

Measurement of management and development deficit on sustainability in neighbourhood unit. Case of the new city Ali Mendjeli Constantine

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Abstract. Wastewater and household waste management are among the most significant issues for sustainable districts. Their management requires quantifying spatial relationships between the appreciation spaces rate and well-being. This research aims to quantify the effect of development and management deficits on the sustainability of social housing districts. The case study is the neighbourhood unit in the new Ali Mendjeli Constantine, Algeria, characterized by high urban concentration. The critical points marking the latter relate to health and well-being problems. The methodology used in this research is a qualitative survey based on J.P. Thibaud's commented course approach. It involves the surveyed population selection who create the course according to the issue asked. The results show that more than 50% of the neighbourhood's spatial configuration directly affects the appropriation feeling, with a high dissatisfaction rate of approximately 85%. Furthermore, the interviewees declared that intermediate spaces within their neighbourhoods are spread over large areas without delimitation and specific development and management, making space assumption difficult. Thus, these spaces become sources of conflict and tension.

1 Introduction

Managing sewage and household waste is one of the most critical issues for sustainable neighbourhoods. Their treatment requires quantifying the spatial relationship between the rate of space appreciation and well-being.

In Algeria, one of the biggest challenges of social housing is illegally appropriating social housing outdoor spaces [1]. These unlawful behaviours have resulted in poor resource management and difficulties planning social housing areas.

Furthermore, the mismanagement of social housing programs presents a big issue in Algeria. This can manifest in poor building maintenance, a lack of follow-up in housing allocation [2], a lack of effective mechanisms to resolve disputes related to social housing, and insufficient controls to prevent premature degradation of the built environment [3].

The previously listed challenges have impacted the quality of housing alongside associated services and the government's ability to accommodate the growing demand for affordable housing [4].

The present research work is interested in the problem of the deficiencies of management and development and their impact on the sustainability of the external spaces of the social habitat of the new city Ali Mendjeli Constantine (Neighborhood unit number 8).

Indeed, the affected population of Constantine experienced relocation to the new city of Ali Mendjeli without prior notice. The circumstances of the transfer of the inhabitants to the new city were not without implications.

The new city's housing was not ready to welcome the new residents. Most of the structures were unfinished, and neighbourhood unit number 8 lacked. Equipment, infrastructure, and connections to the Constantine downtown were not yet assured. Finding out the locations was "such a big and bad surprise" for practically all of the people who came [5].

Hence, there was a total change of scenery, deeply felt, individually and socially. The new residents thought that their ways of living could not be reproduced here and that they were in for a significant change.

Living within the neighbourhood units in the new city Ali Mendjeli is extremely difficult for all the relocated inhabitants. For many relocatees, community life is a conflict between neighbours in the same building or block. This is the case of neighbourhood unit 8, which is the subject of this case study.

This research aims to determine the impact of planning and management deficits on the lives of residents and their relationship to neighbourhood sustainability.

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2 Methodology

2.1 Location of the study area and the Case Study Description

This study was conducted in Constantine, northeastern Algeria, at latitude 36°17'. The case study is the neighbourhood unit number 8, located in the new Ali Mendjli, characterized by high urban concentration (Figure 1).

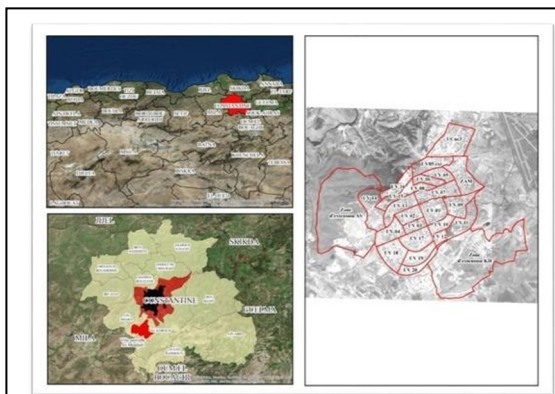


Fig. 1. The case study is the neighbourhood unit number 8

The unit benefits practically no development project or sanitation. Open sewage and the odours that emanate daily have been observed. Household waste, the volume far exceeds the number of bins installed, gives rise to piles and heaps of rubbish, which form a wild landfill. The image reflected is a degraded and unmanaged neighbourhood unit, altering its sustainability.

2.2 Quantitative survey

This research uses a qualitative survey based on J.P. Thibaud's commented course approach. It involves the surveyed population selection, which creates the course according to the issue asked. It should be emphasized that no specific sampling frame is required and considered random.

Our research survey was conducted at different times (9 a.m., 1 p.m., and 5 p.m.) during the week. Sixty (60) inhabitants validated our sample. 76.67% were males, and 23.33% were women. In addition, 55% of the inhabitants exercise a liberal profession, 33.33% are state functionaries, and 11.67% are unemployed. The percentage of their ages was as follows 21.67% were between 20 and 25 years old, 35% were between 35 and 45 years old, and 43.33% were more than 50%.

During the survey, interviewers shared their daily experiences within the neighbourhood unit 8. All the transcribed narratives describe a deconstructed and abandoned entity.

Once the courses were accomplished, sixty-course maps were developed, as shown in (Figure 2). They were overlaid to determine matching courses highlighting the areas designated as problematic for the inhabitants.

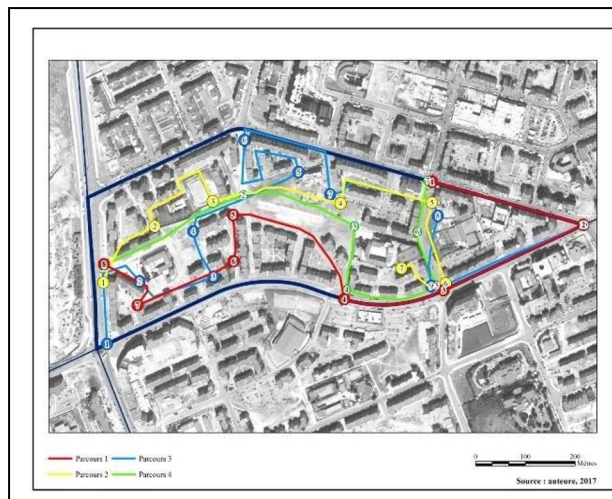


Fig. 2. Neighbourhood unit number 8

During the survey conducted with participants respondents, we observed that the deterioration of space contributes to its devaluation. Therefore, we focused on three points:

- 1- The degree of appreciation of the neighbourhood, that of intermediate spaces;
- 2- The feeling of home;
- 3- The management of neighbourhood units;

These points reveal elements regarding the perception of the neighbourhood, which is ill-defined and leads to its stigma.

3 Results

3.1 Appreciation of neighbourhood spatial organization

According to the analysis, more than 50% of the selected results showed that the neighbourhood's spatial configuration directly impacts the sense of belonging. Thus, the spatial arrangement as a spatial entity should be defined, delimited and appropriate to the inhabitants' expectations.

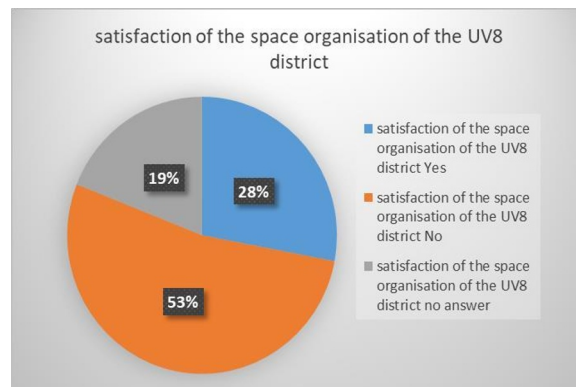


Fig. 3. Satisfaction with the space organization of the neighbourhood unit number 8

3.2 Appreciation of the spatial organization of intermediate spaces

The finding revealed a significant dissatisfaction rate of 85% (Figure 4).

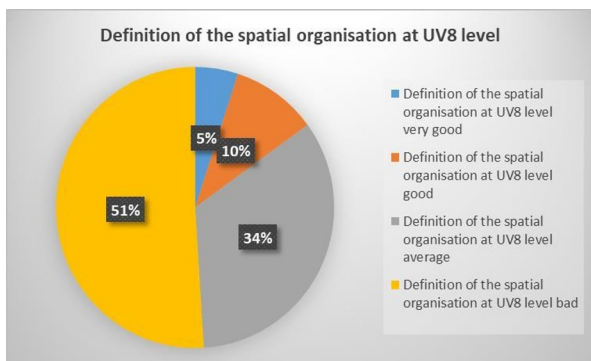


Fig. 4. Definition of the spatial organization at neighbourhood unit number 8

In our interviews, the inhabitants of (UV8) declare that the intermediate spaces within their neighbourhoods are spread over large areas without delimitation and a specific development plan. This makes the appropriation of space difficult, and in most cases, these spaces become sources of conflict and tension, as illustrated in (Figure 5).



Fig. 5. Photo showing the spatial organization at neighbourhood unit number 8

3.2 Feeling of home

The notion of "home" was highlighted by the sociologists of the Pavillonnaires who, in the 1960s, analyzed the practical-symbolic system of inhabiting it. The inhabitants feel at home as soon as they can freely appropriate their home space through interventions that allow them to put their mark on it. These interventions are made through planning and maintenance practices that would enable them to define the more or less public or private status of the spaces in their settlement [6].

To this end, interviews with the unit's inhabitants deduced that the notion of home is strongly linked to the quality of the space. The results show a deficient sense of belonging, which leads us to note the difficulties experienced in appropriating intermediate spaces within the social housing neighbourhood unit number 8. Thus, the problem of belonging becomes polarized at the level of intermediate spaces, especially at the level of shared spaces, where we note a rate of 5% at the level of stairs (Figure 6). This refers to the rather significant deterioration due to lack of maintenance as well as the almost total disinterest of the inhabitants.

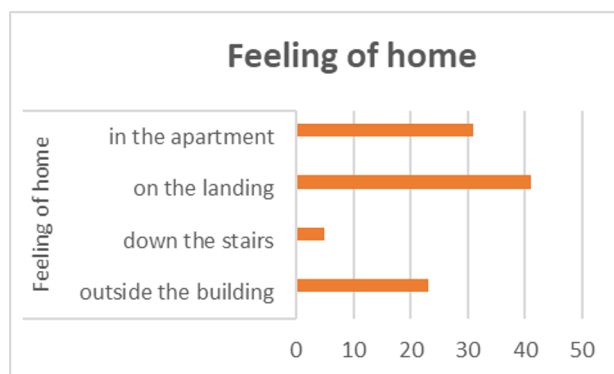


Fig. 6. Feeling of home

We can also point out that the entrance of the building causes all difficulties. To this end, we spoke with some inhabitants who unanimously declared that the building access is poorly maintained and dirty. Sometimes they do not have an access door to the building (Figure 7). These problems are verified by the results obtained, or we find that the inhabitants feel at home on the floor at 41% and in the apartment at 31%.



Fig. 7. Feeling home

3.3 The impact of management on neighbourhood sustainability

The analysis showed that more than 50% of neighbourhood unit number 8 residents perceive their neighbourhoods negatively. During the interviews, we deduced that this negative perception is due to poor hygiene and the failures of urban management (Figure 8).

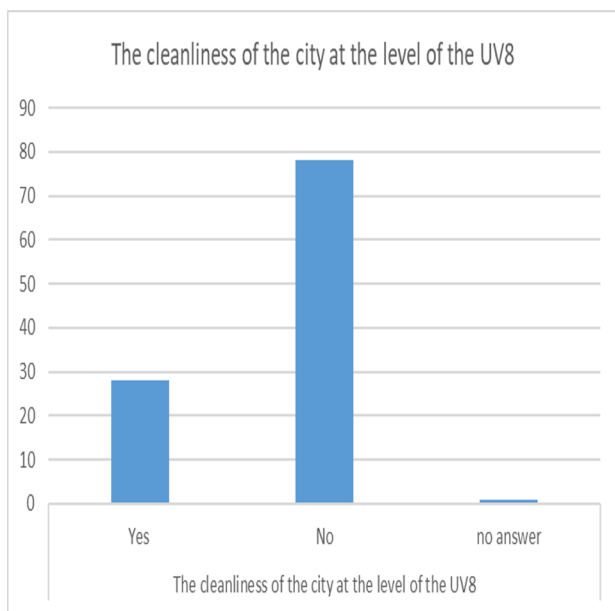


Fig. 8. The cleanliness of the city at the level of the neighbourhood unit number 8

The inhabitants confirmed this and noted that more than 76% believe their neighbourhoods are dirty (Figure 9).



Fig. 9. Photos showing poor hygiene of the unit neighbours

The previous results raised our question about those responsible for managing the city's spaces. Accordingly, we asked the neighbourhood residents about the people

responsible for maintaining the areas: the Communal People's Assembly (APC) and the Real Estate Promotion and Management Boards (OPGI). The analysis of the opinions of the inhabitants can be summarized as follows:

- Conflicting statements have been shown between the inhabitants. These opinions result from the overlapping responsibilities of the two organizations.
- During our meeting with the heads of the two organizations, we noted that the Communal People's Assembly is a delegated contracting authority whose mission is to build housing. Its mission is limited to maintaining its heritage, such as renovating facades.
- As for the intermediate spaces and everything related to the Roads and Miscellaneous Networks, this is the responsibility of the Real Estate Promotion and Management Boards. This observation concerns the management of social housing neighbourhoods.

According to the mentioned results, we deduce that the manager's reluctance was evident. The lack of collaboration between the different authorities in management on a different scale; responsibilities are not clearly defined, but the inhabitant as a user of space has definitely his share of responsibility."

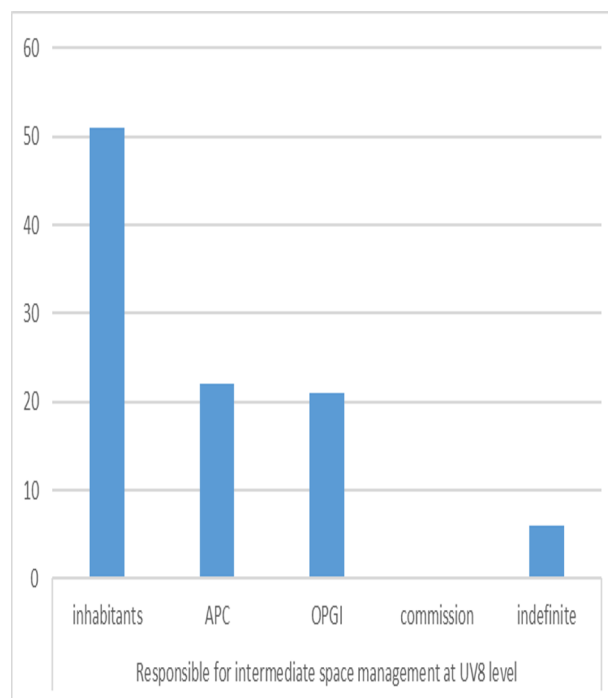


Fig.10. Responsible for intermediate space management at the neighbourhood unit number 8

3.4 Discussion

The environmental perception influences the stigmatization and degradation of housing project intermediate spaces, the impact of the living environment, and the quality of management and development [7]. We quantified the effects of management deficiencies by information provided to residents on documents and complemented by interviews in our survey.

The results obtained have highlighted the causes to which the emergence of premature deterioration of the neighbourhood refers (Figure 11), that is: spatial configuration (the permissive forms to possible acts of aggression, ambivalent spaces), spatial planning (lack of delimitation, lack of urban furniture) and urban management deficits (degradation of the built environment, lack of lighting). These factors are accentuated by the socio-professional situation such as unemployment and the living environment (the neighbourhood and the degree of appreciation of the neighbourhood).

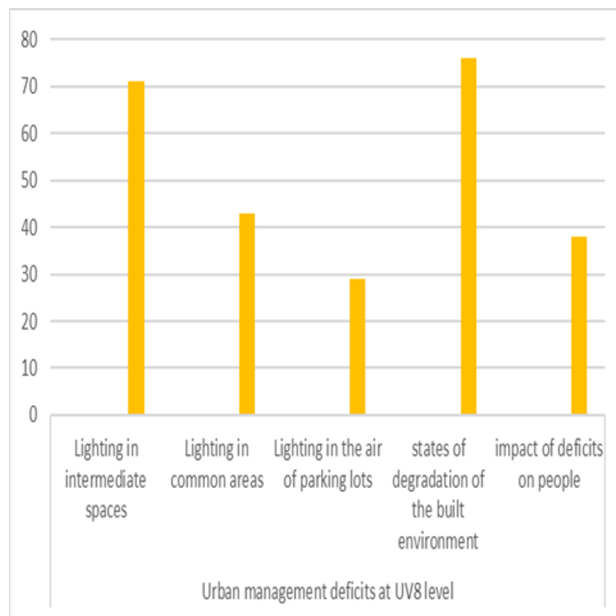


Fig. 11. Urban management deficits at UV8 level

4 Conclusion

The paper discusses the shortcomings of urban management in neighbourhood units in Constantine, Algeria. All the problems identified at the neighbourhood unit number 8 level that certainly impact the inhabitants' behaviour, the neighbourhood's degradation and its sustainability are related to the status of poorly defined intermediate spaces, dirt, lighting and space degradation. This situation puts into question an almost total failure of management within the neighbourhood unit number 8 (Social Housing).

The investigation deduced that the deficiencies of urban management are linked to the lack of interest granted by the authorities and the inhabitants, which accentuates the vulnerability within the intermediate spaces of housing projects. This issue highlights the close link between the shortcomings of the urban management of the neighbourhood unit number 8 (social housing) and the development of conflicting social relations between the inhabitants. However, the development of the approaches undertaken in urban management, which is the opportunity for open financing and the involvement of the inhabitants in Urban Management, must be preserved.

References

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