

A STUDY ON SOCIAL AND ECONOMICAL CONDITION OF PROJECT AFFECTED PERSONS IN MUMBAI : SPECIAL REFERENCE TO METRO LINE - 3

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Abstract :

Mumbai Metropolitan Region (MMR) is one of the fast growing metropolitan regions in India. In MMR, public transport systems are overcrowded and the road network is congested as there is a large gap between the demand and supply. To decongest the existing public transport systems and increase mobility across the Region, MMRDA through MMRC commissioned the services of RITES to prepare a DPR and Environmental/Social Impact Assessment study for the corridor of Colaba – Bandra – SEEPZ covering total length of 33.508 km. A detailed socio-economic survey was conducted in conjunction with the census of the project affected persons (PAPs) to profile the impacted project area and provide a pedestal against which mitigation measures and support will be measured. For this purpose comprehensive information related to demographic, social, economic, structure, employment, community resources and other information such as awareness about the project were collected

Key Words : PAPs, PAFs, MMRC, Mumbai Metro line –III,

1. INTRODUCTION:

Mumbai is the economic/commercial capital of India, which is identified by higher growth in economy as well as population. Mumbai Metropolitan Region (MMR) is one of the fast growing metropolitan regions in India. MMR covers an area of 4355 sq.km, which includes 7 municipal corporations, 13 municipal councils and 996 villages. The projected population of MMR shall be around 34 million, however employment opportunities estimated about 15.3 million by year 2031. The increasing population requires faster transportation to avoid delay in work and to avoid decongestions in the region. The existing transport system of city is not considered capable of bearing the upcoming transportation needs. Thus upgrading transport system is imperative for rapid growth and economic development in Mumbai Metropolitan Region (MMR). The expansion of road network in Mumbai is not possible as it requires large land acquisition leading to huge displacement of the people. Mumbai desires to be one of the globally competitive cities in the world but falls short on several grounds of which transportation inadequacy is the most prominent. The geographic formation of the city makes the expansion of transportation slow which does not match with the demand of fast growing city. In order to improve the overall traffic and transportation in Mumbai/Mumbai Metropolitan Region (MMR) and meet the future travel demand, the Government of Maharashtra through MMRDA has identified metro mode of transport as efficient, economically viable and environmentally friendly mass transport system. MMRDA has proposed metro network to meet the transportation requirement with the existing land resource available for present use with a nominal land requirement and fewer involuntary displacement.

In 2004, DMRC has prepared a master plan for development of metro network in Mumbai. The master plan proposes total length of 149.97 km for metro network development. It is planned in three phases of development, phase-I to be completed during 2005-2011; phase II to be completed in 2011-2016; and phase III in 2016-2021. Line 1 - Versova –Andheri- Ghatkopar section of metro rail is operational. Line II, Charkop-Bandra-Mankhurd section is yet to be started. Line III Colaba-Bandra-SPEEZ, under present study, is 33.5 km in length.

The proposed project corridor shall have direct as well as indirect benefits. The proposed project shall contribute to reduction in road traffic and road stress, fuel consumption, air pollution, travel time, vehicle operating cost, accidents and road maintenance. The proposed metro shall increase mobility and accessibility to facilitate, increase in economic stimulation in

the region, increase in business opportunities, improve aesthetics and image of the city. Overall the proposed project shall change the transportation face of MMR.

The proposed metro rail will facilitate the commuters to travel from South Mumbai to Airport via Mahim-BKC. It will also provide direct access to the economic hubs such as BKC, MIDC Industrial Estate, SEEPZ and famous landmarks such as Kalina University, Mahalaxmi etc. Table 1 has indicated the proposed metro rail network lengths for all three phases as per the master plan and amendment plan. Figure 1.1 depicts the proposed lines as indicated in the Mumbai Metro Master Plan. The Detailed Project Report for line 3 (Colaba – Bandra) of Mumbai Metro Phase – 1 was prepared in October, 2007 and for Line 6 (Mahim – BKC – SEEPZ – Kanjurmarg) of Phase III in April, 2011. MMRC intends to implement Line 3 and Line 6 as one corridor i.e. Colaba – Bandra – SEEPZ which is proposed as fully underground keeping in consideration social and environmental aspects.

Since the corridor is planned fully underground either on the edge of existing road or along the median of the road, there will be no or least disruption to existing services and traffic movement.

With a view to implementing Metro System in Mumbai Metropolitan Region (MMR), the master plan has been partly modified. The List of Corridors proposed for implementation is as follows:

Sr. No.	Name of Corridor	Length (km)	Estimated Cost (In Cr.) (@2012 price level)
1*	Versova-Andheri-Ghatkopar	11.40	2,356
2	Charkop-Bandra-Mankhurd	32.00	7,660
3**	Colaba-Bandra-SEEPZ	33.50	24,430
4	Charkop-Dahisar	7.80	4,680
5	Wadala-Ghatkopar-Teen Hath Naka (Thane)- Kasarvadavali	30.70	8,757
6 "	Wadala-Carnac Bunder	13.50	2,635
7	SEEPZ-Kanjurmarg	10.50	4,200
8	Andheri (E) – Dahisar (E)	18.00	10,800
9	Sewri-Prabhadevi	3.50	2,100
	Total	160.90	67,618

Source : MMRDA, Mumbai Metro Project

TABLE 1 : Metro Master Plan (MMR Region)

2. STUDY AREA:

Mumbai consists of two distinct regions: Mumbai City district and Mumbai Suburban district, which form two separate revenue districts of Maharashtra. The city district region is also commonly referred to as the *Island City* or South Mumbai. The total area of Mumbai is 603.4 km²(233 sq mi). Of this, the island city spans 67.79 km² (26 sq mi), while the suburban district spans 370 km² (143 sq mi), together accounting for 437.71 km² (169 sq mi) under the administration of Municipal Corporation of Greater Mumbai (MCGM). The remaining areas belong to various Defence establishments, the Mumbai Port Trust, the Atomic Energy Commission and the Borivali National Park, which are out of the jurisdiction of the MCGM. The Mumbai Metropolitan Region which includes portions of Thane, Palghar and Raigad districts in addition to Greater Mumbai, covers an area of 4,355 km² (1681.5 sq mi).

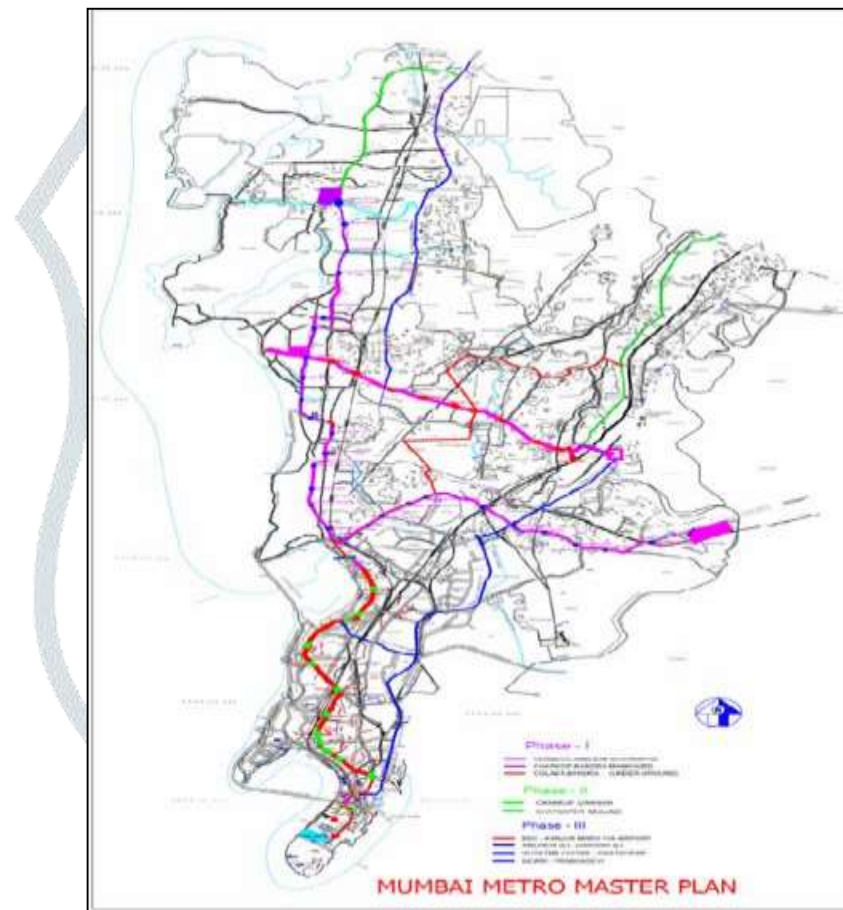


FIGURE 1 : MUMBAI METRO MASTER PLAN



FIGURE 2 : PROPOSED COLABA – BANDRA – SEEPZ METRO CORRIDOR (Metro Line -3)

3. RESEARCH METHODOLOGY

3.1 Purpose of study

The study was intended to find Social and Economical condition of Project Affected Persons and families in Mumbai.

3.2 Objectives of study

- To study the Social Condition of Project Affected Persons of Mumbai Metro line-3
- To study the Economical Condition of Project Affected Persons of Mumbai Metro line-3

3.3 Method of data collection

The data was collected using secondary data sources namely journal, magazines, business articles, websites, government records etc.

3.4 Research design

For the intension to complete the research study the design selected for the study was exploratory in nature as it was based secondary source of the data.

3.5 Scope of study

An attempt was made by the researcher to restrict the scope of study to few cases of Mumbai Which were affected by Mumbai Metro Line -III

3.6 Limitations of research

1. The research was based on secondary data which was assumed to be authentic
2. The information provided during the interview was assumed to be authentic
3. Time and cost were the major limitation of the study
4. The secondary information collected was restricted to Mumbai.

4. ANALYSES OF FINDINGS

The density of population in Mumbai is comparatively high in the country. The increasing population, high population density and limited land area have collectively increased the traffic volume of the city. The increasing traffic volumes on road need alternative public transport system for effective commutation. Metro Rail network was perceived to be fast, convenient and environmental friendly. In the process, Maharashtra government has completed the construction of line I metro rail and is now operational. The proposed metro corridor shall have the length of 33.5 km, which is considered necessary to provide the required level of transport in the city in view of population and area spread. The metro transport system is considered suitable being fast and clean transport system, however it also displaces people from their home and business base in a place like Mumbai where roof for shelter and base for business are most desired. The adverse impacts of metro rail project are minimal in comparison to the other surface transport systems. MMRC requires the census social survey to identify the PAFs, inventory of the property, assess the socio-economic condition of the project affected people to address their issues related to resettlement and rehabilitation as well as the public opinion on the proposed project. This chapter begins with the details of the project area in general and baseline information about the project affected people in particular. The information gathered in this chapter enable us to understand the impact of the project on the socioeconomics of the PAFs and on the area.

4.1 PROFILE OF PROJECT AFFECTED FAMILIES

A detailed socio-economic survey was conducted in conjunction with the census of the project affected persons (PAPs) to profile the impacted project area and provide a pedestal against which mitigation measures and support will be measured. For this purpose comprehensive information related to demographic, social, economic, structure, employment, community resources and other information such as awareness about the project were collected. This information was collected through a structured "Household Questionnaire".

This analysis is based on the responses from PAPs. Data revealed that due to the proposed metro line-3 project about 2622 numbers of families will be affected either because of loss of residential, commercial establishments. Of the total 2622 affected families (Residential- 1837, Commercial-744 and Residential cum Commercial-41).

4.1.1 Demographic and Social Conditions

The proposed project shall affect approximately 2622 PAFs. Out of the total PAFs, 1837 PAFs consisting of 6060 PAPs have been covered under the census survey. The baseline socio-economic data and analysis is based on the surveyed PAFs.

4.1.1.1 Gender Ratio

The data on gender divide and sex ratio is very helpful indicator to know the participatory share of males and females in the society, which is also an important indicator for human development index. Among the surveyed population it is observed that there are 52.90% are male and remaining 47.10% are female. The sex ratio is 893 per 1000 males.

4.1.1.2 Religious and Social Groups

Data on religious groups have been collected in order to identify people with the specific religious belief among the PAFs. The religious beliefs and social affiliation of the people are indicators that help understand cultural behaviour of the groups. The social and cultural behaviour will help understand the desires and preferences of PAPs, which is a prerequisite to rehabilitate the affected people and their families. Table 4.2 shows that the Hindus (Hinduism) is the largest affected religious group among the project affected families, which is followed by Muslims and then by other religions such as Christians. The

study result shows that majority (55.00%) belongs to Hindu religion followed by Buddhist (10%), Muslims (28%), Jains (5%), Shikh (1%) and then by Christians (1%).

The social affiliation of the group differentiates them for benefits under government schemes. Social groups indicate ranking within the society, preferences and vulnerability. In general, the families belonging to Scheduled Castes (SC) and Scheduled Tribes (ST) under the provisions of the Constitution of India get preferential treatment in the government benefits because the group includes the people who are traditionally vulnerable. Except general category, all other groups need attention and to be addressed for their backward socio-economic conditions. The surveyed households belong to the Scheduled Castes 10% Other Backward Classes (OBC) 12%, Nomadic Tribes (NT) 1%, Scheduled Tribes 5% and 71% is identified in general caste category.

4.1.1.3 Mother Tongue and Place of Nativity

A majority of families (47%) speak Marathi as a mother tongue, followed by 1% who speak Urdu, 32% Hindi, 5% speak Gujrathi, 7% speak Tulu, and 4% speak Telagu. Majority of surveyed families are from Maharashtra.

4.1.1.4 Age Group

The persons of surveyed families have been categorized in to five age groups. The distribution of person's age in various group shows that 31.53% belong to 18-34 years age group and 16.68% belong to 35-44 years age; which is potentially productive group followed by 28.15% of the total persons belong to the below 18 years age group who are dependent population. About 16.19% belong to 45-59 years age group and 7.45% belong above 60 years age group.

4.1.1.5 Family Pattern and Family Size

Family Pattern and Family Size indicate the fabrics of sentimental attachment among the family members, social value, economic structures and financial burdens. The family particulars of the surveyed PAPs/ PAFs are given in Table 4.2. Out of total Project Affected Families, family size is determined by the economic burden and opportunities. Family size has been classified into three categories i.e. small (< 2), medium (3-5) and large (> 5). Single member families have also been included in the small family size. Table 4.2 shows most of the families have their member less than five. Majority of the families (53.81%) are medium sized family, 29.19% are small and individual type with ≥ 2 member. Only 16.98% of the families are with members more than five. The data shows the preponderance of medium sized families over other sized families in the project area. Marital Status: The marital status of project affected people is indicated under three categories – married, unmarried, other including divorced/widowed. It is observed that out of total surveyed PAPs, majority of them 53.86% are married, 42.83% are unmarried and only 3.31% are in other types which includes widowed/divorced/separated.

4.1.1.6 Educational Attainment

Education is a double-edged blade. It is a tool for vertical mobility in the society. It provides an opportunity to participate in the process of growth and development. However it also creates differences among people and introduces a new kind of inequality between those who have it and those who do not. In all the cases, education is a basic need and the best indicator of socio-economic development of the region. Out of the total surveyed population, about 19.23% are educated up to primary class, 50.75% are educated up to secondary level, and 12.90% have studied up to Higher Secondary level. 13.42% of the affected people have done their graduation. 3.7% of the total surveyed PAPs have gained technical education.

4.2. Economic Conditions of PAFs

The economic condition of PAFs describes occupational pattern, family income, and number of earning and dependent members. The occupational pattern includes work in which the head of the project affected families are involved. The family income includes income of all the earning members. The earning members include the people who work and earn to contribute to the family; however dependents include housewife, children, elderly people and others who cannot work and earn. About 30% of families reported less than Rs.2500/- monthly income. About 9% of families' monthly income is between Rs. 2501 to 5000/-. About 29% of families' monthly income is between Rs. 5001 to 10000/-, 32% of families' income is more than Rs.10001/-. The average income of a family is Rs.4720/- per month.

4.2.1 Employment Status

The occupation and profession of the head of family has been considered during the social survey (residential and residential plus commercial). The study recorded and assessed the capability, base for livelihood and skills of the family head, so that resettlement impacts can be assessed. Based on the impact assessment rehabilitation plans shall be prepared accordingly. The survey results in Table 4.5 shows that majority 66.97% of the head of project affected families are engaged in private jobs, 15.61% are self-employed, 7.17% are casual labour and 5.90% are employed in service of public sectors and government jobs.

4.3 COMMERCIAL/SELF EMPLOYMENT ACTIVITIES

Commercial and self-employment activities among the commercial PAFs. 0.88% of the total interviewed PAFs are running their own small hotels and dhabas, 5.37% own tea and snacks hotels, 1.72% PAFs own workshop. The shop owners get license from MCGM. Out of the total interviewed PAFs, 98.61% are holding license and 1.31% of the PAFs have no formal license to operate the shops. The employment pattern indicates the number of people involved in the business activities. 27.82% of the total PAFs operate their business and shops without any additional help from employee. 69.13% PAFs have employed 1-5 employees, 3.05% PAFs have employed 5 & above people in their work. The proposed metro project shall have cumulative impacts on both the PAFs as well as their employed people.

5. CONCLUSION:

As per the MUTP R&R policy all legitimate occupants of land and building affected by MUTP will be eligible for the benefits of R&R. PAPs who are squatters and not legal titleholder of land and buildings shall also be eligible for R&R if enumerated during the baseline survey. Therefore, the date of completion of baseline survey shall be the Cut-off date. It is on this date that all impacted persons will be identified and the nature of the impact disclosed. PAPs who settle in the affected areas after the cut-off date will not be eligible for compensation and/or other assistance. They, however, will be given sufficient advance notice, requested to vacate premises and dismantle affected structures prior to project implementation. Resettlement requires involvement of various institutions at different stages of project cycle. This section deals with roles and responsibilities of various institutions for a successful resettlement.

6. RECOMMENDATIONS

MMRC is responsible for planning and implementation of resettlement and rehabilitation component of the proposed Metro Line-3 project. The MMRC should coordinate with all implementing agencies and monitoring the progress of the project. The MMRC is also responsible for the delivery of entitlements, supervising the work of Project Management Consultant (PMC), NGO (R&R Implementation Support Consultant), Public Relation Consultant etc. It will generate Quarterly Progress Report (QPR) for effective management decision. The MMRC headed by Managing Director (MD) should be responsible for overall planning, supervision of all activities related resettlement and rehabilitation of the proposed project during preparation, implementation and post implementation phase. The MMRC staff should work with Consultants for implementation of all R&R activities.

7. REFERENCES:

1. 'Mumbai Metro' available at <https://mmrda.maharashtra.gov.in/mumbai-metro-rail-project>
2. Available from : https://en.wikipedia.org/wiki/Mumbai_Metro_Rail
3. Gadgil, V. B. (2014). Innovation in HMR Project by L & T Metro rail (Hyderabad) Limited.
4. Govt. of Andhra Pradesh (2007). Hyderabad metro Rail Project. Detailed Project Report by DMRCL
5. Mumbai Metro Rail Corporation Ltd MUMBAI METRO LINE 3 (Colaba-Bandra-SEEPZ)
Updated Social Impact Assessment Report Volume – I
6. Hindustan Times (2011):"Notification "Mumbai Metro Rail Corporation Limited, Mumbai.
7. JICA (2010):"The Guidelines for Environmental and Social Considerations", July, Tokyo.
8. MMRC (2011):"Detailed Project Report for Colaba-Bandra-SEEPZ Metro Corridor", Final Report, November, Mumbai.
9. MMRDA (2004):"Master Plan for Mumbai Metro", May, Mumbai.
10. Navbharat Times (2011):"Notification "Mumbai Metro Rail Corporation Limited, Mumbai.