labor’ dimension is defined as one of the core action lines of the upgrading projects financed by PISU (D5). Devising new commercial and productive activities, and taking advantage of already existing employment centers and other related state resources, are identified as the key factors for achieving an improvement in the employment situation of informal settlement’s residents in the program’s guidelines (D5). In the case of ACE, one of the main preoccupations of the community in this field is the high proportion of young people in the settlement that neither study nor works⁷⁹ (D6, E16). Furthermore, one of the main community demands for the settlement’s youth was the creation of a training center, to facilitate their access to the labor market (D6).

Despite of the above, when consulted about this dimension, the planners interviewed admitted that this whole pillar was absent in ACE’s intervention. In this concern, one of them explained: *“many important problems emerged from the diagnostic study of ACE. That meant we had to choose which ones to prioritize, given the monetary and human resources that we had available”*(E13). However, other of the planners recognized that higher coordination with other public institutions in this area would have been desirable (E11). On the other hand, the neighborhood representatives interviewed lamented that no progress was done in this dimension. They all agreed that the presence of *“a lot of unemployed young people in the street all day, doing nothing”*(E16) is still one of the neighbors’ main concerns. The lack of consideration to the economic dimension in ACE starkly contrasts with the strong coordination of actions –both with municipal and national actors- found in this area in the IDG case.

In contrast with the above, it must be highlighted that a considerable effort was done for preserving the livelihood sources of those residents that had to be relocated. For instance, there were two households that depended on horses to work. Since the animals could not be kept in the new housing estates, the professionals from PISU/PIIS conceived two different solutions for these families. One of them was provided with a second-hand dwelling close to the town of *Pando*, with a plot large enough to keep their horses (D7). For relocating the other family, a vacant community center located close to ACE, was refurbished and converted into a house (D7). Additionally, there was a family that had a small shop in the settlement, in a building adjacent to their house. As their relocation would have meant the loss of their source of income, they were authorized to swap their new house with one of the non-relocated families, whose dwelling was appropriate for reinstalling the shop. As a result, their economic activity could be preserved (D7, E13).

⁷⁹ It is worth noting that 72% of ACE’s residents in the 13-18 cohorts, does not attend to any kind educational center (E5).

10.3.4. Environmental dimension

Three main environmental issues were identified in ACE's diagnostic study. The most pressing one was that septic tank leakages were common when it rained (D6). As one of the community representatives explained, the fact that the settlement lies on the banks of a stream meant that septic tanks had to be rather superficial (E15). However, when it rained, and the water level in the stream rose, the level of underground water rose too, pushing wastewater to the surface. As a result of the lack of drainage in the settlement, its terrain flooded easily, and wastewater from the leaking septic tanks quickly spread (E15).

The change in the quality of life brought about by the combination of sanitation and drainage was described by one of the community representatives as *"the single most important improvement of the whole intervention"* (E15). In this regard, he mentioned: *"previous to the upgrading everything got muddy and smelly when it rained. You could smell the wastewater in your boots when you got home. It was a real hazard to health"* (E15). By contrast, other of the representatives commented: *"it is wonderful when it rains now, the streets dry just some minutes after it stops"* (E16).

The second core environmental problem in ACE is the Carrasco stream's contamination, coming mainly from another informal settlement located just a few meters across the brook. As acknowledged in the diagnostic study, that settlement *"has inadmissible living conditions and terrible hygiene, as a result of the presence of animal husbandry activities, which should be immediately stopped since they pose a threat to residents of the area"* (D6 p.9). In this regard, one of the planners expressed *"many times when you go to ACE the smell of pigs and refuse that comes from the settlement across the stream is unbearable"* (E11). Besides, while informal waste collection is almost nonexistent in ACE, by contrast with the IDG case, this activity is performed by many families on the opposite side of the stream (E11). The disposal of the refuse from animal husbandry and waste classification activities directly to the stream has resulted in a severe environmental deterioration of the area (E11,E12).

Despite the efforts of the planners from the PISU/PIIS to coordinate upgrading actions with the *Borough of Paso Carrasco* and the *Municipality of Canelones* –with jurisdiction on the other side of the stream– the process has not been straightforward. Initially, the neighboring authorities manifested not having any plans to intervene in the area⁸⁰ (D7,E11). More recently, however, interest in giving a solution to this area increased, as a result of a change of the local authorities (E11). Still, as explained by the planners interviewed, the authorities of the neighboring province are having trouble to intervene in the area. In this concern, one of the experts informed: *"some of the residents of the settlement on the other side of the stream have pretty violent behaviors. They have even threatened municipal officers working in the area"* (E11). Lastly, one of the planners interviewed pointed to the existence of another informal settlement about two kilometers upstream, where informal waste classification takes place on the stream banks, what further complicates the improvement of the environmental situation (E12).

The third main environmental issue consists in the presence of accumulations of garbage in ACE's surroundings. As already mentioned, a joint project between ACE's residents and the housing cooperatives in the surroundings was fostered by the PISU/PIIS planners, in order to tackle this issue (E11). The project involved the elaboration of a participatory diagnostic study, which resulted in the request of a handful of garbage containers to the *Hygiene Division* of the MM, as the core action to improve the garbage situation. However, as one of the planners explained: *"the lack of response from the hygiene office ended up making the whole project a failure"* (E11). The lack of garbage containers was pointed out by the residents interviewed as being still an important issue (E15, E18). In this regard,

⁸⁰ It is worth mentioning that the municipalities of Montevideo and Canelones, and the borough of Paso Carrasco were all governed by the same political party –Frente Amplio–.

one of them denounced: *“some of us have to walk up to 400 meters to the garbage containers. In this situation it is difficult to convince our neighbors of disposing their waste properly, instead of throwing it to the stream, or burning it”*(E15)

10.3.5. Physical dimension

The interventions undertaken ACE radically transformed the settlement’s physical environment. A quick glance at the aerial images of the area before and after the interventions is enough to grasp the magnitude of the transformations in this dimension –See figures 21 to 24– There are two main sides to the physical upgrading⁸¹ of the settlement, namely, infrastructure and housing, which will be analyzed in the subsequent paragraphs.

Figures 21-24- Aerial view of Asociación Civil Esperanza in 2015 and 2019



⁸¹ The total investment in infrastructure and housing was of 429.240.035 Uruguayan pesos, which in December 2017, when the works were finished, was the equivalent t 14.904.168 €⁸¹ (D7)





Source: MHSP- Unpublished

Infrastructure

As presented in the case studies' introduction, ACE had the particularity of having a very high density, with very few spaces left for circulation. This situation was the result of the lack of plots available to invade in ACE's surroundings, which implied that the settlement always grew within a restricted area (E11). About this situation one of the planners interviewed expressed: *"I have never seen such a built-up settlement in my entire career"* (E11). Additionally, she narrated: *"entering to ACE was like going into a dark and damp labyrinth. Houses were cramped together. Sunlight light and breeze barely reached the inner areas of the settlement"* (E11). The above-described conditions were not only detrimental to the resident's quality of life but also pose important threats to their wellbeing since they increased illness risks (E12). Furthermore, the lack of wide enough passages meant that vehicles such as ambulances and fire trucks could not access the inner areas of the settlement (D6).

The overcrowding situation was one of the main concerns of both the planners and the residents interviewed (D6, E12, E13). In order to give a solution to that problem, many families were relocated and a street grid was designed and constructed. The grid was conceived *"attempting to provide direct access to the street to every house in the settlement, but trying at the same time to respect the original footpaths"* (E13). Thanks to this intervention, ACE's neighbors now enjoy paved streets, sidewalks, drainage, sunlight, and ventilation. Nevertheless, as explained by one of the planners *"this process was not simple, nor cheap"* (E11). It involved the relocation of 102 households to adjacent plots, and 29 families to new locations within ACE's original site (D7). The positive results of this intervention in terms of improving ACE's accessibility, generating a pleasing environment, and improving the local's quality of life were equally highlighted by the planners and community representatives interviewed.

The provision of sanitation was other of the major improvements in the infrastructure dimension in ACE's upgrading. An interesting methodology was devised for making this possible. As explained by the planners interviewed, the municipality constructed the large and middle scale infrastructure necessary for the provision of sanitation to the area. However, a self-building working modality was employed for the connection of the individual dwellings to the sanitation infrastructure. This working modality consisted basically in *"providing training and materials to residents, who dig the ditches and assembled the pipes themselves"* (E12). This experience was evaluated positively both by the residents and planners interviewed. Nevertheless, it is worth noting that the highly positive bonding effect of self-building activities observed in the case of IDG was absent in ACE, since each household worked separately in their own plot (D7).

Housing

As regards to the housing situation, the problems present in ACE previous to the intervention were not just related to the already mentioned issue of overcrowding. Some illustrative figures in this concern are that 50% the dwellings were in a severe state of disrepair, and almost 60% had metal roofs without any insulation (D6). Undoubtedly, the provision of new dwellings was a big step for improving the housing situation. The construction of 137 high-quality dwellings meant that over 40% of the settlement's households significantly improved their living conditions as a result -ACE has 306 households- (E11,D7). However, as explained by one of the planners, a significant difficulty emerged once the relocations started to take place (E11).

Figure 25 –Examples of resettlement housing units in ACE



Source: MHSP (2019)

Unlike almost every other upgrading project undertaken in Montevideo, the households relocated to new dwellings in ACE were not necessarily those whose houses were of poorer quality (E11). Since the primary reason for the resettlement was the layout of the new grid, the main criterion for deciding which households to relocate was their location. As a result, *“once dwellings of the relocated families started to be demolished, a huge quality discrepancy between the newly built housing units and the remaining ones became evident”* (E11) –See figures 25 and 13-. This issue worried both planners and residents alike (D7). In order to enhance the conditions of the dwellings of the non-relocated families, it was decided they would be provided with materials for them to self-improve the conditions of their houses⁸². According to the planners, almost ninety households benefited from this initiative.

Some of the planners interviewed regretted that the restrictions in the monetary resources available to upgrade the preexisting dwellings impeded the achievement a significant improvement in their quality (E11, E12). In this concern, one of them explained: *“given the existent budget constraints we decided to prioritize those necessities related to people’s health, such as repairing roofs, opening windows, and improving toilets, over less urgent necessities[...]But as a result, there are still big discrepancies between the new and the upgraded dwellings”* (E12). Surprisingly, the upgrading solution was evaluated positively by the resident’s representatives. In this concern, one of them expressed: *“the materials provided by the MM helped a lot. Especially when you think about it in terms of money... It would have been difficult to most families to buy them”*(E15). In spite of that, all the community representatives agreed that providing new dwellings for the entire population would have been the ideal solution, since the discrepancies in the housing quality are still strong. In addition to the above-mentioned refurbishment activities, the state electricity company financed the upgrading of the electric installations of 77 dwellings, what represented a huge improvement in terms of their safety (E13, E15). Lastly, water provision to the entire settlement was regularized by the state’s water provider (Ibid).

10.3.6. Service provision dimension

In the service dimension the two main demands of ACE’s residents, which were the construction of a kindergarten and a health clinic for the neighborhood, were met. The community representatives declared that ACE’s residents are highly satisfied with the achievements in this area. Moreover, they all agreed that no major further improvements are needed in this dimension.

⁸² Human resources for the upgrading Works were provided to those families unable to do them themselves (D7)

10.3.7. Challenges and facilitators of the interventions in Asociación Civil Esperanza

The first important facilitator for the intervention mentioned by the planners interviewed was the possibility to use *“a large and warm room”⁸³ to host the meetings with the neighbors and the WMC sessions, located right in front of the settlement*” (E13). As in the Case of IDG, the availability of a meeting place where the neighbors felt at ease, and located in close proximity to where they live, was mentioned by the planners as a crucial factor for establishing a fluent and horizontal communication with the community (E12). In the same line, planners agreed that the WMC’S community representatives had had a fundamental role in achieving a good communication between the municipality, the construction companies, and the residents.

The presence of a *“residents’ organization, with a high commitment to work for the community”*, and with *“experience in managing collective infrastructure”* was pointed by one of the planners as a fundamental facilitator for initiating the communication with the residents, and for transferring the communal assets built to the community (E12). In this regard, other of the planners highlighted that unlike most upgraded settlements, in ACE it was not necessary to provide any support to manage the communal center, and added that the community *“has been doing a wonderful job in managing the communal center after we left the area”*(E11). In addition, the success or the experience of the WMC in promoting new community leaders further magnified this effect (E11, E12).

On the other hand, the presence of a small group of families unwilling to be relocated was signaled by the planners as the most important difficulty for conducting the relocations. This situation was solved in a case-by-case basis, and involved the flexibilization of the construction plans (E12). Some of the solutions found to get to an agreement with these families were to provide slightly larger plots to enable them to expand the dwellings provided, the construction of larger one-room dwellings⁸⁴, and the voluntary swap of houses between neighbors (E11, D7). A further difficulty pointed by one of the planners interviewed was that *“there were ten non-censed families living in houses that had to be demolished when the interventions started”* (E12). Since the relocation of non-censed families to new dwellings is not permitted by the PISU guidelines (D5), the planners solved this problem by giving censed families the possibility of moving to a new dwelling, and leaving their old house to a non-censed household. Besides, the aforementioned difficulties in the communication with other state dependencies, and the lack of response of some of them⁸⁵ were also mentioned as important obstacles for the improvement of the environmental and service provision dimensions (E11).

Finally, some difficulties in the transition to formality of part of ACE’s population emerged from the interviews. As in the case of IDG, many households *“were used to make an irresponsible use of public utilities, especially of electricity, since they did not pay for it”* (E11). While the neighbor’s representatives highlighted that the settlement’s population received very good courses promoting the efficient use of public utilities, some families are struggling to change their habits (E15,E16). As a result, they are getting very high bills which they cannot afford.

⁸³ The room was lent by the NGO *Las Violetas*, which works in women empowerment projects in Carrasco Norte.

⁸⁴ This solution was devised for the case of some households of one or two persons whose houses were much larger than the ones they had been assigned (E11)

11. Conclusions

This study has explored how urban policies in Madrid and Montevideo are addressing informal areas, interrogated the extent to which their planning interventions are contributing to 'integrate' informal settlements and their residents to the formal city, and inquired about the main factors facilitating and hindering planning efforts in these areas.

For operationalizing the study of the integration of informal urban areas and their residents, five dimensions of the divide between the formal and the informal city were identified from the urban fragmentation literature. The physical dimension of the divide is by far the most prominent one of the interventions undertaken in both cities. As expected, resettlement interventions were highly effective in closing this gap in both Madrid and Montevideo, since relocated families were provided with good quality dwellings, in well equipped urban areas. Despite the fact that resettlement interventions are not aligned with the current 'best practice' in planning approaches to informal settlements, and of their high cost, it was clear from the analysis that this kind of policy is a good option for cities with relatively low incidence of informality. However, this study has shown that the modality chosen to allocate the new dwellings can have a determinant impact on the social dimension of integration. Besides, the analysis of ACE's experience has demonstrated that *in situ* relocations, providing new dwellings to just a portion of the residents -40% in this case- can result in important discrepancies in locals' housing situation. Incremental housing provision -i.e. *Aravena*-style dwellings- could be an interesting option to explore in future interventions, for avoiding the creation of such discrepancies. On the other hand, it was evident from the analysis that infrastructure works -particularly paving, drainage, and sanitation- had a huge impact in closing the physical divide in the upgrading cases, resulting in significant improvements in residents' quality of life. On a less positive side, this study revealed that one of the municipalities involved in Madrid's case is actively promoting the physical isolation of CRG from the formal city.

The economic dimension proved to be highly complex to integrate into planning interventions in informal settlements. On a positive note, the analysis of the Uruguayan case studies shed some light on the importance of flexibility, creativity, and case-by-case work for preserving livelihood sources when conducting resettlements. However, the failure of planning interventions in CRG and ACE to provide training and assistance for facilitating resident's access to the labor market represents an immense shortcoming in their attempt to 'integrate' them. Given the considerable economic resources and expertise needed to act in this area, the coordination with other state dependencies with competence in the matter is crucial in cities with a medium and low prominence of informal settlements⁸⁶, as the IDG experience proves. In this regard, it would be highly desirable for future interventions to coordinate mutual aid actions -which showed impressive bonding effects in IDG's case- with state actors working in job training since important synergies can arise from their combination.

A rather ambiguous picture emerged from the analysis of the social dimension of the policies studied. On the one hand, this work showed that the planning interventions studied collaborated to reduce the exclusion of informal settlement dwellers in terms of guaranteeing their rights to adequate housing and improving their access to public services and common property resources, in the three cases analyzed. However, it was evident from the analysis that the resettlement modality chosen in the case of CRG seriously undermines extended family and kinship ties since households were randomly relocated throughout the CM, without any kind of consideration to their preferences and needs. On the other

⁸⁶ In such cases it would be unrealistic to develop a comprehensive strategy for the economic integration of informal settlement's population. It must not be forgotten that the majority of the poor population does not live in informal settlements in these cities.

hand, while the Uruguayan group relocations proved to be effective for maintaining intra-settlement ties, their potential to promote the expansion of resettled household's bridging ties appeared to be rather limited.

The second-hand relocation modality implemented in IDG seems to be the most promising resettlement scheme when it comes to the social dimension. As households can choose their new dwellings within a certain budget, they can coordinate with their extended family to find dwellings nearby. However, no concentrations of former informal settlement residents are generated under this modality. The realization of a more in-depth study comparing the evolution of social links of the households relocated under the group and second-hand housing resettlement modalities in the IDG case would be crucial for arriving to more concluding results in this area.

As regards to the environmental dimension, relocation interventions were logically effective for bridging the existing divides. However, this proved to be a challenging area to integrate to the upgrading interventions, owing to the need to coordinate actions with a variety of actors in this field. By contrast, the service provision dimension showed positive results in all the cases studied, and no major difficulties emerged in this dimension.

From the above, it is evident that in spite of policy-makers' claims of integrality, efforts towards the 'integration' of informal urban areas are still rather biased towards the 'hard' factors which have characterized urban policies in this field for the last four decades. This study has shown that part of the answer for a more encompassing approach to these areas lies in a higher coordination between state dependencies. The experience of Montevideo is valuable to illustrate the importance of the coordination between and within the institutions at the city, regional, and national level. However, while a higher institutional coordination may help to solve the main shortcomings observed in the environmental and employment fields in future interventions, achieving a more in-depth integration in the social arena is far more challenging. As mentioned above, further research into IDG's experience could offer interesting insights in this regard.

As concerns to those factors hindering planning interventions in informal settlements, the availability of monetary resources was the main obstacle that emerged from this study in the Spanish case. This situation is in stark contrast with the official planning discourse, which has fairly overstated the scale of the investments made, and has presented these as a proof of the political commitment to give a solution to CRG's situation (CM, 2019a). Comparing the monetary resources allocated to the interventions in the two cities was useful for putting into perspective the magnitude of the investment made in CRG. The budget allocated for the intervention in CRG –the only prominent informal settlement in the CM– is not significantly larger than the amount invested in each of the Uruguayan cases, even though the population of these is only about 1/7 of that of CRG.

The second major obstacle that emerged in Madrid's case was the multiplicity of state actors and levels of government with planning competence over the territory of CRG. For overcoming this issue, the institutional framework laid out by the regional agreement proved to be highly effective. Its main achievement was the creation of a series of formal instances for enabling the dialogue and coordination of actions between the different municipalities and actors involved. This represents an important lesson for future planning interventions in Montevideo's metropolitan area, since the difficulty to coordinate actions between regional and local administrations was one of the most prominent obstacles found in ACE case.

Finally, generating the adequate conditions for a fluent and horizontal communication emerged as the most important facilitator for the interventions from Montevideo's cases. One of the key lessons from the Uruguayan experience was that having an on-site meeting place hugely facilitated the

communication between the community and the planners. Besides, the experience of ACE demonstrates that the promoting the participation of the community does not only facilitates the design and implementation phases of the interventions, but can also generate long-lasting effects in strengthening the community's social capital.

12. Abbreviations

ACE – Asociación Civil Esperanza

ECLAC- Economic Comission for Latin America and the Caribbean (UN)

MDG- Millenium Development Goals

MHSPE- Ministry of Housing Spacial Planning and Environment - Ministerio de Vivienda Ordenamiento Territorial y Medio Ambiente - MVOTMA (Uruguay)

MM – Municipality of Montevideo - Intendencia Municipal de Montevideo

NIS – National institute of Statistics (Uruguay)

NRP- National Relocation Plan – Uruguay

ORU –Oriental Republic of Uruguay

PIIS –Program for the integration of informal settlements- Programa de Integración de Asentamientos Irregulares –PIAI -IMM

PISU – Informal Settlement Upgrading Programme- Programa de Mejoramiento de Barrrios – PMB (Uruguay).

PNR – Progam of Neighborhood Remodeling - Programa de Barrios en Remodelación (Spain)

PORU- Presidency of the Oriental Republic of Uruguay – Presidencia de la República Oriental del Uruguay

RSF – Roma Secretariat Foundation - Fundación Secretariado Gitano (Spain)

SDG-Sustainable Development Goals

UCC –Uruguayan Cooperativist Center - Centro Cooperativista Uruguayo

WB – World Bank

ZCC – Zonal Community Center – Montevideo

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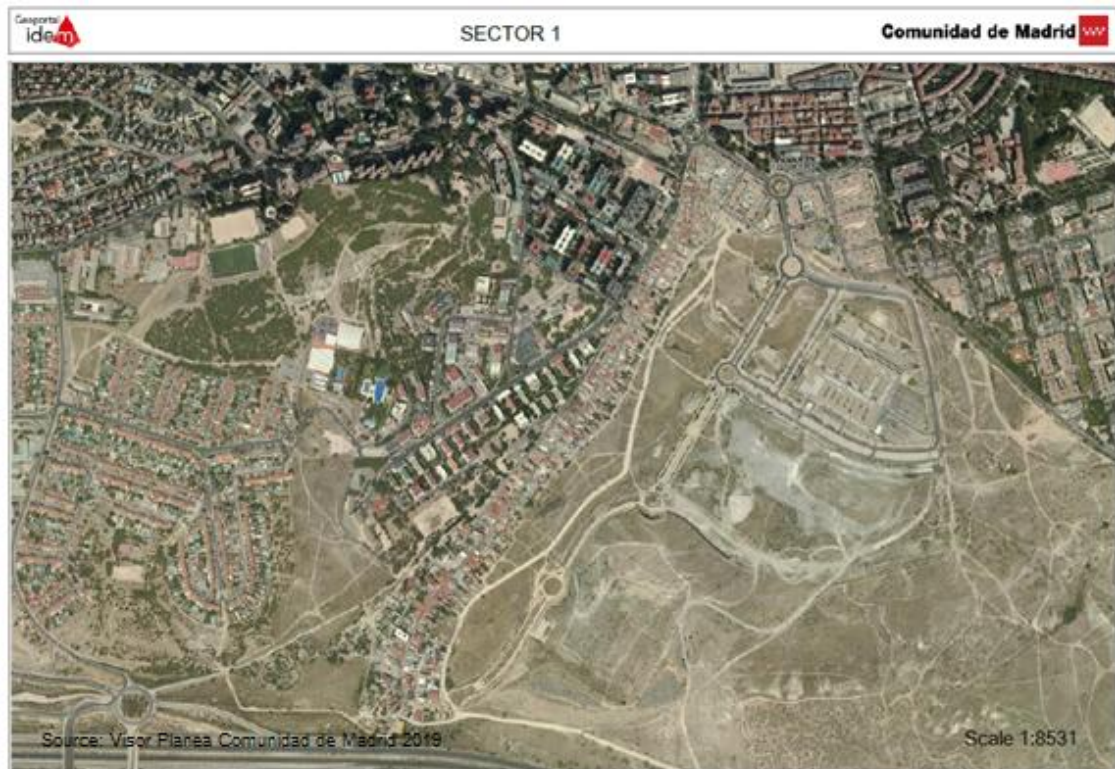
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World Bank (2019b) Adjusted net national income per capita (current US\$), Retrieved from: <https://data.worldbank.org/indicator/NY.ADJ.NNTY.PC.CD>

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14.3 Annex 3 – Maps

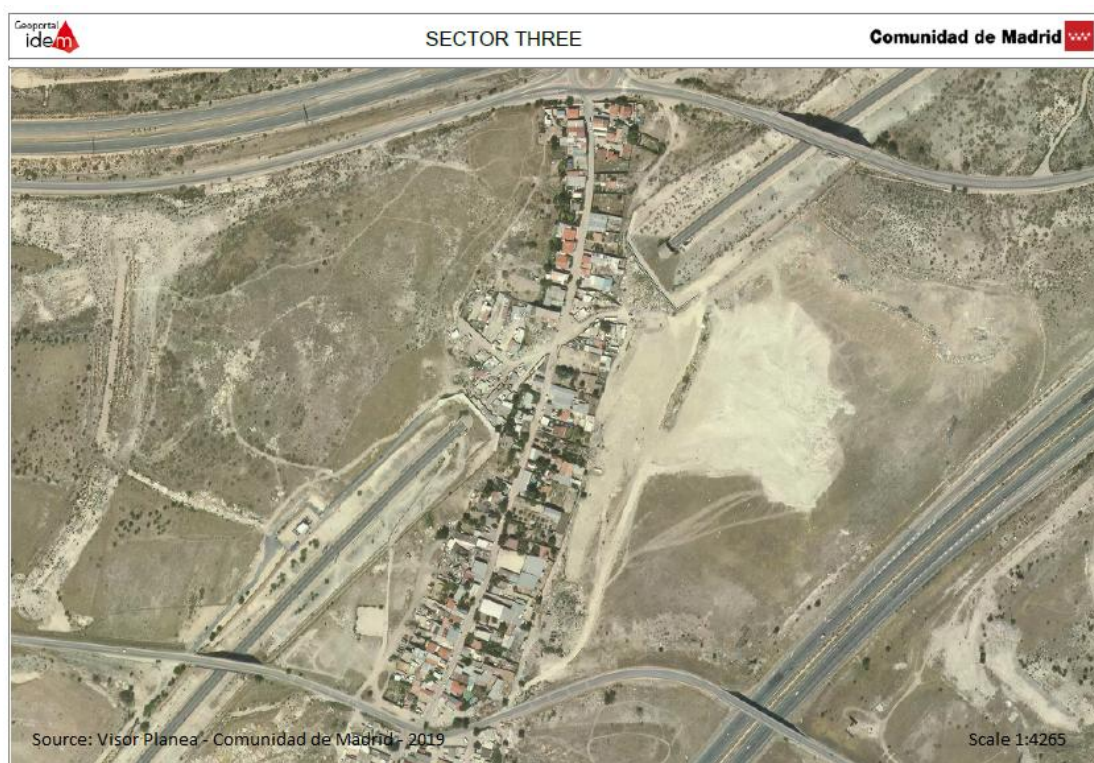
Aerial image of sector 1- Cañada Real settlement



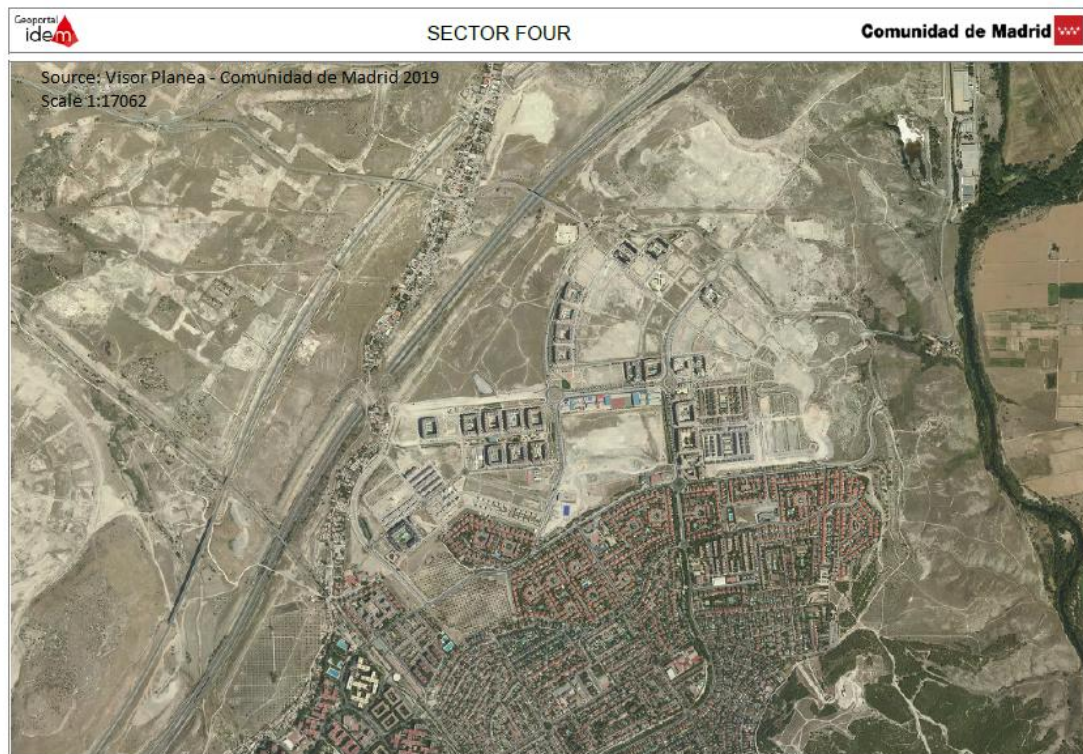
Aerial image of sector2- Cañada Real settlement



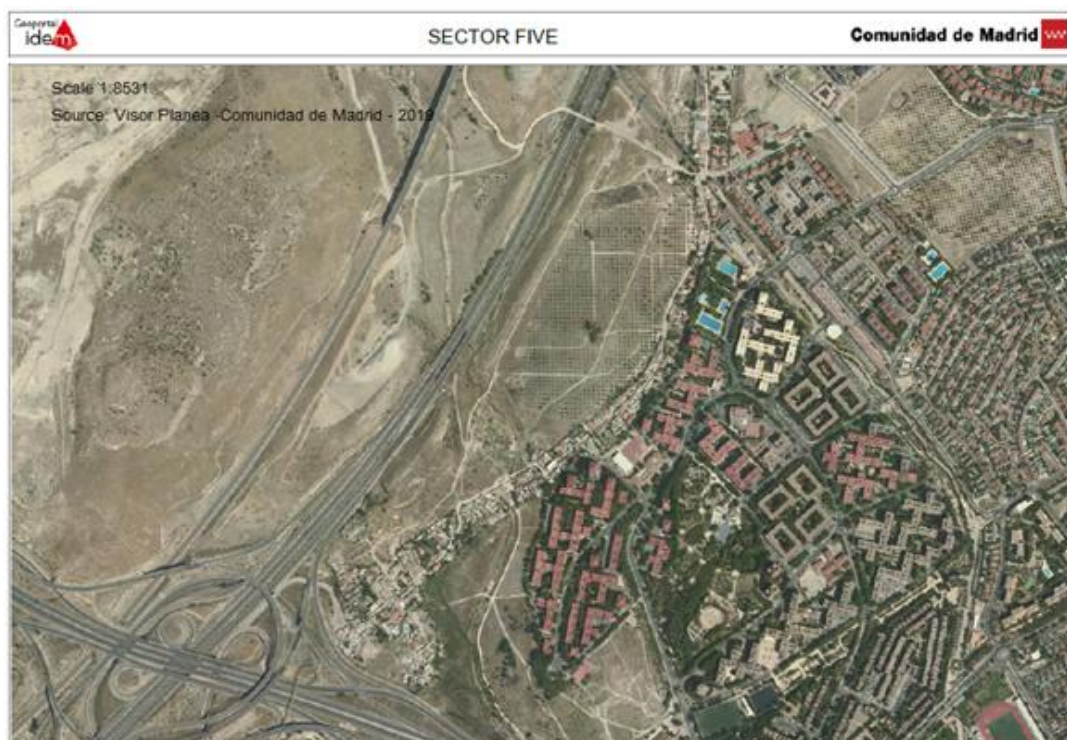
Aerial image of sector 3- Cañada Real settlement



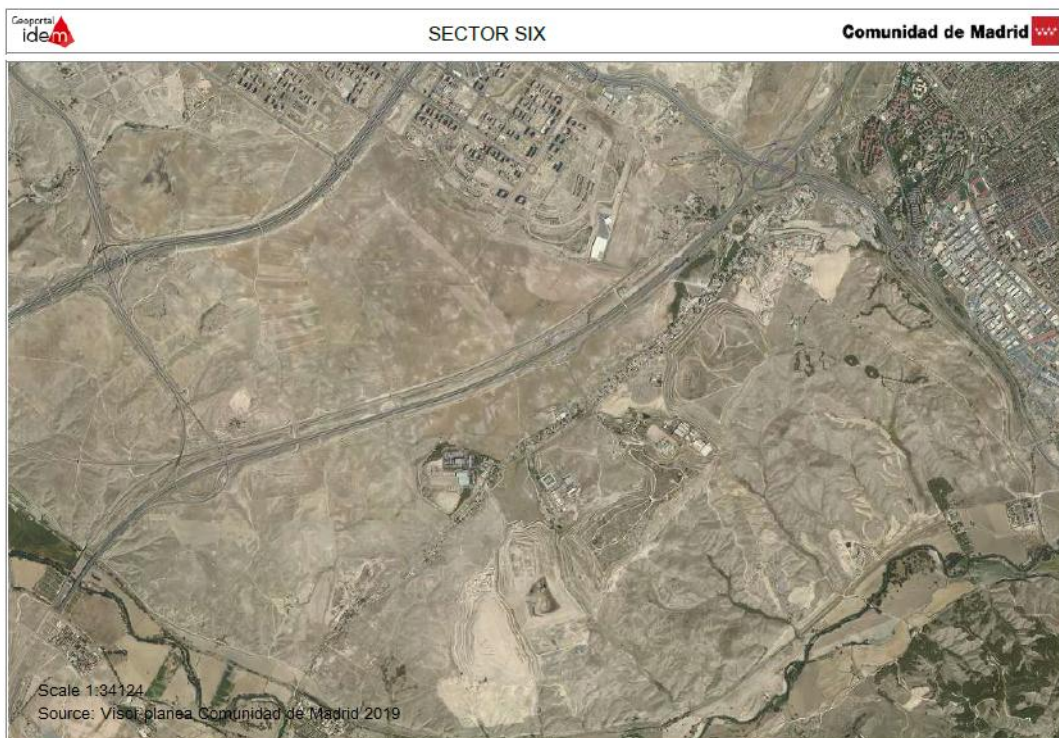
Aerial image of sector 4- Cañada Real settlement



Map 8- Aerial image of sector 5- Cañada Real settlement



Map 9- Aerial image of sector 6- Cañada Real settlement



14.4 Annex 4- Regional Agreement Organizational structure

The organizational structure laid out in the agreement consist in the following bodies:

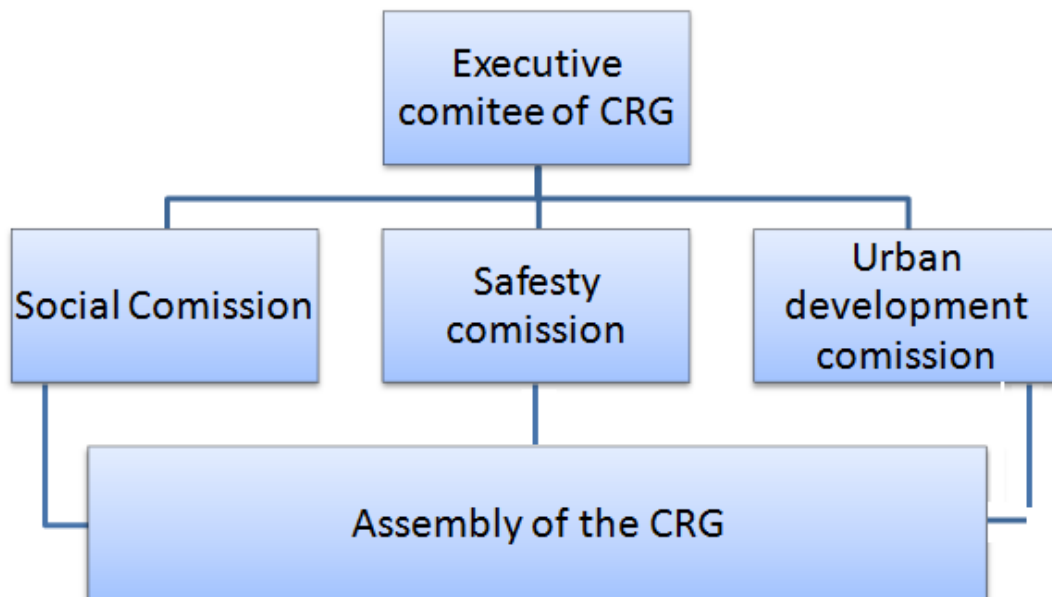
1- Assembly of the Cañada Real –It is the main deliberative organ created in the agreement. The assembly has regular sessions once every three months, and any of its members can request special meeting instances. It is integrated by: The commissioner from the Community of Madrid from Cañada real, a representative from each of the municipalities involved, a representative from each of the political parties with seats in the regional parliament, a representative from each of the political parties with representation in the three municipalities involved, a representative from each of the registered neighbor associations, a representative of each of the NGOs working in Cañada, and a maximum of three persons designated by the Commisisioner of the Community of Madrid.

2-Thematic commissions –The agreement devises the creation of three commissions (social, safety, and urban planning) for providing technical assistance and advice to the Assembly of Cañada Real. These are integrated by as many members of the municipalities, political parties, and the community, as considered necessary. The commissions can submit proposals to the Assembly. According to one of the experts interviewed, so far the only active commission is the urban planning one (E7).

3- Executive Comitee of the Cañada Real – The executive committee is devised as the decision-making organ. It is composed by 6 representatives: one representative of each of the municipalities involved, one representative from the national government, one representative from the community of Madrid, and the Commissioner for the Cañada Real of the regional government.

4- Monitoring commission – This commission is formed by the Comissioner for Cañada Real from the Community of Madrid, a representative from each of the municipalities involved, and a representative

from each of the political parties with representation in the regional parliament. Its main functions are to track the progress of the interventions in Cañada, and to interpret the agreement when necessary.



Source: Comunidad de Madrid (2017b).

14.5 Annex 5 – General questionnaire structure

1. HOUSING

- 1- (P, R, O)⁸⁷ Which were the main deficiencies of settlement x in the housing dimension?
- 2- (P, R, O) Were specific interventions made to improve the housing situation of existing dwellings?
- 3- (P) What would you say that were the most important challenges faced to improve the situation of existing houses? How were these overcome?
- 4- (P) Was there any factor which facilitated the improvement of existing houses?
- 5- (R, O) - How would you evaluate the outcome of housing improvement interventions?
- 6- (P, R, O) What do you think is still pending?

2-RELOCATIONS

-Version for the Cañada, to be adapted for the other cases-

- 1- (P) What reasons led to the decision to relocate from the settlement families?

⁸⁷ P- Questions for planners; R –Questions for community representatives, N – Questions for NGO workers.

3- (P) Can the families chose the location of their new dwellings?

4- (P) To what type of housing are families relocated?

5- (P) Which were the main challenges to carry out the relocations? How were these overcome?

6- (P) Were there any factors which facilitated them?

7- (P, R, O) Which do you think were the main advantages of the relocation, as compared to the possibility of on-site housing improvement? And the disadvantages?

8- (P, R, O) How satisfied are the relocated families with their new situation?

9- (P, R, O) How would you evaluate the results of the relocations in terms of the socio-economic integration of the relocated families?

3. URBAN EQUIPMENT AND INFRASTRUCTURE

1- (P,R O) Which were the main deficiencies in the urban equipment infrastructure in settlement x?

2- (P) Which interventions were made to overcome these deficiencies?

3 - (P) Which would you say that were the most important challenges faced for improving the situation of urban equipment and infrastructure in settlement x? How were these overcome?

4- (P) Was there any factor that facilitated the improvement of urban equipment and infrastructure in settlement x?

5 (R, O) How would you evaluate the outcomes of the interventions in the urban infrastructure and equipment dimension?

6- (P, R, O) Is there anything that is still necessary to improve with respect to the situation of urban equipment and infrastructure of the settlement x?

3. POVISION AND ACCESS TO BASIC SERVICES

1- (P,R, O) Which were the main deficiencies and barriers to access regarding public services in settlement x?

2- (P) Which were the interventions carried out to improve the access to public services for the residents of settlement x?

4 - (P) Which would you identify as the most important challenges they faced for improving the public service provision in settlement x? How were these overcome?

4- (P) Was there any factor that facilitated the improvement of the service provision of settlement x?

5- (P, R, O) How would you evaluate the outcome of the interventions in the service provision dimension?

6- (P, R, O) Is there anything that it is still necessary to improve in this dimension?

4. SOCIAL DIMENSION

1- (P, R, O) Which were the main social problems in settlement x?

2- (P, R, O) Were specific measures taken to improve these problems?

3- (P, O) How would you evaluate the social cohesion of settlement x's community? And the relationship of residents with the outside?

4- (P) Which difficulties did you encounter for improving the main issues in the social dimension- adapt to each case- in settlement x?

5- (P) Was there any factor which facilitated the interventions in this dimension?

6- (P, R, O) How would you evaluate the results of the interventions in this area?

7- (P, R, O) Was any there any specific intervention performed to address any of the following themes? : (Insecurity, stigmatization, educational dropout, social cohesion, community organization). With what results?

8- (P) Are there other state actors that intervene to improve the social situation of settlement x? residents who are not part of plan X? ? Was there any kind of coordination with these actors?

5. ECONOMIC DIMENSION

1- (P, R, O) Was there any intervention to improve the economic situation of the residents of settlement x? How would you evaluate the results of these measures?

3 - (P) Which were the main challenges to improve the economic situation of the residents of settlement x?

4- (R, O) Which further actions do you consider necessary to improve the economic situation of the residents of settlement x?

5- (P) Are there other state actors that intervene to improve the economic situation of the residents of settlement X that are not part of plan X? Was there any kind of coordination with these actors?

5. REGULARIZATION

1- (P) Which were the main difficulties for carrying out the regularization of land and housing in settlement x? How were these overcome?

2- (P) Was there any factor which facilitated this process?

3- (R, O) How would you evaluate the results of the regularization and titling of the dwellings of the settlement x?

6.OTHER

1- (P, R, O) Was there any other serious problem in settlement x of which we have not spoken?

2- (P, R, O) Was there any intervention to solve that problem? With what results?

3- (P, R, O) What measures do you think would be necessary to solve it?