
The Role of Resident Participation in Upgrading Informal Settlements: The Case of La Rocade Neighborhood in M'sila - Algeria

Boudjema Khalfallah¹, Salima Amrane^{2,*}

¹Department of Urban Engineering, Institute of Urban Techniques Management, The University of M'sila, M'sila, Algeria

²Department of Architecture, Institute of Architecture and Urbanism, The University of Batna 1, Batna, Algeria

Email address:

boudjema.khalfallah@univ-msila.dz (Boudjema Khalfallah), salima.amrane@univ-batna.dz (Salima Amrane)

*Corresponding author

To cite this article:

Boudjema Khalfallah, Salima Amrane. The Role of Resident Participation in Upgrading Informal Settlements: The Case of La Rocade Neighborhood in M'sila - Algeria. *Urban and Regional Planning*. Vol. 8, No. 4, 2023, pp. 69-78. doi: 10.11648/j.urp.20230804.12

Received: September 23, 2023; **Accepted:** October 17, 2023; **Published:** October 30, 2023

Abstract: Informal settlements represent a significant housing stock in Algeria. Faced with this situation, the government settled on acknowledging them by means of regularizing their illegal status with the aim of integrating them into the general fabric of cities. This public reconciliation is defined by certain measures such as authenticating land ownership and housing tenure, and by initiating urban upgrading operations. This study aimed to identify the concept and importance of resident participation in the improvement of their informal settlement by analyzing an urban upgrading project. It is a field project concerning an informal residential neighborhood called La Rocade located in the city of M'sila in Algeria. The project was led by the municipal authority in collaboration with the university members and with the assistance of residents' representatives. Since this study concerns resident participation in urban intervention projects, the emphasis was on the third party, the representatives of the residents, by studying them as a group of individuals in their context using the method of 'active participant observation'. The group, as an equal social partner, was actively engaged in all stages of the project process, sharing experiences and opinions to be used in the improvement of its urban environment. The group was also the proponent of the negotiating dialogue between members of the local community and the municipal authorities responsible for such urban initiatives. Results suggest that using urban upgrading projects to learn about resident participation can be considered an effective strategy for social-urban improvement since the insights gained can be used to determine and develop policies for civic involvement in public projects and the recognition, funding and inclusion of informal settlements.

Keywords: Informal Residential Neighborhood, Spontaneous Self-Built Housing, Resident Participation, Neighborhood Upgrading Project, Improvement and Integration Scheme, M'sila

1. Introduction

Since the 1960s, large and medium-sized cities in Algeria have witnessed the emergence of informal settlements that have taken root and expanded due to massive rural migration toward cities. These vast areas, located on the outskirts of cities, experience ignorance that has led to clear manifestations of urban and social marginalization and exclusion within the semi-urban areas. Despite the hostility of public authorities towards this type of settlement, these residential areas have gradually become an essential component of the landscape of Algerian cities. In recent

years however, the government settled on accepting the reality of these unofficial neighborhoods as part of urban growth, and many initiatives have been taken to plan and determine how to improve and integrate these unplanned and poorly serviced areas into the city. Urban integration entails introducing a new element or group into the existing ones and ensuring consistency between them and that they constitute a continuity of form and function [1]. Urban integration cannot be limited to its technical dimension only, but its social and economic ones must also be included. Public authorities should acknowledge the rights of low-income families to live in the city by securing their

tenure rights and connecting their homes to all public services and infrastructure [2]. Once the residents feel they have a right to live in a place without the risk of eviction and that the local authorities will improve their living conditions, they will start to invest in upgrading their housing [3]. As a result, the area will gradually improve. Moreover, it certainly increases their sense of belonging to the place and helps them establish good social relations with their fellow residents and the rest of the city's society. An urban area must be well integrated into its environment for it to be able to support the economic, social and environmental liveability of the city.

In an attempt to respond to the recommendations of the Earth Summits and the UN-Habitat related to housing, cities and sustainable development, Algeria adopted an urban policy based on planning at the central level in 2002. It is represented in a national plan of intervention for the environment and sustainable development (PNAE-DD), of which a sustainable development strategy has been defined every five years. Following this policy, significant operations have been programmed at the local level to improve the urban environment in different cities by creating or activating mechanisms for urban, social and economic development based on the actual and efficient contribution of all actors, especially the concerned population. In this context, an urban project is set up in collaboration between a university team and the municipal authority to improve the general environment and living conditions of residents of one of the neighborhoods in the medium-sized city of M'sila in Algeria. The intervention focuses on the informal residential neighborhood of La Rocade. Supported by a partnership between academia, municipal administration with its technical bureau, and civil society, this field project covers several required competencies and provides a rich opportunity to apply theories while honoring problem-solving. The neighborhood upgrading project is based on two phases: first, the survey method to map and examine all the physical-spatial issues related to the area and the socio-economic data related to the inhabitants. Secondly, an urban intervention called the 'Improvement and Integration Scheme' to prepare and develop proposals to resolve these issues. In both phases, local community participation was at the heart of the work, relying on residents as the local-social partner with a significant contribution to the project process.

This study explores how the inhabitants of La Rocade interact with their environment and its physical elements by accepting to participate in its development, trusting and working closely with local authorities to improve their existing conditions. The study aims to assess the growing role of civil society and its participation in various projects usually initiated by officials and how success can be achieved in most urban projects if users get involved as key players in the different stages of the preparation process. It has become evident that urban environments do not require planning schemes only but also careful intervention, upgrading and renewal strategies, which go beyond the requirements of statutory limits. These strategies necessitate

residents' views, perceptions and experiences that help deepen the understanding of local issues [4]. In short, resident participation is a significant factor in the development and implementation of successful policies in the field of urban environments.

2. Theoretical Definitions and Concepts

2.1. Spontaneous Self-Built Housing in Algeria

Informal housing, also known in Algeria as spontaneous housing, is of two types; the first is called precarious housing or slum, built with recycled materials, devoid of any public services and it appeared during the French presence in Algeria and continued throughout the 1990s [5]. Under Algerian laws, precarious housing must be demolished; it is almost non-existent in present-day Algeria. The second type is spontaneous self-built housing, which is built with solid materials and appeared around the 1970s. This study is concerned with the latter. These informal settlements are located on the outskirts of major and medium cities in the country. As they grow and extend, they create spontaneous self-built residential neighborhoods.

These neighborhoods are called spontaneous because they are not planned by the public authorities and are built without any urban or zoning regulations; as a result, they have limited access to public services. In some cases, these settlements are also called illicit because they are built on public lands without approval from the state, and residents have no land rights to build homes and live there [6]. In other cases, residents have purchased these lands from private landowners, and transactions are made through customary contracts. In both cases, the residents do not have secure landholding or housing tenure. This type of residential neighborhood came to be because of the massive rural migration towards cities or of city inhabitants who faced the exacerbated housing crisis, so they resorted to spontaneous self-construction to obtain their housing.

All the measures taken in the past to prevent new spontaneous housing have not led to the expected results. At present, however, the government is developing new and strict legislation related to land and housing that will prevent the emergence of such new settlements. Having said that, it must be admitted that these informal settlements represent a significant housing stock in the country. Faced with this situation, the government settled on acknowledging them through admission of the *fait accompli*. The conditions for legalizing them are defined at two levels: legally, by authenticating ownership of the land, and technically, by complying with construction standards and town planning rules. These reconciliation measures to regularize illegal constructions are part of a state policy known as towns without informal housing, which was based on the program "Cities without Slums" of The World Urban Forum established by the United Nations in 2001. With the new regularization laws, these informal houses are considered unfinished constructions that must be completed within a deadline at which owners are

required to obtain building completion permits. In turn, the local authorities have to provide the necessary public services and infrastructure to integrate these neighborhoods into the general fabric of cities.

2.2. Informal Housing Upgrading

Taking a hostile attitude towards informal residential areas by viewing them as unfavorable parts of the city results in a lack of access to urban amenities and infrastructure and the non-availability of public spaces, sports facilities, schools, and health services [7]. Housing will generally be made of poorly built and tightly packed concrete blocks. A shift in approach towards making efforts to upgrade, rebuild and redevelop informal residential neighborhoods is the only solution to this urban vicious circle. Urbanization, the main driver of informal settlements, is not going away; on the contrary, it is on the rise since it is a positive process that reflects progress characterized by an urban lifestyle which attracts the rural population [8].

Informal housing upgrading is an encompassing, integrated and investing approach that aims to improve the living conditions of the inhabitants by resolving the legal issue of land tenure, the physical of infrastructure, and the social of poverty [9]. These issues should be undertaken cooperatively among all parties involved; residents, community groups, and local authorities. Informal housing upgrading is not only about providing a decent life for the poor, but it is also in a city's best interest since it promotes inclusion by integrating such urban areas into its general fabric; hence, it deals with city issues by containing environmental degradation, improving sanitation, and reducing poverty [9]. Improving informal housing is affordable because providing these areas with the necessary services costs less and is more efficient than relocating residents to other parts of the city. It is also viable since it can be done gradually by the public authorities and the inhabitants at a technically and financially feasible pace [9]. Providing residents of informal housing with security of tenure and connecting their households to necessary services will encourage them to invest in improving their housing. As a result, and rather than being spatially excluded, this informal area will become a vital part of the city and its development.

2.3. Resident Participation

Participation means contribution and assistance, and it is also the voluntary cooperation between two or more people to accomplish a joint action that does not only aim to achieve immediate benefit. Participation concept in architecture and urban design refers to a communication and representation mode among all parties needed in the design process, especially when the designer is different from the user [10]. Practical participation is based on clear theoretical foundations concerning the process of designing urban projects; these foundations are represented in the following elements: exchanging information through writings or designs, facilitating the process of communication among the parties involved through dialogue, translating initial ideas presented

by users into preliminary plans, which are then shown to those users in order to develop them based on their suggestions, and making decisions in a democratic and consensual manner on the final designs [10]. Participation has characteristics that make it an effective method for the success of urban projects, and it is not limited to the design process only but extends to include all steps of the proposed development. According to John Abbot, the characteristics of participation are: its form, which requires defining participating methods of the parties and their position from the initiation of the problem until the final evaluation of the project; participation period, which specifies the processing period which can be short during one stage or extended to all; and participation requirements that are the conditions required of the participating parties so that they are efficient and can achieve a definite benefit for the project [11].

The implementation of an urban project requires the participation of different parties, which depends on the specificity of each project. The user is an essential partaker in this respect, particularly in housing projects, in which the parties involved are generally the users, public authorities, technical bureau and civil society. Users designate the group of individuals directly related to the project as beneficiaries. Therefore, the role of the group must be efficient and of significant influence. In some studies, the user is considered the owner of the process and thus is responsible for it, and his role continues throughout the execution phase [12]. Public authorities are represented by state bodies at both provincial and municipal levels. The latter proposes, supervises, and partially finances the project because they are directly concerned with local communities' management, whereas the state is responsible for ensuring proper execution as well as part of the financing. The technical departments are active parties in the project; they guarantee the design and supervision, and with their technical expertise, they participate in the planning and management of the whole process while ensuring the involvement of the users. Civil society is an intermediating party between the user and public authorities in charge of the project. In most cases, the user is part of civil society, which facilitates negotiation for the benefit of the population and participants in the process.

Participation in the development process of an urban area can only be effective if it is a deliberate and systematic action in accordance with the type of involvement of the population or community concerned. It can be a participation through contribution, by which the interested party shares part of its funds to contribute to the financing of the project or shares its physical and intellectual abilities and skills to implement the project. It can also be in the form of participation through commitment, by which the concerned party is committed to respect the details of the project and not to obstruct its implementation by resorting to contrary choices. Or be integrative participation by assuming responsibility, in this case, the interested party is obliged to undertake the task that it has to perform in the planned project, which is divided into phases where various parties get involved.

3. Research Method

Most urban research studies emphasize and heavily rely on the case study method because the comparative advantage of case studies is their ability to handle messy, complex, contradictory social situations related to urban environments and then communicate the results in a clear and persuasive narrative. Since this study is concerned with an urban-societal issue, this research method was adopted, which can be used as an illustrative and exploratory tool. The primary purpose of using a case study is to learn as much as possible about the participant group so that the insights gained can be used to determine and develop policies for civic involvement in public projects and the recognition, funding and inclusion of informal settlements. This case study is of a residential neighborhood called La Rocade where a field project consisting of an urban intervention was carried out in the previous years. This intervention was divided into two phases; the first concerned the evaluation of the spatial, social and economic aspects of the neighborhood and its inhabitants using a survey to collect data. All problems and issues associated with the informal urban area were raised during this assessment phase. The second phase was considered a response to the first; this involved preparing an urban intervention scheme based on design proposals and legal and financial recommendations to improve the neighborhood studied.

Resident participation methods in urban renewal projects are generally classified into four types, namely, administration-led, expert-led, resident-led, and complex-led participation [13]. The administration-led method is the one used in this urban intervention project which this study is based on, because the project is led by the municipal authority. The project team consisted of members of the university and public authorities with the assistance of representatives of the inhabitants. Since this study concerns resident participation in urban intervention projects, the focus had been on the third party, the residents' representatives, by studying them as a group of individuals in their context. This was carried out using a type of data collection method called 'active participant observation' that was done by one of the authors of this paper, who was a participant in the project as a member of the university team. He observed the actions and involvement of the group of the residents' representatives in the project. Thus, the researcher studied the group not only by observation but also by participating with it in the improvement activity of its neighborhood. This method provided the researcher involved with the opportunity to interact with residents' representatives and gather honest information about their participation in the project, thereby giving greater credibility to his interpretations of their involvement. The setting place of the study is familiar to the researcher, and his long interaction with the studied group has also played a vital role in getting valuable data.

4. The Case Study

4.1. The Neighborhood Location

The place chosen for the urban intervention is a spontaneous self-built neighborhood called La Rocade,

located in the Algerian city of M'sila. This city is considered one of the medium-sized in the Hodna region. It is the seat of the wilaya or province, with a population of more than 200,000 according to the general population census 2008. The city extends over an urban area of 1771 hectares, and in addition to the planned residential districts, it includes four informal and spontaneous residential areas located on its outskirts [14]. These areas have developed on privately owned land where nearly a fifth of the city's population lives; La Rocade is one such area. The neighborhood has grown spatially on both sides of the national road no. 40, called La Rocade, from which it takes its name. It is surrounded by private agricultural lands to the north and east, and along its south side lay a few other residential areas mixed with farmed and vacant lands; the rest of the city lies on the west side. As the inhabitants were of low incomes, they sought the cheapest land to build their homes, and private owners in the eastern part of the city offered them this alternative. The neighborhood has a population of about 7,400 who live in 708 dwellings (2008 census) and at an average occupancy factor of 10.42 persons per unit, which is well above the national average estimated at less than seven people per dwelling. La Rocade is distinguished by a lack of spatial layout and urban structuring and a significant undersupply of public facilities such as sanitation, running water, gas and electricity. It is also marked by the almost total absence of supporting infrastructure such as paved roads, parking areas, green spaces, and street lighting. The result is a residential environment of a critical and displeasing quality, which impairs the overall aesthetic character of the city and disturbs the public health environment [14]. The neighborhood has remained unintegrated into the general urban fabric of the town despite its extension over a total area of 45.7 hectares.

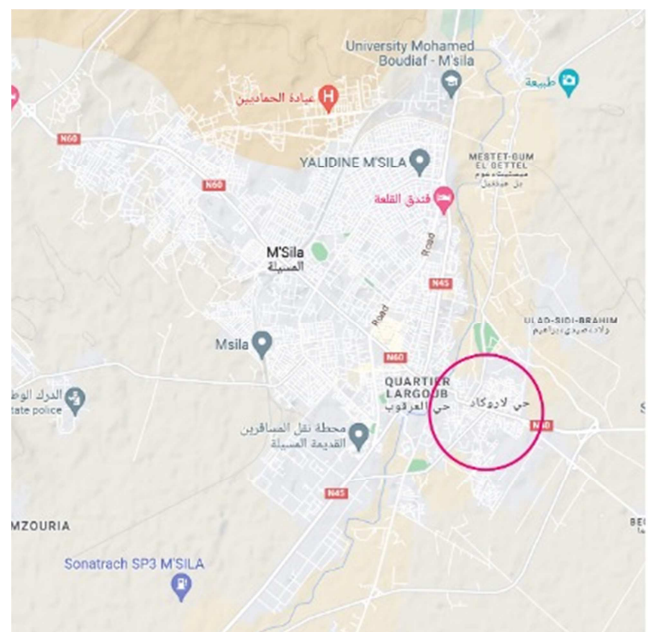


Figure 1. The site of La Rocade neighborhood in the city of M'sila.

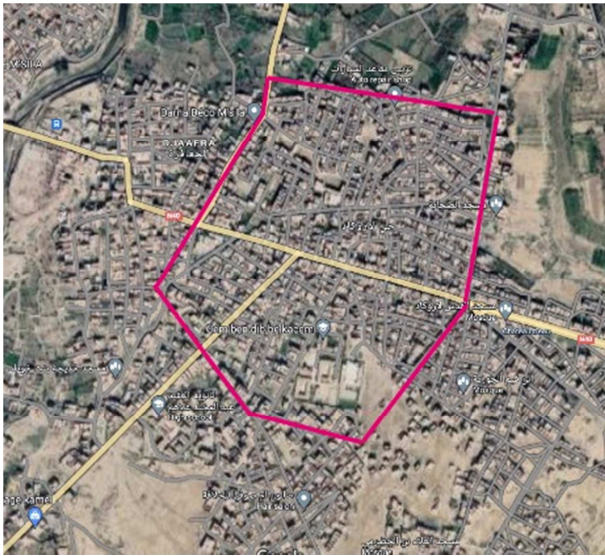


Figure 2. Limits of La Rocade neighborhood.

4.2. Assessment of the Neighborhood

The evaluation of the neighborhood’s spatial, social and economic aspects aims to identify its specificities, on which an upgrading scheme can be drawn up. The survey method was

used to collect and examine the data. The team involving members of the university and public authorities, with the assistance of residents’ representatives, designed a self-administered questionnaire and distributed it to a randomly selected sample according to known procedures in such a field of research. The sample consisted of 800 people, which allowed us to make strong statistical inferences about the entire study population. The survey aimed to identify socially, for example, the number of families and individuals living in the same dwelling, and spatially, for example, the access of each house to potable water, sanitation, gas and electricity. From an economic point of view, the survey aimed to determine, for example, the legal status of the property and how it was acquired, built and financed. Then, the team carried out a record of the shortcomings of the neighborhood and each dwelling. This record was based on observations made during field inspections, which enabled the team to identify and record the conditions of roads, paths, services networks, public lighting, vacant lands and the rest of the urban components of the neighborhood. The work concluded with a comprehensive table in which spatial and non-spatial data was classified and ordered.

Table 1. The physical, social and economic assessment of the neighborhood.

Analysis of Physical Components			
The number of people in the dwelling	Less than 07	07-10	More than 10
Percent	16.25%	36.25%	47.50%
Service networks	Water	Sanitation	Gaz
Percent	70.0% of all dwellings	40.0% of all dwellings	30.0% of all dwellings
Road quality	Main roads	Secondary roads	Pathways
State	Average	Bad	Bad
The legal nature of the property	Private	Municipal	Arch
Percent	82.0%	15.5%	2.50%
Construction financing methods	Self-financing	State contribution	
Percent	100%	0.0%	
Analysis of Social and Economic Data			
Population origins	Within the city	Neighboring countryside	Other areas
Percent	13.75%	76.25%	10.0%
Social class	Middle	Working	Other
Percent	15.50%	70.0%	14.50%
Desire to contribute to the improvement	Financial contribution only	Physical & intellectual contribution	Both types
Percent	18.75%	62.50%	18.75%
Reason to live in the neighborhood	Having a relative	Proximity to the first Place of residence	Other
Percent	37.50%	52.50%	10.0%
The number of families in the dwelling	One family	Two families	Three or more
Percent	17.50%	47.50%	35.0%

The analysis of the collected data on the neighborhood led to the following conclusion:

1. The neighborhood consists of residents whose majority had tried to obtain social housing before but failed.
2. A majority of residents purchased their land from private landowners, and transactions were usually made through customary contracts.
3. A large number of housings are overcrowded at an average occupancy factor equal to 10.42 persons per dwelling, which is well above the national average estimated at less than seven people per unit.

4. Most homes are not appropriately connected to basic facilities such as potable water, gas and electricity.
5. The absence of certain public buildings in the neighborhood as a health center.
6. There is a significant lack of supporting infrastructure such as paved roads, parking areas, green spaces, and streetlights.
7. The neighborhood is divided into sections based on co-ethnic social ties.
8. A majority of the residents have expressed their desire to engage and participate in improving their urban

environment, provided there are guarantees that they will never be displaced from their homes.

9. There is an implicit acceptance by public authorities to consider this informal residential area as an integral part of the city as compensation for their inability to provide alternatives.

4.3. The Urban Intervention Scheme

Once the legal nature of the land ownership of the neighborhood was determined, the non-eviction of the inhabitants from their housing was guaranteed, and the municipal authorities had agreed to incorporate this area into the city; an urban intervention was put forward for the neighborhood. Since the municipality authorities were ready to positively settle the issue of the neighborhood boundaries, we worked collaboratively to complete the delimitation of these boundaries. On the north and east sides, the neighborhood is limited by vast areas of private agricultural land, and on the south side, there are an elementary school, a middle school and a high school, which are set as a marker to delineate the boundaries on this side, some vacant spaces are also included for the planning of some public facilities in the future, such as a health center. The rest of the city lies with its center on the western side.

The results of the physical-spatial, social and economic survey stated above showed that about 4/5 of the population (79.4%) wanted to upgrade the neighborhood and renovate their houses with the help of the state and local authorities. Consequently, and with the guidance of local authorities, our university team planned an urban intervention based on the participation of residents and community volunteers. The urban intervention is called the 'Improvement and Integration Scheme', and it aims to prepare and develop a plan for the neighborhood to improve its residential environment and integrate it into the general urban fabric of the city.

The 'Improvement and Integration Scheme' is a plan of action to upgrade the informal neighborhood of La Rocade to be integrated into the city. The scheme was designed to make proposals and recommendations for all urban issues of the study area mentioned above and to guide the process of actions agreed upon by the actors, relying on five technical indicators: related to finance; land and security of tenure; housing improvement; access to basic services such as sanitation facilities, water supply, gas, and electricity; and access to supporting infrastructure such as paved roads, parking areas, public lighting and containers for household solid waste.

The scheme can be described as a place improvement rooted in spatial justice. Engaging the residential community in urban intervention was the cornerstone of this scheme. Members of the university and municipality partnered with the community of La Rocade by assembling representatives of this community who have relationships with the residents or are in their social networks and have various backgrounds, identities, and experiences to represent community engagement. This choice produced a group of participants representing a diverse set of homeowners who collected data

from residents to determine their needs. This focus on inclusivity and diversity ensured that the scheme reached a wide range of participants who were able to add valuable inputs to its development.

The tripartite team developed several potential proposal alternatives and collected community feedback; the work can be recapitulated as follows:

1. The data of the above survey were examined and coded,
2. The boundaries of the neighborhood were well-defined,
3. Legal property procedures to resolve issues related to ownership and tenure of land and houses were presented and discussed with residents' representatives,
4. Types of housing subsidies available to citizens to finance the construction and renovation of their homes were presented and discussed with residents' representatives,
5. Recommendations were made concerning families sharing a single house, such as dividing the latter where each family occupy a floor,
6. The houses mapped to be connected to running water, sanitation facilities, gas, and electricity were described and classified,
7. Suggestions were made that all principal roads be paved with their sidewalks, secondary roads be paved and have their sidewalks completed by residents, and that all tertiary roads be paved because they are in the form of cul-de-sacs and without sidewalks,
8. Public lighting is to be installed in principal and secondary streets only,
9. Waste and garbage containers are to be placed on the main streets.

5. Resident Participation in the Scheme

The term 'resident participation' includes many forms of citizens' work and contribution to solving real community problems, and it takes various names, such as active citizenship, community consultation, resident support, and community partnership [15]. From a practical point of view, participation means bringing all actors together around a table to agree on a process in which everyone participates and is expected to produce results. In this regard, an agreement is reached on the main axes while the details are left to the second stage. Participation has degrees, ranging from passive participation, which is merely expressing an opinion, to the self-mobilization of the population for a specific project [16]. Since the end of the 20th century, the participation of residents in urban processes and projects has become an imperative necessity to provide factors of success, which emerge from the combination of solutions resulting from the desires and choices of residents with technical advice offered by professionals [17]. From a societal aspect, residents' active participation in the planning and implementation of urban renewal projects can strengthen the sense of responsibility for their own community and enhance mutual trust among them. [18].

In our case, this urban intervention scheme was an entry

point to change the mindset and build residents' capacity to participate in upgrading their residential context. The recognition of the role and participation of the residents aimed to benefit from their positive interaction and cooperation in the scheme proposals to increase the chances of its success by avoiding the obstacles that these people may create to prevent this urban intervention. In such a way, the residents were transformed into partners who defended their project and tried to achieve its objectives. The scheme was a firm collaborative set that presented strengths, opportunities, and regulatory frameworks that indicated the way forward for participation and what actions needed to be taken to get the dwellers and urban poor involved in improving their built environment. This scheme intended to provide participatory inhabitants with a framework to understand their legal rights and responsibilities and to guide and support their voluntary and participatory work to be considered as what is called institutional participation [19]. The scheme was carried out by establishing a close cooperative relationship between users and urban specialists. In addition to collecting information and getting feedback from the residents, and based on the type of urbanization, the population living in the area, and the process envisaged, participation by contribution was considered the most appropriate to manage the financial aspect. Integrative participation was favored during the initiation of the operation. Residents were involved according to the following stages:

1. Participate in the design,
2. Participation in the financing and implementation,
3. Participation in management.

5.1. Participate in the Design

Preliminary designs were prepared to represent scheme proposals for the general development of the residential environment to be linked spatially and functionally to the adjacent surroundings. These initial designs concern housing renovations; restructuring and improving the service network of sanitation, water, gas and electricity to be linked to every household; determining the road network that will be paved and provided with street lighting, and the points where the waste containers should be placed. Afterwards, the technical team distributed copies of the drawings to the population representatives who enjoy widespread influence to study them freely with all residents who convey or communicate their feedback of objections, demands and proposals to these representatives. Then, the team, which includes the population representatives, met in a consultative session to study and develop the various propositions and designs based on the residents' feedback; the process of preparing the semi-final designs took place at the end. In this regard, the designers had been committed to responding as much as possible to the residents' feedback. When a conflict of interest arose, the university members intervened to reconcile and bring opinions together and seek a consensual solution, resulting in a consensus on the final design that got its way to implementation even partially at the time of writing this paper.

5.2. Participation in the Financing and Implementation

The financial factor is considered one of the most important in housing projects in general and projects directed to informal residential areas in particular. Therefore, having a well-designed intervention scheme to improve informal housing areas is not enough unless there is consensus on envisioning a realistic financial method in which the residents can contribute even with a small amount. This contribution can help complete the project in good conditions and within the desired deadlines.

In this regard, the team had considered several alternatives based on the assumption that the population does not have sufficient funding sources to legalize its situation and improve its living environment, which constituted a main obstacle from the start. The regularization of the residents' situations means how they can change their home tenure contracts from customary land tenures to statutory land tenures since all residents have purchased their lands from private owners who transferred it to them in a non-statutory manner. That is why the team held new consultative sessions between the residents and the various parties, which led to encouraging results. The municipal authorities were willing to transfer the residents' contracts from customary to statutory tenures free of charge in exchange for their commitment to the literal implementation of the scheme, regardless of the objections mentioned in the questionnaire from the estimated nine per cent of respondents. It also led to the adoption of the following financial structure:

The municipality finances the completion of the infrastructures of sanitation, water, gas and electricity and the works to link the neighborhood to be merged with the immediate surroundings using the budget of the Municipal Development Plan.

Through its provincial directorates, the state finances the completion of the necessary facilities on a sectoral basis. For example, the construction and paving of roads are to be funded by the provincial directorate of transport, the health center by the directorate of health, and schools by the directorate of education.

Citizens are fully responsible for financing the reconstruction and renovation of their homes after benefiting from two types of housing subsidies. The first is a national program called Contributory Housing that consists mainly of capital grants and allowances targeted to poor households in the housing sector. Capital grants are one-time subsidies that they can use to purchase, build new houses, or complete and rehabilitate the existing ones. Each household in the neighborhood under study can benefit from 700,000.00DZ under such a program. The second kind of housing subsidy is a bank loan, in which an additional 700,000.00DZ can be obtained as a loan to be paid back over twenty years at a low-interest rate. The source of this benefit is the National Housing Fund, which guarantees the loan at the Local Development Bank.

Thus, the budget of the scheme is divided as follows:

1. Completing and rehabilitating approximately 658 housing units (60% of the budget),

2. Completing and improving infrastructures (30% of the budget),
3. Adding some basic public facilities in the neighborhood, such as a health center (10% of the budget).

5.3. Participation in Management

Participating in the management means pursuing the scheme execution since the agreement on properly allocating resources until the completion of the works. The university and the municipal authorities have the knowledge, tools and skills to successfully manage and implement this type of project. For this reason, a monitoring committee has been supported to oversee the execution of the scheme proposals and intervene to resolve any problems that might arise on the ground. It also identifies and defines how each party performs and progresses in its assigned task so that scheme execution is tight and efficient. Representatives of the residents are members of this committee who are committed to overseeing the execution of the scheme and reporting on progress to the residents, they are a bridge that connects the executives to the users.

6. Results and Discussion

This field project of public involvement integrates the academic experience of university researchers and the practical experience of administrators and technicians of the local government to provide community members with an opportunity to make decisions and get involved in their urban environment development. Inviting and engaging residents in improving the residential neighborhood in which they live is a serious attempt to give all possible chances for the success of the urban project. The work creates opportunities for communication and consultation that led to adopting the most effective ways to improve the living conditions of the inhabitants of the La Rocade area. While the inclusion of the residents in the project came with a unique set of challenges, adopting collaborative strategies according to practical proposals has brought significant advantages. Different

inhabitant groups of the neighborhood received truthful representation, with most households feeling included in the project. The scheme of intervention created various opportunities that welcomed residents to inspire and share their ideas for improvement and to work closely with the design team to ensure that community input is well reflected and honored in the plans for the neighborhood's development. The dialogue and good listening to the experiences and opinions of the residents led to the exposure of real urban issues that framed the conduct of the investigation and provided recommendations to resolve these priority issues.

The inhabitants participated in both phases; the first was during the neighborhood assessment through the survey, where they got involved in the design of the questionnaire and its distribution. The second phase was during the improvement and integration scheme, which was designed to make proposals and recommendations for all urban issues raised during the first phase, relying on five technical indicators related to financing, land and security of tenure, housing improvement, access to basic services and supporting infrastructure. The aim is to achieve the following results:

1. Resolving all property illegal issues related to ownerships and tenures of land and houses,
2. Developing the basic infrastructure of the area, sanitation facilities, water supply, gas, and electricity,
3. Ensuring acceptance from all households to renovate and complete the construction of their houses once they have obtained their housing subsidies,
4. Ensuring an agreement with the municipal authorities to build a health center in the future,
5. Paving roads and sidewalks, providing parking areas, installing streetlights and providing waste and garbage containers placed in specific locations throughout the neighborhood.

The scheme guide, which took the form of design proposals and law-financial recommendations got its way to implementation even partially at the time of writing this paper.



Figure 3. Some places in the neighborhood before the intervention.



Figure 4. Some places in the neighborhood after the intervention.

7. Conclusion

The upgrading of informal residential neighborhoods is an approach of therapeutic urbanism, which is considered an effective alternative to the preventive bureaucratic urbanism practiced by public authorities in the country. Therapeutic urbanism comes after the exacerbation of a negative phenomenon in the city, such as the expansion of informal settlements, to contain and take charge of it. Therapeutic urbanism depends on urban managers who acknowledge the role of all actors, mainly resident participation, community support, and civil society partnership.

Acknowledging the resident as a dynamic, genuine, and equal social partner who engages in sharing experiences and ideas to be used in the improvement of his urban environment and in selecting the best alternatives for their execution is an effective means that represents negotiating dialogue between members of the local community and municipal authorities responsible for such urban initiatives. Community participation represents social and moral cohesion, enhances security sense and mutual trust, and can lead to high awareness and strength among people, especially the weaker groups. Resident participation can be considered a tool of spatial development and is an effective strategy for local urban policies. It can provide a systematic framework for progress that enhances democracy and transparency, thus allowing municipal authorities to become critically reflective and more aware of their local partnerships, social relationships and duty practices.

This approach of upgrading an informal residential neighborhood with the assistance of its residents can influence city and country policy, leading to further recognition, funding and inclusion of informal settlements. Additionally, it can set the bar for civic involvement in public projects in the city and the country, prototyping strategies and tools that can be used for future community engagement.

References

- [1] Jean-François Besson. (1970). *Urban Integration*. Paris: University Press of France.
- [2] Alain Durand-Lasserve. (1986). *The Exclusion of the Poor in Third World Cities*. Paris: L'harmattan.
- [3] Pascal Percq. (1998). *Citizens as Planners*. La Tour d'Aigues: Edition de l'Aube.
- [4] Malick Gaye & Fodé Diallo. (1997). Community Participation in the Management of the Urban Environment in Rufisque-Senegal. *Environment and Urbanization*, vol. 9, no. 1, pp. 9-30.
- [5] Ghanima Meskaldji. (1994). Spontaneous Housing in Algeria: The Case of Constantine. *Works Review of the Geographical Institute of Reims: Algerian Studies*, no. 85-86, pp. 83-91.
- [6] Pierre George. (1967). Spontaneous Housing is a Parasite of Urbanization in Underdeveloped Countries. *Cahiers Internationaux de Sociologie*, vol. 42, no. 6, pp. 13-26.
- [7] City Alliance, *City without Slums*. <http://www.citiesalliance.org/>, 2016, (last accessed on 12-10-2023).
- [8] Thomas Gries & Rainer Grundmann. (2015). Fertility and Modernization: The Role of Urbanization in Developing Countries. *Journal of International Development*, vol. 30, no. 3, pp. 493-506. doi: 10.1002/jid.3104.
- [9] Mark Rowe. (2022, June 22). The Global Effort to Improve the World's Slums. *Geographical*. <https://geographical.co.uk/culture/the-global-effort-to-improve-the-worlds-slums>.
- [10] David Stea, David Canter & Martin Krampen. (1988). *New Directions in Environmental Participation*. Avebury Publisher.
- [11] John Abbott. (1996). *Sharing the City: Community Participation in Urban Management*. 1st ed. Abingdon: Routledge.
- [12] Forbes Davidson & Monique Peltenburg. (1993). *Government and NGOs/CBOs Working Together for Better Cities*. IHS working papers, vol. 6. Rotterdam: Institute for Housing and Urban Development Studies.
- [13] Yan Hong. (2018). Resident Participation in Urban Renewal: Focused on Sewoon Renewal Promotion Project and Kwun Tong Town Centre Project. *Frontiers of Architectural Research*, vol. 7, no. 2, pp. 197-210. doi.org/10.1016/j.foar.2018.01.001.
- [14] Boudjemaa Khalafallah. (2001). *Spontaneous Housing in the Hodna Region: The Case of the City of M'sila*. Unpublished Doctoral Theses. The University of Setif.

- [15] Martin Wood, Bill Randolph & Bruce Judd. (2002). Resident Participation, Social Cohesion and Sustainability in Neighborhood Renewal. AHURI Positioning Paper no. 26. Victoria: UNSW-UWS Research Centre.
- [16] Samuel Paul. (1987). Community Participation in Development Projects: The World Bank Experience. World Bank Discussion Papers No. 6. Washington.
- [17] Paul Maginn. (2007). Towards More Effective Community Participation in Urban Regeneration: The Potential of Collaborative Planning and Applied Ethnography. *Qualitative Research*, vol. 7, no. 1, pp. 25-43.
- [18] B. Woong Kyoo. (2002). Housing Improvement and Citizen Participation for the Recovery of Urban Community. *Review of Architecture and Building Science*, vol. 46, no. 11, pp. 44-49.
- [19] K. Sei Yong. (2002). A Study on the Citizen Participation in District Unit Planning. *Journal of the Architectural Institute of Korea*, vol. 18, no. 9, pp. 195-202.