

Untitled Work

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The proposal envisages Dharavi as a sustainable, carfree environment with strong public transport, pedestrian and non-motorised transport. New housing is proposed to be built 4 to 7 meters above the existing settlement. Residents would then move to these houses while construction at the ground level takes places for commercial activities. Financing will be provided through government schemes, and through surplus TDR. The jury found the submission unclear and incomplete.



PREMISE

At about 223 ha and housing between 600,000 to 1 million people, Dharavi is one of the world's largest, oldest and most famous informal settlements. There are 60,158 structures in Dharavi, of which 45,563 are residential. Dharavi is composed of 80 districts, called "nagars" built and dominated by different ethnic groups and communities. The presence of industry in the settlement is so vibrant that every second or third house seems to be the site of some or other economic activity.

Traditional industries such as pottery and textiles are still very prevalent in Dharavi however the largest and most significant industry is recycling which takes care of approximately 50% of Mumbai's recyclable materials. According to a survey by the National Slum Dwellers Federation (NSDF), Dharavi's plastic recycling industry is the largest in India,

employing over 5,000 people. There are around 2,000 families involved in pottery making. 250 potters' families who live here have a special place in the community, their business being as old as Dharavi itself. 400,000 leather labourers also work in Dharavi within a complex and efficient live work typology. Currently, there are about 110 families of broom makers known as *kunchikorves* staying in Dharavi. Dharavi plays a key role in the economy of Mumbai, generating 1.5% of the city's Gross Domestic Product (GDP).

As it is the first thing that anyone who comes to Mumbai sees from the air, the image of Dharavi is the image of Mumbai. This proposal envisions a framework for development within which Dharavi can reinvent and evolve an identity for itself but also integrate within the larger urban fabric.

GUIDING PRINCIPLES

This proposal looks at empowering the people of Dharavi, to realise their dreams and desires, and change their own lives, physical environment thereby resulting in a vibrant Dharavi as a whole. This is starkly different to the current approach in getting funds that are necessary for bringing this proposal to life. They are as follows:

- Retain and enhance Dharavi's original character and community.
- Strengthen major east-west connectivity for Mumbai.
- Enhance mixed use live-work environment in Dharavi.
- Support active business and manufacturing sector environment.
- Enhance the existing social and economic structure.
- Formalise informal activities thus giving it an order and structure.

GOVERNANCE

A Local Administrative Enterprise (LAE) will be formed in each of the 12 sub-sectors which will take care of the needs and priorities of that sector.

The LAE will be formed for representatives of residents and commercial units in that sub-sector and with the help of specialists/

consultants they will look at raising finances, development and maintenance of the proposed development.

FINANCE

National / Local Schemes

Various funding schemes such as the national scheme of *Rajiv Awas Yojana* or State schemes such as *Garib Samrudhi Yojana* in Maharashtra can be used for the development of Dharavi.

Sale of TDR

With the Floor Space Index given by slum redevelopment schemes in Dharavi, the total FSI generated from the scheme will be more than the total construction area proposed. The balance FSI will be sold as TDR in other areas, which in turn will be used to pay back the loans taken for the execution of this proposal.

Loan against Land

Although there are a lot of issues of land ownership in Dharavi, the formalisation of these issues by the concerned Dharavi Local Administrative Enterprise (DLAE), will ensure that a particular piece of land is under one ownership (partnership/company etc.) By mortgaging this piece of land, a loan can be taken by the land owner for development. The same can be paid off from the sale component of development and the profit can be shared by the owner with residents for taking care of maintenance.

D-PPP Scheme

Starting the Dharavi Public-Private Partnership scheme will encourage involvement of the corporate sector in the development of Dharavi (in lieu of naming/advertising rights) with various companies possibly adopting various sub-sectors and neighbourhoods.

In addition, new construction may be offered to existing inhabitants at a higher price to cover development costs. Agencies like MHADA and MMRDA can be used for the construction and financing of physical infrastructure.

PLANNING

- Sub-sectors may be divided into identifiable lots of 4,000 to 10,000 sq m based on community, occupation or social groupings.
- Columns may be laid in approximate 6 metre grids in available open gaps between existing structures with minor adjustments.
- Every development/developer will also be responsible for the provision and maintenance of an open area/garden area, street-scape, urban furniture and road development.
- The proposal will be phased with the initial stages looking at formalising informal structures, settlement and entities, improvements in sanitation, drainage, transportation and housing in dilapidated condition.

HOUSING

- Columns will be raised to a level higher than existing units.
- New units would be built above existing units using prefab/dry wall construction.
- Each new unit has a built up area of 36 sq m.
- Duct position would be fixed in each unit.
- Construction agency will construct the outer walls, windows/doors, floors and the internal division may be built by the occupant.
- When the construction in the above units is completed, the occupant will move into it and the improvements to the ground floor may be carried out.

POLICY

- Recognise Rights of Residents.
- Residents should not be displaced.
- Residents should participate in the housing process.
- Areas should be divided into smaller segments of 4,000 - 10,000 sq m.
- Cooperatives should be formed under Slum Development Authority.
- The Slum Development Authority will prepare guidelines for redevelopment, coordinate approvals, plans and oversee the construction process. The FSI should be restricted to 2. The residents will make a contribution to the cooperative as per the area they occupy.



- Green Spaces
- Residential Spaces
- Residential and Commercial Spaces
- Religious Spaces

● Evolved Neighbourhood

PHASING



Phase 1



Phase 2



Phase 3



Phase 4



Existing major roads



Proposed major roads



Proposed major and minor roads



Proposed major junctions and open spaces

TRANSPORT

Strengthening Existing and Proposed Motorised/ public transport Networks

- Public transport and motorised roads are more important in Dharavi due to the large and small scale commercial and industrial activities in the area.
- In the existing condition, major roads and rail lines in and around Dharavi divide it into five distinct sectors but these sectors are large and lack permeability. This also results in a lack of access/connectivity to public transport and increased walking distances for residents, which is very inconvenient.
- The strategy will connect these roads to each other, such that the network of major roads is permeable, connected to the rest of the city and will result in smaller manageable sectors.
- These sectors will be divided into smaller sub-sectors by minor roads which are based on the existing intrinsic and organic pattern of road streets. These roads will have an intermediate public transport (IPT) and mini-bus network with stops every 250m and will connect residents to other parts of Dharavi as well as to major public transport lines.
- The junctions of major roads will be the major nodes, providing a hub for major commercial areas and markets as well as where people could switch between different modes of transport and different network lines.

Reclaim Footpaths

A typical street section of Dharavi has a lot of spillover of shops with overhangs, potters displaying their earthen-ware, illegally parked bikes and cars etc. This proposal looks at reclaiming the streets and using the footpaths for pedestrians and cyclists.

Pedestrian Friendly and Non-motorised Transport (NMT)

- The vision for Dharavi is of a compact, walkable city which sustains itself.
- Dharavi can be managed by pedestrian and non-motorised transport systems such as walking, hand carts, cycles and so on.
- Pedestrian routes for heritage and eco-walks connecting Dharavi to Mithi River promenade, Kala Killa, Mahim Nature Park etc. are proposed.
- The western and central railway corridor will be connected by pedestrian and NMT modes.
- There will also be a NMT connection between the western express highway and eastern express highway.
- Transport systems will be based on pedestrian accessibility: Inter-Dharavi Hop-in / Hop-off Bus - within 250m, Intermediate Public Transport - within 250m, Long route bus - within 500m, Direct Connection to Railway station - within 500m.

Parking

With increased affluence levels, there are a lot of cars and two-wheelers that are parked on major roads in Dharavi resulting in congestion. Off-street parking lots are bad for the urban design of a neighbourhood as they not only occupy a lot of area but also create unsafe spaces. Through this proposal, the need of cars should be reduced and parking demand should be fulfilled by on-street parking on major roads.