



# Urban Planning Dimensions of Informal Settlements in Post-War Aleppo.

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## **Abstract:**

Informal settlements are considered the fastest-growing human gatherings and the most significant urban challenge facing different countries. In case of any crisis, the urban fabric of these settlements is usually the most affected area. This is due to their poor planning, construction, and infrastructure. Therefore, upgrading their environmental standards has become essential in meeting the challenge of crisis recovery.

In the city of Aleppo-Syria, Informal settlements represent about 35% of the total housing units. Many are deteriorating, and most have minimal construction, urbanization, and services. During the Syrian conflict, these areas have become part of military fortifications and suffered severely from destruction and displacement. That has put all urban options back on the table for reconsideration in the prospects of future reconstruction.

The housing theme is always considered a priority and an urgent need for the immediate urban and design response after the war. This process, however, should not be understood as returning to the pre-war situation. Accordingly, it is a significant opportunity that must be used positively to upgrade the reality of informal settlements and make their urban environment more resilient and sustainable for the future.

The paper aims to identify the impact of informal settlements on the urban structure of Aleppo. It also aims to unveil the city-urban development needs to upgrade informal settlements' morphology in conjunction with Aleppo city's growth during the reconstruction phase, and the different urban policies of intervention.

**Keywords:** Aleppo, Informal Settlements, Reconstruction, Urban Planning.

## **THE PHENOMENA OF INFORMAL SETTLEMENTS.**

Considering the increase in urban and population growth rates in exchange for the availability of economic housing units suitable for basic needs, the random growth of illegal residential settlements has emerged, in which many inhumane practices are

spread because of their lack of the essential elements of a decent life for their residents. (Davis, 2007)

Informal housing is defined as gatherings that arose in places not initially prepared for construction, in violation of the law, and on state property and agricultural lands without planning, which then expanded and became a reality (UN-Habitat,2018). This phenomenon is not limited to developing countries; many have suffered from informal housing because of economic and social pressures, especially in the last half of the twentieth century.

Still, the difference lies in the ways of the solution, the mechanisms adopted, and how to find innovative solutions that fit the cultural, social, and economic dimensions of the causes of this phenomenon (UNHSP, 2003). In 1972, Turner published his book *Freedom to Build*, in which he wrote a theory for solving the problem of the slums. He noted that governments should not attempt to address the housing problem per se but rather develop the surrounding environment, and the residents will gradually build their homes independently. Many studies argue that many states regulatory decisions have contributed to increasing the novelty of this phenomenon rather than treating it.

### **Informal Settlements in Aleppo**

The informal settlements in Syria occupy half of the residential areas, exceeding them in some city centers. The statement of the Syrian housing minister in 2018 recognized that informal areas constitute between 40% and 50% of the residential areas. According to joint studies between Aleppo municipality and the GTZ1 (2019), before 2011, 45% of the city's three million inhabitants lived in different types and sizes of informal areas. These areas have been widespread since the 1970s and early '80s, mainly in the Eastern side of the city, accounting for 28 regions, and 22 are within the city's administrative boundaries.

Urban, industrial, and commercial concentration in Aleppo formed a pole of attraction for those wishing to create opportunities that were not available in their places of residence. As a result, there was an increase in migration from the countryside to the city and the deterioration of the urban environment (GTZ, 2019).

These areas suffered from poor planning and construction, lack of public and green spaces, overcrowding in their buildings, low level of services such as sidewalks and paved roads, and the denial of public services, schools, and sewage networks. In addition, there is high population density and crowded areas that may reach between 700 and 800 people/hectare, compared to a population density of 216 people/hectare in common areas (UN-Habitat,2014).

The severe shortage of public utilities led to adding a polluted urban mass to the environment. It also led to the overlap of polluting commercial and industrial activities

with residential buildings in an unplanned and deliberate manner, as those did not meet the privacy and safety of the residents (Touma, 2013).

The urban impact of informal areas is concentrated through a heterogeneous, distorted, and unstudied urban fabric on a massive extension of the main movement axes that connect the city with its surroundings. They have become similar to villages surrounding the city and sometimes within it- thus distorting Aleppo's general landscape. At the level of the axes of movement, the essential impact is the traffic-related problems that result in multiple distortions, as the case for the penetration of the fast-moving streets of informal areas (ibid).



Figure.1 : Urban morphology's sample of informal settlements in Aleppo (Source : Author)

Before the crisis, Syria suffered many planning problems, the most important of which was the absence of the role of local authorities and communities in participating in the study and preparation of urban applications, notably since it lacks spatial consistency and knowledge about the studied area's needs. In the 2000s, many programs and studies were carried out in this framework.

Due to the weak sources of in-depth data for these areas, most previous studies focused on the characterization of this phenomenon (urban, social) in general and showed its causes and negative consequences. The organizational plan for new urban areas was delayed for years and decades, and the urban policies were still in the development stage or implementation process in conjunction with the rapidly growing population's need for housing, as well as the inadequate supplies in the formal housing sector. Therefore, the expansion of the informal regions was the closest response to population growth (Clerc, 2015).

Since the outbreak of the war in Syria in 2011, the architecture of the whole city of Aleppo has been severely damaged by residential buildings, which have become direct military targets. According to the World Bank's estimates (2017), until the beginning of 2017, the number of damaged homes in Syria was approximately 1.7

million, constituting 27 percent of the total number of Syrian houses, while 20 percent of them were partially damaged. In Aleppo, the second largest city, about 424,000 homes were destroyed, which made it the most damaged city in Syria, followed by Damascus. Unfortunately, most of this destruction was concentrated in the informal areas, which caused an increase in the severity of the urban difficulties facing the country.



Figure 2: Damage Analysis (UN, 2014)

In the next few years, people are projected to return to the city of Aleppo at an estimated 12% population growth speed per year (Reliefweb, 2019). Accommodating those who inhabited the city of Aleppo will require a careful balance of reconstruction planning and provision of temporary accommodation while the reconstruction effort is underway. Therefore, the study examines the solutions policies, which should include many executive programs to implement strategies. This should be done with the participation of the public and private sectors and according to legal forms of intervention and treatment processes to ensure that the intervention is positive and achieves the desired urban results

## THE ROLE OF URBAN PLANNING IN THE RECONSTRUCTION PHASE

Reconstruction is one of the most critical planning concepts after disasters and crises. Still, its content consists of several models and mechanisms of application that have historically developed from one society to another due to internal and external factors. Such development, in turn, affects the transformation of the theoretical concept of reconstruction into tangible materials through means and mechanisms concerning the reconstruction of affected areas, as in the case of Aleppo.



## **The Development of Planning and Urban Applications After Disasters and Crises**

The beginnings of planning applications appeared as solutions to the problems of cities, whether resulting from daily urban life or following a disaster or crisis. The renewal of the city of Paris by Haussmann in 1853 was considered the first urban renewal project on a large scale (Broudehoux, 1994)

After the Second World War, the main period of re-examination of urban areas began according to legislation and laws that differ according to the country and the dramatic situation, including the Housing Act / of 1949 / in the United States of America and its counterparts in other countries, whether European, such as the United Kingdom, for example, and other countries impacted by a war (Freeman, 1996).

During the sixties of the last century, it gradually became clear that the spread of suburbs had exacerbated the city's problems and that improving urban conditions requires more than merely physical renewal. Hence, the urban improvement plans appeared to raise the level of degraded urban areas without addressing the construction of new communities.

Therefore, The City Model Program was announced in 1966 to provide adequate housing by organizing low-income residents and planning their contribution to improving their neighborhoods. However, this model failed to reduce the social and economic class disparity among citizens (Broudehoux, 1994) until the principle of urban revitalization appeared in the early seventies. It was a new urban application to emphasize the preservation and rehabilitation of the neighborhood, with limited population displacement, through cooperation between the public and private sectors.

During the nineties, sustainable development was introduced into urban planning curricula (Edmond, 2012). From 1997 to 2010, governments began to work according to the regional policy reform program and urban as, in developing countries, most governments have started to realize the social and economic impacts of slum demolition (Crowley, Balaram, and Lee, 2012)

Thus, the development of urban applications can be observed, both in developed and developing countries, which followed a pattern of gradual development from the demolition and reconstruction approach to the softer approach and focused on upgrading the existing structures.

Aleppo can be considered in the future as one of the global planning and urban experiences in reconstruction, as it is characterized by its local spatial specificity, which makes it a unique case different from others, that would benefit from the lessons and mistakes of the past, the pre-crisis period and the pitfalls that occurred in previous studies. Such studies included many degraded areas in dire need of urban treatment, including the damaged informal settlements.

## **Types of Urban Applications in Reconstruction of Informal Settlements**

Because of the diversity of the informal areas, the methods, and policies of intervention to develop them vary. These are generally confined to the following main policies (Broudehoux, 1994), considering the possibility of applying more than one policy to the same area according to its urban condition, and its location in the city:

- Complete removal and redevelopment: it has high costs and adverse effects.
- Partial removal and gradual renewal of squatter areas: it reduces the extensive removal through gradual reduction where the population is replaced in the same site to avoid the adverse effects of replacing the residents away from their original environment. Following this, a solution could be developed according to priorities considering the poor current housing situation.
- Upgrading: it is one of the relatively recent approaches that work on developing the urban environment in all its aspects, including addressing the built blocks, raising the efficiency of dilapidated housing, setting the level of services, improving infrastructure networks, developing productive business to raise the standard of living and other various activities to reach a complete and comprehensive concept of urban development for informal and dilapidated residential areas (Longa, 2011)

The informal settlements of Aleppo deal with various possibilities in the appropriate urban planning interventions based on several factors, such as the urban diversity in the region, population density and type, and the extent of the damage suffered by the area as a result of the negative impact of the crisis. As such, the more damaged it is, the more urban applications urban intervention will need.

## **CONCLUSION**

Urban reconstruction after the war is a complex project requiring concerted local and international effort. Reconstruction in conflict areas often aims at a quick profit neglecting the indigenous rights or the city's privacy. Therefore, we may witness the same problems before the conflict, such as inequality in the level of services and the spread of new informal settlements. It is necessary to conduct further research that could form a link between the different parts of Aleppo and avoid previous organizational mistakes. Such research would be essential to investigate equality in services and opportunities, to avoid reviving the reality that has created a rift between parts of the city in the reconstruction process, and to prevent more informal settlements from spreading further after the war. Thereby, improving the situation of these areas and strengthening the relationship between them and the city could be one of the vital factors in addressing a significant dilemma in the Syrian crisis.

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