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Study on Slum Redevelopment and It's Delay Factors in PPP Model: State of Art Review

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Abstract:
Slum redevelopment is a difficult and complex process that needs a multidisciplinary approach involving government organizations, non-governmental organizations, the corporate sector, and the community. Governments have increasingly invited private financiers and investors to take care of public provisions, making public-private partnerships (PPPs) the new perspective for the development of the public sector. Slum reconstruction efforts are being carried out successfully and effectively through the Rajiv Awas Yojana (RAY), Slum Networking Programme (SNP), and Slum Improvement Programme (SIP). There are numerous PPP types and delivery models, but unclear policies and regulations, a lack of funding, the complexity of the project structure, problems with resettlement and relocation, difficulties with land acquisition, problems with technical and design aspects, and corruption all cause delays in the implementation of PPP models for slum redevelopment. For slum redevelopment efforts to succeed, overcoming these delay reasons is imperative.

Keywords:
PPP (Public Private Partnership), Public Housing, Slum, Redevelopment.

1. Introduction:

In India for example in the National Sample Survey Organization (58th Round), slums have been defined as 'A compact settlement with a collection of poorly built tenements, temporary nature, crowded & usually with inadequate sanitary and drinking water facilities in unhygienic conditions.' The population tally of India considers any area as a slum having a compact area of at least 300 population or about 60–70 households. Slum redevelopment is a complex and challenging process that requires a multi-disciplinary approach involving government agencies, NGOs, the private sector, and the community. Public-private partnerships (PPPs) are regarded as the new perspective for the development of the public sector. The popularity of PPPs has grown over the past few decades, as governments have increasingly welcomed private financiers and investors to take care of public provisions. Improving project efficiency, enhancing project effectiveness, increasing stakeholder satisfaction, and supporting evidence-based decision-making for all these intentions are critical for ensuring the success of PPP projects.

2. Basic Concept:

Causes that create and expand slums:

1) Rural-urban migration: Many people migrate from rural to urban areas in search of basic employment. As employment is less in the rural area as compared to urban areas. Also, they want better facilities and education for their children so that their children could support them and their families. Also, there are more opportunities in urban areas as compared to rural areas.
2) Urbanization: More than 50% of the world's population lives in urban areas. The gap between people's low income and the high land price forces some people to look for and construct cheap informal settlements, which are known as slums in urban areas.
3) Poor housing planning: Lack of affordable low-cost housing and poor planning encourages the supply side of slums. Whenever there is a gap between the demand for houses and the availability of houses there is a step toward the formation of slums.
4) Poor infrastructure, social exclusion, and economic stagnation: social exclusion and poor infrastructure force these migrated people to take shelter in slums. Urban poor cannot afford the demands of the city like house rent, transportation, school fees, monthly electricity, water bills, etc.
5) Informal economy: Informal economy is that part of an economy that is neither registered as a business nor licensed, one that does not pay taxes and is not monitored by local or state, or federal government.
6) Poverty: As because there is more employment in the urban sector, people migrate from the rural area and settle down in slums which increases poverty in urban areas. The urban poor arrives with hope in

the city for employment and better facilities, He or she typically has no access to shelter, basic urban services, and social amenities.

7) Politics: Politics plays a major character in the formation of slum areas. For instance in our documentary, we got to know that during the commonwealth games the people where migrated from a well-settled area to a slum area, promising that they would be given permanent houses and jobs. Even after their complaints, no action took place.
8) Natural disasters: Major natural disasters in poor nations often lead to the migration of disaster-affected families from areas crippled by the disaster to unaffected areas, the creation of temporary tent cities which is the expansion of existing slums. These slums tend to become permanent because the residents do not want to leave from there.

Project benefit to slum dwellers:

Integrated Housing and Slum Developing Programme (IHSDP) project benefits to slum dwellers are:

1) Housing
2) Provision of individual toilets drainage
3) Water supply arrangement
4) Rooftop rainwater harvesting
5) Electric connection
6) Stormwater disposal pipeline
7) Community centre
8) This project will uplift the standard of living
9) Employment opportunities during project development
10) After getting the tenure (residence) in the family name they can get the personal loan

Comprehensive information on PPP projects:

PPP is a form of collaboration between the government and private organizations in order to deliver a public service or infrastructure project.

1) Purpose: The main purpose of PPP projects is to leverage the resources and expertise of the private sector in order to provide high-quality public services and infrastructure. The government partners with private companies to finance, design, construct, operate, and maintain public projects, such as highways, hospitals, schools, slum redevelopment, and water treatment plants.

2) Benefits: PPP projects offer several benefits to the government and the public. They can provide high-quality public services and infrastructure at a lower cost, reduce the burden on the government's budget, transfer some of the risks associated with the project to the private sector, and provide long-term maintenance.
3) Financing: PPP projects are typically funded by a combination of government funding and private financing. The private company may provide funding through equity, debt, or a combination of both. The government may also provide financing through grants, loans, or tax credits.
4) Procurement Process: PPP projects typically involve a competitive bidding process, where private companies submit proposals to the government. The government then selects the proposal that best meets its requirements and awards the contract to the private company. The procurement process is usually transparent and competitive to ensure that the public interest is protected.
5) Risk Management: PPP projects involve a transfer of risk from the government to the private sector. The private company is responsible for managing the risks associated with the project, such as construction risk, operational risk, and market risk. The government may also retain some of the risks, such as regulatory and policy risks.
6) Contractual Arrangements: PPP contracts are typically long-term agreements between the government and the private company, often lasting 20 to 30 years. The contract defines the roles and responsibilities of each party, the scope of the project, the performance standards, and the payment mechanism. The contract also includes provisions for dispute resolution, termination, and transfer of ownership.
7) Monitoring and Evaluation: PPP projects are monitored and evaluated regularly to ensure that the private company is meeting its obligations and delivering high-quality public services. The government is responsible for monitoring the performance of the private company and evaluating the success of the project.

3. Literature Review:

PPP (Public Private Partnership):

Public-Private Partnership (PPP) is regarded as one of the key effective tools in the development of many countries. Some of the key challenges in PPP implementation are (1) different organizational cultures and goals between the partners, (2) poor institutional environment and support, (3) weak political and legal frameworks, (4) unreliable mechanisms for sharing risk and responsibility, (5) inadequate procedures for the selection of PPP partners, (6) inconsistency between resource inputs and quality, (7) inadequate monitoring and evaluation of PPP processes, (8) lack of transparency, and (9) the inherent nature of PPPs [1].

Construction sector delays are inevitable, and they often have a negative financial impact on all project parties. The construction phase of traditional procurement was shown to be delayed, whereas pre-construction delays were more common with PPP. On conventional projects, a number of delays (big or small) have an impact on one another and eventually the handover date, causing the project completion date to be delayed. Generally, people favored traditional procurement over PPP for the achievement of quality and value for money, while PPP was favored for completing the project on time [2].

A Build Operate Transfer project often involves three different risks, i.e., technical, financial, and political. Adopting Key Success Factors and preventing delay causes are essential to the success of a BOT project. The project delivery method of BOT increases the commencement probability of public construction works through private investments as well as encourages the development of related industries. Identified causes can be used to prevent such delays from occurring in future BOT projects [3].

PPP is a method of financing public infrastructure projects in which the local, state, or federal government acts as the public partner. The private partner may be a privately held company, a public corporation, or a group of companies with specialised knowledge. PPP agreements are helpful for huge projects requiring highly specialised labour and a sizable financial investment. They are particularly helpful in nations where the state is legally required to own any infrastructure that serves the public. The 12th Five-Year Plan seeks to accomplish a significant infrastructure investment target through PPPs, however the private sector is unable to take on new projects because of lengthy clearance processes, ill-defined contracts, and bureaucracy. To address the current difficult business environment, new PPP models are required, and project agencies must be given the authority to make decisions that are both effective and timely. A long-term sustainable infrastructure plan must be designed in order to foster an environment that will encourage increasing private sector investment. Risks that must be borne by the public and private sectors must be clearly defined. The government's infrastructure PPP plan may be realised with the help of cooperative efforts from the public and private sectors and supportive policy provisions [4].

According to the findings, incomplete contracts, ambiguity, and information asymmetry cause moral hazard, opportunism, and delays in PPP projects. Lack of contract management expertise among project authorities and the ineffective and unfair distribution of risks among stakeholders further aggravated the issues, resulting in failed projects and no involvement from private developers. In order to effectively implement the future PPP programme in India and other developing nations with comparable socioeconomic situations post-COVID-19 pandemic, it suggests a 20-point conceptual institutional architecture such as sectorial planning, institutional development, efficient and transparent procurement process creating competition, designing

bankable projects and de-risking them by taking measures like awarding plug-and-play ready projects in terms of land acquisition and various permissions to avoid delays in financial closures and time and cost overrun, setting a fair and transparent alternative dispute redressal mechanism based on arbitration, mediation and conciliation, rewarding efficiency and punishing dishonesty will attract the private developers and financial investors for future PPP projects [5].

PPP Housing Projects:

The Pradhan Mantri Awas Yojana (PMAY), a program that includes in-situ slum reconstruction, has mainstreamed it in India. In the case of in-situ slum redevelopment in PPP mode, the incentives for the developers are two land management tools, FSI and TDR. The second issue is with regard to the financial viability of the approach. The third major issue in this approach is the governance of the project. The last overall issue is of policy. It appears that the local government simply had shrugged-off its responsibility acting as a passive spectator [6].

The Sanjay Nagar experiment sheds light on the causes of the government's well-intentioned but unsuccessful efforts. It also demonstrates the necessity for a fresher strategy to address the unemployment issue. In order for the unskilled to create chances for well-paying jobs, we must improve their abilities [7].

Due to its role in the nation's economic growth, the construction industry in India is a significant sector. Unfortunately, many building projects are susceptible to delays because of the topographical, political, social, and economic environment. Using questionnaires to gather information from clients, consultants, and contractors, the Statistical Software for Social Scientists was used to conduct the analysis (SPSS). The findings indicated that a lack of materials, poor time estimates, and building mistakes were the three main reasons for delays. Cost overruns, time overruns, negative social repercussions, and lawsuits were the main outcomes of delays. The greatest dangers of a construction delay were excessive pressure on project stakeholders and disagreements among project participants, project abandonment, and overall cost increase and decline in revenue [8].

PPP Road Projects:

Time overrun was not significantly impacted by PPP projects. To find out whether rewards could be given for finishing projects faster than anticipated without having a comparable effect on cost. The findings are the necessity of giving PPP agreements a comprehensive review and tightening them up to lessen the likelihood of cost overruns. The results imply that poor planning and contractual mistakes can cause cost overruns. To cut down on cost overrun, projects might be organized as shorter lengths of road. It may be more cost-effective

to use performance incentives based on deliverables rather than project cost recovery. In the case of time overrun, they were as good as non-PPP projects, whereas, in the case of cost overrun, PPP projects were predicted to result in an increased cost overrun [9].

In order to concentrate risk management efforts, project risk management highlights the necessity of ranking and prioritising hazards in a project. the preparation of a hierarchical structure using interpretive structural modelling (ISM) and the interrelationships of these risks that would allow decision-makers to take the proper action. In the Indian road sector, there were 17 dangers identified throughout the development phase of PPP projects, and it was discovered that 14 of these risks had weak drivers and weak dependents. The three risks that are most dependent on one another are time overrun, cost overrun, and delay in financial closure. Practitioners can expand the research to include risk analysis for additional infrastructures including railways, seaports, and airports [10].

Slum Redevelopment:

When it comes to slum redevelopment projects, it is important to pay attention to having clearly set plans and targets in terms of relocation of all the slum dwellers. Following this, the important factor is the lack of risk assessment carried out in the planning stage which further lends these projects vulnerable to delays. In the execution stage, two factors are of the highest significance, namely handling working capital issues and a shortage of manpower on the site. These factors if not properly looked into lead to avoidable delays and work stoppages. In the closeout stage of the project, the typical delay that emerged was the disagreement among parties about the snag list related to quality, in the course of project completion [11].

SNP is an illustration of successful beneficiary involvement in a low-income community improvement project funded by microloans. The existence of SEWA Bank, a locally based financial institution, was essential to the program's success. The SNP has improved the lives of the communities where it has been implemented so far, despite its inability to expand its reach [12].

The elements contributing to the modest success of a slum upgrading project carried out in Ahmedabad, India, between 1995 and 2001. First, this has questioned why an innovative and promising alliance between corporate, public, and civil society actors finally failed, prompting Arvind Mills Ltd., the alliance's primary private sector participant, to leave. Second, the implementation of complicated inter-institutional interactions has been examined more carefully, as well as how the Ahmedabad Municipal Corporation (AMC), neighbourhood NGOs, and community activists were able to negotiate and develop these partnerships. Third, examines two connected issues that have to do with the SNP's inability to be widely adopted [13].

Urbanization in emerging countries is unprecedented, and in the next few years, it is anticipated that the number of urban residents will surpass that of rural residents. The major goal is to investigate the factors that have contributed to the rapid rise of slums in and around Visakhapatnam and to provide appropriate planning methods to improve the deplorable circumstances that exist there. The project also entails mapping land-use and land-cover patterns with the aid of ARC GIS and the identification of significant slum areas utilising remote sensing photos and tools like El Shayal Smart Online [14].

In the north-eastern corner of the state of Karnataka, Kalaburagi, a second-tier city, serves as a significant business centre for the Hyderabad-Karnataka area. The population of the slums is growing as a result of the country's fast urbanisation and population increase. In order to improve the living conditions of slum inhabitants, it intends to propose sustainable approaches for better slum development programme implementation. In order to detect slums from satellite data, a slum ontology was created and confirmed with field research and field photography. We identified the fundamental inputs for the Cellular Automata (CA) model and produced criteria maps with scores. The suitability map was developed by providing the factors the proper weight, and the output of the CA model produced accurate data for the current slum distribution and also a hint of the possible occurrence of slums in the future. The Spatial Decision Support System (SDSS) was built for selecting slum development options and demonstrated with one case study – Borabai nagar slum [15].

India is a rapidly developing nation, and many of its major cities are experiencing faster population growth. Slum growth has caused the urban environment to deteriorate, which has raised serious concerns for the authorities. One of the primary crises facing the majority of Indian urban centres is the widening disparity between the availability and demand for affordable housing. In order to identify the issues related to slums, it looks at several Indian slum policies. It also looks at various slum redevelopment strategies [16].

It analyses the accomplishments and fabricated realities of several government projects aimed at ridding Ludhiana of slums. The Slum Free City Plan of Action (SFCPOA) – Ludhiana 2015, which aims to improve and reconstruct existing slums, prevent the creation of new slums, and bridge the demand and supply gap of affordable housing, is evaluated using a sequential methodology. A sequential methodology is used, including semi-structured interviews, field surveys, field photography, and the creation of an ontology for slums based on socio-economic and sustainability criteria. Slums continue to be crowded, unprofitable economically, and with low levels of community involvement despite the government's efforts. It acts as an analytical model for future government initiatives to sustainably redevelop, rehabilitate, or resettle slum inhabitants [17].

India is one of the nations with the quickest growth rates and has numerous large cities. Migration from rural areas and small towns has grown over the past 20 years, which has negatively impacted sustainable urban

growth. The majority of families impacted by urban development initiatives live in slum neighbourhoods, which is a severe problem in many urban regions. In order to identify the most important and troublesome area of the slums, it seeks to analyse and examine slum areas and the conditions in which people live [18].

By contrasting the efforts at "slum-free city planning" with the "durability" of some slum settlements, it investigates the effects of macro-forces of neoliberalism and globalisation on slum clearance in Delhi, India. It looks at two settlements that the Delhi Development Authority chose to put its slum redevelopment plan into practise through a public-private partnership, and it illustrates how space-specific arrangements and the interaction of actors may instead help slums become entrenched. Slum rehabilitation in collaboration with private developers faces significant obstacles at the municipal level, calling into question the importance placed on this approach to providing affordable homes for the urban poor [19].

It looked into the reasons why rehabilitated dwellers of horizontal slums in India experience a rebound effect on slum rehabilitation policies. Based on the concepts of participatory back casting and the notion of homeostasis, a novel methodological framework was created to explore it. To identify the social, economic, and environmental causes of unhappiness and discomfort, 30 households in Mumbai's slum redevelopment homes were questioned. The findings indicated that economic hardship was caused by low income and high electricity costs, and discomfort in the physical environment was brought on by a lack of social spaces and subpar design. By reducing these non-income factors, the slum restoration effort can be made more sustainable and rebound phenomenon can be avoided [20].

By categorising the project's delay issues into several stages and suggesting a better sort of method to solve them, it seeks to recognise the potential difficulties encountered in the development of a slum rehabilitation project. Slum areas are densely populated places that were built without proper design and lack essential amenities, making them a challenging assignment for any builder or owner. Project delays, schedule overruns, and capital overruns can be caused by delays in the preplanning and early stages of building projects, such as obtaining general plans, licences, licences, and other legal clearances [21].

Slum Redevelopment on PPP Model:

In India, there is a shortage of 18 million homes due to a larger demand for housing than there are available homes, 95% of which are in low-income and economically disadvantaged groups. The government of India's "Housing for All" strategy intends to give every person access to appropriate housing by 2022. The right to adequate housing is a fundamental human right. Under the Pradhan Mantri Awas Yojana (PMAY), a part of which deals with in-situ housing, the private sector's participation and intervention are becoming more and more significant. One of the four urban verticals of PMAY (Urban) is in-situ slum rehabilitation (ISSR), which

uses land as a resource to give people living in informal urban settlements modern homes without displacing them. This essay seeks to examine the DDA's In-Situ Slum Redevelopment Policy critically on a policy level, underlining the difficulties that DDA, Private Developers, Slum Dwellers, and other stakeholders encounter. The analysis identifies potential problems and difficulties associated with project execution and offers appropriate solutions to make projects profitable for the developers with stakeholder involvement that ultimately benefits government and end users [22].

4. Case Study:

Public private partnerships should adopt the following eight governing principle:

1) The public interest in paramount
2) Good practices in accountability and transparency measures must be maintained
3) throughout the lifecycle of the project.
4) A PPP project needs to be carefully planned, well-defined in scope and fundamentally
5) clear in its objectives.
6) The viability of the project needs to be measured against criteria set by the initiating
7) partner to assist it in determining its potential suitability for PPP procurement.
8) The selected PPP model must provide value for money in terms of costs and time
9) savings with appropriate consideration of risk transfer
10) The PPP tendering process must be competitive, fait and subject to proper due
11) diligence on the part of the partnership.
12) An urban sector PPP must reflect the needs of the affected community and must
13) integrate into the project key stakeholders priorities.
14) The project must be responsibly managed throughout the terms of the agreement, with
15) predictability and priority as determined by the partnership.

The majority of infrastructure industries are now open to FDI thanks to the Indian government. Notwithstanding this, PPP in India has not fared as well as in other nations. PPP implementation has challenges in the Indian context. Also, historical case studies are examined in order to draw lessons from both their advantages and disadvantages. When put into practise, these lessons will aid India in discovering the true potential of the Public Private Partnership approach to project implementation [23].

Principal Takeaways and Observations:

1) Facilitation provided by Government to ensure efficient execution.

   The Government provided necessary facilitation to ensure efficient execution of the Amritsar Intercity Bus Terminal, including efficient leasing of land, necessary approvals, and support to the private operator during the construction and O&M stages. This was a critical element in the timely execution of the project, allowing the private operator to complete the construction ahead of time and within budgeted costs.

2) Favourable policy environment to ensure revenue stream.

   All intercity buses were given notice by the government to pick up and drop off passengers at the new intercity bus terminal, and the terms of the concession included "adda fees" and user costs for particular passenger amenities. The concession agreement addressed policy environment uncertainties by providing that the concessioning authority would be reimbursed for any changes in policy that would directly affect the viability of the project.

3) Flexible project structuring was undertaken to facilitate funding of the project.

   The concession agreement included the required clauses that the government needed to make in order to make borrowing money for the Amritsar Intercity Bus Terminal project easier. Access to the revenue streams and the power to step in for the private operator in the event of default served as security for the lenders.

4) Need to develop a monitoring and implementation mechanism.

   Although 2000 to 3000 buses per day were anticipated to pass through the Amritsar Intercity Bus Terminal, just 1700 do so at the moment. This is because the private operator is unable to guarantee that all buses use the facilities in accordance with schedules. A monitoring system should be established to make sure all buses adhere to notifications, and a system for implementing predetermined schedules amongst the various government divisions should be identified and put in place in order to increase the financial feasibility of such initiatives.

5) Detailed and clear definition of project design and scope.

   For projects in the private sector, project scope and design specifications are crucial because they must satisfy the requirements of the concessioning body and uphold key standards for both project development and delivery [24].

5. Conclusion:

The conclusion is established by checking the literature review, case study and basic concept:

Slum Redevelopment Scheme (SRS) is crucial for improving housing. According to the impact evaluation analysis of the SRS projects on slum dwellers, who are the recipients of slum rehabilitation/resettlement under SRS programmes, a lot of attention has been placed on the physical infrastructure at the expense of social infrastructure. In terms of water supply, sanitation, solid waste management, public health protection, and electricity, the physical infrastructure has significantly improved. Yet, social infrastructure including playgrounds, recreation spaces, dispensaries, primary schools, and welfare centres need to have been built now rather than later. Some common findings from the above literature reviews in slum redevelopment and the study on delay factors in the PPP model include: lack of political will, inadequate planning, and coordination, funding constraints, community resistance, and lack of stakeholder engagement. Addressing these factors and ensuring effective planning, coordination, and stakeholder engagement can help to mitigate delays in PPP models for slum redevelopment and improve the outcomes of the projects. Under the Slum Reconstruction Program, location is also one of the key considerations, as if the residents of the slums can lose interest if the rehabilitation site is moved to a location with inferior job chances and transit options. This will advance their development and improve their living conditions.

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