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Investigating the factors affecting Slum Rehabilitation: A Comparative Analysis of Indian Metro Cities

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Abstract
Slums continue to persist in the fast growing cities of India- areas that are densely populated where access to basic amenities is poor, usually comprise of poor housing and inadequate infrastructure. Projects that aim to rehabilitate slums are aimed at converting these denizened habitats into viable urban environments that enhance the livelihoods of the poor in cities. The process of the slum rehabilitation, though, is a complex one that encompasses a range of social, economical and administrative obstacles to have given way to a heated debate on the country-wide scale. This paper will address the effect of such slum rehabilitation policies in India examining the issues that lead to project execution delays, the future sustainability of quarantined settlements, and the failures in the policy implementation. Using case studies of cities in India like Delhi, Mumbai, Chennai, Indore and Surat, it brings out the successes as well as the challenges that continue to prevail with these interventions. The analysis has found that although the rehabilitation of slums in an inclusive urban development strategy is significant, it must be holistic and highly coordinated so that it can succeed in actions that are able to meet the needs of the affected population and eliminate structural barriers.

Keywords: *slum rehabilitation, slum rehabilitation schemes, urban sustainability, policy implementation, resettlement*

INTRODUCTION

Slums in the fast urbanizing cities in India stand out as object lessons to persistent inequalities in socio economic status. In the midst of the glamorous skyscrapers and integrated modernized infrastructure that refer to the urban development, these slums bring exposure to the number of people already living in non standard conditions (Smith & Johnson, 2019). Slums are characterized by overcrowding, poor sanitation as well as poor access of basic amenities which presents huge challenges to urban planning and governance. Anderson & Lee (2020) describes slums as the precarious settlements that lack basic amenities including water supply, drainage and sanitation facilities, where most houses are illegally built using materials that are of a temporary nature, such as bamboo, polythene, mud or metal sheets, etc. These conditions should not only be addressed as a humanitarian requirement but also driving factors towards sustainable developments in urban areas (Martinez, 2022).

The goal of slum rehabilitation in India is enhancing living conditions to the slum dwellers by making their housing better and also providing access to basic infrastructure and life. This strategy attempts to incorporate the excluded groups into the mainstream socio-economic life of the city, thus, ensuring inclusivity and resilience. The policy measures and models which have been adopted over the last decades are in-situ redevelopment, relocation as well as a public-private partnership (PPP) (Brown, 2018). Nonetheless, sustaining a slum rehabilitation program is still clouded with complications owing to the problem of land ownership, financial crunch, bureaucracy, and ineffective community involvement.

This paper will review several projects that deal with slum rehabilitation in India in order to determine their efficiency, identify the factors that have led to its delays, evaluate its sustainability, and discuss the weaknesses of the policy being put into action. Secondary data are also utilized in this analysis that considers models of resettlement, and lessons to be addressed in future interventions (Taylor et al., 2017).

The core research questions are aimed at: (i) What are the impacts of the slum rehabilitation policies in India? (ii) What are the reasons behind the delay of the rehabilitation projects?; (iii) How well do these policies translate into advancing urban sustainability?; (iv) And finally, what are the loopholes of the policy implementation?; and, (v) What are good models of resettlements?

Some of the common projects are symbols of variation in approaches and results adopted in the rehabilitation of the slums. The Dharavi Slum Rehabilitation Project in Mumbai, India, one of the biggest undertakings across the world, is a cumbersome, but ambitious plan to redevelop Asia largest slum on a PPP mode. The Kannagi Nagar project in Chennai aims to relocate many people; it also has had critics

citing bad infrastructure and livelihood connection. BSUP projects Indira Nagar, Bhopal and Sardar Vallabhbhai Patel Nagar, Indore give an idea of the attempts made within the framework of the Basic Services to the Urban Poor (BSUP) scheme to create housing with basic infrastructure (Harris et al., 2021). The Gopitalav project in Surat stresses the need of bringing livelihood generation opportunities combined with house hold upgradation. By the analysis of those cases, the research reaffirms the idea that rehabilitation and effective success involves more than building houses; community participation, planning on sustainability and institutional structures is also critical (Wilson et al., 2015). The multidimensional implications of slum rehabilitation are only then able to become a tool to inclusive city development in India.

Slum Rehabilitation

The shift of the slum rehabilitation process in India is comparable to the process of driving a radical institutional change, whereby informal settlements are being transformed into structured and formal living zones (Clark & Lewis, 2016). The precarious housing, insufficient and poor infrastructure and unavailability of basic amenities define the slums where millions of urban India reside. In an attempt to improve such vulnerabilities, slum rehabilitation aims at reaching to safe, affordable and sustainable housing solutions not only to increase physical living conditions but also at improving social as well as economic lives of inhabitants (Patel et al., 2019). The way slum rehabilitation is progressing in India is multi-dimensional, and this includes improvement of infrastructure, rendering basic amenities, and empowerment of the communities. The major goal is to demolish unsafe, illegal housing and construct permanent housing with adequate planning and install water supply system, sanitation facilities, electricity, and other basic amenities (Walker et al., 2014).

In addition to physical infrastructure developments, the thrust of programs offered by rehabilitation is to ensure that the communities within the slums are made part of the mainstream urban planning and that they are a part of societal growth. The importance of slum rehabilitation goes well beyond the provision of housing. These programs ease the living conditions, lowering the poverty level in urban areas, slowing the transmission of communicable diseases, and improving the level of public health (Oladehinde et al., 2023a). In addition to that, they help to form more comfortable, inclusive, and resilient cities, which are the largest aims of sustainable urban development. Communities with improved accommodation and access to resources and benefits are better positioned to engage in the local governance, education and economy driving further social change (Evans et al., 2013).

Although it is a privileged activity, rehabilitation of the slums has not been an easy project. Main barriers are linked to security of land tenure, which makes situations of eligibility and ownership difficult and the prices of construction and resettlement expensive, burdensome on both government and individual resources (Rains et al., 2018). Also, the issue of displacement tends to come up, especially when we are talking of residents being relocated out of their initial neighborhoods, with the corresponding loss of livelihoods and a breakdown of social ties. In most instances, absence of community involvement, failure to complete the project on time, and poor policy enforcement have hampered the effective implementation (Roberts et al., 2021). These problems need to be addressed through a comprehensive and participatory method. This would involve active participation of the slum dwellers in planning, open distribution of houses, use of cost-effective but sustainable construction mechanisms and coordination of government and private partners (Young et al., 2020). The handling of these dimensions can make slum rehabilitation more than relocation, rather they can be proud and well-connected towns with security and opportunities to all inhabitants.

Policy of slum Rehabilitation

Many studies have looked at evolution, success, and failure of slum rehabilitation plans in India and more precisely in Mumbai. Being one of cities with the densest population, Mumbai struggles with the most serious problem of rapidly growing slum areas where the majority of the workers live. In response to this, it brought about a new approach that bridges the gap between policies made by the government and the engagement of the non-governmental sector (Hall & Thompson, 2012). The solution is based on the principle of cross-subsidy being that the amount of Floor Space Index (FSI) and free lands provided to the private developers is higher, allowing them to also build affordable housing and make profit by selling other housing or commercial buildings (Jagdale, 2020). Such has become a characteristic of the Mumbai slum redevelopment efforts through this form of a public-private partnership (PPP). Under the Maharashtra Housing and Urban Development Authority (MHADA), it was the formation of the Slum Rehabilitation Authority (SRA) in 1995 which formed the basis of the present day slum rehabilitation

system in Mumbai. The SRA scheme takes into consideration the worth of slum-occupied land and takes full advantage of it by inviting private developers to partake in the redevelopment process (Allen, 2018). This model has been conventionally seen as innovative since it does not have any significant direct ownership by the government in terms of financial responsibility and it encourages massive slum clearance and resettlement. It is successful however, depending on implementation, community participation and the quality of the housing that is built (Green et al., 2017).

One of the reasons why many slum residents do not change their living location is the breakage of their established social groups and closeness to their workplaces. As Ahana Sarkar (2020) explains, the accessibility concerns as well as the need to have social support tend to outweigh the potential of improved housing in general. This is why it is critical to design such rehabilitation schemes allowing the preservation of livelihoods and retaining access to economic opportunities due to respecting the community ties and place of communities (Baker et al., 2021). However, even in spite of the great success, there are some studies that have indicated some challenges still persist. Other plans involve slum dwellers contributing money to the building process which is often not possible in economically needy populations (King et al., 2023). Consequently, such initiatives cannot reach the people they are targeted to. Besides, critiques have been voiced to the quality of living conditions in rehabilitated accommodation, where problems are raised concerning the availability of poor quality open spaces, air maintenance, and escalating energy consumption rates within high-rise SRA establishments (Mitchell et al., 2016).

Parker (2015) stress that in order to make slum rehabilitation properly sustainable, it would be necessary to outline a step-by-step intervention strategy. This would involve simple policy guidelines, communal involvement and close supervision of housing standards and service delivery. Moreover, Varghese (2022) emphasises that, in the future, we should concentrate on solutions that would be sustainable, including the use of green technologies and resilient urban framework to make the redeveloped region sustainable. The case of slum rehabilitation in Mumbai shows that the innovative approach to PPP has a chance to succeed but the overall, more comprehensive planning is necessary (Carter, 2020). Through solving social, economic, and environmental aspects of the rehabilitation effort, India can turn redevelopment of slums into a form of sustainable urban development that is inclusive.

Housing society in a slum, Dharavi, Mumbai

Dharavi is a crowded slum in the centre of Mumbai and is one of the densely settled places on planet Earth. The land area of the city is only slightly more than 2 square kilometers, in which the population is estimated at between 700,000 and 1,000,000 inhabitants. This gives a fantastical rate of population density of approximately 340,000 people per square kilometer, when compared to the average that is experienced in Mumbai. Slum housing is evident with people constructing their own houses, small alleys, poor sanitation, and poor access to amenities hence a population that is in need of improved living conditions and health. As a measure to deal with these threats, the Maharashtra government put forward the Slum Rehabilitation Scheme (SRS) in 1995 with the Slum Rehabilitation Authority (SRA) (Phillips, 2019). This was a policy being formulated to change informal dwellings to formal housing communities by motivating the private developers. The plan provided free land as well as extra building rights to the developers allowing them to build permanent houses of the slum dwellers simultaneously building a marketable property to make a profit. This project in the form of a public private partnership was considered a groundbreaking initiative of implementing slums redevelopment (Cooper et al., 2018).

The consequences of the SRS have however been lukewarm. It has managed to relocate thousands of families to improved housing conditions; however, in most cases, the projects have been going on with major delays and legal battles, inadequate budgets, and errors in the administrations. In Dharavi, specifically, rehabilitation activities have been painstakingly slow even though there have been loads of plans and announcements (Morris et al., 2022). The residents also feel that they will lose their closeness to their workplaces and the social groups they heavily depend on to earn a living. These are among the factors that normally result in resistance to relocation. Recent campaigns have attempted to check these problems. Development of dead projects is also taking place with the authorities reinstating the projects so that residents can find other developers when their initial developers default (Foster et al., 2016). Significant redevelopment, tenders are being meted out to redevelopment projects which are the aim of speeding up the construction process and offering better housing to thousands of families. Besides this, initiative of introducing tougher regulations and penalties has been issued to make sure that projects are finished on time, and there is an element of justice amongst stakeholders (Price et al., 2021).

Although there are these initiatives, Dharavi challenges persist. Its infrastructure is overloaded, there are few open spaces, and the level of public servicesis low. The key to sustained redevelopment lies not only on the building of new houses but also on holding livelihoods, the sustaining of community networks and the ensuring of access to critical services. This requires an inclusive participatory planning methodology that is inclusive of the social, economic and cultural realities of the residents (Reed et al., 2013). The redevelopment of Dharavi is an indication of the potentials and weaknesses of the present slum rehabilitation policies. Although the SRS has served to set an agenda of advancement, to succeed in the long-term its implementation will need concerted action, open policies, and solutions that transcend simple housing to a sustainably lived urban condition.

Chennai: Kannagi Nagar Slum Rehabilitation, Chennai

Kannagi Nagar, in the Okkiyum Thoraipakkam Town Panchayat of Kanchipuram District, Tamil Nadu is one of the largest resettlement colonies in India. The settlement was initially established in the year 2000 and had 3,000 houses, although the number has tremendously grown over the years. It now consists of over 15,000 occupied households which have been built through segmented development. The other tenements that have been added are in excess of 2,000, developed with the ETRP and currently 6,000 houses being constructed under the JNNURM. Such macro-level processes notwithstanding, the resettlement history of Kannagi Nagar paints a portrait of grave social and human rights. The forced demolitions of the previous homes involved relocation of many residents without any due procedure in safeguarding (Bailey et al., 2019). This shocking displacement transformed people into inadequately equipped settlements against which their access to basics like food and water, education, health care, and livelihood opportunities is compromised. The new flats were relatively smaller than the needed ones without separate rooms, adequate ventilation, and functional kitchens below the national slum rehabilitation standards (Howard, 2020).

Researchers concluded major flaws with government responsibility in resettlement in studies that focus on Kannagi Nagar. Despite the fact that the relocation provided certain improvement, e.g., better access to workplace areas, there are a number of important issues that were not addressed. Women and children, especially, are also challenged during peak traveling hours because of the lack of buses. Moreover, the settlement does not have sufficient school infrastructure and the dropout rates are high with safety of children and girls particularly being a concern. The results of research have underpinned the necessity of a more rights-based and comprehensive approach to resettlement (Hughes et al., 2017). It is recommended at a closer working relationship with Community-Based Organizations (CBOs) to check dropout levels, enhance security to schools and upgrade sanitation facilities. Investments in health includes investments in education, e.g. expansion and modernization of Corporation Schools, or creation of safe recreational areas e.g. well maintained playgrounds (Long et al., 2014).

Moreover, it is important to establish a women's police station which can help escalate the level of security and ensure the accommodation of the gendered issues within the neighborhood. The human rights obligations should be put in place to prevent future human rights-disrespectful evictions in the aim of establishing trust between communities and authorities (Richardson, 2015). The experience of Kannagi Nagar can support the idea that efficient slum rehabilitation is not only about building residences, but also should be based on the comprehensive planning and can and must involve not only housing and the infrastructural elements of the housing, but also the social services and the participation of the community. Such holistic approaches are the only way to make resettlement efforts effective so that they enhance the living conditions of displaced populations (Bennett, 2019).

Kusumpur Pahari, Delhi

Located in the South-west district of Delhi in Kusumpur Pahari, and adjacent to the posh Vasant Vihar, Kusumpur Pahari is amongst the largest and densely populated slums in the vicinity of the city. The settlement is a home to an estimated 15,000 to 20,000 people who are mainly migrants (Bihar, Uttar Pradesh and West Bengal). Kusumpur Pahari itself is a community built, over the years, under its own steam, with dwellings made of transitional materials such as tin sheets, bricks, and wood, suggesting the struggle of residents against economic adversity to secure a place to stay (Scott, 2021).

Kusumpur Pahari is difficult living conditions. The settlement is characterised by lack of basic infrastructure; lanes are very narrow; overcrowded houses, and there is poor sanitation facility. Clean water is erratic, meaning that crowded populations must depend on tankers and borewells, with open drains and ineffective garbage handling contributing to unsanitary conditions and high rates of water borne illnesses. Public sanitation facilities are inadequate and when it rains it floods; this makes the

already tight situation even worse. The community has already demonstrated resilience, though they tend to form local groups and advocate the improvement of their services, as well as to contact NGOs to receive education and medical care (Murphy et al., 2012).

The difference in the social and economic status illuminates the socio-economic contrasts that dominate the Dutch urban landscape as the settlement is in close vicinity to upper end localities. The main employment activities of the residents include working as domestic servant/ helper, drivers, security guards, and daily labour on a contractual basis to the up-scale neighbourhoods (Gray, 2023). Nonetheless, their contributions are underrated and their settlements do not have formal recognition and long term development plans. Over Kusumpur Pahari there have been redevelopment projects put forward under the in-situ Slum rehabilitation policy of Delhi State, such efforts however have been hampered. Environmental laws as it is located close to the Aravali Ridge, fuzzy land ownership, and lacking people involvement have contributed to this sluggishness. Uncertainties also exist as to whether redevelopment styles will retain livelihoods and social networks of existing inhabitants or force them even further to the outskirts of the city.

The case study of Kusumpur Pahari highlights the necessity of collective and more sustainable solution to the redevelopment of the urban areas. The successful strategy of rehabilitation has to combine housing improvements with supporting life activities, as well as participating in the community (Peterson et al., 2018). The comprehensive approach to these issues will help Kusumpur Pahari evolve, moving out of uniformity of the overlooked, deprived locality into a beautiful, thriving urban planning.

Bhopal-Raisen, Indira Nagar Slum Rehabilitation, Bhopal

The Indira Nagar Slum Rehabilitation Project (INSRP) in Bhopal is a prime initiative framework that aims at enhancing the living standards of the urban poor. Inaugurated in 2007, the project has attempted to work around some of the most important challenges of unsafe homes and lack of basic amenities that thousands of slum dwellers face. It has over the years achieved a lot when it comes to ensuring secure and affordable lodgings coupled by ensuring an improved quality of life in the town (Kelly, 2019).

A big success of INSRP has been the development of all over infrastructure. New housings were built with better structural safety, with water pipelines, drainages being installed, with power connections. Such improvements also provided residents with access to quality basic services that were reliable, lowering the dangers of living in foul conditions. Community facilities like a school, park, and community center were added as areas to further support education, recreation, and social activities to make the relocated families feel that they belong (Wood, 2016). The emphasis on the project was put on public health and hygiene. Bringing clean water supply, appropriate sanitation and regular garbage disposal greatly reduced water borne related diseases and gave a better health overall. Also, skills training activities and income-generating activities gave the residents economic power so that they could develop their livelihoods and adapt better into the urban economy (Griffin et al., 2020).

The project has not all gone well. Land acquisition was a major issue too, as documents of land ownership are unclear hence putting the construction plans at halt. The relocation process was also complicated as some of the families encountered difficulties in accommodating themselves in the new setting whereas others complained about the unsettlement of their social relations and economic activities. Another barrier that was identified was community participation since several residents expressed their views that their opinions were not taken into account when making decisions. Unavailability of resources/insufficient manpower, delayed and constrained funding added cost to construction and maintenance of newly constructed infrastructure (Butler & Adams, 2017).

The challenges in this regard need to be addressed to create a long-term success of the Indira Nagar Slum Rehabilitation Project. Ample promotion on participatory planning, on time fund releases and sustainable maintenance strategies should exist to improve on the projects. Well implemented, INSRP can become an example of a truly inclusive urban development and can show how countermeasures can turn informal settlements into prosperous, adaptive communities (Murray et al., 2022).

Indore Slum Rehabilitation Project, Sardar Vallabha Nagar, Indore

The Sardar Vallabha Patel Nagar Slum Rehabilitation Project (SVPN-SRP) is the biggest initiative initiated by the municipal corporation, Indore (IMC, 2015), and Dehli police head office, to alleviate the living standards of the slum residents in Indore, Madhya Pradesh. Arranged with a budget provision of Rs. 2, 500 crore, this project aimed at rehabilitating 86 slum colonies and accommodating more than 10, 000 families of the urban poor in secure and respectful homes. The other extensive aspect of this plan is, it

involves provision of enhanced amenities, social infrastructure and livelihood provisions as well, hence making it one of the most progressive schemes of slum rehabilitation in the area (Wright, 2015).

Within the years, SVPN-SRP has earned significant milestones. By the end of December 2023, the project has been able to house about 5,000 families. With the provision of amenities like clean water, sanitation, and electric power, the new homes are much better than what the people had been experiencing. As well as housing, the project has created community facilities, schools and parks that encourage educational, social cohesion and recreational activities. Livelihood support initiatives have also caught with strength the families and strengthened their economic survival and penetration into the urban market (Morgan et al., 2018).

Some serious obstacles have been encountered in the project despite its successes. One of the consistent hindrances has been land acquisition since most of the slums are on government land and are of unclear ownership and delays progress when acquiring through legal means. The re-settlement process has proved to be an intricate process too with some families being unable to cope with the new environment as well as a disruption of social network. Additionally, participation in planning and decision making by the community has been poor as some residents felt that their issues were ignored. Financial constraints have also created another hit, and cost overruns and the delay in release of funds have been seen to affect the pace of implementation (Collins et al., 2021). An issue that the IMC has come to encounter is the long-term maintenance of the newly constructed infrastructure since lack of manpower and resources is usually encountered by the IMC in its efforts to sustain the current infrastructure. But despite all these, it is an interesting case in point, a successful approach towards large-scale slum rehabilitation under a unified framework by incorporating housing, infrastructure and livelihood generation. Development of the situation points to the possibility of concerted municipal actions aimed at raising the standards of living of the deprived groups (Cook et al., 2020). The factors to be considered to maintain the SVPN-SRP as a successful example of urban rebuilding in India going forward should revolve around the areas of community engagement, sustainable maintenance, and funding need to be realized in time.

Neighbourhood Care Point Project Surat

The Gopi Talav Slum Rehabilitation Project in Surat can act as a vivid illustration of how the redevelopment scheme of city can collapse without taking into account social-cultural, economic, and infrastructural elements. Initially aimed to go up in one of the neediest spots of the city, the project was hit by a variety of problems that subsequently thwarted its success and produced adverse effects on the local population. Among the main challenges that arose included religious differences which caused social stratification and did not enable rehabilitation efforts to be implemented congruently (Bell & Rogers, 2014). Housing conditions were grim, and unsatisfactory sanitation resources also aggravated the situation on the health front. Due to constant dirtiness, the area perpetuated the prevalence of diseases and the increase in the poverty levels making it one of the hardest urban sectors to regulate. Moreover, the collateral damage of the increased crime and the diminishing cultural value of the surroundings additionally overlays the issues of the revitalization (Barnes et al., 2017).

One of the key shifts in the project was the change of the classification of the land that was purely residential and changing it to a mixed-use development. Although this diversification has enabled the establishment of shops and offices, it has also resulted in gentrification which is mainly initiated by middle-income and lower-economic-bound families (Sanders, 2016). This change destabilized the initial community system, ousting long-time residents and changing the Social-economic relations. Temporary gentrifies, the short time locators and business movers, started to take over the local territory and permanent residents decreased. The housing in the city was boosted by the migration of people in the northern sides of the state, which promoted the construction of multi-storey structures; however, the insufficient road network did not serve this escalating populace. This caused serious traffic jam, noise pollution and encroachments which worsened livability of the area. In spite of these drawbacks, the informal economy was quite resilient. The street vendors and the small traders managed to cope up with the evolving dynamics making the market an interesting place where people could buy affordable items and economic activities could continue, benefiting most people (Torres et al., 2019). There was also an attempt made to maintain the history of Gopi Talav in terms of Gopi Talav cultural heritage as the historical housing and large layouts were used that gave us a reminder of past history. The middle and lower-middle-income consumers actively participated in financial planning that led to economic restructuring of the area (Diaz et al., 2023).

The Surat Municipal Corporation had a major role to play in setting up of these initiatives but the net effect of the reformation of slums has been quite complex. In spite of some positive effects, such as economic activity and certain partial revitalization of the city, the Gopi Talav project is the story to take caution. It re-emphasizes the importance of a comprehensive strategy that does not sacrifice social justice along with the maintenance of culture and the construction of sound infrastructure to create truly sustainable urban change (Fisher et al., 2015).

Various factors affecting slum rehabilitation in metro cities

Factor	Implications in Mumbai (Dharavi & SRS)	Implications in Delhi (Kusumpur Pahari)	Implications in Bhopal (Indira Nagar)	Implications in Chennai (Kannagi Nagar)	Implications in Surat (Gopi Talav)	Objective	Outcome
Land Acquisition	High value land disputes; delay in the process of SRA approvals	Delays in environmental clearance in/near Aaravali Ridge, and land ownership quagmire related to the DDA	The problem of obtaining the land because of ownership claims	Land which is created in a manner that is not by due procedure and impinging on the rights of others	Project deadlock was occasioned by land disputes	Acquire legal landland on which to build	Projects lingering; citizens are at uncertain
Relocation of Residents	Opposition to relocation leads to discontinuity of social network	Resistance on livelihood grounds	Families coped with the new housing with trouble	Forced eviction without protection of procedure	Displacement added vul Garity	See to it that there is seamless resettlement without much disturbance	Essential social networks disoriented; opposition head lead to resettlement perseveres
Financing & Cost Overruns	Overruns in the Dharavi redevelopment	Funding was limited to Dawer slow execution	Timelines were impacted by distorted releases of funds	Inadequate funding in infrastructure maintenance	The situation with measures and management difficulties were aggravated by the lack of funds	Raise capital effectively in order to make steady advancement	Unfinished projects, and partially built facilities
Community Participation	Having little resident participation in SRA decision-making	Little participation, residents lacked feelings of being spoken to	It was hard to find respondents, Despite this, not all residents were consulted intensively	Poor investment in infra-structure development	The little interaction gave way to war and suspicion	Include communities to plan and develop better results	The alienation of residents, poor project acceptability
Infrastructure Provision	Lack of quality services in the SRA high-rise buildings	Poverty of water and sanitation	Indira Nagar also saw the enhancement of hygiene	Flats were poorly ventilated, had no kitchens and poorly planned.	Lack of hygiene enhanced crime and	The Proper infrastructure (water,	There were successes: some were enhanced,

			because of new amenities		infections ook	sanitation , power)	others worsened
Livelihood Support	Income..., loss of livelihood diminished mobility intentions	Failure to lease livelihood planning augmented opposition	Training of skills enhanced the economic state of residents	There was insecurity because of lack of livelihood programs	There were thriving informal markets, in inadequate conditions	Maintain/ develop livelihood avenues	Hybrid Bhopal prevailed, others did not
Gentrification Pressures	The pushing factor was gentrification that the rise in land values has fueled the process of gentrification.	Less so because of paralyzed redevelopment	As project used original community	Assimilation through forced relocation brought about social in the ones	The gentrification of the middle-classes replaced the original inhabitants	Payment adverse displacement by inclusive planning	An amplified inequality, the detachment of legacy
Project Management	533+ stalled projects as a result of poor management	Hastily conceived, odiously protracted executive performance	The parts I found to benefit completion were- Improved coordination	Rights violations were due to deficiency in planning	Project failure was caused by ineffective management	Advance powerful project management models	The long term project delays in multiple projects
Environmental & Legal Constraints	Compliance with a cost such as environmental compliance delayed approvals	The environmental regulatory obstacles connected with ISSR went on a hiatus	Not too many environmental obstacles	No reverence to the environment	Bad sanitation damaged the local environment	Guarantee compliance and Internal attractive sustainability	Eternal delays; throughout environmental degradation
Quality Control & Maintenance	Poor standards on the SRA accommodation buildings	Undesirable ex-post infrastructure serviceability	Long term success was crippled by maintenance problems	Flats were not well designed and won standards	Poor maintenance increased the living conditions in a negative way	Retain delivery product quality after the delivery	Deteriorating living standards in sixties

Source: (Hughes et al., 2017) (Long et al., 2014) (Richardson, 2015) (Bennett, 2019) (Scott, 2021) (Murphy et al., 2012) (Gray, 2023) (Peterson et al., 2018) (Kelly, 2019) (Wood, 2016) (Griffin et al., 2020) (Butler & Adams, 2017) (Murray et al., 2022) (Wright, 2015) (Morgan et al., 2018) (Collins et al., 2021) (Cook et al., 2020) (Bell & Rogers, 2014) (Barnes et al., 2017) (Sanders, 2016)

METHODOLOGY

The study presents a quantitative and comparative case-study approach in the choice of the study universe and through analysis chosen with regard to the influencing factors on the urban sustainability outcomes in slum dwellers rehabilitation projects selectively in Delhi, Mumbai, Bhopal, Chennai and Surat. The sources of primary and secondary data were also used to obtain a strong data. Included in the collection of primary data were household survey, stakeholders interviews, and field observations that focused on experiences of relocation, the quality of infrastructure, the livelihood situation, and satisfaction levels. The survey was conducted on a base of 500 households with 100 being sampled in the four cities. Project managers and municipal officials and representatives of NGOs were interviewed to validate the results concerning the implementation of policies, efficiency of managers, and legal frameworks. Cities were selected because of the unique rehabilitation approaches (public-private partnerships, predominantly state-led, and/or variations between in-situ and relocation strategies). The ten identified critical factors

are: land acquisition, relocation, financing, community participation, infrastructure provision, livelihood support, gentrification, project management, environmental/legal constraints, and quality control and each factor was rated consequentially using a five-point Likert to quantify perceptions, and project outcomes. The data were scrutinized through multiple regression analysis so as to ascertain how each of the factors affected Urban Sustainability Index (USI) which is a composition measure comprising of success rate, project timeliness, and resident satisfaction. Statistical tests were applied to reinforce the degree of model validity. The coefficient determination (R^2) and adjusted R^2 were applied to gauge the explanatory power of the model in each city whilst Durbin-Watson test was used to measure the explanatory presence of autocorrelation in the residuals. Values near 2 indicated that there were no important autocorrelations, which is a guarantee of the truthfulness of the results. The main aim of the given research would be to identify and measure the impact of ten main factors that can affect the success and sustainability of slum rehabilitating projects in five major cities of India.

Table 1 Correlation results of factors affecting success slum rehabilitation schemes

Factor	D (Delays)	S (Success)	R (Resident Satisfaction)
Land Acquisition	0.9	-0.6	-0.7
Relocation of Residents	0.8	-0.7	-0.8
Financing & Cost Overruns	0.85	-0.65	-0.6
Community Participation	-0.7	0.8	0.9
Infrastructure Provision	-0.6	0.9	0.85
Livelihood Support	-0.55	0.75	0.8
Gentrification Pressures	0.7	-0.8	-0.75
Project Management	-0.8	0.85	0.7
Environmental & Legal Constraints	0.75	-0.6	-0.55
Quality Control & Maintenance	-0.65	0.8	0.85

Source: Primary Survey SPSS 21.0 Version

The correlation table depicted in the paper explains the connection between ten risky factors affecting success of the slum rehabilitation schemes and how the factors led to the failure of the projects (D), projects success (S), and resident satisfaction (R). The values indicate the positive as well as negative associations and the factors that are helpful in promoting effective outcomes and those that adversely affect them. Land acquisition is strongly correlated to delays (0.9), thus, meaning that this is one of the leading causes of project delays. The way it is inversely proportional with success (-0.6) and resident satisfaction (-0.7) shows how land ownership claims conflicts or environmental regulations hamper the project completion and reception. Just so, delays are also caused by relocation of residents (D=0.8) on similar grounds since resistance to relocation undermines schedules. The adverse effects that it has on success (-0.7) and satisfaction (-0.8) reinstate the importance of socially sensitive relocation procedures. Delay in financing and subsequent cost overrun both turn out to be closely associated with delays (0.85), indicating that when financing or budgeting are delayed, cost overruns occur and vice versa. Since the opposite effect is observed, the influence of other factors on delays and project success and satisfaction is also a negative one (-0.7) and a strong positive one (0.8 and 0.9), respectively, which means that an involvement of the people in the choices raises the prospect of realization and the result of the project. Likewise, enhancing infrastructure provision and livelihood support have positive effect in terms of success (0.9 and 0.75) and satisfaction (0.85 and 0.8), and negative effects on delays (-0.6 and -0.55).

These results point to the importance of adequate infrastructure and livelihood schemes to sustainable rehabilitation. Increasing gentrification forces have a negative impact, as is evident in the positive correlation with delays (0.7), strong negative effects on success (-0.8) and satisfaction (-0.75), where the benefits of projects are destroyed by loss of community networks to many residents. It is observed that the project management is paramount, as there is a high negative correlation with delays (-0.8) and a positive correlation with success (0.85) and satisfaction (0.7), which is evidence that supporting project management structures are necessary. Finally, there is the issue of the environmental/legal restriction in

addition to quality control. Although law-related obstacles slow system development (D=0.75), adherence of high quality standards is beneficial to project success (0.8) and satisfaction among residents (0.85). In general, the table suggests that the successful slum rehabilitation requires the need to circumvent legal, monetary as well as social barriers whereby community participation, infrastructure and quality control need to be emphasized.

Urban Sustainability of Slum Rehabilitation

Slum rehabilitation is also major in enhancing urban sustainability as observed in the JVLR initiative which is financed by World Bank. Slums which are normally situated in unregulated or reserved pieces of land pose challenging situations which attain to the impediments of a sustainable urban development. The general defining features of these regions are poor access to basic amenities like clean water, sanitation and waste disposal (Torres et al., 2019). Inadequate sewage systems, coupled with poor public transport means, increases their vulnerability level, most of them being unable to move freely or to seek economic activities. Pollution, overcrowding and inadequate shelter- poor ventilation and lack of electricity add to the poor state of living conditions and environment in these settlements (Diaz et al., 2023).

The objective of JVLR project is to change these settlements into habitable and sustainable living conditions with high quality and fully functional housing. Although the physical enrichment in the field of infrastructure fulfills the requirements of the day, like shelter, water and sanitation, it is unfavorable in providing sociocultural aspects. Community interaction/community interaction space should be considered to discard because the lack of them can lead to the overall ineffectiveness of the rehabilitation processes in the long term (Fisher et al., 2015). Studies have found that real sustainability occurs not only by way of redevelopment physically but by encompassing all aspects of the well-being of cities such as socially or economically. In Mumbai, where people living in slums constitute a considerable proportion of the population, neglecting the employment and social demands of communities living there creates a serious challenge to the sustainable development of the city (Nguyen, 2018).

Sustainable rehabilitation should therefore be one that considers programs of livelihoods, community involvement and social support mechanisms to make sure that residents adjust in the new settings at no point in time losing their economic ties. The way towards urban sustainability can be characterized as that of collaborative governance. Government institutions as well non-governmental organizations and communities need to harmonize their efforts and not work like silos (Henderson et al., 2019). By involving the community in the decision-making process, making sure that their livelihoods are not threatened by the economic inclusiveness, and focusing on a set of goals that enables the reduction of greenhouse gases emission, which aligns both with environmental concerns and social needs, slum rehabilitation will become a potent instrument of establishing an urban environment that would not be merely sustainable but also equitable and robust (Coleman et al., 2014).

Table 2 Regression results of factors affecting success of slum rehabilitation schemes

Factor	**Coefficient (β)**	**Std. Error**	**t-Value**	**p-Value**	**VIF**
Land Acquisition	-0.42	0.08	-5.25	0	1.8
Relocation of Residents	-0.38	0.07	-5.42	0	2
Financing & Cost Overruns	-0.33	0.06	-5.5	0	1.9
Community Participation	0.48	0.09	5.33	0	2.1
Infrastructure Provision	0.55	0.08	6.87	0	2.3
Livelihood Support	0.41	0.07	5.85	0	1.7
Gentrification Pressures	-0.36	0.06	-6	0	1.6
Project Management	0.46	0.07	6.57	0	2.2
Environmental & Legal Constraints	-0.29	0.05	-5.8	0	1.5
Quality Control & Maintenance	0.49	0.08	6.12	0	2
Statistic	**Value**	**Statistic**	**Value**	**Statistic**	**Value**
R	**0.92**	**R^2**	**0.85**	**Adjusted R^2**	**0.82**
Durbin–Watson	1.95	F-Statistic ($p<0.001$)	45.3		

Source: Primary Survey SPSS 21.0 Version

The regression findings indicate the manner in which the different factors impact the success and

sustainability of slum rehabilitation projects. This model also illustrates a great explanatory power where R-value is 0.92 and R-square is 0.85, which indicates that 85 percent of the variance could be predicted on the basis of the ten factors examined. The value of adjusted R 2 of 0.82 further indicates the strength of the model although it was adjusted according to the number of the used predictors. The Durbin-Watson statistic of 1.95 indicates that the significant autocorrelation is absent in the residuals, which proves the efficiency of the regression model. Moreover, the overall model is also statistically significant as reflected by the F-statistic (45.3) which is significant ($p < 0.001$). Looking at the coefficients, infrastructure provision (beta = 0.55) comes out as the single strongest positive predictor of urban sustainability, as better infrastructure intensity is a major determinant of success of the project. Next comes the quality control and maintenance ($\beta = 0.49$) and the community participation ($\beta = 0.48$) that have a great impact on the project success and satisfaction of the residents.

Participatory planning ($\beta = 0.46$) and livelihood assistance ($\beta = 0.41$) are also positive contributors to this effect however, full development requires effective planning and economic empowerment of individuals. On the other hand, the opposing aspects, such as land acquisition ($\beta = -0.42$) and relocation of residents ($\beta = -0.38$) have significantly negative effects, meaning poorly addressed land issues and ill-chosen process of relocating people are currents against project success. Gentrification pressures (2 36) also have negative impact on sustainability, due to the fact that it usually brings about displacement and social disturbance. Cost over-runs, financing (β -0.33) and environmental/legal constraints (β -0.29) also add to project delays and subsequent ineffectiveness. The t-values are significant (greater than 1.96), and the p-value is 0, that indicates the significant role of all the factors. Significance levels of VIF values, which are all less than 2.5, show no multicollinearity and this makes the coefficient estimates reliable. Altogether, the analysis shows that the improvement of infrastructures, the infrastructures preservation, the community involvement and the effective management of the projects yields results, whereas unresolved land, legal and finances problems present its major limitation to the realization of the sustainable city rehabilitation (Russell et al., 2020).

Table 3 Regression results for factors affecting slum rehabilitation based on different cities

Factor	**Delhi**	**Mumbai**	**Bhopal**	**Chennai**	**Surat**
Land Acquisition	-0.45	-0.5	-0.3	-0.35	-0.4
Relocation of Residents	-0.42	-0.48	-0.28	-0.38	-0.36
Financing & Cost Overruns	-0.33	-0.4	-0.25	-0.3	-0.35
Community Participation	0.44	0.5	0.48	0.4	0.38
Infrastructure Provision	0.5	0.55	0.6	0.42	0.4
Livelihood Support	0.4	0.48	0.52	0.35	0.3
Gentrification Pressures	-0.3	-0.55	-0.2	-0.25	-0.45
Project Management	0.46	0.52	0.5	0.38	0.36
Environmental & Legal Constraints	-0.35	-0.4	-0.25	-0.3	-0.32
Quality Control & Maintenance	0.48	0.53	0.55	0.4	0.38
City	**R**	**R^2**	**Adjusted R^2**	**Durbin–Watson**	
Delhi	0.91	0.83	0.8	1.93	
Mumbai	0.94	0.88	0.85	1.98	
Bhopal	0.89	0.8	0.77	1.9	
Chennai	0.87	0.76	0.72	1.88	
Surat	0.88	0.78	0.75	1.91	

The city-wise regression analysis reports are a good indicator of how ten key variables may affect the success or failure of urban sustainability in slum rehabilitation projects of Delhi, Mumbai, Bhopal, Chennai, and Surat. The coefficients (0) indicate the level and direction of influence that each factor has on project success and the model statistics (R, R-, and adjusted R^2 and Durbin - Waton) determine the strength and stability of the regression models.

The model of Delhi reveals R^2 of 0.83 which denotes that 83 percent of the variance of urban sustainability can be explained by the 10 factors. The large value of R (0.91) indicates a good association between predictors and outcomes, whereas the Durbin Watson (1.93) indicates that there is no first-order

autocorrelation. Project management (beta = 0.46), quality control (beta = 0.48), and infrastructures supply (beta = 0.50) are the three most important variables that contribute positively to sustainability; this implies that both technical and managerial enhancement boost performances. Also, land acquisition (-0.45) and relocation (-0.42) negatively contribute to progress, which implies difficulties in the form of ambiguity of ownership and environmental clearances-related problems, and local hostility. The findings are suggestive that legal complexities and engagement of the communities are some significant means in enhancing the rehabilitation activities in Delhi (Hamilton, 2021).

The model of Mumbai is characterized by the largest value of R^2 (0.88) and the value of R 0.94, which confirms its power predictability. The adjusted R^2 (0.85) confirms model robustness, whereas Durbin-Watson (1.98) confirms an existence of individual independence of residuals. The infrastructure provision (0.55), quality control (0.53), and project management (0.52) are the important drivers of the city success. But in Mumbai, there is the heaviest negative influence of gentrification (-0.55) and land acquisition (-0.50). These findings are consistent with the issues that have been confronted in SRA projects in Mumbai where rising land prices and redevelopment pressures are actively replacing the original inhabitants creating a problem of sustainability in the future. This suggests that though management and infrastructure interventions in Mumbai are useful, it follows that policies are supposed to be more sensitive to the displacement risks faced by communities and benefits have to be more equitably distributed (Spencer & Brooks, 2013).

The regression model of Bhopal (R^2 = 0.80, Adjusted R^2 = 0.77, R = 0.89) indicates excellent but a bit lower explanatory potential when compared with Delhi and Mumbai. Infrastructure provision (beta = 0.60) would be the largest positive determinant, the largest of any other city. Support to livelihoods (0.52) and quality control (0.55) is also a significant predictor of success, a quality which is community-led in nature of Indira Nagar project. The comparatively low adverse effect of the acquisition of land (-0.30) and that of gentrification (-0.20) indicates fewer legal and social destabilizations than those of the other cities. This has shown that such adaptive balance of planning and livelihood integration can yield sustainability, and Bhopal was far much better than others as regards to socio-economic inclusivity (Watson, 2022).

Chennai: The best Adjusted R^2 is lowest (0.72) and the R^2 is 0.76 hence the model is reliable to a moderate extent in Chennai. The lower R (0.87) portrays an indication of less overall association amid factors and outcomes. Greater contribution is made by the infrastructure provision (0.42), quality control (0.40) and community participation (0.40) but their coefficients are lower in comparison to other cities showing less good implementation. Countervailing issues such as land purchase (-0.35) and relocation (-0.38) continue to be some of the obstacles and this is heightened by violation of procedures during evictions. The weak measure of livelihood support, as evident by a lower coefficient (β = 0.35) indicates inability to facilitate programs that economically empower the population. This is similar to problems encountered in Kannagi Nagar where relocation was resorted to without proper checks on rights abridgment or livelihood schemes. In order to boost positive results, Chennai needs to better engage with the community and incorporate socio-economic approach and housing delivery (Bryant & Foster, 2019).

The model of Surat (R2 = 0.78, Adjusted R2 = 0.75, R = 0.88) exhibits a fairly good but ineffective explanatory power as compared to that of Delhi and Mumbai. The city records great adverse effects of gentrification (-0.45), land acquisition (-0.40) and less positive effects on infrastructure (beta = 0.40) and livelihood support (beta = 0.30) as is the case in Mumbai. The results of this study also reflect those of the Gopi Talav project where development-induced gentrification led to resident displacement without generating equitable development. The necessity of community involvement in the process (β = 0.38) and the effectiveness of the project management (β = 0.36) could be identified as the barriers of the sustainability of results despite some revitalization through commercial development. The results serve as a testimony to the fact that more community integration and ways to prevent social displacement are needed (Chapman et al., 2020).

Infrastructure provision, quality control and project management turn out to exert the most robust positive impact on urban sustainability across all cities, suggesting that technical and managerial effectiveness is decisive (Grant, 2018). Social involvement and provision of livelihood also come into play especially in Bhopal; showing that social-economic factors are equally vital in ensuring long-term success. Instead, the acquisition, relocation and gentrification become the most prominent negative drivers in all models with Mumbai and Surat being worst hit by displacement pressures. Durbin-Watson value of all the cities is almost equal to 2, indicating the reliability of the models and no autocorrelation of residuals.

The disparities in the values of Adjusted R2 demonstrate that Mumbai has more extensive and integrated rehabilitation frameworks whereas Chennai and Surat need more integrated stratagem.
The analysis shows that the issue of urban sustainability in slum rehabilitation hinges between physical development as opposed to integration of social and economic aspects. Whereas large urban centers such as Mumbai are on the forefront as far as infrastructure and other forms of project management is concerned, it also suffers all the consequences of gentrification. Indicative of the influence of livelihood programs is the situation in Bhopal and the challenges that Delhi faces due to the limitations of laws and environment issues. Chennai and Surat have poor performance because of the violation of procedures, displacement and failure to plan well according to socio-economic perspective. These results underscore the importance to rehistoricize policy to focus on inclusionary growth, community engagement and protection against displacement toward realizing sustainable intra-urban revitalization in India (Sullivan et al., 2017).

DISCUSSION

The city-wise regression analysis gives a deep insight into the impact of various factors on sustainability of slum rehabilitation projects of Delhi, Mumbai, Bhopal, Chennai and Surat. The results indicate that urban sustainability does not depend on the physical infrastructure but on the interaction of the founded factors of law, economy, social and management (Harris et al., 2021). A common trend that is reflected in all the cities is the positive contribution of infrastructure provision, quality control and projects management. The cities that had these factors well in place, e.g. Mumbai and Bhopal, demonstrated a superior R^2, or Project performance. The most powerful influence in Bhopal was provision of infrastructure; the project carried out in Indira Nagar not only utilized housing improvement with the basic facility such as sanitation, water supply and community utilities. This is a very high score that shows that well-designed infrastructure is critical to the enhancement of the living conditions and creation of sustainability of communities (Wilson et al., 2015).
Community participation is equally essential and a great contributor towards good results. The highest percentage of satisfaction and project success was recorded at Mumbai and Bhopal where the community was relatively more involved (Clark & Lewis, 2016). When compared, Surat and Chennai exhibited inferior coefficients in increasing participation within the community, due to the nature of top-down planning where the voices of the residents of the community were not taken into account. The example of Kannagi Nagar confirms the findings that lack of consultation and support with regard to forced relocation can go against the overall success of such rehabilitation projects. Negative drivers like land acquisition, relocation problems and pressures of gentrification, on the other hand, continue pulling down sustainability (Walker et al., 2014) (Patel et al., 2019). Mumbai and Surat are regions that have experienced a lot of gentrification, as the gradual rise in property value and pressure on redevelopment areas evicted the original occupants (Evans et al., 2013). This implies that in the absence of policies to protect tenure rights of slum dwellers, rehabilitation is likely to become another mode of displacement rather than the empowerment. Delhi, which has high negative coefficient of land acquisition, demonstrates how project timelines are inflated by cases at the court as well as legal restrictions on environmental aspects which diminish the results of a project. The results also demonstrate that livelihood support is an important component during sustainable rehabilitation (Roberts et al., 2021). The higher coefficient relating to livelihood support in Bhopal reflects that a greater degree of integration of income generating schemes and housing augmentations results in higher long-term success. Conversely, the Chennai and Surat, with smaller coefficients, indicate the deficiencies of the projects which do not take into consideration the economic empowerment of the residents, leaving them in a weak position after the relocation (Young et al., 2020).
Comparing the R^2 figures, it becomes evident that Mumbai has the strongest explanatory power on the model and that its policy structure is strong even though it suffers the ill effects of gentrification. The experience of Bhopal has proven that smaller cities were able to surpass larger cities when societal and occupation policies are put to the fore (Hall & Thompson, 2012). Indeed, Delhi has a high R^2 but quite strong negative effects of land disputes that reflect the legal and environmental peculiarities of the capital. Chennai and Surat with less model strength will need larger scale integration approaches to overcome violations and loss of ground. On the whole, the analysis shows the importance of striking a balance between the physical development and the social inclusion in the process of sustainable slum rehabilitation. Other infrastructure, good housing and decent management are required but these have

to be integrated with good community participation, livelihood opportunities and policies to avoid displacement (Allen, 2018). Cross-sectoral governance between the government agencies, NGOs and residents is the key component of achieving these objectives. These results are strong indicators that the holistic, inclusive and rights based approach is the most appropriate in changing the scenario of slum rehabilitation projects to successful urban sustainable models (Green et al., 2017).

Future Implications

The evaluation of the slum rehabilitation efforts in Delhi, Mumbai, Bhopal, Chennai, and Surat to some extent illuminates the future impact on policy, planning, and implementation policies in India. These implications can be used to inform future interventions such that slum rehabilitation brings benefits to better housing in addition to achieving the goals of urban sustainability and social inclusion. On the one hand, the findings point to the necessity of involvement all-encompassing development models including physical infrastructure improvement in conjunction with social and economic aspects (Baker et al., 2021). Projects that appear to be content on constructing homes only without attending to livelihood needs and involvement of the community are prone to build up living environments that lack any sense of livelihood. Rehabilitation strategies in the future must ensure that skills are developed, employment connections and entrepreneurship is encouraged as a means to build economic resilience of rehabilitated communities (King et al., 2023).

Second, community participation in the planning process and decision-making process becomes an imperative success factor. The participatory approaches should be observed in programmes and residents are not regarded as beneficiaries but as active stakeholders of their future neighbourhoods. A system of community representation in the design, monitoring, and maintenance of projects will assist in the alignment of outcomes to outcomes on the desires and needs of the residents and will lead to better acceptance (Mitchell et al., 2016). Thirdly, there is the problem of acquiring of land and legal conflicts that need to be addressed specifically. Project delays can be minimized by streamlining of the land ownership, clarifying the legal frameworks and implementation of transparent acquisition process. The risk of gentrification should also be addressed through the policies so that original residents are not displaced in case of redevelopment. There will be safeguarding people by implementing protection schemes like tenure security, rent control, and affordable housing (Parker, 2015). Fourthly the environmental and urban design needs are to be given top priority. To enhance environmental results projects must incorporate the standards of a green building, effective ventilation, waste management and climate resilient infrastructure. This will put the effort of rehabilitation in tandem with wider objectives of urban sustainability and climate adaptation (Murphy et al., 2012).

Also, it is important to maintain infrastructure and long-term structures of governance. Creating community-owned maintenance or making a partnership between the population and the government can also guarantee that the rehabilitated areas do not sink into ruin. The future policies must contain post implementation support and monitoring systems in order to sustain quality (Gray, 2023). Lastly, the important collaborative governance of municipal authorities, state governments, non-governmental organizations, and general developers and residents are important factors towards effective results. The rehabilitation efforts in the future should no longer be limited to individual efforts but should be targeted at the multi-stakeholder collaborations to combine the wealth of resources, skills, and responsibility (Peterson et al., 2018). The rehabilitation of the slums in India needs to deviate to more comprehensive, inclusive, and sustainable strategies that should move beyond housing to the aspects of livelihoods, social networks, environmental health, and governance. The strategy will see cities taking the transformative challenge of turning informal settlements to be livable, equitable, and sustainable cities (Kelly, 2019).

CONCLUSION

In comparative analysis of slum rehabilitation schemes in Delhi, Mumbai, Bhopal, Chennai and Surat, it becomes evident that the concept of urban sustainability in these scenarios is affected by intricate conglomerate of legal, social, economic and managerial conditions. Although infrastructure development, quality control, and proper management of the project proved to have a potent beneficial effect, the obstacles of land acquisition conflicts, relocation difficulties, finance issues, and gentrification will remain a challenge to the success of these initiatives. The regression results are useful in ensuring that policy efforts complement the positive drivers of sustainability because it is also imperative to address these adverse factors (Wood, 2016). Mumbai showed the most predictive power over sustainability outcomes backed up by well-developed infrastructure and project management structures that are part of its Slum

Rehabilitation Authority (SRA) model. Nevertheless, the city has major problems associated with gentrification and the eviction of initial inhabitants, which shows that mere physical development does not entail that all effects are positive (Griffin et al., 2020). Bhopal generated impressive returns, even though being a smaller city, because of its orientation toward the need of livelihood and community participation. This implies that the economic empowerment coupled with the housing solutions make rehabilitation efforts more sustainable and socially inclusive (Butler & Adams, 2017).

Yet, the development of Delhi is limited by the legal and environmental issues, especially in the territory of Kusumpur Pahari whose development is held back by the legal process of land acquisition and environmental permission (Jagdale, 2020). However, through the high-scoring factor in the regression model, it exhibits a possibility of betterment because such issues can be handled systematically. Chennai, in its turn, shows how the effectiveness of relocation schemes is to be compromised by procedural rights violation and insufficient support in providing a living when the housing provision is actually realized (MoHUA, 2011). Likewise, the Gopi Talav project of Surat indicates that long term-sustainability is compromised in cases where redevelopment creates gentrification and displacement regardless of initial revitalization (Murray et al., 2022).

Urban sustainability, in the study, cannot be realized through housing constructions in all cities. It demands a whole-minded approach that takes into consideration community area aspects, livelihood integration, environment protection and legal understanding. Policies should be developed in such a manner that does not just transfer poverty to other locations or push weak populations in the pursuance of development. Policies like tenure security, low-income housing, and inclusive development are critical to ensure the safety of the residents and the establishment of trust in rehabilitation policies (Wright, 2015). The result also highlights the need to have collaborative governance where the agencies of the government along with NGOs, the private developers and the local communities act not in a separate manner but as a coherent body. These resource gaps can be only overcome by collective efforts, expertise can be shared, and accountability can be ensured. Additionally, it should be institutionalized that it should continue monitoring involved in the rehabilitation of areas, as well as continuous support after rehabilitation has been achieved to ensure that these areas do not lose quality (Morgan et al., 2018). Sustainable slum rehabilitation is not merely the physical movement but a socio-economic one as well. Lurking cities is based upon the potential to strike a balance between city development and societal inclusion so as to refrain from merely re-positioning the population but enabling them. The experiences of these five cities present a guide of what to expect in future projects: The integration of the infrastructure with livelihoods, community involvement at all stages, and the policy that serves to protect people against displacement (Gupta & K., 2020). India can reshape slum rehabilitation as an effective tool to create equitable and resilient urban futures by working on these dimensions.

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