

# Slum Re-Development: Case of Dharavi

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## ABSTRACT

Shelter is a basic human necessity and has emerged as challenge for the various countries. Slums have been an integral part of urban landscape, offer an affordable housing solution to the urban poor. The word slum is used to describe the illegal informal settlements with lack basic amenities and infrastructure. Rapid urbanization and demand for affordable shelter and emergence of slums are strongly associated. Slums should be considered as an asset rather than a liability. Using minimal resources of the country and surviving in least area with vulnerable housing conditions, the slums contribute a huge amount in the country's GDP. Its example is India's largest slum Dharavi that can be found operating a part of the country's economy. It's a self-contained township developed due to its social and economic ties. The proposal of its redevelopment should be around its socio-cultural and economic zones.

**Keywords:** Shelter, Slum, Urban Poor, Affordable, Urban Landscape, Sanitation.

## 1. INTRODUCTION

*"A major failure of city governance has been our inability to address the needs of the poor- basic services like drinking water supply, sanitation, housing and social services are not available to an increasing share of urban population." - Dr.Manmohan Singh, Former Prime minister of India.*

[UN-Habitat, 2003] Slum is used to describe informal overcrowded settlements within cities that have inadequate living conditions lacking basic services and amenities, such as water and sanitation. They are a physical and spatial manifestation of urban poverty. Slums rapidly form and grow due to rural-to-urban migration, economic stagnation and depression, high unemployment, poverty, informal economy, poor planning, politics, natural disasters and social conflicts. Increased urbanization is a major concern for less developed countries since they often lack the infrastructure and basic services (e.g., water, sanitation and healthcare) necessary to absorb the increasing number of people [Cohen, 2006; Montgomery, 2008].



Figure 1: Location of Dharavi

Currently, about 1 billion people live in slums, with most slum dwellers located in less developed countries, which accounts for about 30% of their urban population [United Nations, 2015].

The development of shanty hutments has emerged as a major challenge across the world. Strategies tried to reduce and transform slums in different countries, with varying degrees of success, include a combination of slum removal, slum relocation, slum upgrading and slum redevelopment. Globally, several interventions have been made that aim to provide solutions for all, largely categorizing them into slum up-gradation and slum redevelopment. With the aspiration of new urban India, several policies such as national slum development programme (NSDP), basic services to urban poor (BSUP), housing for all etc. have emerged.

#### **About Dharavi – ‘A Gold Mine’**

Shelter is a basic human need, which has become a major challenge in a country and the cause of urbanism. Maharashtra is one of the most urbanized states in India. The metropolis of Mumbai is often called slum bay with probably the largest number of slum dwellers in the world. [J Joel Samuel, et. al., 2018] Dharavi, Asia's largest slum is a home to nearly 700,000 to 1 million people, with an inordinate population density of 277,136 per square km. The dearth of hygiene, miniature homes, low income and lack of awareness has exacerbated the living conditions in the Dharavi dwelling. This paper proposes a synergistic redevelopment model for the rehabilitation of the local community. In addition, thermal analysis has been carried out for redeveloped model. Dharavi itself is an informal township within the metropolis as shown in Figure 1. India's largest slum, Dharavi is no ordinary slum but a unique self-contained township. Spreading over 525 acres, it exactly looks like a mosaic floor of a building. It is a sprawl to which 8 lakh people are squeezed on top of each other. Almost 60% of Mumbai's populations live in Dharavi and they occupy only 6% of the total land area of the city. There are approx. 57000 structures in which most of them are more than one level and many having more than one family.

Dharavi includes tens of thousands small businesses and hundreds of thousands of residents of different religions, castes, languages, provinces and ethnicities, dependent on one another socially, culturally and economically. Its enterprising residents manufacture garments, leather goods, foods, and pottery, besides running a flourishing and unique recycling business.

## **2. HISTORY**

Dharavi, located on the northernmost tip of Mumbai island City, was once a fishing village on the backwaters of the one of the seven islands of Mumbai cleared and revamped. The growth of Dharavi is closely interwoven with the pattern of migration into Bombay. As long as Dharavi was on the edge of the city, the main city was not affected much by the squatters and their activities. But as Mumbai expanded northwards and its population grew with new industries, the pressure on land increased, and Dharavi was drawn into the heart of the city.

## **3. IMPORTANCE OF DHARAVI**

Dharavi pulsates with its economic activities. It is centrally located in the city and therefore is of prime importance. Most of the people are unaware of the fact that it is also the heart of small-scale industries in Mumbai boasting an annual turnover of approximately US \$665 million. Due to this small entrepreneur business Dharavi is becoming jackpot for Mumbai. This are having number of industries like recycling, the making of clay pots, embroidery, bakery, soap factory, leather tanning, papad making, and many others as shown in Figure 2.



Figure 2: Livelihood Opportunities

The Bandra- Kurla complex, the posh new business district in the neighbourhood of Dharavi, with its very high commercial real estate value has made Dharavi a 'hot property' indeed. It offers huge potential for the upcoming architects, planners and developers to invest their talents in. It's an ultimate challenge to redevelop ensuring minimum disruption to everyday life.

#### 4. PAST PROGRAMS TO DEVELOP DHARAVI

In early part of 1985, the Prime Minister Late Shri Rajiv Gandhi earmarked Rs.100 crores for the improvement of infrastructure and housing for the whole Island city of Bombay, and a third of that sum was reserved for Dharavi. The Prime Minister's Grant Project (PMGP) was initiated in 1987 and Maharashtra Housing and Area Development Authority (MHADA) was declared as Special Planning Authority (SPA) for Dharavi. Later on, after the year 1995, under the Slum Rehabilitation Scheme (SRA) 86 Schemes were approved in Dharavi in the period up to 2004. The SRA schemes lacked the much-needed emphasis on holistically planned urban development. As a result, major part of Dharavi remained in undeveloped and unhygienic condition.

#### 5. REMODELING INITIATIVES – IN SITU SLUM REDEVELOPMENT

Government of Maharashtra has ensured systematic and planned development for Dharavi. Slum Rehabilitation Authority was established under section 3A of Maharashtra slum areas act, 1971 as a special planning authority.

In June 2007, Mumbai's Slum Rehabilitation Authority (SRA) invited Expressions of Interest from private sector developers for the Dharavi Redevelopment Project (DRP). Dharavi had been divided into five sectors, and developers were invited to bid for development rights each sector, covering an area of 144 hectares (355 acres) out of Dharavi's 220 hectares (525 acres). Developers had the responsibility to provide all infrastructural amenities such as roads, schools, hospitals and cultural centers; public services such as education or health services would be provided by the government or by non-profit organizations. Developers were required to maintain all the buildings and public areas for the first 15 years, with explicit criteria for maintenance activities such as repainting and waterproofing. The builders were given an option of using FSI of as much as 4.0 for Dharavi compared to FSI of 3.1 of municipal land and 1.3 for privateland.

A new approach of the Dharavi redevelopment project was proposed by Mukesh Mehta. He suggested a sectorial approach. The slum dwellers would obtain free housing of 225 sq. feet, later revised to 300 sq. feet. Other incentives that were provided included the Transfer development rights in respect of any surplus floor area, which could be transferred to another area. Over a few months, the government distributed 70,000 leaflets in different languages to explain the program to different slum dwellers.

Slum dwellers that have area greater than 225 sq. feet were reluctant to join. The scheme received lukewarm response as builders feared delays due to problems of land ownership and political alignments.

#### 6. CONCLUSIONS

Dharavi is a city within a city with a culture and lifestyle that has developed over generations. It was not an accident rather it developed due to its social ties and economic needs. A unique characteristic of Dharavi is its very close work place relationship. Any plan for Dharavi must obviously take small businesses into consideration that had developed over the years so that it does not destroy the local economy.

The state of Dharavi is not due to lack of economic opportunities and poverty rather it is due to lack of basic infrastructure and amenities. But in midst of all this, residents are still unaware of the project and have no much say in the creation of the plan for the community. The proposed scheme failed to acknowledge the upliftment of small commercial and industrial units persisting in Dharavi. The future of Dharavi's current residents is unclear. The social and economic networks can hardly retain in high rise structures. The Dharavi redevelopment plan proves to be profit maximizing real estate tool leaving no room for sustainable and economic low rise, high density approach.

Dharavi serve as a window not only on the future of India's burgeoning cities, but on urban space everywhere. Dharavi needs a mechanism that engages in deeper interaction with the people to cater to the different needs of the diverse society. Future model needs more effective integration of residential, commercial and ceremonial functions.

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