Sustainable Renewal in Urban Areas: Looking Beyond the Jawaharlal Nehru National Urban Renewal Mission

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ABSTRACT

Urbanisation is a continuous process of growth by which the cities accommodate the shifting populations. A city must continually address concerns related to housing, employment and the balance of demand and supply of basic infrastructure services. The act of planning for urban growth and transformation is termed Urban Renewal. While urban renewal started after World War 2 in Europe, it was not until the 1980s that issues of sustainability were addressed through urban renewal. Sustainable urban renewal enables a balance of physical, social, economic, and ecological improvements in cities. This paper presents case studies of some exemplary urban renewal projects implemented around the world focussing on physical, social, cultural, economic or ecological development of an area. It traces the evolution of the concept of urban renewal in the Indian context with a focus on the biggest scheme launched by the Indian government under the aegis of JNNURM. It further analyses the performance of JNNURM on the sustainability platform. The paper concludes by proposing that the learnings from JNNURM should be used to devise the next phase of urban renewal programs in India and that all future schemes should be based on sustainable urban regeneration principles. It also proposes that effective implementation of any UR scheme requires the strengthening and empowering of the urban local bodies as well as contextualising the issues while engaging the community in the process of planning and implementation.

Keywords - Urban Renewal, Sustainable Renewal, Sustainable Regeneration

1. Introduction

The term "Urban Renewal" originates from Europe and Britain, primarily emerging as a response to the need for the redevelopment of urban centres in the post-World War II era, focusing notably on economic infrastructure. Over time, the concept has evolved into a global intervention, driven by the escalating forces of urbanisation and rapid transformation worldwide, propelled by factors such as population growth, migration, globalisation, and poverty.

The correlation between urban sprawl and neighbourhood degradation is evident and impactful. When economically secure individuals and investments migrate to new areas, leaving behind marginalised and impoverished communities, neighbourhoods often experience blight. This shift results in a decline in property values and a challenging environment for attracting new investments. The core objective of urban renewal is to ameliorate these ailing aspects within a city. Urban renewal encompasses a diverse range of activities aimed at revitalising established areas that have succumbed to blight and disinvestment Courey (2019).

The areas in need of renewal exhibit signs of neglect, ranging from aged and dilapidated buildings to poorly maintained streets and utilities. In some instances, these areas may even lack essential infrastructure altogether. Urban centres, serving as multifunctional nodes, play a pivotal role by integrating commercial, retail, cultural, and residential components. Beyond being key drivers of regional economic growth, these centres significantly contribute to national GDP and serve as crucial revenue sources for local governments.

The imperative to renew declining urban areas stems from the fundamental goal of improving living conditions, ensuring longevity, and adapting to the evolving needs of the populace. The motives for renewal are diverse, encompassing the facilitation of urban growth, reconstruction from decay, demolition, and destruction, restructuring or relocation for densification or relief, and, in certain cases, the revival or revitalization of areas for the preservation of public memory.

In summary it can be said that urban renewal has transcended its historical origins and has now become a global imperative, addressing the complex interplay of urbanisation, migration, and socioeconomic dynamics. By revitalising declining urban areas, we can not only enhance living standards but also foster sustainable growth and resilience in the face of evolving societal needs

2. Urban renewal and urban regeneration

Urban renewal (UR) and urban regeneration (UG) have very similar meanings and both involve work of a relatively large scale: urban renewal is defined as the process of slum clearance and physical redevelopment that takes account of other elements such as heritage preservation (Couch, Sykes, & Börstinghaus, Thirty years of urban regeneration in Britain, Germany and France, 2011). It aims at improving the physical, social-economic, and ecological aspects of urban areas through various actions including redevelopment, rehabilitation, and heritage preservation. Urban regeneration, on the other hand, is a comprehensive integration of vision and action aimed at resolving the multi-faceted problems of deprived urban areas to improve their economic, physical, social, and environmental conditions (Ercan, 2011)..

2.1. International Urban renewal projects

Urban renewal projects around the world have been undertaken with a physical, cultural, social or environmental focus. Some representative cases are discussed below:

2.1.1. Physical renewal

Physical renewal includes developing city identity and preservation of heritage in certain cases. A good example of physical renewal is that of the Toronto Distillery District project (TDD) (Fig 1, Fig 2 & Fig 3) taken up in 2003. The project transformed a collection of Victorian-era industrial buildings into a thriving pedestrian-friendly district.



Fig 1. Layout of Toronto Distillery District project (TDD)

Source: https://torontosavvy.me/2018/04/08/the-distillery-district-40-heritage-bldgs-3-theatres-

Source: https://torontosavvy.me/2018/04/08/the-distillery-district-40-heritage-bldgs-3-theatres-galleries-shops-bistros-within-13-acres/



Fig 2. Exterior View of Toronto Distillery District project (TDD) Source:

https://torontosavvy.files.wordpress.com/2011/0 3/distillery1.jpg?w=585&h=652



Fig 3. Interior View of Toronto Distillery District project (TDD)

Source:

https://torontosavvy.files.wordpress.com/2016/07/youngc tr1.jpg

New York High Line Project (Fig 4 & 5) started in 2004 was born out of the need to repurpose an abandoned and deteriorating elevated railway track. Originally built in the 1930s, the railway fell into disuse and faced demolition threats. The project aimed to address the lack of green spaces in the surrounding neighbourhood, enhance the quality of life for residents, attract tourism, and contribute to the revitalization of the area.





Fig 4. Exterior View of New York High Line Project

Source: https://dsrny.com/project/the-high-line

Fig 5. Exterior View of New York High Line Project

Source: https://en.wikipedia.org/wiki/High Line

Vienna Urban Renewal Project (Fig 6 & 7) of 2011 was an ambitious initiative that focused on revitalising urban areas in the city. It aimed to create sustainable, liveable, and inclusive neighbourhoods. The project emphasised pedestrian-friendly streets, green spaces, and efficient public transportation.





Fig 6. Exterior View of Vienna Urban Renewal Project Source:

https://www.isocarp.net/data/case_studies/2042.pdf

Fig 7. Exterior View of Vienna Urban Renewal Project Source:

https://www.isocarp.net/data/case_studies/2042.pdf

2.1.2. Social renewal

Social renewal includes demographic changes, social housing, public spaces, and cultural facilities. Several cities have undertaken projects focussed on social renewal. Progressive socio-cultural urban renewal of the City of Genoa (North Italian region of Liguria) was focused on attaining better management of the city as a system of health, education, and jobs. It enhanced socio-cultural interaction through the creation of more museums, theatres, sports areas, and universities. The Waterfront di Levante is a project that aims to transform what was previously the back of a port into a new urban front

on the sea. The development is planned to become a new landmark on the seafront of Genoa, Italy, by bringing new urban and port functions, both public and private, to an underutilised area. By controlling the built-to-open area ratio, it also seeks to enhance the connection between the city and the sea. The project introduces functions such as the new Urban Park, a new dock, residences, offices, student housing, retail facilities, apart-hotels, and a new sports hall.

Urban renewal of Glasgow (Fig 8) central area was geared to bid for designating Glasgow as 1990 European City of Culture (Tanguy, Breton, P., & Amor, 2020). It focussed on visual improvements by removal of slums and upgradation of sub-standard tenements (Alpopi, 2013).

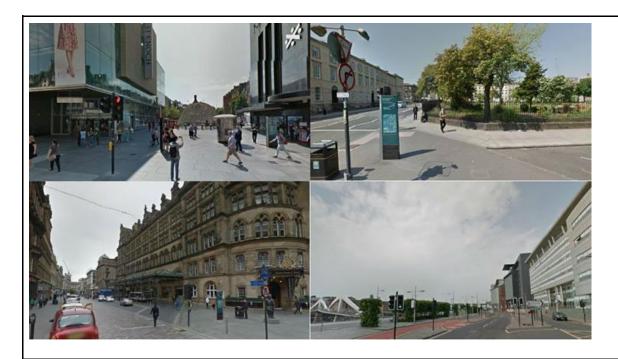


Fig 8. Exterior View of Glasgow city

Source: https://www.bbc.co.uk/news/uk-scotland-scotland-business-37213627

2.1.3. Economic:

Financial renewal focusses on inflow, increase in tax revenue, job opportunities and boom in real estate. Urban renewal of Porto-Novo in Benin (Sub Saharan Africa) proposed increase in public lighting, properly serviced roads, and cafes to boost the economy. It aimed at providing adequate infrastructure to internationally promote festivals and events for economic activities during day as well as night (Reguiessé, 2012). Urban renewal of Dundee's Victorian industrial base and port facilities was to boost the confidence of financial institutions. The renewal process worked on decongestion of the centre and improvement of the peripheral estates. It introduced ways of diversifying and developing new economic environment (Anđelić & Mihić, 2016).

2.1.4. Environmental:

Environmental renewal focusses on reduction of pollution, adding more green spaces, soil restoration and waste management. Toronto Distillery District renewed abandoned brownfields that were turning into potential pollutants. Porto- Novo project aimed at reducing pollution, better waste management and promoting healthy living conditions (Jenkins, Kennedy, & Mukhopadhayay, 2014).

3. Urban renewal in India

India continued to follow the 'master planning approach' (5-year plan) initiated by the British the Town and Country Planning Act of 1947 (Ahluwalia, 2014). The first 2 five-year plans from 1951 to 1961 looked at the housing needs starting from the rehabilitation of the refugees and later fulfilling the housing deficit in many areas. The awareness of overcrowded cities and a missing housing policy was the first step toward the idea of an evolution in the field of urban policies in India. In May 1952, the Ministry of Works, Housing, and Supply came into existence. Later it was renamed as the Ministry of Works and Housing and a separate Ministry of Supply was created. Recognizing the importance of urban issues, the government named it as the Ministry of Urban Development (MoUD) in 1985. In 1992 (8th five-year plan) the focus shifted to the mega city schemes for development of metro cities like Mumbai, Kolkata, Bangalore, Hyderabad, and Chennai. To accelerate the process of development, the 74th Amendment was made to the constitution that helped prepare municipalities to use institutional funds. The 9th five-year plan closely looked into the skewed urban processes, uneven urbanisation, and economic growth. The 10th five-year plan then launched India's biggest mission, the Jawaharlal Nehru National Urban Renewal Mission (JNNURM) on the 3rd of December 2005. The aim was to redefine urban governance through a focus on the immediate demand.

The Jawaharlal Nehru National Urban Renewal Mission (JNNURM) was launched on the 3rd of December 2005 by the Ministry of Urban Development (MoUD) as a coherent urbanisation policy/strategy to implement urban renewal projects in 65 cities in a mission mode (Brundtland, 1987). JNNURM was a ministerial program "to encourage reforms and fast track planned development of identified cities [with a focus on] efficiency in urban infrastructure and service delivery mechanism, community participation and accountability of ULBs/parastatal agencies toward citizens" (Government of India (Rao, 2017)).

JNNURM is a partnership program of Central, State, and Local governments that builds on some common understanding and agreed program of shared investments on core infrastructure and governance improvement policy. The Mission estimated that over a seven-year period (2005-06 to 2011-12), concerned cities would need a total investment of Rs. 1,20,536 crores as investments in basic infrastructure and services. On an annual basis, this meant an average investment of Rs. 17,219 crores (MoUD).

JNNURM aimed to encourage the state governments to make provisions for land to meet the acute shortage of affordable housing and to work through a partnership (Public-Private Partnership) model envisaged in the National Urban Housing and Habitat Policy (NUHHP) 2007. The four schemes under JNNURM were the Urban Infrastructure & Governance (UIG), Basic Services to the Urban Poor (BSUP), Urban Infrastructure Development Scheme for small and Medium Towns (UIDSSMT) and

Integrated Housing and Slum Development Programme (IHSDP). JNNURM reforms can be broadly categorised into 3 major streams, namely Financial Management Reforms, E-Governance Reforms and Poverty Related Reforms. Frameworks are most often established at the local level by Urban Local Body (ULB), and are nested into State and Central economic frameworks. The ULB and State have to make parallel financial contributions along with the Central Government in the ratio of State: ULB: Central Govt.= 10: 10: 80, (Rao PV 2017). The mission was due to end in Dec. 2012 but was extended for two years, up to March 2014 to facilitate the completion of ongoing projects and reforms and allow for sanction of new projects. The results at the end of the seven-year mission were mixed mostly because it came out that states were not able to work within the committed deadlines. (Sadoway, Gopakumar, Baindur, & Badami, 2018). Experts believe that though JNNURM was able to push the urban renewal process effectively, it fell short of reaching its full potential. The process of urban transformation in India is complicated by local factors including the high growth of population, legislation and informal settlements, private sector investment decisions, political, social, and economic transition, intergovernmental relationships, government capacity, and financial constraints.

4. Urban renewal and sustainability

Sustainable development is a term that was first introduced in the 1980s in the Report of the World Commission on Environment and Development (WCED), and it is defined as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" ((Weeks, 2010) (WCED, 1987)The commonly accepted concept of a sustainable city refers to attaining a balance between the 3 pillars of sustainable development namely People, Planet and Profit ((Elkington, 1997)). The 3P approach, also known as the "triple bottom line" (UN2002) underlined the importance of interactions between the different actors and institutions to carry out development and added the fourth pillar for Project and Process (Van Dorst & Duijvestein, 2004). Objectives Related to the 4 pillars and the criteria to be addressed are discussed below (Rey. E, M, & S, 2022).

Objectives related to Environment Pillar

- Optimal use of resources (Land, energy, water, and biodiversity)
- Impact Management (Carbon neutrality, pollutants, waste, and noise)

Objectives related to Sociocultural Pillar

- Quality of life (wellbeing indoor, wellbeing outdoor and proximity)
- Socio-cultural links (mixed use, flexibility, and heritage)

Objectives related to Economic Pillar

- Economic efficiency (Construction costs, operational costs, and external costs)
- Endogenous economy (Local economy and employment)

Objectives related to Governance Pillar

- Project specificities (Context, uniqueness, and temporality)
- Decision making process (Interdisciplinarity and monitoring)

5. Sustainability analysis of JNNURM

The strength of Sustainable Urban Regeneration (SUR) is that it helps build an urban environment where the quality of urban life and urban economic structure go hand in hand. SUR looks closely at the social structure while suggesting intervention in the physical, economic, political, and social structure. The criterion of the 4 reforms (Courey, 2019) can be used as a template to analyse JNNURM.

5.1. Criterion of Physical Reforms:

- Green Design (Optimal use of resources, waste management, Wellbeing of inhabitants, etc.)
- Access to public facilities / Open Space
- Provision for meeting, Special Needs
- Improvements in Existing Building Forms (Rehabilitation of Repairable properties)
- Efficient, Safe Environment for pedestrian & public transport user (Mobility, Walkability, safety of women, accessibility).

Under JNNURM, the revision of building bye-laws, mandating rainwater harvesting in all buildings, has been successfully implemented in 57 cities, and the remaining cities are in the final stages of completing this reform. This crucial step aligns with broader objectives focused on cultivating a sustainable urban environment, with a key emphasis on the efficient utilization of resources (Sharma, 2013). While water needs are being addressed, unconventional energy sources like the sun and the wind have not been explored in the scheme.

JNNURM focuses on economic reforms for ease in the collection of property taxes. However, it overlooks the results of the collective reforms that lead to the increase in the exchange value of the property that ultimately leads to gentrification. The control in the hands of real estate agencies increases which may not be in favour of the community (Cabernet, 2004).

Bangalore city launched an online property transaction platform in 2003 called Kaveri. It covers aspects related to Registration and valuation of properties, scanning and archival of documents, Reports, Vendor management systems, Utilities, Websites, Societies, Firms and Marriage Registration and Data Transmission (Choguill, 2008).

The urban form that is shaped for capital satisfaction generally avoids justice to the social needs of the people (Couch C. &., 2000). JNNURM must find a middle path and all reforms must balance the two.

5.2. Criterion of Political Reforms

Under JNNURM, Municipal Acts were amended by ULBs to incorporate most of the reforms. E-governance improved the system of governance. Many cities have been able to implement this.

However, smaller ULBs do not have enough resources and capacity to implement this reform (Couch, Fraser, & & Percy, Urban regeneration in Europe, 2008).

5.3. Criterion of Social Reforms

The initiative to allocate 20-25% of developed land in all housing projects for the Economically Weaker Section (EWS) and Low-Income Group (LIG) was implemented to enhance the availability of cost-effective land for housing those with limited financial means, ensuring access to essential services. Municipal bodies were tasked with the responsibility of augmenting the provision of land and economical housing options for individuals in need (Korkmaz, 2016).

Social reforms provide opportunities for inhabitants to become citizens who participate actively in the production of space. JNNURM looks at the participation of urban local bodies whose formulation may or may not be based on the common goals of the community. This may lead to factions and thwarting of the reforms.

An analysis of the JNNURM scheme shows that though significant progress has been made in developing the framework for reform-linked investment in urban infrastructure through JNNURM, yet, the program did not achieve all the expectations. This can be attributed to the following reasons.

5.4. Lack of Participation of the Urban Local Bodies (ULB)

Under JNNURM, the ULBs were entrusted with the responsibility of implementing the renewal programs as envisioned by the 74th Amendment of the Constitution. However, most ULBs in India face a resource constraint to carry out their functions. They are yet to develop themselves as autonomous urban agencies to dovetail urbanisation with economic development.

5.5. Lack of contextual focus

Effective urban renewal requires an approach that links small scale renewal to large scale social change. It is required for all the stakeholders to be in consensus and no one should feel left out of the decision-making process. The challenge is to determine how to coordinate and collaborate among divergent groups to homogenise the community voice. In conclusion it is important to note that community development can happen only after community organising. Thus, urban renewal process must regulate urban reforms at the neighbourhood scale i.e., bottom-up approach rather than the top-down approach of JNNURM that had put forth India's urban agenda as the basis of urban renewal.

6. Conclusion

It may hence be concluded that there is a need to have large mission scale projects like JNNURM to bring about UR in India. The learnings from this mission should be used to devise the next phase of urban renewal programs in India and that all future schemes should have sustainability as a major pillar in planning. It also proposes that effective implementation of any UR scheme requires the strengthening and empowering of the urban local bodies as well as contextualising the issues while engaging the community in the process of planning and implementation.

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