





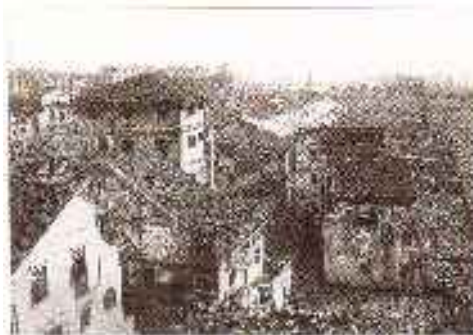
Bombay's segregated enclaves continued to grow in the manner they had been established in the early founding years of the town. These enclaves became increasingly overcrowded as more and more people came to Bombay for jobs created by new building projects, the expansion of trade and industry, the continuous growth of the cotton, spinning and weaving industries and the heightened activity in the docks.

By 1880, 42 spinning and weaving mills had been established, increasing to 68 in 1885, 94 in 1890, 102 in 1895 and an astonishing 136 by 1900. Among the important new industries that were being set up in the city were tramway and railway workshops, engineering and shipbuilding, dyes and chemicals, coach-building, kerosene tinning and packing, metal stamping, manufacturing of steel trunks, locks, cutlery and oil and paper mills. The leather industry at Dharavi, where the first tannery had been started in 1887, drew continuous streams of Tamil immigrants. Dharavi, in time, was to develop into the largest slum on the sub-continent.

The most evident change in the composition of the population, however, was a wave of poverty stricken Maharashtrian peasants from the drought-ridden districts of Satara, Kolaba and Ratnagiri, who came to Bombay for jobs in the textile mills and docks. They settled mainly in what came to be

termed Girangaon, the village of the mills, which included the areas of Tardeo, Byculla, Mazagaon, Reay Road, Lalbaug, Parel, Naigaum, Sewri, W orli and Prabhadevi. The population spurted from 644,405 in 1872 and 773,196 in 1881 to 821,764 in 1891.

It became apparent that although parts of Bombay - lying principally in the southern A ward, then comprising Colaba, the Fort and Esplanade - had been carefully planned and developed to make Bombay a magnificent 'First City of India', this outward face was



Above: Women workers in a textile mm. Right: The Kohinoor and other textile mms at Dadar. Opposite: View looking north from Nowroji Hm between the railway and Chinch Bunder Road. showing the poor and dilapidated condition of housing in the inner city during the plague outbreak.

totally illusory. The reality in especially in the congested par wards was shocking, despite authorities to establish better civic infrastructure and the att Arthur Crawford to improve sa the city. The sudden growth obviously led to overcrowding and a scarcity in of insanitary living eventually l



Plague Epidemic

The epidemic began in September 1896 when the disease was first detected in the congested Mandvi locality of the B ward. The epidemic quickly spread to neighbouring C ward areas like Phanaswadi, Khetwadi and Nagpada and then to other wards. In 1896 alone, the death toll averaged more than 1,900 people per week. Through the decades Bombay had continually faced regular epidemics of influenza, pulmonary and intestinal diseases, small pox and cholera, and was now completely traumatised by the plague.

The mortality rate forced people to flee in terror to higher areas like Malabar and Cumballa Hills, to healthier suburban districts in the north or to leave Bombay altogether. Until the epidemics were brought under control, a part of the population was accommodated in tented colonies set up on the western foreshore along Kennedy Sea Face and Chowpatty. Business came to a standstill, trade was paralyzed and enormous sums of money had to be diverted from improvement works into efforts to combat the scourge. The plague drew government as well as public attention to the appalling conditions that contributed to the unhealthy nature of the town, caused primarily due to the high density that developed - especially in the Indian quarter.

A map of Bombay for this period would show that the port and docks, railways, mills and the business quarter, which collectively afforded employment to the city's populace, were crowded together in the narrowest part of the island. It was therefore natural that workers, who could not afford tram and train fares, had chosen to live in close proximity to their place of work - a phenomenon that naturally resulted in overcrowding and unsanitary slums.

In the course of its rapid development, Bombay had become a quagmire of congested slums that harboured pestilence. Alarmed by the plague deaths and the devastation that gripped the town, the Bombay Government was jolted into seriously considering the question of a comprehensive scheme of improvement. In evolving this scheme, primary consideration was to be given

Lord Reay, noted Bombay's prosperity of the most noble events of the reign. "Its internal peace is as much as its external", he said. "It is one of the most beautiful towns of the world if not of the world. In the five decades of the mid-1830s and Bombay's economy had dramatically as a intensified

commercial and industrial activity. Exports increased from Rs 60 million to 419 million and imports from around Rs 47 million to almost 440 million, and the Municipal income rose from Rs 1.8 million to 4.2 million. However, living conditions for many were miserable. Mark Twain observed in 1896 during a midnight drive around the silent and vacant Bombay streets that "everywhere on the ground lay sleeping natives - hundreds and hundreds. They lay stretched at full length and tightly wrapped in blankets, heads and all. Their attitude and rigidity counterfeited death."

At a lecture given in 1905,
G Owen Dunn,

Chairman of the
Improvement Trust,
described the
degrading conditions
the poor lived in. "The
wonder is not that
the death rate is
exceedingly high, the
infant mortality
terrible and plague so
prevalent, but that so
many human beings
manage to exist at
all, and that the
ravages of disease
and pestilence are not
far greater. In many
quarters the houses
are jammed so closely
together that free
circulation of air is
prevented, the sun
can barely get lower
down than the roofs
and the atmosphere
is thick with foul
odours. There are no
proper roads, only
narrow tortuous lanes
and passages and
horrible gullies and
the older houses have
generally been built
without any regard to
light and air." Owen
Dunn reminded the
Trust's critics that a
committee appointed
in 1883 had
considered allocating
the entire Marine
Lines maid an to
the builder but the
Trust had dedicated
it for ever to
the public.

to the ventilation of densely inhabited areas, removal of unsanitary dwellings, better means of sanitation and prevention of overcrowding.

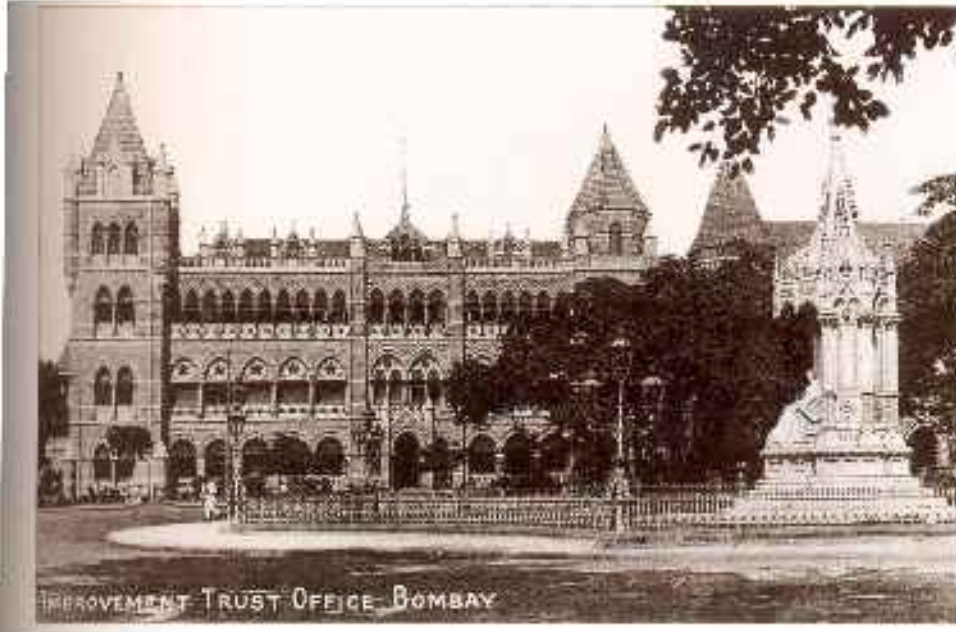
The first step undertaken by the Government to combat the plague, however, was the setting up of a Plague Research Laboratory by Dr W M Haffkine, initially housed at the J J Hospital in 1896 and three years later, moved to the abandoned Government House at Pare!. For the long term

implementation of proposed improvements, the Bombay City Improvement Trust was constituted on 9 November, 1898 under the City of Bombay Improvement Act (Bombay Act IV of 1898) - which was to dramatically alter and improve Bombay's physical state in the coming years.

City Improvement Trust

The challenging tasks placed before the Improvement Trust included the reclamation of more lands from the sea to provide room for expansion, making new streets, opening out crowded localities and constructing sanitary dwellings for the poor and for the police! For the successful implementation of its schemes, the Municipality and Government handed over to the Trust all their vacant lands in order to create an income for the Trust by the raising of rents. This income was to be supplemented by a yearly contribution from the Municipality. The Government and the Municipal Corporation thus constituted the Improvement Trust as a statutory authority with specific financial support.

In addition, the Trust had exceptional provisions in its structure to ensure speedy procedures, mandatory financial allocations for schemes formulated and undertaken and a mandatory time limit for buildings to be commenced in its schemes. For example, the Trust's policy ensured that each



scheme was detailed before work commenced. In its redevelopment scheme, properties affected were prepared and these, together with the plans, were displayed consistently over a period of three weeks in order to invite objections. Objections were promptly considered and final plans submitted to the Government for sanctions. It was stipulated that final decisions had to be taken by the Government. Subsequently, private properties to be taken over for the projects had to be vacated within a few years.



In fact, it was the very organisational structure of the Trust that was achieved - modelled as it was on the highly successful Port Trust pattern. The Trust was constituted as a compact body of 14 persons with a Chairman and Chief Executive, who were nominated as officials by the Government.

A majority of the Trustees were officials accountable directly to the different Government departments such as the Collector of Bombay, Chairman of the Bombay Port Trust, the Military Officer commanding the area and other Government nominees from departments concerned with the city's development,

like the waterworks and health.

Four members were elected and deputed by the Municipality, including the Municipal Commissioner, who was also the *ex officio* member. In addition, the Bombay Chamber of Commerce, then a powerful body of leading business houses, was also given a representation as a Trustee on the Board.

The importance of this attitude and approach was two-fold; firstly it ensured that different interest groups included in town development were represented and felt part of the improvement

*Opposite: The Plague Hospital, now Kasturba Gandhi Infectious Diseases Hospital on Arthur Road.
Left: The Improvement Trust building on Esplanade Road, (MG Road) now the Municipal Ear, Nose, Throat Hospital.
Above: Bombay City Improvement Trust engineers at a site office at Dadar-Matunga, 1912, in protective sola pitch tops.*

process. Secondly, the commitment of financial support from the Government and stipulated timeframes ensured prompt implementation of proposals. **In** fact, a summary of the Trust's activity reveals that its projects were executed effectively and had a long-term sustaining impact on the development of Bombay. The Trust's work over the next 12 years, beginning from 1898 to 1910 was not only to dramatically transform the geography of Bombay, but also its very form, from a town to a city!

At the heart of the Trust's success lay its conscious policy to simultaneously address issues of infrastructure, open up new land as well as restructure congested parts of the existing city. This recognition that city issues and problems must be dealt with idealism (the hope that goes with the creation of new areas) as well as realism (that is required to unravel problems within the city) contributed to the real impact that the Trust's work had on the improvement of Bombay.

The contribution of the Trust can be divided into three major areas of work. Firstly, the improvement of areas within the inner city which were either over-congested or unsanitary. Secondly, the creation of new streets for the purposes of both improving ventilation as well as communication connections between different parts of the city. The third area of work was the development of available land within the city as well as the creation of new land in and around the city via reclamation.

In addition to these areas of work, the Trust also addressed the issue of providing housing for the poor and the police, and initiating the formulation of building bylaws to control the urban form of the city, both in order to improve its aesthetic as well as sanitary conditions. Among the various schemes, those that involved the improvement of areas within the city were perhaps the most difficult to deal with as the strategy for their effective implementation was complex, involving as it did, displacing and temporarily re-housing part of the population.

The first of these schemes was the Nagpada improvement scheme, which aimed at dealing with the unsanitary low-lying area between Belassis and Parel Road junctions south of Shepherd Road. This area had a population of approximately **11,000** people mainly comprising the labour classes. The Trust purchased the entire property in this area, with the exception of the Police Lines and Jewish synagogue. The objective of this scheme was to restructure the precinct by opening up wide roads to decongest the unsanitary living conditions as well as provide adequate housing to re-house the existing population in sanitary surroundings.

The scheme included temporary accommodation for the population that would be displaced during the construction. The prepared plan restricted the density of the population to 500 persons per acre - in a low-rise pattern. Thus,

Opposite top: Nowroji HJJ being quarried.

Opposite below: New Trust chawls at Chinchbunder, 1916.

Above: Hughes Road under construction.



the buildings were arranged as far as possible to form sides of a quadrangle with an interior courtyard, which allowed the entire configuration of apartments to have a source of internal ventilation. The courtyards were paved and well drained to create a sort of internalised open space or focus for the community, that occupied the apartments.

The census of 1911 revealed that the population, which had dropped to 780,000 in 1901 as a result of the plague epidemics had now increased to 980,000. More startling was the fact that 76% of the population lived in single room tenements. Another astonishing finding showed that despite the Trust's laudable efforts to improve existing roads and construct new thoroughfares, sadly, Bombay lacked in seaside promenades. In fact, although the island city had a foreshore of more than 34.5 miles, 3.75 miles were taken up by the docks on the eastern edge and there were less than 6 miles of marine parades in the city. These included 0.38 miles at Apollo Bunder, 0.44 miles at Cuffe Parade, 0.87 miles along Nepean Sea Road, 3.37 miles at Chowpatty and 0.91 miles along Hornby Vellard!

Besides introducing a new approach and precedent for upgrading and restructuring an existing congested area, the Nagpada scheme also demonstrated the efficiency with which city improvement could be effected if there was political will, coupled with an efficient implementing body! Under normal circumstances at that time, a scheme such as the one at Nagpada would have been expected to take up to 10 years to complete. However, under the Improvement Trust's direction, this scheme was completed in three and a half years, thus perhaps boosting the public's confidence in the Trust's operations. Other schemes of this nature that were taken up by the Improvement Trust were the Mandvi-Koliwada Improvement scheme, the scheme at Agripada, where low lying lands were raised and new blocks of chawls were created.

Similarly, Nowroji Hill was decongested and the Dongri hill was quarried down and levelled, with roads, recreational spaces and modern building sites replacing what was formerly a wasteland.

Although these schemes had the greatest impact on the poorer population of the city and improved actual living conditions manifold, their visibility on the overall city was limited. In that sense, the projects that had the greatest impact on the perceptual quality of Bombay, both in terms of movement and visual experience were the Improvement Trust projects to open up and develop new streets.

Ventilators for the City

Foremost in this category of city improvement projects were the Princess Street, Sandhurst Road and the Mohammedali Road schemes. The Princess Street scheme of 1901-1905, extended from Queen's Road to Carnac Bridge and involved requisition of private lands and buildings to restructure an entire area that was extremely congested. The proposal comprised opening up new avenues,

vistas with a view not only to funnel in sea breezes to the dense inner city, but also to make the movement in these parts visually more dramatic by the creation of new buildings (designed under regulations) along the major avenues. This street was opened by the Prince and Princess of Wales on 10 November 1905 and thus named Princess Street. An extension of this street was created to connect on to the Crawford Market and was named Lohar Chawl Street.

The Sandhurst Road scheme on the other hand, besides opening up ventilation for the inner city from Chowpatty, also incorporated the Sandhurst Road bridge which was crucial to improve traffic flow from the inner city to the





Opposite: Lohar Chawl Street. Left top: Princess Street leading to Lohar Chawl was created as an extension to connect on to Crawford Market. Princess Street funnelled the westerly breezes to a congested area, while creating a visually dramatic avenue. Left below: Sandhurst Road led from Chowpatty to Umarchadi in the east.



western edge. Sandhurst Road also opened up Chowpatty and the whole area on the western side of the BB&CI Railway. On the north side and leading off from the Sandhurst Bridge approach, the new Hughes Road, completed in September, 1908, opened a new and convenient road to Cumballa Hill, 111 and the areas beyond.

The schemes executed in the areas lying to the north and south of Sandhurst Bridge were thus the keys, as it were, that opened up the whole communication

system with Malabar and Cumballa Hills and Chowpatty. In the same way the incorporation of Mathew Road in 1906 as part of this scheme created a secondary connection for Sandhurst Road to Queen's Road and

opened up a small estate behind the Royal Opera House for development. In fact, like Princess Street, Sandhurst Road also gave the inner city direct access to the sea. This has been in evidence through the years during the annual Ganesh festival immersion at Chowpatty.

The demolitions effected for the construction of these two important roads and other secondary streets, released valuable building ground and the entire frontage plots of Sandhurst Road and Princess Street from Queen's Road to Sheikh Memon Street were completely built over by ranges of new buildings. These new buildings were designed to visually structure these parts of the city to be consistent with the images evolving in the highly structured core - the Fort area.

Just as Sandhurst Road cut across the congested inner city in the eastwest direction, in the north-south direction, an Eastern Avenue named

Above: Hughes and Gibbs Roads looking towards Kemp's Corner. Completed in 1908, Hughes Road opened a new approach to Cumballa Hill and areas beyond. Below: Hughes Road near the Chowpatty end. Opposite top: A car showroom on Hughes Road. Opposite below: The new Mohammed Afi Road opened up areas in the north-south direction.





Sydenham Road (later called Mohammedali Road) was created to open up access from the Fort area to the new areas in the north. This avenue began at the Byculla Bridge and extended up to the Crawford Market. Again, new buildings under regulations were built along this avenue, bringing a sense of order to the chaos that had characterised the inner city in the 1800s.

Interestingly, these new roads were completed during a period when the motor car made a timely and tenacious entry into the city. The first automobile was brought to Bombay in 1897-98 by Mr Forster of Greaves Cotton & Company and the first car imported by an Indian in 1901, belonged to the eminent industrialist, Jamsetji Tata. Registration of cars was commenced in 1905, motor taxis were introduced in 1911 and motor buses began plying from Mughan Church to Crawford Market on 15 July 1926.

The automobile, the new and convenient mode of transport, provided a potent stimulus for the affluent to move to the Malabar and Cumballa Hills. With the growing demand for motor cars in the city, it was not surprising that an industry in automobile showrooms and repair shops grew gradually. Later, it flourished from Marine Lines through Hughes Road and up to the base of Cumballa Hill - naturally occupying the new areas created by the Improvement Trust around that time.

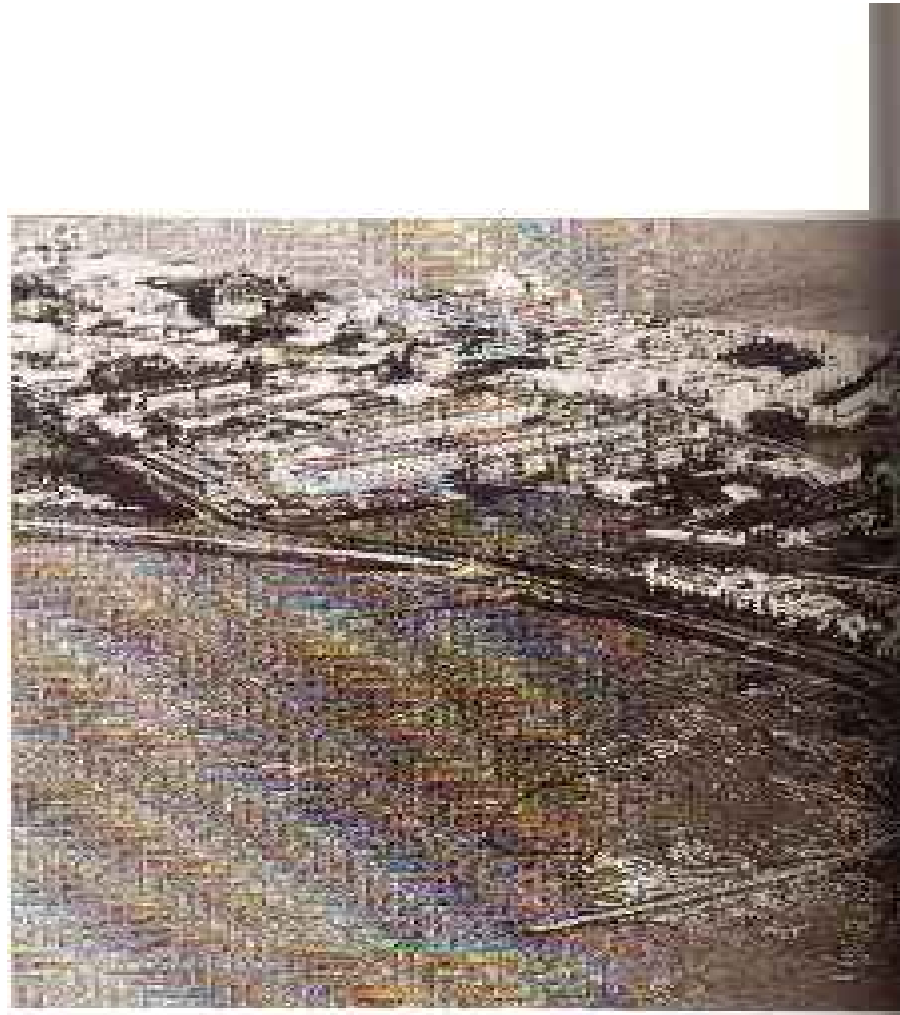
In the meanwhile, the Trust had also realised that ownership of land in Bombay was fragmented and thus there were very few continuous estates of

more than an acre or two belonging to a single private owner. This quite often resulted in piecemeal development with a total lack of urban design qualities or any cohesive strategy for public amenities. Thus the Trust's efforts also focused on creating new land and opening up new areas for city development.

Cuffe Parade

The Trust undertook what was considered one of its most successful schemes on the western foreshore of Colaba. Here, land was reclaimed at a cost of Rs 500,000,

light: A 1930s aerial view of Colaba, showing the Cuffe Parade scheme, completed in 1905 in the foreground. At top left, can be seen the Brady's Flats and Cusrow Baug complex at Colaba and beyond these, the dome of the Taj Mahal Hotel.





opening up 90,000 square yards of valuable building sites overlooking the sea. The scheme faced dire criticism, even from leading citizens like Pherozezshah Mehta, who believed that the reclamation would lead to a decrease in value of building plots vested in the Trust at Chowpatty, Kennedy Sea Face and Wodehouse Bridge; in short, it would stunt the demand by supplying excessive land.

Fortunately for the Trust, the plots at Colaba were laid out in a prosperous year for the cotton mills. Within no time, 30 of the 35 plots were leased at high prices. On this newly reclaimed land, the Trust commissioned an



The Saraswat Cooperative Society set the trend for the formation of housing societies, by successfully building on the Trust's Gamdevi Estate. Other societies of the time included one formed by the GIP Railways for their employees, and the Bombay Hindu Society which took two large groups of plots in Matunga, totalling 22 acres. Plots in the Oadar Matunga and Sion Wadala schemes were bought by the Hindu Association, the Chandraseniya Kayasth Prabhu Society, the Bombay Cooperative Housing Society, the Kutchi Visa Oswal Society and the Telugu Building Society. In 1919, the Zoroastrian Building Society acquired Trust land in Oadar to the west of Kingsway Avenue. One of the principal streets in the Parsi Colony, was named after Muncherjee Joshi, who initiated the idea. By 1926, 125 buildings were constructed here by private enterprise and by the Parsi Panchayat and Parsi Cooperative Society.