CHAPTER-II
THE ENVIRONS OF DHARAVI URBAN SUB - UNIT

2.1.0. INTRODUCTION

2.2.0. LOCATION AND EXTENT

2.3.0. SITE FACTORS

2.4.0. CLIMATE

2.5.0. WATER RESOURCE

2.6.0. SOCIO-CULTURAL ASPECTS

2.7.0. MANUFACTURING ACTIVITIES

2.8.0. COMMERCIAL ACTIVITIES
CHAPTER-II
THE ENVIRONS OF DHARAVI URBAN SUB - UNIT

2.1.0 INTRODUCTION

In order to understand and study the entire slum situation of any urban area and for the future development of the region it is very essential to understand the salient Geographical features of the region. Therefore, a positive attempt has been made to deal briefly with the Position, Climate, Temperature, Humidity, Rainfall, and Drainage and other socio cultural aspects of the study area. These are considered as basic factors and give the real picture of the study area and help for future planning and development of the area.

2.2.0 LOCATION AND EXTENT

The study area, Dharavi is central part of Greater Mumbai, Geographically it is located in the Mahim-Mithi basin and with elevtion of less than 4 meters, above MSL. It is coverd in SOI Topographical map of 47 A/16 and in landsat of 148-047.

The Dharavi which covers almost central part of Greater Mumbai has been situated between 19° 2' 0" to 19° 2' 4" North and between 72° 50'12" to 72° 50' 19" East longitudes stretching the littoral part of Mahim creek. The total area of Dharavi is 432 acres or 4.0 sq.km. In the year 2001 The total population of Dharavi was -609694 lakhs.
LOCATION OF MAHARASHTRA IN INDIA

LOCATION OF MUMBAI IN MAHARASHTRA

MAHARASHTRA

Mumbai

Map-1
LOCATION OF DHARAVI IN MUMBAI (G WARD)

INDEX

- A Ward
- Ward Boundary
- Study Area Dhavari
Asia's largest slum is located between Mumbai's two main suburban railways lines western and central railway. These are the virtual lifelines of Mumbai, transporting thousands of people from one end of the metropolis to the other. Dharavi is literally sandwiched between the two sets of tracks to its west are Mahim and Bandra, to its north lies the Mithi river which empties out into the Arabian sea through the Mahim Creek and to its east and south are Sion and Matunga. Matunga and Sion stations mark its three corners.

2.3.0. SITE FACTORS

The site Factors or the physical expressions of Dharavi include the weathered pediment, denudational hill, residual mounds, in the interior part. Along its coastal line it represents the features like bay/cove, rock cliff, head Lind, sandy beach. Along the coast tidal flats are formed with mangrove vegetation. In the upper part of coastal margin mud flats are found along with reclaimed alluvial flats. There are shoals and large number of salt pans. There are grass hedges which are considered as weed.

In the interior part there is a pediment which is weathered highly, and the hills are much denuded leaving behind mound like features.
FOREST
WASTELANDS
WATER BODIES
OTHERS

Legend:
URBAN/BUILDP AREA
RESIDENTIAL/SUUM (Dowmn)
INDUSTRIAL
INSTITUTIONAL
RECREATIONAL
(Play ground, Park)
TRANSPORTATION
(Road, Railways)
OPEN SPACE
RECLAIMED AREAS

FOREST
WASTELANDS
WATER BODIES
OTHERS

PLATE No. 2
2.4.0 CLIMATE

Dharavi is one of the major business centers of Mumbai. Dharavi is situated in the western coast of Mumbai. The temperature in summer is quite good and healthy with an average of 34°C plus although humidity is a problem. During winter season a dip in temperature occurs with an average low of about 17°C.

Climate of Dharavi is fluctuating one as it is a coastal area and the weather is highly influenced by the presence of Arabian Sea. Generally May is the hottest month of the year and the average temperature remains between 32°C- 40°C. January is the coldest month in Dharavi and the average temperature remains about 18°C. The proximal distance to the sea lends a humid effect to the weather in Dharavi throughout the year.

Summers season in Dharavi is from April to Mid June followed by monsoon from Mid June to Mid September. Winter in Dharavi lasts from November to February and during this season the weather of Dharavi is really pleasant. During the winters the temperature varies in between 15-25°C and all these climatic features of Dharavi makes it different from other Indian cities.
Dharavi has a tropical wet and dry climate. Dharavi’s climate can be best described as moderate temperatures with high level of humidity. Its coastal nature and tropical location ensures moderate temperatures throughout the year, average of 27.2°C and average precipitation of 242.2 cm (95.35 inches). The average temperature is about 30°C in summer and 18°C in winter.

The annual rainfall of Dharavi is around 2,200 mm. Dharavi experiences the maximum rainfall in the month of July, which results in flood. The rainfall continues till the third week of September. By October the humidity starts decreasing. As November arrives, Dharavi goes through literally hot days and warm nights. During December the nights are very cold and the temperature may turn to 13°C Winter in Dharavi lasts from November to February and during this season the weather of Dharavi is really very pleasant.
2.5.0 WATER RESOURCE

Water resource is one of the basic resources of mankind. The life of all organisms entirely depends upon water. Water is also a source of power, an industrial ingredient, a medium of transport, a waste removal and purifying agent, as well as a recreational asset and maker of boundaries. One cannot imagine separate land. Among the natural phenomena with which man is linked Geographically almost as closely as with air, water deserves a place of first rank.

The drainage pattern of this region closely follows the Geological foundation of the area physiographic and drainage are important factors for the evaluation of the relief and geology. In this regard it is very important to study the drainage of the study area. The study area is drained by Mithi river (Photo No.2).

Dharavi has occupied 432 acres of land and has been divided into 5 major areas, they are 1. Mukund Nagar, 2. Central Area, 3. Social Nagar, 4. South Area, 5. South-West Area.

Each area consists dozens of chawls containing about 50 to 100 population. Nearly 85% of Dharavi gets water supply from the Tansa and Virar lake through big pipelines. The people near by pipelines distract the pipeline to get the water. Still there will be no scarcity of water supply to Dharavi.
There are innumerable small and big drains in Dharavi which they may be called as Nalla’s in the local language. In Social Nagar all drains are near by homes they are being no man’s land people nearby them through the garbage and other waste materials create the problems during the rainy season. In Dharavi all the drains are full with the plastics, bottles garbage etc., The tracing out of drainage system in Dharavi has become very difficult due to deformation of land by the said garbage’s (Photo No.3).

2.6.0. SOCIO-CULTURAL ASPECTS

The Researcher has observed that most of the people in Dharavi reside in tight clusters of one room homes, with high population density. There are many chawls, (streets) which are really slums. In Mumbai chawls, a neighbour casually walks in without knowing, rightfully opens the refrigerator and carriers the ice tray to home. Not just toilets, here almost everythings is common property, except may be spouses. There was a time when death was the only way one could exist these chawls but nowadays, marriage and modern perceptions of privacy are making the youth leave their childhood chawls. A tall wooden showpiece act as a partition, Behind it, those are atonils, a tap and a mat which they call the kitchen, the bathroom and bedroom. The old BDD chawl spread over 90 hectares, has house
about 16,212 people while another 10,000 live in the 110 Muncipal chawls in the city. The resident mainly consists of public servents who are from the backbone of the city. These is no space but they make room. Tiny bicycles hung from the same level as the cloths line above the door. Bikes are parked in the passage and parrots and other pets live close by, on top of water filled drums. The passage as a playground for kids, library for elders, storage room for water filled drums or gas cylinders and social life for the woman. They share gossip with neighboring woman here while seperating areals or feedings their kids. Men prefer sharing food and solving domestic disputes.

An enduring cultural characteristic of Chawls are that here doors are almost always open. Even to venders, Vegetables, fish sellers and welcome the mango vender. If there is a young couple, rest of the family members move out either for a movie or some where else. New born are first nicknamed by neighbours, before the official naming ceremony and the babies have a tough time figuring out which room they belong to the elders, who mostly responds to these nicknames alone, manage space by sleeping without rolling over, collegians study at libraries, gardens or on terraces. At home, they watch T.V., takes turns filling water, play carrom or exchange notes. It is in the
chawls that Dharavi's festivals truly come alive of course some confidential meetings still happen. Lovers try to steal glance or make conversation by comading there time at the bathroom queue when they marry people in the queue stop wondering. The girl from outside this queue or chawl through finds it tough. When a flat based girl marries then 120 square feet guy, she who marries his troubles. She awkwardly stands in the queue for the toilet, bathroom and common tap. The monthly rent for the BDD chawl room as Rs. 2,700 and the rooms would easily fetch a pries of Rs. 6 and 7 lakh. No body wants to move. The people who do move keen comings back to their one room comforts that they call home.

2.7.0. MANUFACTURING ACTIVITIES

In Dharavi there are 500 hundred small scale Garment units and about 100 dying embroidery and zardozi work. 150 leather shops, 25-30 big and 5000 small job work leather goods manufacturing units. Only 50 lijjat members are in Dharavi (out of 8000 in Mumbai and of 40,000 in India) Rest are involved in Papad making for other private labels. There are about 100 printing presses, 85 export oriented units (including WHO approved surgical satares). 3 to 4 Soap and Detergent factories, 152 Food units, chikki (27) papad, chana dal, khari biscuits, 111 restaurants, 25 Bakeries, Number of suitcases, Four
Gold refining and retail outlet, some tanneries and Indian sweet making units (biggest in India). 250 potters in Kumbharwada and Kite making units are also there in Dharavi.

- 500 small scale Garments units, and about 100 doing embroidery and zardozi work.
- 25-30 big and 5000 small jobwork leather goods manufacturing units
- 150 leather shops
- Suitcases
- Only 50 Lijjat members are in Dharvi (out of 8000 in Mumbai and of 40000 in India). Rest are involved in papad making for other private labels.
- Printing presses – about 100
- Foundries (brass buckles)
- Gold refinery and retail outlets
- Indian sweets making units (biggest in India)
- 111 restaurants
- 85 Export Oriented Units (including WHO approved surgical sutures)
- 3 to 4 Soap and detergent factories
- 152 Food units – chikki (27), papads, chana dal, khari biscuit etc.
• Some tanneries
• 25 bakeries
• 250 potters in Kumbharwada
• Kite making

Opposite Mahim creek, Naik Nagar, Ambedkar Nagar and Ravin Nagar have the worst living conditions, was built on swamp after concrete waste dumping.

With a population of just over one million, it is one of Asia’s largest slums, and there are repeated calls for its buildings to be knocked down to make way for new housing. “The living conditions look terrible – they are terrible, but when you go inside the homes, they are spotless. The people of Dharavi not hopeless – they are the most enforcing and energetic people in the city. The women make and sell textiles and food such as papadums. A survey of toilet facilities in Dharavi in 1997 revealed. However, 80 per cent of these mainly use public toilets. So these are unusable usable because of blockages. There are municipal taps from which 600-700 families use. Water comes for only two hours. It is dirty. Researcher observed that it takes them around one hour every day to collect the water they needs for the day.
Dharavi is one of the areas of Mumbai where contamination is fairly common. The water is black and filthy, often with garbage floating in it, the clothes are boiled in oildrums over fires stocked with rubber tyres and they beaten and scrubbed on dirty stones and laid out to dry on railway tracks – and yet the end result is starched, clean clothes.

Researcher feels that, “This corner of India (Dharavi) produced everything from garments to pillow to watch-strap buckles to lipsmacking savouries like chikki (peanut sweet), much of it for export. Much of this activity is illegal and unsafe, but that matters to nobody. Dharavi has been a magnet of opportunity that has reached out to every corner of the country. There are people here from Tamil Nadu, Karnataka, Bihar, Uttar Pradesh, Gujarat and elsewhere; and of course from Maharashtra itself.
Table 2.1: Occupational Status of Slum Dwellers

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Occupation</th>
<th>Male (%)</th>
<th>Female (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Rickshaw/Van/Pushcart Puller</td>
<td>27.8</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>Auto Scooter/Baby Tax/Tempo Driver</td>
<td>2.6</td>
<td>-</td>
</tr>
<tr>
<td>3</td>
<td>Driver of other Mechanical Vehicle</td>
<td>0.9</td>
<td>-</td>
</tr>
<tr>
<td>4</td>
<td>Helper of Mechanised Vehicle</td>
<td>2.7</td>
<td>0.07</td>
</tr>
<tr>
<td>5</td>
<td>Vendor/Hawker</td>
<td>3.9</td>
<td>1.7</td>
</tr>
<tr>
<td>6</td>
<td>Petty Trader/Shop Keeper</td>
<td>11.2</td>
<td>2.23</td>
</tr>
<tr>
<td>7</td>
<td>Night Guard/Cleaner</td>
<td>5.03</td>
<td>1.15</td>
</tr>
<tr>
<td>8</td>
<td>Day Labours</td>
<td>16.22</td>
<td>7.6</td>
</tr>
<tr>
<td>9</td>
<td>Garment/Other Factory worker</td>
<td>5.94</td>
<td>15.76</td>
</tr>
<tr>
<td>10</td>
<td>House Maid / Servant</td>
<td>0.78</td>
<td>12.78</td>
</tr>
<tr>
<td>11</td>
<td>Other</td>
<td>13.83</td>
<td>10.23</td>
</tr>
<tr>
<td>12</td>
<td>Unemployed</td>
<td>6.56</td>
<td>5.84</td>
</tr>
<tr>
<td>13</td>
<td>Housewife</td>
<td>38.51</td>
<td></td>
</tr>
</tbody>
</table>

Sources: Field Survey 2006-08

Majority of male slum dwellers are Rickshaw/Van drivers and followed by daily labours. Majority of women are housewife, but some are engaged in factory work (Table 2.1)

2.8.0. COMMERCIAL ACTIVITIES

In recent decades due to improved infrastructure, and expansion of marketing enlarged and commercial activities have been
made possible and these have drawn more and more people towards commercial activities as a main occupation. In Dharavi there are 244 small scale industries, 177 Scrap units, 152 Food items units etc are evenly distributed.

Table -2.2. No. Unit of Commercial Activities in Dharavi

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Commercial business</th>
<th>No. of units</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Food Items</td>
<td>152</td>
</tr>
<tr>
<td>2</td>
<td>Leather</td>
<td>43</td>
</tr>
<tr>
<td>3</td>
<td>Video</td>
<td>114</td>
</tr>
<tr>
<td>4</td>
<td>Printing Press</td>
<td>50</td>
</tr>
<tr>
<td>5</td>
<td>Hotel</td>
<td>111</td>
</tr>
<tr>
<td>6</td>
<td>Bakery</td>
<td>25</td>
</tr>
<tr>
<td>7</td>
<td>Scrap</td>
<td>177</td>
</tr>
<tr>
<td>8</td>
<td>Garment Export</td>
<td>85</td>
</tr>
<tr>
<td>9</td>
<td>Small Scale Industries</td>
<td>244</td>
</tr>
<tr>
<td>10</td>
<td>Big Industries</td>
<td>43</td>
</tr>
</tbody>
</table>

Sources : NSDF -2008 (National Slum Dwellers Federation)