AN INFORMAL FRAME

INCORPORATING SOCIAL & ECONOMIC PRODUCTION OF SPACE IN REDEVELOPMENT OF INFORMAL SETTLEMENTS

Case study: Dharavi, Mumbai, India

Kritika Sha

Complex Cities | Inclusive Cities | International Planning and Developing Regions

04 July 2017
OUTLINE

PROJECT DEFINITION

PROJECT APPROACH

STRATEGIC FRAMEWORK

DESIGN FRAMEWORK

REFLECTION
MAJORITY OF THE URBAN SLUM POPULATIONS LIES IN THE ECONOMIC CENTRE OF GRAVITY -

ASIA

(UN HABITAT, 2014)

PERCENTAGE OF SLUM POPULATION DISTRIBUTION ACROSS THE WORLD

Source: World Urbanization Prospects, UN Habitat, 2014
PERCENTAGE POPULATION OF INFORMAL SETTLEMENTS IN INDIAN METROPOLITAN CITIES

Source: Indian Census, 2011
“All they know is that you’re trying to get to the city of gold, and that’s enough. Come on board, they say. We’ll adjust.”

-Suketu Mehta (Author of Maximum City)

MUMBAI - 2011
POPULATION: 18.3 MILLION
METROPOLITAN AREA: 4355 SQKM
ANNUAL ECONOMY GENERATED: $ 238 BILLION
Source: Derived from Google Maps
DHARAVI - 2011

POPULATION: 1 MILLION (APPROX)
METROPOLITAN AREA: 2.39 SQKM
ECONOMY GENERATED: $ 1 BILLION

Source: Derived from Google Maps
THE BOOKS, MOVIES AND DOCUMENTARIES ON DHARAVI
Money, power and politics collide in the battle for Mumbai’s slums

India
The Observer

A controversial project to bulldoze Dharavi, the giant shanty town that formed the backdrop to Slumdog Millionaire, is reviving the fortunes of extremist parties

Dharavi redevelopment project: Tender terms turn off developers, no bids

Last date to submit bids extended to May 5, officials say no terms, conditions to be changed.

Written by MANASI PHADKE | Mumbai | Updated: April 21, 2016 10:26 am

Dharavi slum's decades-old informal economy turnover of $1 bn plus now threatened by development
REDEVELOPMENT SCHEMES HAVE FAILED TO RESPOND TO THE EXISTING SOCIAL TIES AND ECONOMIC NETWORKS
INDUSTRIAL SPACE AND NETWORKS IN COMBINATION FORM THE BASIS OF THE SPACE PRODUCED
A heavy reliance on community life influences the quality of the space produced.
India’s number of informal settlements have seen a meteoric rise of 25% in the last decade (Census, 2011), and the pressing need to rehabilitate its citizens is now a more important issue than ever before.

This is accredited mainly to an indifferent attitude of the policy makers, planners and developers towards existing social and economic mode of production of space with its associated values, leading to highly insensitive, unsustainable and unequal redevelopment & upgrading projects.
RESEARCH QUESTION

How can a strategic spatial framework incorporating the existing social-economic production of space in informal settlements linking it to the formal city, lead to long term inclusive and sustainable redevelopment projects?

Case study: Dharavi, Mumbai, India
SPATIAL FRAMEWORK

1ST LEVEL OPERATOR
Urban Household Network

2ND LEVEL OPERATOR
Production-consumption network

3RD LEVEL OPERATOR
Road network, infrastructure etc.

Dupuy Network City Model
Source: Derived from (Dupuy, G., 2008)

Additional layers added
Source: Author
THEORETICAL FRAMEWORK

EXPLORATIONS IN THE GLOBAL SOUTH

URBANISATION PROCESSES

- Planning Theory - the rise of the “Subaltern”
- Morphology of informal settlements
- Social Capital and Security in the informal Settlements

ECONOMIC CHALLENGES

- Entrepreneurial nature
- The call of insurgent citizenship

POLICY IMPLICATION

- Global overview on informal settlements
- Case site specific - Policy review
ANALYTICAL FRAMEWORK

LAYER 1
Historical evolution

LAYER 2
Policy & Governance

LAYER 3
Landform & Infrastructure

LAYER 4
Economical networks

LAYER 5
Social security and capital
Dharavi Through Its Conception

Urban Form of Mumbai

- 1900: Polluting industries move to Dharavi
- 1909: The first colony
- 1910: Potters
- 1964: Informal industries take off
- 1965: Co-operative society
- 1985: Grassroot advocacy
- 1991: Slum Upgrading Scheme
- 1995: Private Redevelopment Scheme
- 2012: International Limelight

DHARAVI THROUGH ITS CONCEPTION
NATIONAL POLICY TOWARDS INFORMAL SETTLEMENTS
THE ‘LIMBO’ STATE OF THE DHARAVI REDEVELOPMENT PROJECT

NO TAKERS?
Dharavi Redevelopment Project

Residents
Where do we work?
Too small apartments!
what about the rest of us?

Parties of Interest
(2100 million Euros)
Private developers + MHADA (Govt)

THE NEW LOOK
Elevated walkways
Gardens and open spaces
Multi-storey residential and office complexes
New Dhavari railway station between Sion and Mahim
Multi-layer roads and car parks

Conception & Idea

Mukesh Motla

Features: HIKES
Health | Income | Knowledge | Environment | Socio-cultural

High FSI
4
Area of plot

High-end real estate for profit + financing the low-income housing

The ‘LIMBO’ State of the Dharavi Redevelopment Project
INFRASTRUCTURE BYPASSES THE INNER FABRIC OF DHARAVI
INFRASTRUCTURE BYPASSES THE INNER FABRIC OF DHARAVI
ECONOMY CONNECTS DHARAVI TO THE REST OF MUMBAI

ECONOMIC CONNECTIONS & CLUSTERS IN DHARAVI
PROJECT DEFINITION

PROJECT APPROACH

STRATEGIC FRAMEWORK

DESIGN FRAMEWORK

REFLECTION
Dharavi - Religious and Ethnic Concentrations

Economic Connections & Clusters in Dharavi
SYNTHESIS OF ANALYTICAL LAYERS AT DHARAVI
Existing policy does not incorporate social structure

Infrastructure does not support economic networks

Economic networks not incorporated in policy structure

SYNTHESIS OF ANALYTICAL LAYERS AT DHARAVI
ECONOMIC CLUSTERING and its spatial manifestation & organisation can act as a shorthand for the cultural and material spatial aspects in Dharavi.
PROJECT APPROACH

Dharavi

Theoretical Framework + Spatial Framework

Analytical Framework

Design Hypothesis

Theoretical Framework + Spatial Framework + Fieldwork

Analytical Framework

Spatial Guidelines + Policy Recommendations

Strategic Framework

Spatial Guidelines + Policy Recommendations

Design Framework

13 Compound

Supports

Develops

Tested on
EXISTING ECONOMIC MODEL FOR REDEVELOPMENT
PROPOSED ECONOMIC MODEL FOR REDEVELOPMENT
REINFORCEMENT OF ECONOMIC ACTIVITY IN DHARAVI
PROPOSED NAGAR DIVISIONS FOR REDEVELOPMENT

PROPOSED NAGAR DIVISIONS

Sector Boundaries
Railway lines
Major Roads

km
0 km
0.2 km
0.4 km

MATHIMA NATIONAL PARK
BEST BUS DEPOT
RAJIV GANDHI NAGAR
NAIK NAGAR
SOCIAL NAGAR
13 COMPOUND
CHANDA BAZAAR
KAMDEV NAGAR
SHASTRI NAGAR
AKO BAZAAR
TRANSIT CAMP
MUSLIM NAGAR
MATUNGA LABOUR CAMP

Guru Tegh Bahadur Nagar

Sion
PROPOSED RSTRUCTURE OF THE WATER INFRASTRUCTURE
DESIGN FRAMEWORK

13 COMPOUND
PROJECT DEFINITION

PROJECT APPROACH

DESIGN FRAMEWORK

REFLECTION

RECYCLING UNIT

LEATHER UNIT

GARMENT UNIT
ECONOMIC AND INDUSTRIAL UNITS IN 13-COMPOUND

- INDUSTRIAL UNITS
- COMMERCIAL UNITS
- RESIDENTIAL UNITS
Gathering points for new and experienced makers connect to work on projects.

Supporting systems & space for entrepreneurs, non-government organisations.

Business space for outside enterprises on lease with cheaper rental offered.

Low-income housing for the inhabitants with long-term lease rights.

Rebranding of 13-compound, as an innovation hub, which provides recognition to the informal industries and also helps attract other entrepreneurs.

A Special Economic Zone in 13-compound, offering tax benefits for informal industries, that formalise themselves in the same location.

E-commerce plays an important role in integrating the informal industry. Already a growing trend, 13-compound could encourage it amongst its existing industries as a means to operate.

Occupancy rights could take various forms such as long term leaseholds, rentals, transferable leases on individual, plots etc.
IDENTIFYING ECONOMIC CLUSTERS AND AVENUES IN 13-COMPOUND
Restructuring the Proposed Water Infrastructure
SUSTAINABLE REDEVELOPMENT PROJECTS

SOCIAL EQUITY

ECONOMIC OPPORTUNITIES

ENVIRONMENTALLY RESPONSIVE